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PART II

Athlete Physical and Mental Health

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ATHLETE HEALTH AND WELL-BEING

Introduction

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Success on the field of play doesn't just mean that athletes must focus on developing specific aspects of their sport such as conditioning, technique, tactics, and equipment. What happens away from their sport matters as well. They must consistently balance their athletic efforts, including conditioning, sport training, recovery, competition, with other aspects of their lives such as school, work, and relationships. As noted previously, when athletes enter the competitive arena, they don't leave their "personness" on the sidelines. What is going on in their broader lives has a direct impact on athletes physically and psychologically, and, by extension, their practice and competitive efforts. Second, most athletes are only serious athletes for a part of their daily lives; they also attend school, work, engage in a variety of other activities, and are family members and friends. Additionally, if they are fortunate, athletes' careers will last into their thirties and, for most, their careers will last a much shorter time. So, they will have many decades ahead of them in which their primary identity will be as people, not athletes. As a result, it is incumbent on athletes, and the consultants with whom they work, to broaden their view of themselves beyond the role of athlete and consider themselves in the broader context of their overall health and well-being.

Simply put, for athletes to perform at their highest levels, they must also maintain optimal health and well-being in their lives. This chapter focuses on five essential areas that influence this relationship between sports and life. The first section explores the impact of athletes' *physical health* on sports performances and general health and well-being. It also examines the importance of sleep and the roles that nutrition and hydration play in performance and health. The second section focuses on athletes addressing *stress* both within and outside of their sports lives. The third section discusses the roles of *well-being* in performance and health. In the fourth section, the challenges of *at-risk athletes* are explored. Finally, the fifth section considers the impact of *athletic career transition* on athletes' sports participation and life after sport. Collectively, these sections provide insight into contemporary thinking that will help consultants to better understand the interaction between sports performance and the health and well-being of athletes. This chapter also provides consultants with valuable information and useful tools they can use to ensure that athletes' health and well-being is their foremost priority.

PHYSICAL HEALTH

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Athlete health is a complicated subject. Athletes are tasked by parents, coaches, and themselves with performing at their highest level consistently in pursuit of their sports goals. Unfortunately, the singular quest for athletic success often has its costs in which many aspects of their broader lives are relegated to lower priority than sport.

Student-athletes have particular challenges because they must make a significant commitment to their sport, but also make a similar commitment to their academics.

Consultants can have a meaningful impact on athletes not only in their athletic lives, but also in their general health. In fact, it could be argued that consultants' first and foremost responsibility is to the athletes' health for several reasons. First, athletes will be committed athletes for only so many years, but they will be people their entire lives. Second, consultants should prioritize athletes' long-term health over results. Third, when athletes pay attention to their health, their competitive performances frequently improve.

Theory and Research

The life of dedicated athletes who also strives for health is an ever-challenging dance of meeting sometimes-conflicting needs and goals. It requires that athletes find a balance between what happens on and off the field. This balance is difficult to find and maintain because an certain ethos about sports has been cultivated in the contemporary sports culture that highlights prioritizing sports over everything else, sacrificing all else for the sport, striving to be the best, taking risks, and challenging limits as a model for behavior (Hughes & Coakley, 1991). Hence, committed participation in sport becomes especially vulnerable to corruption (Hughes & Coakley, 1991) and it can prove to be a destructive rather than life-affirming experience for athletes. This ethos, though ostensibly beneficial for athletic success, can also unintentionally put athletes at risk. Athletes often fall out of balance in their lives in ways that have significant physical and psychological implications. This conflict is especially impactful when they develop an over-commitment and over-conformity to the demands of their sport. This mindset is adopted when athletes prioritize their sports participation over other aspects of their lives without fully understanding the effects it will have on their broader lives. Indeed, highly committed athletes often have a belief that they must do anything to achieve a high level of performance and accomplish their sport goals (Hughes & Coakley, 1991).

Overcommitment and Overconformity

A decline in health have been observed when athletes care too much for, accept too completely, and over-conform to what has become the value system of sport itself (Hughes & Coakley, 1991). The notions of overcommitment and overconformity are behavioral manifestations of the concept of overinvestment described in Chapter 2. One example of an over-committed athlete is a collegiate thrower who used the "110% rule" every time he trained. After disk fusion surgery and eleven months of physical therapy, his surgeon instructed him that back squatting was no longer a safe activity if he wanted to stay injury free and continue competing. During that season's max lift session, he could not say no when the strength coach put him under the rack to back squat (*do what he is told*). As his numbers increased and his teammates were cheering with excitement, he hit a 500-pound one-rep max, the highest weight of his cohort that day (*be the best*). He felt a twinge in his back with some numbness which he kept to himself and continuing to smile, despite the discomfort (*do not show weakness*), as he relished his teammates' admiration. In his next sport psychology consultation, he berated himself for his "stupidity" because he had become quite anxious that his inability to resist the coach and the ego-stroking of his strength numbers may have put his back's health and his last eligible season in jeopardy.

This kind of excessive and detrimental commitment to the sport ethos creates a counterintuitive shift in behavior for athletes. What often is perceived as being in the service of sport may lead to overuse or acute injury, burnout, eating disorders, substance abuse, loss of motivation, and early retirement. Overconformity is often prevalent among athletes whose self-identities are excessively dependent on their sports efforts for validation, have low self-esteem, and are unable to resist the messages of the sport ethos from their coaches, parents, and others. Additionally, overconformity is found in athletes who perceive few options for success in their lives, so come to believe that their only path to success is through sport. With this belief, they feel compelled to accept the extreme demands and commitment that the prevailing sports culture imposes on them. The result is that these overinvested athletes who overcommit and overconform often engage in behaviors that are ultimately self-defeating to their sports aspirations and their general physical health.

Sleep

The days when athletes bragging about sleep deprivation as an indication of toughness are over. The importance of sleep to athletic performance is well documented. For example, one hour less sleep from an athlete's sleep routine causes naturally occurring human growth hormone to be compromised. Sleep is essential to athlete reaction time, focus, and physical recovery. Athletes in youth, high-school, and collegiate sports are often trying to balance the demands of sport with many other life demands and sleep is often sacrificed. Inadequate sleep is also associated with increased injury risk (Luke et al., 2011). Thun et al. (2015) indicate that sports requiring longer sustained effort, such as running and cycling, do not improve after athletes experience insufficient sleep. These sleep studies also showed that participants who were sleep deprived were less motivated to endure discomfort from physical activity after experiencing sleep deprivation. They also found that extending sleep over a period of time and incorporating naps into a daily schedule can improve performance (Thun et al., 2015). A newly held belief is that athletes not only need adequate sleep at night, but also that strategically placed naps can serve the overall performance and recovery of athletes.

Sleep for committed athletes functions as a restorative effect for the endocrine system, helps recovery from the nervous and metabolic cost of being awake, and helps cognitive development because sleep plays a critical role in learning and memory (Fullagar et al., 2015). Studies comparing athletes who get enough sleep to those who do not demonstrate significant differences in motor tasks. Particularly before and after competitions, it is essential for athletes to get enough sleep so that they are properly rested both physically and mentally for competition and so they can recover effectively after competition, respectively.

Serious athletes follow long and intensive practice and competitive schedules that can lead to fatigue, illness and injury. Demanding sports regimen, including early morning practices, double workouts, and night-time competitions, can create an imbalance in athletes' lives and prevent them from finding time in their schedule to get the seven or more hours of sleep they need to perform at their optimal performance level. According to several reports, athletes can experience poorer mood states after sleep restriction, decreases in vigor, and increases in depression, sleepiness, and confusion (Fullagar et al., 2015). These negative mood states have been linked to athletes who are over-training and participating too much in their sport (Fullagar et al., 2015).

Insufficient sleep in athletes also affects their cognitive capabilities. An increase in physiological fatigue due to decrease in sleep can create a "neurocognitive state not conducive for either engaging in physical activity requiring a high motivational component or employing optimal decision making" (Fullagar et al., 2015, p. 180). When athletes are not getting enough sleep, deficits of motivation, confidence, and intensity, and focus can lead to a decline in performance, increased risk of injury, poor decision making, and a loss of enjoyment and desire to continue to their participation in their sport.

Nutrition

Nutrition is another important contributor to athletes' health. Simply put, nutrition is the fuel that propels sports performance. It plays an essential role in:

- overall physical health (both immediate and long-term);
- mental health;
- motivation;
- energy level;
- focus;
- training quality;
- competitive effort;
- injury prevention; and
- recovery from training.

Proper nutrition before, during, and after intense training and competitive efforts is critical for optimizing athletic performance. A successful nutrition plan should be individualized for athletes taking into account:

- demands of the sport;
- position played;
- training load;
- lifestyle;
- personal physiology;
- time in the season;
- individual nutrition needs;
- level of stress; and
- co-occurring medical complications (e.g., eating disorders, osteopenia/osteoporosis, diabetes).

Adequate caloric intake is also important to maintain lean muscle mass, reduce unnecessary weight gain or loss, normal functioning of the reproductive and immune systems, and enhance athletic performance (Thomas, Erdman, & Burke, 2016).

To help demonstrate the effects that nutrition has on athletic performance, it will be useful to describe the negative consequences of inadequate nutrition. Athletes who do not consume adequate energy are at increased risk of fatigue, nutrient deficiencies, infection, illness, injury, anemia, and decreased strength, endurance, mobility and muscle mass. When severe caloric restriction continues, even more severe consequences arise including excessive weight loss, decreased basal metabolic rate, decreased bone mineral density, cardiovascular and gastrointestinal issues, loss of menstrual periods in female athletes, decreased testosterone levels in male athletes can occur, and a decline in athletic performance (Rosenbloom & Coleman, 2012; Thomas et al., 2016). The effects of insufficient nutrition on athletic performance can include decreases in:

- energy;
- response to training;
- endurance;
- concentration;
- muscle strength;
- glycogen stores; and
- coordination.

Other effects include increased risk of injury, depression, and irritability, and impaired judgement. Athletes must consume adequate kilocalories to avoid fatigue, preserve lean body mass, and avoid negative side effects associated with chronic low energy intake (Rosenbloom & Coleman, 2012; Thomas et al., 2016).

The majority of an athlete's diet should consist of carbohydrates (Rosenbloom & Coleman, 2012; Thomas et al., 2016). Adequate carbohydrate stores are crucial for optimal performance during endurance and high-intensity training. Hansen et al. (2014) found that marathon runners who consumed a higher carbohydrate diet were significantly faster than those who consumed a lower carbohydrate diet. Wilson et al. (2013) reported that marathon runners who ingested carbohydrates the day before and morning of a marathon had significantly faster times than those who did not. Protein is also necessary to repair and maintain muscle tissue (Rodriguez, 2013). Protein needs are increased for athletes to maintain lean body mass, promote muscle synthesis, and recover and repair muscle damage after intense exercise. Athletes who do not consume adequate amounts of protein or kilocalories have an increase in protein degradation. Athletes should consume adequate protein and kilocalories to support lean body mass and overall health (Rodriguez, 2013).

Adequate fluid and micronutrient intake are also important. Indeed, dehydration of as little as 2% body weight can impair athletic performance. It is important that athletes consume adequate fluids before, during, and after their training and competitive efforts to maintain and replenish their hydration levels. Stresses from exercise may also increase the need of certain micronutrients such as vitamin D, calcium, iron, and antioxidants. Athletes who consume an inadequate diet due to energy restriction, elimination of certain food groups, or extreme weight-loss practices are at increased risk of micronutrient deficiency (Thomas et al., 2016).

Practical Implications

As discussed in great length in Chapter 2, consultants can play an essential role in helping athletes to address the challenges of overcommitment and overconformity (referred to as overinvestment in Chapter 2).

Consultants can work with athletes to reduce their investment of their self-identities, self-esteem, and goals to a healthy level, provide balance in their lives, to develop or shift attitudes related to overinvestment that will lay the foundation for practices and habits that will foster their physical health and, by extension, their sports performances.

Additionally, few consultants in applied sport psychology or mental training also have expertise in the physical health aspects of athlete performance such as nutrition and sleep. As a consequence, consultants would be well served to collaborate with experts in these two areas of physical health to ensure that the athletes with whom they work are engaging in sleep and nutritional practices that support their sports efforts.

At the same time, consultants can, with the support of the domain experts, help athletes to integrate these physical health areas into their overall sports development and performance regimens. Consultants can help athletes develop a sleep plan that will ensure that they get a sufficient amount of rest each night to allow their bodies to recover and regain the energy they lost from the previous day's sport-related efforts. In addition, Individualized self-awareness programs integrating metrics (e.g., hours of sleep each night, meal and nutrition tracking) around physical health will help athletes attend to the ever-shifting balance between exertion and recovery. Consultants can help athletes reality test their perceptions of their overall physical health and daily health-relate habits to ensure that they are maximally every physical area that may impact their sports performances.

Summary

- The singular quest for athletic success often has its costs in which many aspects of their broader lives, including their physical health, are relegated to lower priority than sport.
- This balance is difficult to find and maintain because a certain ethic about sports has been cultivated in the contemporary sports culture that prioritizes sports over everything else, sacrifice for the sport, striving to be the best, taking risks, and challenging limits as a model for behavior.
- Physical health can suffer when athletes care too much for, accept too completely, and overconform to what has become the value system of the sport in which they participate.
- This kind of commitment to the sport ethos creates a counterintuitive shift in behavior for athletes in which what may be perceived as in service of sport may lead to overuse or acute injury, burnout, eating disorders, substance abuse, or early retirement.
- Consultants can have a meaningful impact on athletes not only in their athletic lives, but also in their general physical health.
- Consultants' first and foremost responsibility is to the athletes' health because athletes will be committed athletes for only so many years, but they will be people their entire lives, consultants should prioritize athletes' long-term health over results, and when athletes pay attention to their health, their competitive performances frequently improve.
- Sleep research has found that athletes who experience insufficient sleep suffer many physical and psychological consequences.
- A newly held belief is that athletes not only need adequate sleep at night, but also that strategically placed naps can serve the overall performance and recovery of athletes.
- Consultants can help athletes develop a sleep plan that will ensure that they get a sufficient amount of sleep each night to allow the body to recover, reset, and regain the energy it lost from the previous day's sport-related efforts.
- Nutrition is another important contributor to athletes' health acting as the fuel that propels sports performance.
- Athletes who do not consume adequate energy are at increased risk of fatigue, nutrient deficiencies, infection, illness, injury, anemia, and decreased strength, endurance, mobility, and muscle mass.
- The majority of an athlete's diet should consist of carbohydrates. It is important that athletes consume adequate fluids before, during, and after their training and competitive efforts to maintain replenish their hydration levels.
- A successful nutrition plan should be individualized for athletes taking into account the demands of the sport, the position played, training load, lifestyle, personal physiology, time in the season, individual nutrition needs, level of stress, and co-occurring medical complications (e.g., eating disorders, osteopenia/osteoporosis, diabetes).
- Few consultants also have expertise in the physical health aspects of athlete performance such as nutrition and sleep, so they would be well served to collaborate with experts in these two areas of physical health to ensure that the athletes with whom they work are engaging in sleep and nutritional practices that support their sports efforts.

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STRESS

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Competitive sports are, by their very nature, stressful. Whether stressors relate to training, competitions, conditions, or expectations, or stress is physical, psychological, emotional, or social, all athletes experience stress on a daily basis. Stress is thought to be prevalent among athletes who compete at all levels but those in high-performance or dual-career (e.g., student-athlete) environments may be particularly susceptible to the experience and potentially detrimental effects of stress. The extent to which stress is harmful depends on the genetic, physiological, and psychological make-up of individual athletes which, in turn, impacts the ways that they perceive, experience, and respond to stressors (Lazarus, 1999). Indeed, athletes are likely to experience different cognitions, emotions, and behaviors, each of which will subsequently influence their health, well-being, and performance. As a result, stress has wide-reaching implications for athletes. Thus, consultants should be adept at helping athletes develop the ability to optimally manage stress in ways that will promote their health, well-being, and sports performances (Didymus & Fletcher, 2017a, 2017b).

Theory and Research

To understand the impact of stress for athletes and different approaches to stress management interventions, it is necessary to first understand the theoretical and empirical underpinnings of stress.

Stress in Perspective

Stress in an umbrella term that refers to stressors, appraising, emotions, coping, and outcomes of stress transactions. It involves physiological and psychological reactions to a perceived threat to athletes' health, well-being, and performances. Stress originated in the primitive survival instinct and its associated flight-or-flight reaction intended to ensure our survival. The activation of the sympathetic nervous system triggers changes in the brain and body that mobilize action in response to a perceived threat to survival.

Stress involves individuals experiencing one or more stressors, making appraisals of those stressors, experiencing emotions, and attempting to cope. Stress is a normal part of any environment that is driven by high goals and expectations, and sports are no exception. Despite what some may think, stress is an important and adaptive experience (to a point) that athletes engage with every day. Stress can help them to respond physically by encouraging more effort, building strength, and enhancing stamina when athletes are confronted with the often intense and exhausting schedules that they must keep. Stress can also generate emotions that can be perceived as facilitative such as excitement, pride, and happiness. Stress can also sharpen athletes' thinking and focus, which can help them to make better sports-related decisions and perform better in training and competitions.

At the same time, stress can be detrimental to health, well-being, and performance when athletes perceive stressors as a threat, feel helpless to respond to it or with a sense of harm or loss. These perceptions usually arise when athletes perceive that they no longer have the ability to cope with stressors effectively or have a lack of control over the situations they find themselves in. When stress becomes detrimental, several red flags may appear:

- athletes may feel psychologically overwhelmed and emotionally vulnerable;
- the quality of their efforts in training and competitions may decline;
- their health deteriorates;
- they may lose enjoyment and lack motivation in their athletic lives; and
- their general quality of life may decrease.

Stressors

To date, sport psychology researchers have highlighted that stressors are prominent in sport environments and that a variety of organizational stressors (e.g., those relating to funding, selection, travel to and accommodation during competitions, role conflict, leadership, and referees' decisions) are experienced and recalled more frequently than those related to competitive performance or athletes' personal lives (Hanton, Fletcher, & Coughlan, 2005). In addition, researchers have noted that group differences (i.e., between males and females; individual and team sports athletes; and international, national, or regional level performers) exist in the type and frequency of stressors that athletes experience and that stressors are encountered more often among athletes competing at an elite level than by those performing at a non-elite level. Additionally, student-athletes may experience a unique blend of stressors when trying to balance the demands of high-level sport and education. Indeed, student-athletes are thought to encounter stressors such as schedule clashes, fatigue, and financial pressure, and have reported a perceived need to prioritize sport to the detriment of education to overcome the stressors that they encounter (Cosh & Tully, 2014). Stressors can relate to both external and internal factors:

- External stressors include time pressure; workload; practice duration and intensity; weather; social conflicts; pressure from family; friends; and media; and financial problems.
- Internal stressors involve lack of perceived control; insufficient resources or skills; negativity; personal standards and expectations; doubt, worry, and fear; lack of support; poor physical health (e.g., illness, injury); and mental health difficulties.

Appraising

Though stressors are real and have a potentially impact on athletes, they do impact every athlete in the same way. The fundamental experience of whether stressors are harmful depends on how athletes appraise them and whether they believe they have the capabilities to manage them effectively. Stress is most acute and debilitating when athletes sense that the demands placed on them are greater than the resources they believe they can marshal in response.

Contemporary conceptualizations of stress place emphasis on the transactional nature of person-environment relationships and on the relational meaning that individuals construct from them (Lazarus, 2000a). These contemporary perspectives suggest that athletes will engage in cognitive-evaluative processes to ascribe meaning

to the stressors that they encounter and attempt to cope with them (Lazarus, 1999). At the theoretical heart of stress transactions is appraising, which refers to evaluations of situations that can affect athletes' beliefs, values, and or goals (Lazarus, 1999). Put simply, appraising is the act of making an evaluation and paves the way for psychological, physiological, emotional, and behavioral outcomes (see e.g., O'Donovan et al., 2012; Schneider, 2004). Researchers who have examined the ways in which athletes appraise stressors have found that athletes often respond negatively to stressors although they do have the potential to appraise stressors in positive ways (Didymus & Fletcher, 2012).

Symptoms

How athletes react to stress can be expressed by athletes in five main ways:

1. **Physical:** Increased heart rate, respiration, and adrenaline; frequent illness due to immune system deficiency; physical complaints (e.g., headache, stomach aches, GI distress, muscle pain); sleeping problems (e.g., exhaustion, insomnia, nightmares); fatigue; and changes in appetite (e.g., either overeating or calorie restriction).
2. **Cognitive:** Racing thoughts, excessive negativity and criticalness, low confidence, increased doubt and worry, poor focus, unrealistic expectations, memory lapses, learning struggles, decision-making difficulties, and obsessive thinking.
3. **Emotional:** Frustration, anger, moodiness, panic, worry, and excessive or inappropriate emotional expression.
4. **Social:** Social withdrawal, difficulty communicating, and increased conflict (e.g., between teammates).
5. **Performance:** Tentative performances, unusually high numbers of mistakes, inconsistency, reduced or excessive effort, lack of enjoyment, "give-up" syndrome, poor adaptability to changing conditions, and low resilience.

Coping

Coping is defined as "constantly changing cognitive and behavioral efforts a person makes to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (Lazarus, 1999, p. 110). An inability to cope with stress is thought to be an important factor in athletes underperforming during competition (Lazarus, 2000b) and in reduced health and well-being. Researchers who have focused on the coping strategies used by athletes (e.g., Didymus & Fletcher, 2014; Kristiansen, Murphy, & Roberts, 2012) have suggested that social support, self-reliance, pre-performance routines, thought stopping, and avoidance of stressful situations are important coping options.

Stress reduction

Various approaches to stress reduction have been explored in sport, which can be broadly categorized into three levels of intervention: primary, secondary, and tertiary. Primary-level interventions are preventive in that they aim to alter the environment to reduce or eliminate stressors (e.g., reducing the emphasis on winning, fewer practices; Dewe, O'Driscoll, & Cooper, 2010). This type of intervention is often more resource intensive than secondary- and tertiary-level interventions and require substantial buy-in from sport organizations because they may involve organizational restructuring or the development and application of new philosophies, policies, and procedures (e.g., improved communication channels and talent development; see Rumbold, Fletcher, & Daniels, 2018). The potential for primary-level interventions to create environments that minimize stress among athletes and coaches is significant but further research is required to better understand how to implement and evaluate them in sport. The effectiveness of this level of intervention in sport has not been evaluated more widely because of the challenges of instigating organizational change and the difficulties in trying to remove stressors from an activity that is inherently stressful.

The majority of sport psychology literature that has explored the efficacy and effectiveness of stress reduction interventions has focused on secondary-level techniques (see, for a review, Rumbold, Fletcher, & Daniels, 2012).

These interventions have been described as the reduction "of experienced stress by increasing awareness and improving the stress management skills of the individual through training and educational activities" (Cooper & Cartwright, 1997, p. 8). These types of interventions do not attempt to eliminate stressors but, rather, focus on how athletes can mitigate or relieve negative outcomes of stressors (Rogissart & Martinent, 2017). Secondary-level interventions include psychoeducation, relaxation, psychological skills training, synchronous music, motivational general imagery, hypnosis, and cognitive restructuring (Rumbold et al., 2012), as well as meditation, yoga, and biofeedback. Little research exists that compares the effectiveness of different secondary-level interventions but the work that has been published suggests that multimodal interventions may be more effective than unimodal interventions (Rumbold et al., 2012).

The third group of interventions (tertiary level) involves techniques (e.g., counseling) that aim to address the outcomes of stressful experiences, rather than addressing the precipitating stressors (primary level) or individuals' experiences of them (secondary level). These types of interventions are considered to be reactive or rehabilitative and are typically introduced once athletes are already suffering from negative outcomes of stress (e.g., diminished psychological well-being, emotional exhaustion, burnout). Tertiary-level interventions in sport that involve counseling, for example, have been conducted in the contexts of injury support (Gutkind, 2004) and career change-events (Samuel, 2013). Outside of sport psychology, counseling has been widely discussed as an effective technique for helping individuals to cope with psychological (e.g., depression) and physical (e.g., infertility) conditions, difficult life events (e.g., bereavement), and various affective situations (e.g., low self-esteem; Van den Broeck, Emery, Wischmann, & Thorn, 2010). Despite this promising body of evidence, rehabilitative approaches to stress reduction shift focus away from prevention and towards reactive interventions that only help athletes after stress has had a debilitating impact on them.

Practical Implications

An essential role that consultants play when helping athletes to achieve their goals is to help them learn to cope with the inevitable stressors that they will experience both within and outside of sport. As such, consultants must have at their disposal a well-stocked "toolbox" of techniques that address stress directly while leveraging the consultant-client relationship that is built on credibility and trust. This combination can then be used to optimize stress transactions that will both enhance athletes' performances and safeguard their overall health and well-being (Didymus & Fletcher, 2017a).

Approaches to Overcoming Stress

Consultants' work with athletes in helping them to cope effectively with stress begins with establishing a way they can approach stressors in a helpful manner. Athletes can think about stress much as they would the thermometer and thermostat in their homes. When their home gets too hot, they adjust the thermostat to a more comfortable level. The same applies to athletes' experiences of stress. They know when stress is at a manageable level and need to recognize when it is becoming problematic. When that happens, athletes can to adjust their stress thermostat (Mohr, 2010), that is, reduce the stressors they experience, adjust their appraisal of them, or increase their coping resources. By adjusting their stress thermostat in one of these ways, athletes not only lessen the potential for negative outcomes of stress but also take control of their experiences and feel empowered to cope more effectively.

Another part of consultants' work with athletes involves explorations of how they perceive their ability to respond to stressors in training, competition, and outside of sport. As noted in the Introduction, *CASP* is deliberate about the vocabulary it uses to describe the wide range of phenomena that are discussed and stress is no different. The conventional terminology for addressing harmful stress is "stress management." Yet, the term management has the connotations of just getting by or barely dealing with a situation. Such an understanding of management doesn't do justice to what athletes need to do overcome harmful stress in their lives, whether within or outside of their sport. Nor does it suggest true empowerment in taking control of the stress in their lives. Consequently, the term "stress mastery" is used to describe a proactive, assertive, and vigorous approach to addressing stress among athletes. Moreover, this perception can be of a victim, manager, or master:

- Stress victim: suffer from and controlled by stress, loss of motivation to succumb to stress quality of effort deteriorates, depression and or anxiety may be evident.
- Stress manager: respond to stress but most often reactively so there is little sense of control, get by, hang on, short-term relief but long-term negative impact.
- Stress master: accept stress, positive attitude toward stress, prepare for stress proactively, feel in control of stress, thrive in stressful situations.

A key goal for consultants is to help athletes see themselves as stress masters. The notion of mastery (see, e.g., Ntoumanis & Biddle, 1999) is already woven into the fabric of sports in terms of mastering skills, conditions, and their opponents. That same feeling associated with mastery—more control and empowerment—can be helpful in when coping with stressors that they will inevitably face during their sports careers.

Steps to Stress Mastery

Consultants can help athletes to achieve mastery of their stress experiences by, first, having them take active steps to understand stress and gain control of it. This first step involves athletes accepting stress as a normal part of their athletic career (Weston, Thelwell, Bond, & Hutchings, 2009). So, when stressors present, they are not fully unexpected but are seen as an inevitable part of their journey toward their goals. The second step is for athletes to recognize when, where, and with whom stress often occurs. Consultants can point out patterns in the situations, people, and experiences in which athletes experience stress. When athletes know in what situations stress is likely to arise, it is partially mitigated because they see it as more predictable (Didymus & Fletcher, 2012) and controllable, and they are in a better position to prepare and respond positively. The third step involves identifying athletes' recurring stressors. In doing so, consultants can explore the most common stressors and their root causes. The fourth step is for consultants to assist athletes in shifting their focus away from being overwhelmed by or wallowing in stressors and onto optimization of their coping resources. With this emphasis, athletes tend to feel more in control, confident, and emboldened to cope with stress effectively.

When athletes experience stressors, consultants can show athletes that they have three possible solutions to pursue. First, they can try to change the stressors themselves. For example, if an athlete is part of a team that is led by a coach who is overly focused on winning and can act abusively toward his players, the athlete can join a different team with a coach who focuses on fun and process. Second, athletes can alter their appraisals of stressors (Didymus & Fletcher, 2017a). For instance, imagine that two swimmers of equal ability have a big meet approaching and are experiencing pressure from their parents to win their events. In this case, each athlete is experiencing the same stressors but can appraise them in very different ways. Swimmer A appraises the stressors as threats to her goals and well-being and is overwhelmed and paralyzed by them. In contrast, Swimmer B appraises the stressors as a challenge and is excited and energized by the stressful experience. In all likelihood, Swimmer B will outperform Swimmer A because challenge appraisals lead to more beneficial coping and performance outcomes. Third, when confronted with stressors, athletes can attend to the outcomes of stress. For example, consultants may teach athletes how to use a variety of stress-mastery tools. Physical tools include meditation, massage, biofeedback, and exercise. Mental tools include perspective taking, positive thinking, refocusing, and emotional redirection.

The final step is for consultants to fill a "toolbox" with stress-mastery tools that athletes can access when they experience stressors both within and outside of their sports lives. Though stress is inevitable in sports, the potential for negative outcomes can be exacerbated when athletes do not believe that they have the means to cope effectively with stressors. Conversely, stress can be mitigated substantially when athletes feel more in control of and capable of mastering it. This position of strength can occur when athletes have access to a variety of coping techniques with which they can proactively and reactively address stressors.

Given the breadth of issues that stress encompasses (e.g., stressors, appraisals, emotions, and coping) and the individual differences (e.g., personality, resilience, trait anxiety; e.g., Kaiseler, Polman, & Nicholls, 2009) that influence athletes' responses, consultants are not likely to find success by using a "one size fits all" approach to stress mastery. Instead, consultants can approach their stress-related work with athletes with a well-stocked toolbox from which they and athletes can choose tools that will be most effective for their particular needs and goals. As noted earlier in this section, stress can be addressed at many levels of the experience and specific tools can be offered at each of those levels.

General Tools

Consultants can show athletes some general tools that can be used to relieve stress:

- **Manage time and energy:** Athletes should do what they need to do in their sports and overall lives but should not over strive or over commit.
- **Have healthy outlets:** Athletes should have activities (e.g., cultural and spiritual pursuits, cooking, reading, and watching movies) that provide them with joy, excitement, meaning, satisfaction, inspiration, and pride that can "refill their tanks" when they experience stress.
- **Build a social support network:** One robust finding in published research on stress is that social support acts as a buffer against stress and that family, friends, and significant others (e.g., coaches, teammates) can provide emotional support, sympathy, problem solving, encouragement, perspective, and distraction from stressors.
- **Increase coping resources:** Negative outcomes of stress often arise when the real or perceived demands of a situation exceed athletes' real or perceived resources to cope. By increasing their coping resources (e.g., by getting help from others, gaining relevant information and skills, or giving themselves more time), athletes are able to tip the scales of resources and stressors into a healthy balance.
- **Rest:** Where stress can negatively impact athletes' bodies and minds, rest heals and restores them.
- **Eat well:** A healthy and balanced diet bolsters athletes' immune systems and gives them the energy they need to meet the stressors they experience.
- **Exercise:** Exercise provides athletes with opportunities to boost strength and stamina that can protect them from negative outcomes of stress, and also acts as a temporary escape and distraction from stressors.
- **Take a break:** By taking a break from the situations in which stressors occur, athletes distance themselves physically and psychologically and, thus, its effects on them.

Physical Tools

Consultants can also teach athletes a variety of physical tools that can help their bodies and minds to counteract negative outcomes of stressors. When experiencing stressors, physical strategies can lessen the immediate symptoms and make athletes feel more relaxed and comfortable:

- **Breathing:** Slow and deep breathing has a direct impact when stress has caused changes to heart rate, neurochemicals, and muscle tension. Breathing exercises provide additional oxygen that slows heart rate, reduces stress-inducing neurochemicals, relaxes muscles, and increases athletes' sense of comfort and well-being, while also taking their minds off of the stress experience.
- **Muscle relaxation:** During stressful encounters, muscle tension increases to protect the body and prepare for fight or flight. When athletes engage in relaxation exercises (e.g., meditation, yoga, or targeted relaxation), muscle tension is relieved, and athletes' bodies are better able to withstand stress.
- **Music:** Music has a profound influence on athletes psychologically, emotionally, and physically by transporting them from their stressful lives into worlds of tranquility or excitement, either of which, depending on their musical tastes, can relieve outcomes of stress and re-instill a sense of relaxation and comfort.
- **Biofeedback:** Using technology that provides objective information about their physical responses to stress (e.g., heart and respiration rates), athletes are able to gain awareness of and control over the physical outcomes of stress.

Mental Tools

How athletes think about the stressors they experience impacts their physical and psychological reactions to them. As a result, by changing the way athletes perceive, interpret, and feel about stress, they also alter the degree to which stress affects them:

- **Positive thinking:** When athletes view stress in a positive light and talk to themselves positively, the potential for negative outcomes of stress is lessened.

- **Mindfulness:** The practice of mindfulness increases athletes' awareness of stress, centers them, and has relaxing effects on their minds and bodies.
- **Imagery:** When athletes see and feel themselves performing well and transacting positively and calmly with stressors, their minds and bodies respond accordingly.
- **Journaling:** Writing down their thoughts and feelings related to stress transactions can act as a cathartic coping technique for athletes.
- **Problem solving:** If stressors relate to controllable situations, athletes can find solutions that directly alter or manage the stressor(s).
- **Distraction:** Athletes can ease the immediate experience of stress by thinking about other things, interacting with people, or engaging in a diverting activity.
- **Have fun:** Doing enjoyable activities, smiling, and laughing distracts athletes from stress, produces pleasant emotions, generates positive thinking, and activates the parasympathetic nervous system, all of which counteract negative outcomes of stress.

All of the above mental tools have been discussed in greater detail earlier in *CASP*. Consultants can use the general information and approaches from the previous chapters and apply them to stress mastery with athletes.

Summary

- Whether stressors relate to training, competitions, conditions, or expectations, or stress is physical, psychological, emotional, or social, all athletes experience stress on a daily basis.
- Stress has wide-reaching implications for athletes and, thus, consultants should be adept at helping athletes develop attitudes and tools to optimally manage their experiences in ways that will promote health, well-being, and sports performances.
- Despite what some may think, stress is an important and adaptive (to a point) experience that athletes engage with every day.
- Stress can help athletes to respond physically by encouraging more effort, building strength, and enhancing stamina when athletes are confronted with the often intense and exhausting schedules that they must keep.
- Stress can be detrimental when athletes perceive stressors as a threat or with a sense of harm/loss. These perceptions usually arise when athletes perceive that they no longer have the ability to cope with stressors effectively or have a lack of control over the situations they find themselves in.
- External stressors include time pressure, workload, practice duration and intensity, weather, social conflicts, pressure from family, friends, and media, and financial problems.
- Internal stressors involve lack of perceived control, insufficient resources or skills, negativity, personal standards and expectations, doubt, worry, and fear, lack of support, poor physical health (e.g., illness, injury), and mental-health difficulties.
- How athletes appraise stressors determines the physical, psychological, and behavioral outcomes of stress.
- Negative outcomes of stress relate to physical, cognitive, emotional, social, and performance changes.
- Red flags of stress include athletes feeling psychologically overwhelmed and emotionally vulnerable, reductions in the quality of athletes' efforts in training and competitions, health deterioration, loss of enjoyment and motivation, and general decreases in quality of life.
- Three ways in which athletes can address stress is to prevent the stressors before they arise, relieve the outcomes as they occur, or address the effects of stress after it happens.
- Athletes can respond to stress as victims, managers, or masters.
- Athletes can master stress in several steps including accepting it as normal, identifying their most common stressors, recognizing when and where stressors occur, shifting focus away from the experience of stress and on to resolving it, and developing a toolbox of strategies to cope.
- General tools for mastering stress include managing time and energy, having healthy outlets, building a social support network, increasing resources, getting rest, eating well, exercising, and taking a break.
- Physical tools for mastering stress involve breathing, muscle relaxation, music, and biofeedback.
- Mental tools for mastering stress include positive thinking, mindfulness, imagery, having fun, problem solving, journaling, and distraction.

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WELL-BEING

Gloria Park

Why is it important to support the mental health and well-being of athletes? Athletes are more than the sum total of their best performances, and sense of self-worth, happiness, and fulfillment should be tied to more than just

their athletic accomplishments. This is particularly true since even the most successful athletes will remain competitive into their thirties as Olympians and professionals, but for the vast majority of athletes, their serious sports careers end in high school. The field of applied sport psychology focuses on supporting processes that contribute to optimal performance. While the quality and consistency of athletic performance itself are of chief interest, consultants should understand that other outcomes, for example, the development of character, psychological flourishing, and enduring social connections, should be outcomes that matter just as much as discrete moments of athletic performance.

Athletes' lives outside of the domain of practice and competitions are impacted by their sports experience. Conversely, when athletes perform in their sport, they don't leave their "personness" on the sideline. Thus, athletes' well-being influences their capacity to perform, and in turn, their sports experiences can powerfully impact their well-being. For example, competitive failures may hurt self-worth, produce negative emotions, and interfere with relationships. However, armed with the right attitudes and tools, those competitive failures can become fruitful opportunities to cultivate motivation, confidence, and resilience. Happiness and well-being can support and precede performance and success across a broad range of domains (Lyubomirsky, King, & Diener, 2005). It is well accepted that the primary focus of the field of applied sport psychology is on helping athletes to perform their best and achieve their goals in their sport. At the same time, given the importance of well-being in both the immediate and long-term lives of athletes, it is also incumbent on consultants to understand that other aspects of the sports experience matter apart from simply competitive outcomes. On the way to supporting athletes' goal attainment, consultants can integrate opportunities to teach strategies that can help them cultivate and sustain their well-being. In fact, the mental muscles (e.g., motivation, confidence, focus) and the mental exercises and tools (e.g., goal setting, mindfulness, self-talk, breathing) that were described in Chapters 3 and 4 are equally beneficial for the development of well-being in athletes and can be used to facilitate lifelong mental health and success in other domains of life (Moore & Bonagura, 2017).

Theory and Research

Because Chapter 8 examines clinical issues among athletes, this section will not focus on "mental health," but rather on "mental wealth" (Uphill, Sly, & Swain, 2016). Mental health traditionally refers to the absence of pathology. In contrast, mental wealth relates to key psychological functions that enable enriching and engaging lives, the capacity to overcome challenges and adversity, and flourishing in meaningful areas of athletes' lives. This notion of mental wealth can be useful to consultants in their work with athletes as they make progress toward their goals in sports and other areas of their lives.

Approaches to supporting "mental health" are not the same as cultivating "mental wealth" (Uphill, Sly, & Swain, 2016): Simply attaining "mental health"—defined as the absence of pathology—does not necessarily contribute to athletes' "mental wealth"—or the presence of positive psychological strengths such as purpose and grit, since resolutions in pathology can be orthogonal to the development of positive mental states. Clarifying this distinction is beneficial to consultants as they navigate the sometimes murky waters of intervention with athletes. As will be noted in Chapter 8, only licensed professionals are qualified to address mental-health challenges that rise to the level of a clinical diagnosis. With their training, clinicians can effectively diagnose, target, and intervene with athletes to resolve the presence of mental illness.

Well-being, however, does not exist simply in the absence of mental illness. Well-being is defined independently as the presence of positive mental health, which includes dimensions of positive emotional states, self-actualization, as well as meaning, purpose, and functioning within a societal or community structure (Westerhof & Keyes, 2010). Although there are various theories underlying well-being (see Grenville-Cleave & Brady, 2018), the two-continuum model of mental health by Keyes (2002) might be the most relevant for thinking about how to move beyond a pathology-focused approach and broaden consultants' understanding of how to support both performance outcomes and well-being. The two-continuum model views mental health and mental illness as distinct (but related) phenomena rather than opposite ends of a single continuum (see Uphill, Sly, & Swain, 2016 for a complete description). This model helps explain how athletes struggling with mental health issues may still be able to experience success in their sport.

Understanding the two-continuum model can aid consultants in better identifying when to refer clients to licensed clinicians, and to broaden their thinking around available intervention strategies since (unlike with

clinical issues) consultants with a broad range of education, training, and experience can intervene to support the development of mental wealth, enhanced performance, and well-being. A focus on building mental wealth, strengths of character, and means of resilience can also serve to circumnavigate the stigma around mental illness and weakness that can impede athletes' willingness to seek help.

PERMA

The PERMA model of well-being (Positive Emotion, Engagement, Relationships, Meaning, and Achievement; Seligman, 2018) suggests that well-being is composed of some combination of its elements and the makeup of what flourishing looks like can vary from individual to individual. The PERMA framework provides opportunities for consultants to actively explore and develop new pathways to athletes' well-being just as mental training allows them to impact their mental preparation in their sport positively. Consultants can work with athletes on a broad range of strategies considering all elements of PERMA in their quest toward athletic success and life beyond sport. This subsection will present a conceptual understanding of how consultants can support "mental wealth" of athletes through positive interventions and introduce a sampling of strategies based on the PERMA model that can help athletes build the essential psychological building blocks for flourishing (see Park-Perin, 2010 for additional approaches).

Positive Emotions

Positive emotions, such as joy, excitement, pride, awe, and inspiration, serve distinct functions from negative emotions, contribute to the experience of fulfilling lives, and serve to build critical social and psychological resources across the lifespan (Fredrickson, 2009). Many consultants are adept at helping athletes understand how negative emotions impact their sports participation and performance and sharing ways to productively leverage negative emotions in the service of performance. By understanding the functional role of positive emotions, consultants can help athletes to better embrace the full range of human emotions and be more purposeful and intentional about cultivating more of these emotions as a means of achieving optimal performance and well-being. They can help athletes to identify the situations in which positive emotions are most commonly experienced and become more mindful when they arise so that these emotions can be savored and sustained. Consultants can also help athletes understand how the induction of positive emotion can shift cognitive perceptions, fuel motivation, and support recovery from challenges and setbacks.

Engagement

Deep engagement and absorption in sports can lead to optimized performance in a discrete moment, as well as optimized experiences across a broad range of performance domains (Nakamura & Csikszentmihalyi, 2014). Consultants often work with athletes to better clarify the antecedents of flow (namely challenge–skills balance, clear goals, and unambiguous feedback). Consultants can target changes in flow by leveraging existing mental training approaches including imagery, mindfulness, and pre-performance routines (Norsworthy, Gorczynski, & Jackson, 2017). With this knowledge, athletes can become better architects of flow experiences and understand how moments of deep and powerful engagement contribute to sport success and well-being. While deep engagement and flow experiences can foster optimal performance, consultants can also explore ways to help athletes disengage to enable full rest and recovery, and more balance off the field. Finally, as athletes transition out of their often-brief careers, consultants can help athletes learn how to bring the strengths they developed in sports to bear to pursue goals outside of the athletic domain.

Relationships

Much of the research on how to cultivate well-being can be boiled down to a single phrase: "Other people matter" (Peterson, 2006). In a variety of ways, an individual's sense of well-being hinges greatly on the quality of the connections they share with others. For athletes, these connections can be an important

source of support, belongingness, and encouragement or they can be a significant source of stress, conflict, and ill feelings. Interpersonal skill development is also an area ripe for exploration and intervention with athletes as it relates to well-being. Consultants can work with athletes and their broader network of social support to enhance the quality of relationships with family, partners, friends, teammates, and coaches. When presented with opportunities to work with key figures who influence the success and well-being of athletes, consultants can consider concepts like Active Constructive Responding (ACR; Gable & Reis, 2010). ACR provides guidance on how to provide meaningful, positive feedback in a way that also builds relationships and supports future performance efforts.

Meaning

In the daily grind of athletes' lives, it can be easy for them to keep their eyes on the prize of outcomes and goals but lose sight of the sense of meaning and purpose underlying their sports pursuits. Meaning and purpose contribute greatly to well-being in a distinctly different way than happiness and positive emotions, and their presence is a hallmark of those living enriching and fulfilling lives. Consultants can encourage athletes to regularly identify, clarify, and connect with their values. Because consultants are often with athletes during the peaks and valleys of their competitive careers, they can help them to make sense of their how deepest failures, most challenging setbacks, as well as their greatest successes, fit into the larger narrative of their lives. Additional approaches to cultivate meaning come from strengthening connections to others, intentionally working toward purpose, storytelling, and seeking out transcendent experiences (Esfahani Smith, 2017). As athletes transition out of the competitive sphere, consultants can help them explore ways to give back to others through sports, through coaching, mentoring, or passing along their skills and experience in other significant ways.

Accomplishment

Because high-achieving, goal-oriented athletes are so focused on their sports performances, it can be difficult for them to consider what well-being means to them apart from the results they produce. Well-being for this population is often equated to wins, personal bests, awards, and status. This relationship to well-being is best understood by athletes because their accomplishments, as expressed through objective measures of success, reward their engagement, generate affirming emotions, foment relationships, and are powerful incentives for their ongoing commitment in pursuit of their goals. Consultants can help athletes redefine and broaden their understanding of accomplishment as something more than attaining objective goals. Well-being often also comes from the pursuit of mastery-oriented activities (Bradford & Keller, 2016), and consultants can help athletes shift focus to process-related and more subjective metrics of success. They can also work with athletes to develop the mental tools and healthy character attributes necessary to sustain their efforts along the way, including confidence, grit, resilience, and focus.

Practical Implications

The distinction between mental health and mental wealth, and the discussion of PERMA, provides a theoretical foundation for empirically validated approaches to fostering well-being. The three perspectives outlined below are examples of approaches that span across multiple dimensions of PERMA, and contributors to well-being that consultants can bring to light and leverage for athletes.

Pursuing Purpose and Passion

Consultants can encourage athletes to simultaneously pursue success and well-being through understanding and cultivating harmonious passion (Vallerand et al., 2008). Athletes are willing to put forth energy and effort toward their sport often year after year because they enjoy the pursuit and the activity. The way that their chosen activity becomes integrated into an athletes' identity can be categorized as either *harmonious* or *obsessive*, according to the Dualistic Model of Passion (Vallerand, 2010). Harmonious passion is characterized by autonomous internalization, where a

person feels free to choose whether or not they engage in an activity and where the activity exists in harmony with other salient dimensions of a person's life. Conversely, obsessive passion results from controlled internalization and characterized by a compulsive drive to engage in an activity, and therefore the activity exists in conflict with other dimensions of life (Vallerand et al., 2008).

Passion is the fuel that enables individuals to sustain engagement in highly demanding activities, and although it is commonly assumed that high levels of performance come only from passion that is more closely characterized as obsessive, Vallerand and colleagues (2008) have found that both harmonious and obsessive passion are predictors of behaviors that contribute to performance. Achievement does not have to come at the cost of other valued and meaningful aspects of life. While sport psychology continues to focus on goal-setting as a primary pathway to performance optimization, more needs to be understood about the unhealthy ways that overemphasis on goals and perseverance can unintentionally hinder long-term success and performance sustainability. Performance excellence at the elite level can often come at a cost to other life domains, such as academic and social relationships. Harmonious passion, characterized by less goal conflict and higher levels of positive affect and enjoyment, can help individuals find balance in their lives is central to performance coaching in other domains. Consultants can focus on aiding athletes in finding more balance between work and their social and familial lives, leisure activities, in addition to helping them develop tools to better manage their time and energy. Sport psychology consultants can help their clients define, prioritize, and devise effective ways to find balance in their own lives through cultivating other pathways to well-being.

An emphasis on "peak performance" sometimes undermines greater opportunities to hone in on meaning and purpose. When deeply committed to a specific sport, it can be difficult to see how that activity connects athletes to more long-term objectives. While consultants offer excellent guidance on how to set and obtain goals, they can also help athletes find ways to use their physical skills and talents outside the competitive arena and in service of others and their community. They can encourage athletes to find time to teach and mentor others through coaching, get involved in social justice initiatives or volunteer service, or pursue career fields that continue to allow them to be part of a sport culture in a different capacity. During periods of major transitions or retirement out of competitive sports, consultants can also provide opportunities for athletes to help understand how sport participation has helped them become who they are, regardless of the outcomes they have or have not achieved.

Supporting Strengths

Athletes likely spend a lot of mental energy thinking about what they need to do to improve themselves and their performance. Reflecting on deficiency is healthy and productive when it leads athletes to engage in strategies to support growth and development. However, fixing weakness is just one pathway to fully optimizing performance. Many people have difficulty thinking about their strengths beyond the scope of something they *do* well, like sink free throws or slay backhands. Strengths are more than skilled execution: they are who they are at their best, a reflection of how their deeply held values and beliefs show up in their daily actions and attitudes. Operating from strengths can support feelings of authenticity, support intrinsic motivation, and reduce burnout (Peterson & Seligman, 2004).

Identifying, naming, and learning how to use strengths can help reduce stress, increase well-being and decrease depression (Duan & Bu, 2019), and overcome illness and injury (Peterson & Seligman, 2006). Consultants can help athletes understand what their strengths are by providing them with language and dedicated time to reflect on what their strengths might be. Consultants can also help athletes redefine strengths as more than competency with a particular skill: Strengths redefined as reflections of deeply held beliefs and values, as well as behaviors that feel energizing, authentic, and intrinsically motivating can help them figure out how to bring more of those strengths to bear across all aspects of life. Through assessments like the Values in Action Inventory of Strengths (VIA-IS; Peterson & Seligman, 2004) it is possible to gain more perspective on how strengths influence goal pursuit, how athletes may engage with the world and others, and learn how to bring them more fully on and off the field. Using strengths every day can help transform tasks that you might not enjoy doing and fuel perseverance. From an interpersonal and team perspective, team strengths use predicted flourishing, and feelings of interconnectedness and embeddedness within a team (Stander, Rothman, & Botha, 2017). The goal is intelligent use of strengths, which also involves understanding how strengths aren't working in certain situations or with no regard for others, and how these conflicts might undermine performance or work to the detriment of the team.

Cultivating Gratitude

Reaching and sustaining the highest levels of performance and success requires athletes to be stereotypically self-oriented, possess a singular focus on achieving their goals, and be self-critical of their flaws, mistakes, setbacks, and failures. The human brain has a hardwired tendency called the negativity bias, which is an evolutionary artifact that aids with helping to quickly identify threats in the environment and respond to them with speed and accuracy (Baumeister, Finkenauer, & Vohs, 2001). For athletes, the negativity bias may be supercharged by the motivation to identify and overcome any weaknesses in their sport to facilitate goal attainment. Indeed, focus on growth, mastery, and constant improvement, which is necessary and adaptive in many ways, can further exacerbate athletes' tendencies to focus on, give more weight to, and remember the negative. Positive experiences and beneficial feedback by comparison are much less sticky and more fleeting than the negative. Negativity can catalyze motivation and performance in certain situations but, when it dominates cognitions and emotions, can lead to more serious outcomes including a decline in well-being and mental health.

Consultants can help athletes to minimize the impact of this sometimes destructive self-focus by encouraging them to cultivate gratitude. This practice can support well-being by providing a counterbalance or a positivity offset to the negativity bias. Interventions that focus on cultivating gratitude "can have positive benefits for people in terms of their well-being, happiness, life-satisfaction, grateful mood, grateful disposition, and positive affect, and they can result in decreases in depressive symptoms" (Dickens, 2017, p. 204). Although gratitude has not been shown to be directly related to sport performance outcomes (Chen, 2018), gratitude interventions can generate positions emotions, foster a more relaxed physical state, encourage athletes to reflect on strategies that lead to good performances as well as lift the weight of expectations that they may feel from themselves or others. By intentionally seeking out opportunities to notice good things each day, athletes can train their attention to more habitually notice and remember positive dimensions of their lives. Consultants can teach athletes gratitude exercises including journaling, writing about three good things and reflections on why those good things happened, and regularly thanking others who have supported their sports efforts (most notably, parents, family, and coaches).

Expressions of interpersonal gratitude are mutually beneficial for both the sender and the recipient. Expressions of gratitude from coaches and teammates can reinforce positive behaviors that contribute to individual or team success. When athletes are on the receiving end of appreciation from teammates and coaches, it can create social benefits by inspiring them to pay the goodness forward to others and create positive social contagion. Gratitude can also encourage athletes to focus on personal growth, meaning, and mastery as indicators of success rather than the tangible measures of success (Polak & McCullough, 2006).

Summary

- Athletes are more than the sum of their successes on the field of play and their sense of self-worth, happiness, and fulfillment should be tied to more than just athletic efforts.
- Well-being can be characterized as people's sense of being healthy, happy, and comfortable in their lives and typically encompasses physical and mental health, nurturing relationships, a stable environment, an enjoyable and satisfying school or work setting, and economic sustainability.
- Given the importance of well-being in both immediate and long-term lives of athletes, it is also incumbent on consultants to understand that other aspects of the sports experience (e.g., character development, mental health, emotional stability, and healthy relationships) should also be outcomes that matter to both the athlete and consultants.
- Mental wealth involves helping mentally healthy athletes to more fully develop themselves psychologically and emotionally with the goal of maximizing sports performance in pursuit of their goals.
- Consultants with a broad range of education, training, and experience can intervene on issues related to mental wealth, performance enhancement, and well-being.
- The PERMA model (Positive Emotion, Engagement, Relationships, Meaning, and Achievement of well-being provides a structured framework that consultants can use with athletes to foster their well-being both away from and in their sport.
- In addition to pursuing healthy passions, supporting strengths, and cultivating gratitude, consultants can bring to light and leverage approaches to support the broad range of elements described in the PERMA model.

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AT-RISK ATHLETES

Latisha Forster-Scott

The purpose of this section is to discuss factors that place athletes, particularly student-athletes, at risk for dropping out of sport. When "at-risk" athletes are addressed in the literature, it is typically along the lines of injury, drug, alcohol, and steroid use (Buckman et al., 2011; Cimini et al., 2015; Hoff, 2012; Rattner et al., 2011). For the purpose of this discussion, however, "at-risk" will be defined more broadly as athletes who have a greater probability of dropping out of sport due to daily stressors outside of sport that include academic performance, learning disabilities, legal issues, poverty, homelessness, food insecurity, transportation, familial issues, and problems within the community. Athletes often live insulated lives while they are dedicated to meeting the demands

of their sport. At the same time, they are not immune to challenges that arise in their wider lives and these matters can negatively impact their mental and physical health, well-being, and sport engagement.

Consultants can be valuable resources for at-risk athletes due to their professional credibility and the trusting relationships they establish. Moreover, consultants may have greater access to the particular details of athletes' lives because athletes may feel more comfortable sharing specific information with them as compared to parents, family, coaches, or teammates. Consultants can be better trusted to maintain confidentiality with athletes and there is less of a concern by athletes about consultants influencing decisions related to their place on the team or in their sport. As a result, athletes may be more forthcoming about their lives without fear of judgment. Whether a consultant works with high school athletes, collegians, Olympians, or professionals, there is a likelihood that they will come across athletes who are struggling with issues unrelated to their sport, yet those issues are putting them at risk in their sport as well as having a potentially negative impact on their future life trajectories.

Theory and Research

Athletes can become at risk in their sports lives for a variety of reasons. Moreover, these struggles are often outside of their control, so they are unable to directly and constructively respond to the challenges. An understanding of these difficulties will help consultants to empathize with, support, and respond in helpful ways to at-risk athletes.

Lack of Basic Needs

The prevalence of poverty, homelessness, and food insecurity in the United States is significant. Research indicates that in K–12 education, 1.3 million children are homeless and 8 million live in households where there are low levels of food security (Broton & Goldrick-Rab, 2017). Indeed, 22%-36% of college students reported being hungry and not having enough money for food, 7–11% of college students reported not eating for a whole day due to a lack of money, up to 14% of community college students and 2% of four year college students report homelessness, and 1 in 10 report housing insecurity. To believe that student-athletes are not impacted by these issues is a false sense of reality. Even when student-athletes receive scholarships and financial aid, a percentage of them will still experience insecure housing and food resources. Additionally, most student-athletes do not receive scholarships and, if they do, they only cover a portion of their college expenses. The portion that scholarships typically cover goes toward tuition and, as a result, they must decide how to pay for necessities such as housing, food, books, transportation, and daily expenses. If the family of the student-athlete is unable to provide financial support to supplement scholarships, this leaves the student-athlete vulnerable. Unlike non-athletes who may be able to secure jobs based on their marketable talents, many athletes are unable to do so due to the high demands of sport participation, as well as the restrictions placed on them by sport governing bodies such as the NCAA when it comes to ways in which they can earn money (NCAA, 2018). For some athletes, the costs of sport participation begin to outweigh the benefits, thus they make the choice to drop out or allow themselves to fail out.

Athletic-academic Balance

Student-athletes who are near completion of their athletic eligibility, but are not academically close to graduating, may also drop out of sport prior to completion of their eligibility for athletic competition. For athletes who have desires of competing at a professional level and realize that those aspirations are not a realistic possibility, this could trigger a significant loss of motivation in school and sports. This is particularly relevant where school was a means to an end to compete in professional sports because, once collegiate sports appear to no longer be an avenue that will lead to professional career, athletes may lose motivation to work hard in school simply because there is less of a commitment to academics to begin with. Being a collegiate athlete is a substantial obligation in which most athletes will spend over 40 hours per week dedicated to their sport and less time on academic work (Rankin et al., 2016). Additionally, many athletes must regularly miss class to travel and compete. It is understandable then why some student-athletes choose to drop out as some will determine that the psychological, emotional, and physical costs of remaining committed academically are too high.

It is also possible athletes are dealing with some level of identity foreclosure due to investing little time in other long-term career options (Beamon, 2012; Murphy et al., 1996). Thus, school has less meaning and, once student-athletes lose academic eligibility, they also lose the privilege to engage in collegiate sports. If athletes have a pessimistic outlook on their current opportunities in their sport and in their long-term prospects, there is a greater likelihood that they will not graduate.

Research from a large sample of athletes indicates that student-athletes tend to have better outcomes academically and athletically when they have better relationships with faculty and athletic personnel. However, research also indicates that many faculty have negative perceptions of athletes and significantly underestimate the amount of time student-athletes commit to sport (Rankin et al., 2016; Forster-Scott & Rosendahl, 2011). Furthermore, many athletes deal with stereotype threat when it comes to identifying as an athlete, meaning the stereotype of "dumb jocks" or "over-privileged" athletes makes it more difficult for some athletes to approach and forge relationships with faculty and non-athlete students (Yopyk & Prentice, 2005). Consultants can be instrumental in helping the student-athlete to identify alternative educational and career options, explore how personal strengths are transferable to other areas beside sport, and how to navigate relationships outside of the sport setting.

Learning Disabilities

Another area of concern is the transition from high school to college particularly for athletes with learning disabilities. It is estimated that 11% of undergraduate students have a learning disability and that, if student-athletes have a learning disability, they may struggle upon entry into college. This transition can be especially difficult for talented athletes who are often "passed through" their high school academic experience by being allowed to take easy classes, given certain "accommodations" in their grades, and receiving extra support (both ethical and unethical) from parents, coaches, teachers, and administrators.

Additionally, as part of the transition from high school to college, many athletes, parents, coaches, and high school academic counselors are unfamiliar with the recruiting and acceptance practices for student-athletes with special needs. It is estimated that every year approximately 1500 student-athletes with learning disabilities seek NCAA eligibility certification and about one third of them are denied (Denbo, 2003). This number does not account for students who have special classification status in high school and do not attempt to seek classification status in college yet enter college anyway. Many of these athletes will forego the process of getting approval for college-level special-needs accommodations because they do not know the process exists, are not aware that it is an option, don't know how to do it themselves, or receive no support in navigating the system. These student-athletes are at particular risk because once they get into college through the regular admissions process, it typically means they barely met the requirements but now will not have the accommodations they need to effectively pursue and experience academic success. These student-athletes end up struggling and eventually fail or drop out. Adding to the problem is that, unlike in high school where the majority of the resources are located in one building, at many colleges and universities, the necessary resources are typically dispersed throughout the campus (e.g., the writing center, academic and career advisement, specific departments to meet with faculty for additional help; Weiss & Robinson, 2013) and these student-athletes aren't given a road map for seeking out these resources.

Practical Implications

Consultants have either experience in treating serious mental-health issues or the relationships and resources to refer out to an appropriately trained professional when they lack the specialized training. In a similar manner, consultants need to be capable of providing expertise, resources, or referrals for at-risk athletes who are dealing with the challenges discussed above. This is especially important for those consultants who are working in high school or collegiate settings. Additionally, because of the culturally diverse nature of colleges and universities and the diversity found in many collegiate sports, it is also important that consultants are culturally aware and competent in understanding how these issues may impact at-risk athletes more than others. Issues related to poverty and disability status disproportionately impact racial and ethnic minorities and students attending community colleges versus four-year colleges.

In practical terms, this means getting to know more intimate details about the athlete population that consultants are working with, the school climate and culture in which they are operating, and gaining a clear

understanding of what resources are available on campus settings versus those that may be provided off-campus. Consultants can develop appreciation for the challenges that at-risk athletes face by getting out of their offices and becoming familiar with the various environments in which they inhabit. Consultants can visit the neighborhoods in which they live, walk the streets they walk, attend practices and competitions, spend time in the athletic training room and conditioning facility, and attend team meetings. In other words, consultants are encouraged to "walk in their shoes" as much as possible to gain an in-depth understanding of who at-risk athletes are, how they live, and the challenges they face.

Cultural competency on the part of consultants also means that they will be conscientious not to pass judgement from a "socionormative" perspective that stems from their own life experiences and attitudes. This means deeply examining personal assumptions based on what they perceive as social norms and going out of their comfort zone to provide services which meet the needs of the population they are serving. How athletes respond to the challenges discussed in this section will depend on a combination of personal, cultural, and contextual issues. Effective consultants will have a professional toolbox to help these athletes navigate the wide range of psychological, emotional, social, academic, financial, and physical challenges they face in their lives.

Resources for consultants should include names, phone numbers, and website addresses where athletes can go if public assistance is needed. To support their efforts where social discomfort or communication difficulties may be evident, consultants should be ready and willing to provide introductions and be available for transitions to the support organizations and professionals. There may also be campus resources that student-athletes can take advantage of that the consultants should be aware of. Consultants should have a readily accessible list of places where at-risk athletes can go for food, shelter, acute medical care, legal counseling (e.g., immigration, disability, child-support issues). In some instances, particularly if athletes are well known, having off-campus resources may be preferable to protect their privacy.

Here is a suggested list of contact information all consultants should have as part of their toolbox for sharing referrals and resources with athletes:

1. **Practical support:** Food banks, housing assistance, emergency fund assistance, language and immigration support, legal counsel and religious institutions. Identify campus and off-campus resources. Religious institutions can often be very helpful in providing financial resources, shelter, food and clothing.
2. **Licensed clinician contacts:** Particularly those who specialize in anxiety and depression, psychiatric disorders, eating disorders, drugs and alcohol, family and relationship counseling. Providing resources not directly associated with campus communities may be more suitable for athletes concerned about their privacy.
3. **Academic support:** Do not assume that families and educational institutions have adequate support for these areas in place. It is also possible that certain campus communities have programs that are largely overwhelming and difficult to identify and access, particularly if there is not an academic support program geared specifically to athletes.
4. **Learning disabilities and special needs:** This is an area where a consultant may need to spend time working with athletes to advocate for themselves. Do not assume that parents, coaches, and educational counselors know the rules and guidelines associated with sport when it comes to the special needs population. It is important for athletes with special needs to know and understand their legal rights and services that are available. These resources can often make the difference in an athlete's tenure and success.

Helping athletes to prepare mentally for their training and competitive efforts is a given part of the consultant's role. However, it is the whole person that they must prioritize and care most for. If athletes are experiencing issues like those discussed above, it is incumbent on consultants to assist and support them to the best of their abilities in overcoming these challenges.

Summary

- "At-risk" will be defined as athletes who have a greater probability of dropping out of sport due to daily stressors outside of sport that include academic performance, learning disability, legal issues, poverty, homelessness, food insecurity, transportation, familial issues, and problems within the community.

- Athletes often live insulated lives while they are dedicated to meeting the demands of their sport, yet they are not immune to challenges that arise in their broader lives and these matters can negatively impact their daily lives and sport engagement.
- Consultants may have greater access to the particular details of athletes' lives simply because athletes may feel more comfortable sharing specific information with them when compared to parents, family, coaches, or teammates.
- Athletes can become at risk in their sports lives for a variety of reasons which are often outside of their control, so they are unable to directly and constructively respond to the challenges.
- 22–36% of college students reported being hungry and not having enough money for food, 7–11% of college students reported not eating for a whole day due to a lack of money, up to 14% of community college students and 2% of four-year college students report homelessness, and 1 in 10 report housing insecurity.
- Student-athletes who are near completion of their athletic eligibility but are not academically close to graduating may also drop out of sport prior to completion of their eligibility for athletic competition.
- This is particularly relevant where school was a means to an end to compete in professional sports because, once the sport appears to no longer be an avenue that may lead to bigger things, the athlete is de-motivated to perform well in school simply because there was less of a commitment to academics to begin with.
- It is estimated that 11% of undergraduate students have a learning disability and that, if student-athletes have a learning disability, they may struggle upon entry into college.
- These student-athletes are at particular risk because once they get into college through the regular admissions process, it typically means they barely met the requirements but now they will not have the accommodations that could make it more manageable to succeed academically.
- Consultants need to be capable of providing expertise, resources, or referrals for athletes who are dealing with the challenges discussed above, particularly for those working in an education setting.
- Because of the culturally diverse nature of colleges and universities and the diversity found in many collegiate sports, it is also important that consultants are culturally aware and competent in understanding how these issues may impact at-risk athletes more than others.
- Resources for consultants should include names, phone numbers, and website addresses where athletes can go if public assistance is needed and, to support their efforts where social discomfort or communication difficulties may be present, consultants should be willing to provide introductions and be available for transitions to the appropriate support professional.
- Because consultants are most concerned with the holistic health and well-being of athletes, if athletes are experiencing issues discussed above, it is incumbent on consultants to assist and support them to the best of their abilities in overcoming these challenges.

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ATHLETIC CAREER TRANSITION

Claire-Marie Roberts, James Tabano, and Jim Taylor

Typically, the careers of athletes feature progression, plateaus, and declines (Hendry & Kloep, 2002), are characterized by a high degree of uncertainty (Coupland, 2015) and comprise many transitions. These transitions may be related to athletic, personal and social development, educational level, setbacks such as injuries, new teams, the loss of a coach, deselection, and ultimately, the conclusion of sport careers (Roberts & Davis, 2017). The depth and breadth of the athletic experience are many and often-times extreme compared to the non-sport population. Of all the impactful experiences athletes have, perhaps the most difficult is that of the end of their sport career. Moreover, retirement from sports consists of a range of experiences that are unique in comparison to those encountered in traditional retirement from careers later in life (Stambulova & Ryba, 2014; Wylleman, Alfermann, & Lavallee, 2004).

In reaction to the recognition that this phase of an athletes' life can be difficult, over the past three decades, there has been a growing body of theoretical, empirical, and applied work focusing on identifying and understanding the challenges of athletic career transition and providing services for individuals as they progress through their sports careers to their end. This section will offer a broad and deep perspective on career transition among athletes. The issues that will be explored will emphasize the career transition of athletes whose involvement in sports are a significant part of their self-identities and comprise a substantial portion of their time and energy in their lives. Athletes that fit into this category can include high-level collegiate athletes, Olympians, and professionals.

Theory and Research

Transitions are defined as "a turning phase in athletes' development that brings about a set of demands (usually appraised as stressors) and requires adequate coping processes in order to continue athletic and parallel careers such as education or work" (Stambulova & Wylleman, 2014, p. 601). As suggested, the most significant transition of all is athletic career transition, requiring the individual to re-craft a new career and re-construct a version of themselves. Such is the magnitude of this transition that around 20% of athletes experience helplessness at this juncture and require professional assistance to cope (Alfermann & Stambulova, 2007; Stambulova & Wylleman, 2014). The outcome of the individual's inability to cope at this time is termed a crisis transition (Stambulova, 2017) which can ultimately result in psychopathological behavior and social difficulties (Taylor & Ogilvie, 1994), acute depression (Reardon & Factor, 2010), identity crises (Brewer, Van Raalte, & Linder, 1993), difficulties with body image (Kerr & Dacyshyn, 2000), and occupational problems such as zeteophobia (Lavallee, Grove, & Gordon, 1997).

To help define and further understand athletic career transition specifically, Taylor and Ogilvie (1994) presented a comprehensive conceptual model that consists of a multi-stage framework that explores the relevant issues for all aspects of the transition from athlete to retired athlete.

1. **Causes:** Age, deselection, injury, free choice.
2. **Factors related to adaptation:** Personal investment in sports, self-identity, social identity, perceptions of control, life stress, physical health, socioeconomic status, minority status.
3. **Available resources:** Coping skills, social support, pre-retirement planning, medical assessment and guidance.

4. **Intervention:** Stress management, emotional counseling, social networking beyond sports, skills assessment, continuing education, and job training.
5. **Quality of career transition:** High, moderate, poor.

In essence, the model illustrates that successfully negotiating athletic career transition is centered around the process of coping with a set of demands by accessing resources and employing interventions. This coping process involves leveraging internal and external resources against barriers that athletes are confronted with (Stambulova, 2017). The effectiveness of this coping process leads to how successful the transition out of sport turns out to be for athletes.

Theoretical positions such as Taylor and Ogilvie's (1994) model of adaptation to retirement among athletes and Stambulova's athletic career transition model (Stambulova, 2003, 2009, 2017) present two possible transition outcomes: a successful transition or a crisis transition. According to former model, a successful transition results when athletes have deployed effective coping to overcome the demands of the transition, using their internal and external resources to avoid potential barriers. At the other end of the spectrum is a crisis transition which is a product of ineffective coping, as a result of a paucity of internal and external resources, many and significant barriers, and in some cases, the personality attributes of athletes (Stambulova, 2017). At the point of a crisis transition, Stambulova's athletic career transition model (Stambulova, 2003, 2009, 2017) identifies secondary outcomes of (a) a delayed successful transition when interventions are deployed to reverse the outcome, (b) an unsuccessful transition resulting in premature departure from sport, and (c) other negative reactions to the failure of the transition.

Those negative reactions often manifest sub-clinically or clinically. For example, failing to negotiate an effective transition out of sport may lead to athletes to experience a decrease in self-esteem, lasting emotional discomfort, increased sensitivity to mistakes and failures, an increase in the number of internal barriers (e.g., low motivation and self-efficacy), and disorientation in decision-making and behavior (Stambulova, 2000, 2003). When these sub-clinical reactions (Wolanin, Gross, & Hong, 2015) are evident, an expedient reactive counseling intervention may help athletes cope more effectively and hence reverse the transition outcome (to be discussed in greater depth below; Schinke, Stambulova, Si, & Moore, 2017).

In some cases, clinical reactions to crisis transitions may result if athletes do not receive support and assistance from family and professionals and lack the capabilities to navigate the transition on their own. These reactions often include mental-health problems such as depression (Reardon & Factor, 2010) and maladaptive behaviors such eating disorders, alcohol abuse, drug abuse, and suicidality (Stambulova, 2003, 2009). Theoretically, the conceptualization of athletic transition outcomes is intuitive, yet empirical research on athletic career transition does not always support a dichotomous conceptualization of the outcome (i.e., either healthy or unhealthy; Roberts, Mullen, Evans & Hall, 2015). Instead, it is recommended that consultants keep in mind that athletes may, in fact, fall somewhere on a continuum between these two extremes (Roberts et al., 2015). Whatever the outcome, it is crucial that athletes are supported in their adaptation to life after their sports career, as the vast majority are required to move into a second career path as the money earned during a sport career may not allow for the accumulation of sufficient wealth to sustain them past retirement (Padrão dos Santos, Rosa Nogueira, & Böhme 2016).

Practical Implications

There are two approaches to supporting athletes through to the end of, and beyond, their athletic careers as a means of fostering their long-term health and well-being. These can be succinctly summarized as proactive and reactive.

Proactive Support

Proactive approaches to support mean that sports organizations (e.g., colleges, Olympic and professional teams) take time to assess any potential barriers to a healthy transition and identify and suggest resources to help them overcome these (Morris, Tod, & Oliver, 2015). Resources may involve needs and goals analyses, the identification of available and relevant life skills, the exploration and implementation of educational

and career programs as well as assistance with planning their transitions. This support is delivered through psychoeducational workshops, one-to-one personal development sessions, the provision of educational or vocational experiences, and networking opportunities. Additionally, such programs aim to engage athletes throughout their careers by enhancing both sports performance and personal development (Park, Lavallee, & Tod, 2013).

There are more than 60 different programs available internationally (Stambulova & Ryba, 2014) that leverage a wide variety of proactive support strategies to help athletes prepare for life after sport. However, these interventions can also be delivered outside of a programmatic structure, by different types of practitioners who intervene at different stages of an athletic career. To illustrate, in the United States, there is an athlete career education (ACE) program provided by the United States Olympic Committee (USOC). This program supports Olympic and Paralympic athletes with teaching educational and life skills development in parallel to their sport careers. In addition, they offer individualized career coaching services for athletes looking for a part-time job while training and competing, thus enabling them to prepare for their career transition or determine their next steps on a long-term career journey.

In professional sports, proactive support may be outsourced to a specialist organization or discrete interventions may be delivered by an athlete development specialist or consultant. The emergence of the role of the athlete development specialist is a relatively new phenomenon promoted (in the US) by the Professional Association of Athlete Development Specialists (PAADS) which is dedicated to helping organizations and individuals develop the whole person in an athletic context. Naturally, the majority of consultants that work in the sport psychology field possess the requisite skills to support athlete development, and due to their existing role with individual athletes or teams, they are likely to be the natural choice to provide this proactive support. Having said that, there is often a lack of role clarity for both athlete development specialists and those working in the sport psychology field. This may contribute to the portrayal of proactive lifestyle support within the literature as focusing solely on practical skill development rather than the personal, psychological, and emotional support required.

Providing preventive holistic athlete development interventions and pre-retirement planning throughout the individual's sport career is considered fundamental to the resulting transition experience. For example, providing such support during adolescence, and, therefore, in the early stages of an athletic career, may seem premature, but this is the stage at which identity, cognitive motivational strategies, and the social and organizational skills that may impact the educational choices and career aspirations of individuals are being formed (Nurmi, 2004). Additionally, a concerted effort on proactive support during the early stages of retirement (or put differently, the latter stages of an athletic career) is likely to be beneficial (Park, Tod, & Lavallee, 2012) as it is likely to be targeted and timely. While the proactive support in the early stages of a sport career can be more broad-based in its focus, it is crucial that the support in the latter stages of the career is fully individualized.

There are a number of different approaches that consultants can take to an athlete development or a proactive transition intervention. For example, Danish, Petitpas and Hale's (1995) Life Development Intervention and Stambulova's (2010) Five Step Career Planning Strategy both feature the development of goal-setting skills and the identification and utilization of skills developed during the course of an athletic career for the benefit of a second career. In addition, consultants can intervene proactively by helping athletes to balance their investment in their sport and the degree that their self-identity is consumed by sport. They can guide athletes in expanding their social networks beyond sports. Consultants can show athletes ways to increase their sense of personal control in their lives outside of sports and identify a variety of resources that athletes can leverage during and after their playing days that will benefit them after career transition.

Essential resources can include academic counselors to encourage continuing their educations, financial advisers to bolster economic responsibility, and community business leaders to act as mentors for pre-retirement planning and future career direction. The benefits of proactive, holistic athlete development and pre-retirement planning is considered to be one of the most significant predictors of a healthy career transition. Yet, there is often general resistance to engaging in these types of activities, centered on the myth that they distract from sport performance (Park et al., 2013). In a convincing challenge to this way of thinking, Lavallee (2018) recently concluded that engaging in proactive support throughout an athletic career actually predicted team selection and career tenure.

Reactive Support

Athletes who fail in their efforts to cope with athletic career transition and are facing a crisis transition, can benefit in the immediate term from reactive support. Such support can be provided by consultants and is aimed at helping athletes enhance their awareness and understanding of their transition, to facilitate sound decision-making, and develop resources to enhance the effectiveness of their coping (Stambulova, 2017). The mobilization model of counseling in crisis transitions proposed by Stambulova (2011) is six-step educational intervention designed to help support athletes to develop a problem-solving orientation in reaction to their transition. Typically, this involves:

- collecting out information relevant to athletes' transitions;
- identifying, prioritizing, and articulating the problem issues;
- analyzing athletes' current coping resources and barriers;
- discussing options resulting in athletes' making a decision about how best to move forward;
- goal setting and program planning to put the decision into action; and
- follow-up assessment, evaluation, and program adjustment.

As a result of, or in addition to the educational intervention described above, athletes may benefit from stress reduction interventions, emotional counseling, education and career planning, networking, and account-making and narrative therapy (Carless & Douglas, 2008; Lavallee, Nesti, Borkoles, Cockerill, & Edge, 2011). Where consultants encounter athletes exhibiting clinical symptoms as a result of a crisis transition, a referral to a appropriately trained mental health professional should be considered (e.g., Roberts, Faull, & Tod, 2016). These reactive interventions are designed to help athletes convert their ineffective coping efforts into effective ones. If the crisis transition is unresolved, negative symptoms often persist, and there is little capacity to face new challenges (Stambulova, 2017).

Despite the suggested content of proactive and reactive support available to athletes there is a lack of research examining the effectiveness of specific content of athlete development and transition interventions (Stambulova & Ryba, 2014). Because little of the content is known, their use, effectiveness, and athlete perceptions of their benefits have not been systematically examined (Park et al., 2013). As such, it is currently unclear as to whether the support described is beneficial to athletes in transition. For this reason, it is suggested that this is an area ripe for further exploration.

Summary

- High-level sports participation is punctuated by transitions based on athletic development, educational level, setbacks such as injuries, new teams, and, ultimately, the conclusion of sports careers.
- Of all the impactful experiences athletes have, perhaps the most difficult is that of the end of their sports careers.
- Over the past three decades, there has been a growing body of theoretical, empirical, and applied work focusing on identifying, understanding, and providing services for athletes as they progress through their sports careers to its end.
- Transitions are defined as "a turning phase in athletes' development that brings about a set of demands (usually appraised as stressors) and requires adequate coping processes in order to continue athletic and parallel careers such as education or work."
- Taylor and Ogilvie offer a multi-stage model of athletic career transition that includes causes, factors related to adaptation, available resources, intervention and quality of career transition.
- A successful transition results when athletes have deployed effective coping to overcome the demands of the transition, using their internal and external resources to avoid potential barriers, while a crisis transition is a product of ineffective coping as a result of a paucity of internal and external resources, many and significant barriers, and the personality attributes of athletes.
- Negative reactions to career transition can manifest themselves sub-clinically (e.g., low self-esteem, emotional discomfort, and indecision) and clinically (e.g., depression, anxiety, substance abuse, and suicide.

- Career transition programs and services are on offer in most Olympic federations and professional leagues, providing educational guidance, career planning, and transition support.
- Consultants can support athletes in transition individually by proactively helping them to balance their investment in their sport and the degree that self-identity is consumed by sport, expand their social networks beyond sports, and show athletes ways to increase their sense of personal control in their lives outside of sports.
- Effective interventions that consultants can use with athletes include skills, needs, and goals assessments, stress management, emotional counseling, and networking.
- Consultants can identify a variety of resources that athletes can leverage during their playing days that will benefit them during and after career transition including academic counselors to encourage continuing their educations, financial advisers to bolster financial responsibility, and community business leaders to act as mentors for pre-retirement planning and future career direction.

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8

MENTAL HEALTH

Introduction

Kathy Pruzan and Jim Taylor

Recently, several well-known athletes have publicly discussed the mental health struggles they have had, in particular, anxiety, depression, and sexual abuse. This openness on the part of professional athletes to share their difficulties may signal a shift in how athletes view mental health concerns where they have historically been reluctant to express their vulnerabilities and held negative beliefs about seeking mental health support. In fact, athletes identify a range of barriers to seeking mental health treatment including the stigma associated with mental illness, lack of awareness of mental health issues, and not knowing where to seek treatment, as well as concerns about privacy and how it might affect their sports careers.

Additionally, the prevailing sports culture has traditionally not encouraged or supported discussions about the mental health of athletes. From this perspective, athletes are supposed to be "mentally tough" and, as a result, superhuman and immune to human frailty. As such, many athletes have avoided coming forward when they are struggling with psychiatric issues for fear of being stigmatized by coaches, teammates, administrators, fans, and the media.

In addition to the focus of enhancing sports performance through the mental training of athletes, consultants also have an even more important responsibility and obligation to serve as a starting point for screening, referrals, and treatment for the overall mental health of athletes regardless of their education, training, or experience. Consultants who have clinical training can often treat the mental illness that athletes present with in concert with mental training. Those consultants without specialized mental health training can still play a vital role in screening for and, if necessary, referring out to appropriately trained professionals for treatment.

Because consultants are grounded in the sports world, they can be an initial source of trust toward whom athletes can express their concerns and, in turn, get the help they need. As a result, it's critical that consultants have, at a minimum, a working knowledge of the range of mental health difficulties that athletes may face, as well as an understanding of screening, assessment, and treatment options. It's also important for consultants to know the limits of their professional capabilities when referral to a specific provider or team would be the better choice for helping athletes with a particular clinical issue. This notion holds true for both sport-science and psychology-training professionals because just because a consultant has clinical training doesn't mean they are qualified to treat every form of mental illness that athletes may present with.

ANXIETY

Penny Levin

By its very nature, sports are inherently anxiety-provoking. "Competitive" or "Performance" anxiety refers to an athlete's tendency to approach and respond to competitive sports experiences with some level

of fear and tension (Behzadi et al., 2011), and is accepted as a normal part of the competitive process. Typical symptoms of competitive anxiety include a racing heart, quick and shallow breathing, rushing adrenaline, muscle tension, a narrowing of focus (see Chapter 3 for more). Research indicates that female athletes report higher levels of competitive anxiety than males (Thanopoulos & Platanou, 2017) and athletes competing in individual sports generally experience higher levels of competitive anxiety than those competing in team events (Kumar, 2016). Though often viewed negatively, competitive anxiety can be a healthy and adaptive response to sports competition whereby athletes' bodies are preparing for the challenges that lie ahead.

However, it is important to differentiate typical competitive anxiety from clinical anxiety. Competitive anxiety is sport- and often situation-specific, and short lived. By contrast, diagnosed anxiety disorders are debilitating, persistent, and impact all aspects of athletes' lives long after the competitive event has ended.

Theory and Research

Anxiety disorders are characterized by uneasiness, excessive worry that is difficult to control, hypervigilance, emotional reactivity, and fear of the future. In addition to these psychological red flags, anxiety disorders are often accompanied by a range of physiological symptoms, including restlessness, agitation, fatigue, accelerated cardiac and respiratory activity, muscle tension, and sleep disturbances, and eating disruptions (American Psychiatric Association, 2013), as well as behavioral and social changes and cognitive impairment (Khdour et al., 2016). Despite improved access to mental health treatment, anxiety disorders remain among the most commonly diagnosed mental disorders (National Institute of Mental Health, 2017), with a third of all Americans experiencing an anxiety disorder at some point in their lives (Kessler et al., 2005). Unlike performance anxiety, these conditions extend far beyond athletes' sports lives and negatively impact many aspects of their daily functioning.

The *Diagnostic and Statistical Manual of Mental Disorders*—Fifth Edition (DSM-V) (American Psychiatric Association, 2013) identifies a range of anxiety disorders. Because of their particular importance and prevalence among athletes, this section will consider generalized anxiety disorder (GAD), social anxiety disorder (SAD), and panic disorder (PD). Individuals with GAD experience persistent worry that is difficult to control and causes significant distress. It is often accompanied by muscle tension, restlessness, fatigue, gastrointestinal discomfort, and difficulty sleeping, and impacts people across a range of settings. Because symptoms may appear to be physical rather than psychological and overlap with those commonly associated with depression, misdiagnosis may occur and treatment may be delayed (Bandelow et al., 2013).

Social anxiety is distinguished by a persistent fear of one or more social or performance situations in which athletes expect to be exposed to unfamiliar people or possible scrutiny, judgment, or criticism by others (e.g., tryouts). These fears are often accompanied by concerns about embarrassment or humiliation. Typical indications of social anxiety include:

- fear in anticipation of a social activity;
- extreme feelings of shyness or discomfort in social situation;
- self-defeating expectations;
- avoidance of social situations;
- social withdrawal;
- reluctance to speak up in groups; and
- self-criticism of social experiences.

People with social anxiety disorder manage their anxiety by avoiding social events, not attending school or work, not initiating conversations, avoiding eye contact, and not entering a room alone, asserting themselves with others, and dating (American Psychiatric Association, 2013).

Panic disorder involves recurrent and unexpected episodes of intense fear, accompanied by severe physiological symptoms such as palpitations, chest pain, nausea, numbness, dizziness or sweating, followed by fear of either another panic attack or a physical condition such as a heart attack (American Psychiatric Association, 2013). Behavioral signs include (Jacofsky, Santos, Khemlani-Patel, & Neziroglu, n.d.):

- avoidance of the panic-provoking situation;
- attempts to escape the threatening situation;
- self-medication with alcohol or drugs;
- engaging in self-sabotage as a means of removing the perceived threat;
- narrowing the scope of one's life to minimize anxiety; and
- developing an excessive attachment to an object or person that provides comfort.

While little information about the prevalence of anxiety disorders among American athletes is available, a study examining anxiety in elite Australian athletes reported that 14.7% experienced social anxiety, 7.1% experienced generalized anxiety disorder, and that 4.5% experienced panic disorder (Gulliver et al., 2015). A survey of French athletes found that GAD was the most prevalent disorder and was more common in women than in men (Schaal et al., 2011). Interestingly, the anxiety level of coaches has also been shown to impact their players' anxiety and negatively impacts their athletic performance (Mottaghi et al., 2013).

Until recently, the broader category of anxiety disorders also included both obsessive-compulsive disorder (OCD) and post-traumatic stress disorder (PTSD) (American Psychiatric Association, 2000), both relevant to athletes. Now, OCD is among the "Obsessive-Compulsive and Related Disorders" and PTSD is subsumed by "Trauma- and Stressor-Related Disorders" (American Psychiatric Association, 2013). These changes were made to allow for greater precision in identifying specific disorders (Kupfer, 2015).

Some studies suggest that rates of OCD among athletes are higher than the general population and that common traits in athletes, such as perfectionism, superstitions, rituals, and body hyper-focus, might mask OCD identification (Reardon & Factor, 2010). A recent survey of 270 NCAA Division I collegiate athletes across 13 sports who had not received a diagnosis of OCD found that more than a third reported OCD symptoms, 16% screened positive for OCD, and 5% met full criteria for the disorder (Cromer et al., 2017).

PTSD is now subsumed under "Trauma- and Stressor-Related Disorders." Symptoms of PTSD include re-experiencing the trauma through memories, flashbacks, and nightmares, lack of emotional detachment, avoidance of reminders of the trauma, panic attacks, and other expressions of intense anxiety and fear (American Psychiatric Association, 2013). PTSD has been found to be present among injured athletes, so consultants should be aware that athletes typically experience greater anxiety and lower self-esteem in the aftermath of an athletic injury (O'Connell & Manschreck, 2012). Symptoms of PTSD may be present after an injury (Bateman & Morgan, 2017) and approximately 10% of athletes suffer long-term psychological consequences from sport-related injuries (O'Connell & Manschreck, 2012).

Another area in which PTSD may be evident among athletes is in sexual abuse by trusted people such as coaches and medical professionals. The recent sex abuse scandal in USA gymnastics, in which more than 150 female gymnasts were sexually molested by a team physician over several decades, highlights the harm that can occur (Kirby, 2018). With these and other cases of sexual abuse in the news so frequently, it is incumbent on consultants to be sensitive to and aware of indications of such treatment of athletes by people in power in sports (to be discussed in detail later in this chapter).

Practical Implications

Anxiety disorders can have a serious impact on athletes both within and outside of their sports lives. Consultants would best serve athletes with whom they work by having an appropriate level of understanding of anxiety disorders, depending on their education, training, and experience, that would enable them to assist athletes who present with indications of an anxiety disorder in getting the help they need to facilitate their mental health, well-being, and sports performance. Consultants with a thorough understanding of the difference between performance and clinical anxiety will feel more comfortable knowing when to provide appropriate mental training and when to refer athletes for mental health evaluation and treatment.

Assessment

Regardless of whether consultants have clinical training, an essential part of their intake with athletes should be some type of mental-status assessment. Important questions that should be a part of an intake include (Reynolds & Kamphaus, n.d.):

- Does your family have a history of anxiety?
- Have you ever been diagnosed with anxiety?
- Do you experience any of the following symptoms:
  - A. Excessive anxiety and worry (apprehensive expectation), occurring more days than not for at least 6 months, about a number of events or activities (such as work or school performance).
  - B. Difficulty controlling the worry.
  - C. Anxiety and worry associated with three (or more) of the following six symptoms (with at least some symptoms having been present for more days than not for the past 6 months). In consulting with children, only one of these symptoms needs to be present.
    - Restlessness, feeling keyed up or on edge.
    - Being easily fatigued.
    - Difficulty concentrating or mind going blank.
    - Irritability.
    - Muscle tension.
    - Sleep disturbance (difficulty falling or staying asleep, or restless, unsatisfying sleep).
  - D. Anxiety, worry, or physical symptoms that causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
  - E. The disturbance is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition (e.g., hyperthyroidism).

In addition, there are several objective measures for assessing clinical anxiety, including the Structured Clinical Interview for DSM-5 (First, Williams, Karg, & Spitzer, 2015) and The Beck Anxiety Inventory (Steer & Beck, 1997). In terms of performance anxiety, the Competitive State Anxiety Inventory-2 (Cox et al., 2003) and the Sport Competition Anxiety Test (Martens, 1977) have been developed to specifically measure sports anxiety. These measures are short, easily administered, and free to use. Particularly for those without clinical training, the objective results can provide a clear basis for the need for a referral to an appropriately trained mental health professional.

Treatment

Historically, standard treatments for anxiety disorders have included cognitive-behavioral therapy (CBT) and medication. Both of these treatments have been found to be effective in the management of clinical anxiety, and both are widely used both separately and in combination (Roshanaei-Moghaddam et al., 2011; McArdle & Moore, 2012).

Cognitive-behavioral therapy (Burns, 2006) is founded on the fundamental assumption that how people think directly impacts how they feel and behave. External events or internal beliefs are assumed to trigger dysfunctional thoughts in anxious clients, and it is these negative patterns and distorted thinking that result in symptoms of anxiety. Examples of dysfunctional ideas include those that are overgeneralized, catastrophic, or focus only on the negative aspects of a situation. Treatment is focused on recognizing and systematically reformulating and refuting the inaccurate ideas and developing more accurate and nuanced patterns of thought. Because CBT utilizes techniques similar to those taught in evaluating "self-talk," this modality may be better accepted by athletes than other psycho-therapeutic modalities.

FDA-approved medications that have typically been considered to be the first line of therapy for anxiety disorders include:

- **SSRI medications:** Citalopram (Celexa), Escitalopram (Lexapro), Fluoxetine (Prozac), Paroxetine (Paxil), Sertraline (Zoloft). Vilazodone (Viibryd).
- **SNRI medications:** Desvenlafaxine (Pristiq, Khedezla), Duloxetine (Cymbalta), Levomilnacipran (Fetzima) and Venlafaxine (EffexorDuloxetine (Cymbalta).

In the past, benzodiazepines, including Valium and Xanex, were widely used to treat anxiety conditions, but pose risks, including addiction, with chronic use. SSRIs and SNRIs, while effective, have been shown to

increase the risk of suicidality, and these drugs can cause weight gain and sexual dysfunction, which may be of particular concern to athletes (Bystritsky et al., 2013).

More recently, modalities such as mindfulness-based interventions have proven successful with a range of anxiety disorders, even when offered remotely through internet applications. These techniques do not attack symptoms directly, but seek to improve the conscious regulation of attention and foster an attitude of openness and self-acceptance through the use of a range of meditation exercises (Boettcher et al., 2014). Exercise has also become a focus in recent years as a treatment for anxiety disorders. A recent meta-analysis suggests that exercise may be equivalent to more established treatment modalities in the treatment of anxiety. However, issues such as the range of definitions of "exercise" and other significant methodological limitations suggest that additional research is needed to establish physical activity as a viable treatment modality (Stonerock et al., 2015). In addition, for consultants, the fact that clients generally are already exercising regularly suggests the need to consider other treatment options.

Summary

- By its nature, sports competition is inherently anxiety provoking. "Competitive" or "performance" anxiety refers to an athlete's tendency to respond to competitive situations with some level of fear and tension and is accepted as a normal part of the competitive process.
- However, it is important to differentiate competitive anxiety from clinical anxiety, whereas competitive anxiety is sport- and often-situation-specific, and short lived, diagnosed anxiety disorders are debilitating, persistent, pervasive, global, and impact all aspects of athletes' lives long after the competitive event has ended.
- Anxiety disorders are characterized by uneasiness, excessive worry that is difficult to control, hypervigilance, emotional reactivity, and fear of the future and are accompanied by a range of physiological symptoms, including restlessness, agitation, fatigue, accelerated cardiac and respiratory activity, tension, and sleep disturbances, and eating disruptions as well as behavioral and social changes and even cognitive impairment.
- Because of their particular importance in consultation with athletes, this chapter will consider generalized anxiety disorder (GAD), social anxiety disorder (SAD), and panic disorder (PD).
- Individuals with GAD experience persistent worry that is difficult to control and causes significant distress.
- Social anxiety is distinguished by a persistent fear of one or more social or performance situations in which athletes expect to be exposed to unfamiliar people or possible scrutiny, judgment, and criticism by others.
- Panic disorder involves recurrent and unexpected episodes of intense fear, accompanied by severe physiological symptoms such as palpitations, chest pain, nausea, numbness, dizziness or sweating, followed by fear of either another panic attack or a physical condition such as a heart attack.
- Anxiety disorders can have a serious impact on athletes both within and outside of their sports lives.
- Depending on their education, training, and experience, consultants would best serve athletes with whom they work by having a level of understanding of anxiety disorders that would enable them to assist athletes in getting the help they need to facilitate their mental health, well-being, and sports performance.
- Regardless of whether consultants have clinical training, an essential part of their intake with athletes should be some type of mental-status assessment.
- There are several measures for assessing clinical anxiety, including the Structured Clinical Interview for DSM-5 and The Beck Anxiety Inventory.
- Standard treatment for anxiety disorders includes cognitive-behavioral therapy (CBT), medication, mindfulness and exercise.

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DEPRESSION

Erin Haugen

Major depressive disorder, most commonly referred to as depression, is one of the most commonly diagnosed psychiatric disorders among the general and athletic populations. As noted in the Introduction of Chapter 8, more and more professional and Olympic athletes have shared their struggles with depression (Weitz, n.d.).

This vulnerability has helped to make discussing depression less taboo. In doing so, other athletes afflicted with depression are more comfortable seeking help rather than hiding it and suffering in silence.

Theory and Research

Depression is characterized by a period of at least two weeks of depressed mood and/or loss of interest/pleasure in activities in nearly all activities plus at least five of the following symptoms in the same two-week period:

- change in weight/appetite;
- change in sleeping;
- psychomotor agitation or retardation;
- fatigue or loss of energy;
- feeling worthless or inappropriate guilt;
- difficulty concentrating or indecisiveness; and
- recurrent thoughts of death, suicidal ideation, a suicide attempt, or a plan to die by suicide (American Psychiatric Association, 2013).

It is considered a depressive episode once these symptoms are present for most days for at least a two-week period.

Among the various forms of mental illness that afflict athletes, depression has been the most vigorously and comprehensively studied by researchers. This body of evidence includes a wide range of athlete populations from several countries. Similar to the general population, the findings demonstrate clearly that depression is a significant problem among athletes at many levels of sport.

Depression in Athlete Populations

Studies of the global population suggest the prevalence rate of depression is 4.4% (World Health Organization, 2017), although this varies based upon demographics (e.g., age, gender, national origin). In athlete samples across cultures, the rate of depression ranges from 3.6% (Schaal et al., 2011) to 27% (Gulliver, Griffiths, Mackinnon, Batterham, & Stanimirovic, 2015). Although Gouttebarge and colleagues found rates of up to 45% (Gouttebarge et al., 2017), the measure utilized evaluated both anxiety and depressive symptoms. As a result, the findings suggest that the two disorders may have been conflated, thus producing the astonishingly high rate. One study found rates of depression to vary based upon competitive level with 10% of professional athletes and 28% of elite junior athletes reporting depression (Jensen, Ivarsson, Fallby, Dankers, & Elbe, 2018). In one of the only studies to use a diagnostic interview, Hammond, Gialloreto, Kubas, and Davis (2013) found that 68% of their sample of elite swimmers met diagnostic criteria for depression in the previous 36 months.

Several athlete samples have found that depression is often co-occurring with other disorders. Yang et al. (2014) found 86% of athletes experiencing depression also experienced anxiety. Depressive symptoms were also found to correlate with chronic stress (Frank, Nixdorf, & Beckman, 2017; Nixdorf, Frank, Hautzinger, & Beckman, 2013). Miller and colleagues (2002) found 14% of athletes consuming high rates of alcohol exceeded depressive cutoff scores. Therefore, it is important to consider a wide range of mental health diagnoses when depression may be in evidence.

Suicide is another crucial factor to consider within the context of depression. In a retrospective analysis of college student-athlete deaths, 7% were deaths by suicide with 82.9% of these deaths being male. At the same time, student-athletes were less likely to die by suicide than the general population (Rao, Asif, Drezner, Toresdahl, & Harmon, 2015) and may report suicidal ideation less often than non-athletes (Schaal et al., 2011). Moreover, there is some evidence suggesting that adolescent athletes may experience less hopelessness, suicidal ideation, and suicidal behavior than their peers in the general population, but athlete suicide attempts may result in more serious injury (Sabo, Miller, Melnick, Farrell, & Barnes, 2005). It is also important to note that suicide does not exist exclusively within the context of depression; athletes experiencing other mental health conditions, such as anxiety or substance misuse, may also experience difficulties with suicide.

Unfortunately, due to a variety of methodological limitations, such as use of screening questionnaires to estimate rates rather than diagnostic interviews (Rice, Purcell, De Silva, Mawren, McGorry, & Parker, 2016) and sampling

athletes at various times of the competitive season, it is difficult to determine true prevalence rates for depression in athletes. Moreover, researchers often use different questionnaires or cutoff scores to identify cases of depression making it difficult to compare results across studies. At the same time, based on the extant literature and reports from consultants who work with athletes, there is sufficient evidence to suggest that depression should be a significant concern for all stakeholders in the sports community.

Risk Factors in Athlete Populations

Many athletes use physical activity to manage emotional difficulties, although there may be a critical point where athletes feel trapped, sport becomes a stressor, and depressive symptoms are exacerbated rather than mitigated. A variety of demographic factors are associated with depressive symptoms in athletes. Beable, Fulcher, Lee, and Hamilton (2017) found that athletes under age 25 were more likely to report depressive symptoms than older athletes, whereas Belz, Kleinert, Ohlert, Rau, and Allroggen (2018) found elite athletes younger than 18 were more vulnerable to depression than elite adult athletes. Most studies find that female athletes report higher levels of depression than male athletes. One study found college female student-athletes tended to report higher levels of depression as the season progressed (McGuire, Ingram, Sachs, & Tierney, 2017). Gender-based differences in depression may also vary based upon sport type. For example, in a sample of collegiate student-athletes, Wolanin, Hong, Marks, Panchoo, and Gross (2016) found female student-athletes tended to report higher rates of depression than male student-athletes. Track and field athletes reported the highest rates of depression for women (37.7%) and men (25.0%), whereas lacrosse had the lowest rates of depression for women (16.7%) and men (11.6%). However, other studies found no gender difference regarding depressive symptoms (Beable et al., 2017).

Similar to non-athlete populations, several studies found a variety of factors associated with increased depression levels. Factors such as experiencing recent major life events (Gouttebarge et al., 2017; Kilic et al., 2017) or daily hassles (Beable et al., 2017) were associated with higher levels of depressive symptoms in athletes. One study of elite rugby players found players with a history of depression were up to 22 times more likely to experience clinical levels of depression in-season compared to those without a depression history (Du Preez et al., 2017). Moreover, in samples of elite junior athletes, researchers found perfectionism indirectly related to depression through competitive anxiety (Jensen et al., 2018) and negative attributional style (Nixdorf, Frank, & Beckmann, 2016).

The sport environment poses several unique challenges that have been associated with depressive symptoms. Several studies found injured athletes reported higher rates of depression than non-injured athletes (Gulliver et al., 2015; Vargas, Rabinowitz, Meyer, & Arnett, 2015) and were rated by clinicians as more depressed than non-injured athletes at one week and one month post-injury (Appaneal, Levine, Perna, & Roh, 2009). Higher depression scores were also associated with greater time lost due to injury (Galambos, Terry, Moyle, & Locke, 2005), ongoing injury pain, and pain intensity (Sanders & Stevinson, 2017). Moreover, athletes who experienced depression at baseline were more than four times more likely to experience depression and more than three times more likely to experience anxiety after a concussion than athletes without depression at baseline (Yang, Peek-Asa, Covassin, & Torner, 2015).

The relationship between depression and injury may differ based upon the type of injury. In a longitudinal study, injured college student-athletes had elevated depression scores at one-week post-injury. At one month, this trend continued for athletes with orthopedic injuries, but depression symptoms decreased for athletes experiencing a concussion (Roiger, Weidauer, & Kern, 2015). At the same time, some studies found a greater number of concussions to be associated with greater likelihood of being diagnosed with depression (Du Preez et al., 2017; Guskiewicz et al., 2007; Kerr, Marshall, Harding, & Guskiewicz, 2012), although these studies were methodologically limited (i.e., the data collection was either retrospective or players self-identified as having concussions).

There is little research examining the relationship between injury and suicidal ideation or behavior. One study found that adolescent athletes experiencing severe injury or a long injury rehabilitation period were at-risk for suicide (Smith & Milliner, 1994). In an examination of publicly available information, Webner and Iverson (2016) found 80.8% of American football players that died by suicide since 1920 had documented stressors or medical conditions (e.g., injury). Although there is no compelling information to establish a causal relationship between sport injury and suicide, it is recommended that injured athletes be monitored for suicidal ideation (Kontos & Collins, 2018).

Athletic retirement has also been associated with depression symptoms. Beable et al. (2017) found athletes who were uncertain about retirement or had impending retirement were more likely to report depressive symptoms than athletes not retiring. Giannone, Haney, Kealy, and Ogrodniczuk (2017) found that college athletes with strong athletic identities were more likely to experience depressive symptoms three months into retirement than athletes without a strong athletic identity. There is also evidence to suggest athletes who were forced to retire due to injury were more likely to exhibit depressive symptoms. One study found 38.9% of athletes retiring due to injury reported depressive symptoms and the odds of experiencing depression increased more than threefold when an athlete retired due to injury (Sanders & Stevinson, 2017).

Several other unique sport factors have been reported to be associated with higher depressive symptoms: competitive failures (Hammond et al., 2013), participating in an individual sport (Beable et al., 2017; Nixdorf et al., 2013, 2016; Wolanin et al., 2016); being a high-performing (Hammond et al., 2013) or current student-athlete (Weigand, Cohen, & Merenstein, 2013); and participating in aesthetic sports (Schaal et al., 2011). Therefore, it is important to consider a wide range of variables when evaluating athletes for depression.

Practical Implications

The prevalence and impact of depression on athletes has demonstrated clearly that it is a condition worthy of significant concern within the sports community. Moreover, depression, like other forms of mental illness, is unfortunately still stigmatized by many athletes. Athletes seeking help is still the exception and not the rule. Fortunately, consultants can establish an unusually high level of trust with athletes because of their place in the sports world and depth and breadth of their relationships with athletes. As a result, they are uniquely positioned to identify and create dialogues about depression concerns that others in athletes' lives may not be capable of or comfortable with broaching. A fundamental responsibility for consultants, then, should be to recognize and either treat, if they have mental health licensure, or refer athletes with any indications of depression during the course of their work with them.

Assessing Depression in Athletes

As part of their intake protocol, consultants should include questions about any family history of depression; past experience of, diagnosis, or treatment of depression; and athletes' current status relative to depression. For a more formal and thorough assessment of depression, consultants can evaluate symptoms of depression in athletes using either structured clinical interviews or self-report inventories. The Structured Clinical Interview for DSM-5, Clinician Version (SCID-5-CV; First, Williams, Karg, & Spitzer, 2015) is a structured diagnostic interview that contains modules to evaluate a variety of mood disorders, including major depressive disorder. A wide variety of self-report or screening inventories exist for depression. Haugen, Thome, Pietrucha, and Levin (2017) recommended using the Center for Epidemiological Studies Depression Scale—Revised (CESD-R; Eaton, Muntaner, Smith, Tien, & Ybarra, 2004) for its ease of use and availability in the public domain. The CESD-R is also utilized frequently in research with athletes. Another widely used self-report inventory for depression is the Beck Depression Inventory–Second Edition (BDI-II; Beck, Steer, & Brown, 1996). It is similarly easy to use, although it requires certain credentials to purchase the inventory. Both inventories contain items inquiring about suicide. However, Haugen et al. (2017) suggest this may not be sufficient and recommend administering an inventory such as the Suicidal Behaviors Questionnaire-Revised (SBQ-R; Osman et al., 2001). It is important to address any endorsement of items evaluating suicide with the athlete and make referrals for mental health treatment promptly.

Treating Depression in Athletes

The most common treatments for depression are psychotropic medication and psychotherapy. Selective-serotonin reuptake inhibitors (SSRIs) are considered the first choice of antidepressant medications, although other classes (e.g., mixed reuptake inhibitors) may be used (see Reardon & Factor, 2010, for additional discussion).

Regarding psychotherapy, two approaches have the most evidence supporting their efficacy in non-athlete populations: cognitive-behavioral therapy (CBT) and interpersonal psychotherapy (IPT; Barlow & Durand, 2015).

CBT involves identifying and modifying maladaptive thinking processes, whereas IPT focuses on resolving interpersonal problems and forming adaptive relationships with others. Researchers generally find a combination of medication and psychotherapy to be effective short- and long-term, although either type of treatment produces some improvement (Karyotaki et al., 2016).

There is little research examining the efficacy of various treatment approaches for athletes experiencing depression. Studies that have been conducted with athlete populations generally tailor existing therapy models to include strength-based approaches. With this therapeutic modality, consultants focus on identifying and increasing awareness of athletes' strengths, positive attributes, and resources, particularly those that are not evident to athletes, and then using those assets to problem solve and develop a plan moving forward that builds resilience and alleviates the depressive symptoms (Padesky & Mooney, 2012). In a case study with a 21-year-old female rower, Gabana (2016) discussed concurrent antidepressant treatment with strengths-based CBT. The athlete was noted to have improvement of symptoms that continued one year after termination of CBT. However, this improvement was based upon subjective report and not quantified through assessment measures.

Donohue and colleagues adapted family behavior therapy (FBT) for use in athletic populations such that performance and mental health goals can be addressed simultaneously. Although studies examining FBT have not targeted depressive symptoms, per se, (the entry criteria for inclusion was substance use or dependence; Donohue et al., 2015) a variety of case studies demonstrated reduction in depressive symptoms throughout the course of the intervention (Chow et al., 2015; Donohue et al., 2015). In two studies examining FBT, the mean BDI-II levels elevated to nearly pre-intervention levels at 3-month follow-up (Donohue et al., 2015; Pitts et al., 2015). However, a more comprehensive study comparing FBT to services as usual (SAU; Donohue et al., 2018) indicated student-athletes in FBT consistently demonstrated better outcomes, including reduced depression, than those in SAU, and these gains were generally maintained eight months post-treatment. These effects were particularly likely for student-athletes with greater diagnostic severity (i.e., more than one mental health diagnosis).

There is also an emerging body of research examining mindfulness-based approaches in athlete populations. In non-athlete populations, mindfulness-based approaches, particularly mindfulness-based cognitive therapy (MBCT; Segal, Williams, & Teasdale, 2012) are focused on reducing relapse rates for depression by decreasing mood related negative cognitions (i.e., cognitive reactivity). Mindfulness-based approaches are typically centered on tolerating and accepting uncomfortable thoughts, emotions, and experiences with the goal of helping athletes intentionally choose their response rather than react to them. Preliminary evidence suggests no change in psychological distress (i.e., depression and anxiety) after a mindfulness-based intervention. However, student-athletes involved in this study also exhibited relatively low levels of distress at baseline (Goodman, Kashdan, Mallard, & Schumann, 2014). Therefore, additional research on mindfulness-based interventions for depression in athletes is warranted.

Summary

- Major depressive disorder, most commonly identified as depression, is one of the most commonly diagnosed psychiatric disorders among the general population and the athletic population.
- Depression is characterized by a period of at least two weeks of depressed mood and/or loss of interest/pleasure in activities in nearly all activities plus at least five symptoms in the same two-week period.
- Among the various forms of mental illness that afflicts athletes, depression has been the most vigorously and comprehensively studied by researchers, and, much as with the general population, the findings demonstrate that depression is a significant problem among athletes at many levels of sport.
- In athlete samples across cultures, the rate of depression ranges from 3.6% to 27%.
- Suicide is another crucial factor to consider within the context of depression and other mental health conditions.
- A variety of demographic factors are associated with depressive symptoms in athletes: being under age 25, female, injured, and perfectionistic, having a strong athletic identify, and experiencing recent major life events, stressful daily hassles, and retirement from sport.
- Because consultants can establish aa high level of trust with athletes due to their place in the sports world and depth and breadth of their relationships with athletes, they have the ability to identify and create in athletes an openness to discuss concerns about depression that others in athletes' lives may not be capable of or comfortable with.

- As part of their intake protocol, consultants should include questions about any family history of depression; past experience of, diagnosis, or treatment of depression; and athletes' current status relative to depression.
- For more formal and thorough assessment of depression, consultants can evaluate symptoms of depression in athletes using either structured clinical interviews or self-report inventories.
- The most common treatments for depression are psychotropic medication and psychotherapy.
- Selective-serotonin reuptake inhibitors (SSRIs) are considered the first choice of antidepressant medications, although other classes (e.g., mixed reuptake inhibitors) may be used.
- Regarding psychotherapy, two approaches have the most evidence supporting their efficacy in non-athlete populations: cognitive-behavioral therapy (CBT) and interpersonal psychotherapy.

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EATING DISORDERS

Megan Pietrucha and Jenni Thome

Disordered eating and eating disorders is an area of significant concern among mental health practitioners who work with athletes in sports in which physical aesthetics and body weight impact performance and results. Most often considered a "female issue," disordered eating and eating disorders are prevalent in gymnastics, figure skating, synchronized swimming, among other women's sports. At the same time, both can also be found in male-oriented sports such as wrestling, weightlifting, boxing, and bodybuilding, to name a few, in which either leanness or weight classes play a role. In all cases, pressures to appear attractive, perform at a so-called ideal weight, or "make weight" aimed at maximizing performance can have harmful physical and psychological effects for athletes of both genders.

Disordered eating and eating disorders include abnormal eating and weight-control behaviors such as restricted food intake, binge eating and purging, and other compensatory behaviors such as excessive or compulsive exercise, and laxative and diuretic abuse. These symptoms are typically, though not always, accompanied by body dissatisfaction, and are frequently comorbid with other mental health issues such as depression, anxiety, and low self-esteem (Johnson & Wardle, 2005; Thome & Espelage, 2004).

The DSM-5 (American Psychiatric Association, 2013) includes diagnostic criteria for four eating disorders and related concerns:

- **Anorexia nervosa** (AN): Characterized by distorted body image and excessive dieting behavior leading to significantly low body weight, with an accompanying fear of becoming fat or gaining weight.
- **Bulimia nervosa** (BN): A repetitive cycle of dysregulated eating, including recurrent episodes of binge eating followed by compensatory behaviors such as vomiting, laxative abuse, or excessive exercise.
- **Binge eating disorder** (BED): Recurrent episodes of binge-eating behaviors without compensatory purging or non-purging behaviors following the binge and is more common than AN and BN combined.
- **Avoidant/restrictive food intake disorder** (ARFID): Typically diagnosed in childhood, this eating or feeding disturbance may include a lack of interest in food, avoidance of food based on sensory characteristics, and concern about aversive consequences of eating. This leads to significant weight loss, nutritional deficiency, dependence on nutritional supplements, and marked interference with psychosocial functioning.

Theory and Research

Methodological limitations within research studies make the prevalence of eating disorders among athletes difficult to estimate (Nattiv et al., 2007). However, some well-designed studies suggest that eating disorders such as AN and BN may be more prevalent among athletes than nonathletes, and in female as compared to male athletes, particularly in aesthetic and lean sports such as gymnastics, cross country running, and figure skating (46.7%)

versus controls (21.4%) (Torstveit, Rosenvinge, & Sundgot-Borgen, 2008). Additionally, higher rates of eating disorders may be found in elite versus recreational athletes (Knapp, Aerni, & Anderson, 2014; Sundgot-Borgen & Torstveit, 2004). Some studies suggest eating disorder prevalence rates of 25–31 percent among elite athletes, compared with 5–9% in control groups.

The nature of sport may make it challenging to identify athletes struggling with eating concerns. For example, athletes who engage in high levels of sport-specific training, conditioning, and nutrition may have leaner body compositions than non-athlete peers through genetic self-selection or commitment to their sport, Additionally, athletes may have unusual exercise and eating habits that may or may not necessarily be unhealthy. Even in medical settings, symptoms of concern in nonathlete populations, such as amenorrhea, low blood pressure, and low resting heart rate, may be attributed to an athlete's activity status rather than identified as indicators of eating concerns (Maron & Pelliccia, 2006), and thus left unaddressed.

At the same time, the veneer of athletes' commitment to conditioning and sport training, nutrition, fueling for competition, and healthy eating may, in fact, mask an eating disorder. Several "good athlete" traits, such as perfectionism and overcompliance, are similar to traits found among people with AN and may be valued and reinforced by coaches, trainers, and teammates (Thompson & Sherman, 1999).

Practical Implications

Consultants must be sensitive to disordered eating and potential eating disorders, particularly in sports that encourage them and in athletes whose unhealthy practices may be covered by a façade of being "model" athletes. Being vigilant to and exploring below the surface of athletes' training, exercise, and eating habits can reveal eating challenges that may not be readily evident otherwise. Consultants' ability to make these distinctions and notice unhealthy habits that either may lead to or have already led to eating disorders is one of their fundamental responsibilities in their concern for athletes' mental health and well-being.

Screening and Assessment

Indications that an athlete is struggling with an eating disorder are diverse, as these individuals may be underweight, average weight, or overweight/obese. Physical signs that may be noticeable or reported include marked weight fluctuations, swollen cheeks/face, blood-shot eyes, sore throat, blood in vomit, thinning hair, stress fractures, knuckle abrasions, dental enamel erosion, easily bruising, yellow skin, constipation, fatigue, amenorrhea, dehydration, and osteoporosis, among others (Academy for Eating Disorders, 2016). The reality is that there is no single appearance to eating disorders, but the physical complications associated with these disorders can be severe and require professional medical oversight.

Given the complex presentation of eating disorders, screening tools can be very useful. The International Olympic Committee (IOC, 2009), American College of Sports Medicine (ACSM; Nattiv et al., 2007), and National Athletic Trainers' Association (NATA; Bonci et al., 2008) advocate for screening of eating disorders during the preparticipation evaluation and periodically thereafter, though there is no consensus about how this should be done or which screening tools should be used. Any screening and assessment tools that are used should be sensitive to athlete's age and competitive level, and include multiple sources of information (Mitchell & Robert-McComb, 2014). Several measures have been developed and validated for the general assessment of eating disorders, and many have been used in studies with athletes (see Pope, Gao, Bolter, & Pritchard, 2014). Though not an exhaustive list, the below measures have been found to be effective assessment tools. Their objective results make it easier for consultants, regardless of their training, to identify athletes at risk for eating disorders and make the appropriate referrals:

- **Eating Attitudes Test** (EAT-26; Garner, Olmsted, Bohr, & Garfinkel, 1982). The EAT-26 is a 26-item self-report screening tool of eating disorder symptoms. A total score of 20 is recommended for referral for additional assessment by a trained clinician. This measure screens for extreme weight-control behaviors, which may be red flags indicating the need to meet with a qualified professional. The EAT-26 can be administered in individual or group settings by mental health professionals, school counselors, coaches, or others with an interest in screening and referral for additional evaluation for eating disorders. This measure has been used in a variety of cultures with male and female athletes.

- **Eating Disorders Examination Questionnaire** (EDE-Q; Fairburn & Beglin, 1994). The EDE-Q is a 41-item self-report questionnaire designed to evaluate the frequency of disordered eating behaviors over the past 38 days. It is different from the EAT-26 in that it evaluates eating behaviors and body dissatisfaction. The EDE-Q has been used in research with male and female athletes.
- **Female Athlete Screening Tool** (FAST; McNulty, Adams, Anderson, & Affenito, 2001; Robert-McComb & Mitchell, 2014). The FAST is a 33-item questionnaire developed to identify eating pathology and atypical exercise and eating behaviors in female athletes. In a small group of female athletes, subclinical scores were 77 to 94 and clinical scores were >94 (Robert-McComb & Mitchell, 2014).

Some researchers (e.g., Nagel et al., 2000) have argued that the use of general eating disorder assessments with athletes are inaccurate, leading to false negative or even false positive identification of eating disorders, such that athletes may appear more pathological than they actually are. For example, extreme levels of training, exercise, or nutrition by athletes may have little to do with manipulating weight or appearance (Thompson & Sherman, 2014) and may not reflect the emergence or presence of an eating disorder. While several athlete-specific screening tools have been developed, they typically have less established psychometric properties and may be based on outdated diagnostic criteria. Thus, it is recommended that consultants incorporate more than one screening tool when assessing athletes for eating disorders.

Need for Treatment

Because eating disorders present serious immediate and chronic health risks, including death, it is imperative that athletes who have been identified with eating disorders be referred for appropriate assessment and treatment as soon as a problem is detected (Schaffner & Buchanan, 2010; Sullivan, 2002). Early identification of symptoms is essential to the prognosis and treatment of eating disorders and determining if medical hospitalization is necessary to stabilize athletes should be one of the first determinations of treatment level and approach (Baum, 2013; Bratland-Sanda & Sundgot-Borgen, 2013; Pearson & Rivers, 2006). Additionally, timely referral for assessment of symptoms and diagnosis will help determine the level of care and treatment needs of athletes. Once assessed, the duration and severity of eating disorder symptomatology, including athlete's overall clinical and social picture in addition to weight and medical status, will dictate the level of care to which they should be referred (American Psychiatric Association, 2010). The degree of perceived support as well as existing comorbid psychiatric disorders are also important to consider when making decisions about treatment level, setting, and approach (American Psychiatric Association, 2010; Baum, 2013).

Levels of care guidelines are outlined by the American Psychiatric Association (2010) and take into consideration the frequency and severity of psychological, medical, and behavioral symptoms as well as environmental needs when determining the appropriate treatment setting. Levels of care for eating disorders (from least to most restrictive) include outpatient (level 1), intensive outpatient (level 2), partial hospitalization (level 3), residential treatment (level 4), and inpatient hospitalization (level 5). Medical stability plays a large role in determining level of care especially at levels 4 and 5 where more intensive medical monitoring is necessary.

Athlete-specific Barriers to Treatment

Stigma is a common barrier to treatment for many people with mental health concerns, but this stigma might be higher for athletes and more specifically for athletes with eating disorders (de Bruin, 2017). Athletes often perceive the stigma about mental health issues to be in conflict with their athletic identity, and thus can struggle to disclose problematic eating behaviors (Papathomas & Lavallee, 2010). Additionally, concern about how a diagnosis of an eating disorder may negatively impact training and competitive opportunities may also prevent athletes from seeking help.

Additionally, there are several barriers to the identification of eating disorders in athletes that are unique to the sports environment and context. For example, treatment might be delayed due to difficulty in identifying symptoms as they can be masked by attitudes and behaviors that are normative and valued in the athletic environment (Sherman & Thompson, 2001). At times, coaches and athletes might not consider the dietary and exercise behaviors to be problematic or indicative of an eating disorder within the context of the sport (Bar, Cassin, &

Dionne, 2016), particularly if athletes of concern are performing well and contributing to the success of their team. As such, coaches may feel conflicted about placing the health and well-being ahead of their own needs and the competitive goals of the team. Other times, symptoms of disordered eating or an eating disorder might go unnoticed, or even encouraged, by coaches if performance continues to be maintained (Pearson & Rivers, 2006). Furthermore, gender stereotypes, stigma, and the different ways that eating disorders present in male athletes (i.e., drive for leanness or muscle mass rather than drive for thinness) might inhibit male athletes from seeking treatment for eating disorders and contribute to the lack of identification of eating disorders in male athletes (Bratland-Sanda & Sundgot-Borgen, 2013; de Bruin, 2017).

Considerations and Challenges

Treatment for eating disorders can be challenging for other reasons as well. Often the entrenched behaviors and patterns, denial and low motivation for change, and resistance to treatment as well as the complexity of medical and psychological issues are common treatment challenges encountered by therapists (Baum, 2013; Fassino & Abbate-Daga, 2013). These themes can also be present and even more significant when working with athletes due to the unique cultural aspects of sports (Sherman & Thompson, 2001).

Of the themes that emerge from the literature, issues with management of exercise, nutritional support, and return to sport are commonly cited challenges that are unique to treating athletes with an eating disorder (de Bruin, 2017; Plateau, Arcelus, Leung, & Meyer, 2017). Relatedly, athletes might also be concerned about weight gain and body image in treatment as it relates to optimal performance in their sport (Sherman & Thompson, 2001). Other themes that present in treatment as reported by female athletes who received treatment for eating disorders have included loss of athletic identity and ambivalence about involvement of coaches in treatment (Papathomas & Lavallee, 2010; Plateau et al., 2017; Sherman & Thompson, 2001). In studies surveying athlete's experience of treatment, athletes have also stated that they often feel misunderstood in therapy and question the relevance of treatment if it is not connected to athletic identity or the sport context (de Bruin, 2017; Papathomas & Lavallee, 2010; Plateau et al., 2017; Sherman & Thompson, 2001). Therefore, it is recommended that athletes be referred to treatment providers who are trained in both the treatment of eating disorders and familiar with issues that are specific to athletes (Hildebrandt, 2005; Papathomas & Lavallee, 2010; Sherman & Thompson, 2001).

A common question that arises in the treatment of eating disorders with athletes is if participation in sport or exercise can continue when athletes are symptomatic (Sherman & Thompson, 2001). Most of the literature confirms that this determination is based on diagnosis and medical status and suggests that athletes with a diagnosis of anorexia nervosa do not exercise, train, or compete until symptoms have resolved (Sherman & Thompson, 2001). If athletes are allowed to continue to participate and compete, it is recommended that minimum criteria to maintain participation (i.e., weight status, progress in treatment, caloric intake) and frequency, intensity, and duration of the exercise be clearly discussed with and agreed upon by athletes and their support team (Sherman & Thompson, 2001). Treatment goals can also encourage athletes to exercise autonomy in making the decision to continue participating on their own (Sherman & Thompson, 2001).

Using or integrating exercise into treatment can also be challenging, especially if exercise contributed to the development of an eating disorder. However, with athletes, Baum (2013) also proposes that exercise can be used as a therapeutic tool. Returning to play can provide motivation for these athletes to engage in treatment and overcome symptoms as well as maintaining social support via the team and coaches (Baum, 2013; Sherman & Thompson, 2001). Currently, there are no specific criteria for determining when or if return to exercise or sport is beneficial or harmful for athletes in treatment for an eating disorder, and it is recommended that guidelines be developed to aid in this determination the treatment process (Bratland-Sanda & Sundgot-Borgen, 2013).

Prevention of Eating Disorders among Athletes

While treatment options are available, prevention efforts to reduce the rate or onset of eating disorders in specific populations such as athletes is essential (Bratland-Sanda & Sundgot-Borgen, 2013; de Bruin, 2017; National Eating Disorders Association, 2018; Pearson & Rivers, 2006). General prevention approaches are varied and can include a universal or primary educational approach for larger groups, selective prevention

to target groups that are at risk of developing eating disorders, or targeted prevention for groups at high risk (Bar et al., 2016; National Eating Disorder Association, 2018). More research on the efficacy of prevention programs, especially with athletes, is needed, but preliminary research suggests that selective, interactive, and multimodal approaches and a group format, particularly targeting high-risk athletes, are showing promise in the ability to reduce risk factors associated with eating disorders (Bar et al., 2016; Pearson & Rivers, 2006). Two of the more researched prevention programs for athletes include the cognitive-dissonance-based *Female Athlete Body Project* (Becker, McDaniel, Bull, Powell, & McIntyre, 2012) and the *Bodies in Motion* program focused on developing healthy body image and eating behaviors among female athletes (Voelker & Petrie, 2017). Intervention and consultation can and should occur at multiple levels, including coaches, trainers, teams, and athletes. Studies suggest that coaches be educated and made aware of the signs and symptoms of eating disorders, and address any concerns with the athlete immediately (Bratland-Sanda & Sundgot-Borgen, 2013; Pearson & Rivers, 2006).

Treatment Approaches

Overall, a multidisciplinary team approach to treatment is essential to effectively address and manage the physical, medical, psychological, and nutritional symptoms that might be present (Walsh, Wheat, & Freund, 2000). The team approach is specifically recommended for treating children and adolescents with eating disorders (American Psychiatric Association, 2010). This team of professionals can include a psychiatrist, psychologist or therapist, dietitian, and physician as well as members of the "sport management team" such as coaches, athletic trainers, or strength and conditioning coaches (Sherman & Thompson, 2001). The physician plays an important role at the outset of treatment in determining the level of care necessary for the athlete (Walsh et al., 2000). The dietitian also plays a central role in the treatment goals for athletes with both AN and BN as this support is needed to normalize eating habits and restore or maintain healthy weight status (Yager et al., 2012).

Including coaches in the process can be challenging because of their roles and relationships with athletes, their position within the sports organization, their focus on results, and the authority that they exert over athletes' roles on the team. Thus, determining if and how the coach is to be involved and informed in the athlete's treatment should be a collective discussion with athletes and also with respect to athletes' rights to privacy and confidentiality. Likewise, determining if and how to involve teammates in the athlete's treatment can be considered if sustaining this contact will help their sense of athletic identity and the degree of social support they may receive as a beneficial part of their overall treatment program.

The involvement of any member of the sport management team should be collaboratively decided between athletes and their therapist and must be of clear therapeutic benefit to the athletes (Sherman & Thompson, 2001). Similar to the recommendations that the therapist be well-versed in sport culture, so too should the other treatment providers. Overall, the coordination of care and communication between providers and support persons is essential to the effective treatment of eating disorders, especially when the treatment is occurring in the outpatient setting or when athletes shift between levels of care (American Psychiatric Association, 2010).

Lastly, evidence-based treatment models for eating disorders can include cognitive therapy (CT), cognitive-behavioral therapy (CBT), interpersonal therapy (IPT), family therapy, pharmacotherapy, and relapse prevention models (Yager et al., 2012). CBT has been shown to be one of the most effective treatment approaches for bulimia nervosa (BN) and binge-eating disorder (Pearson & Rivers, 2006; Schaffner & Buchanan, 2010; Walsh et al., 2000). For children and adolescents with eating disorders being treated on an outpatient basis, family therapy has also been found to be effective (American Psychiatric Association, 2010; Yager et al., 2012). More specifically, the Maudsley approach to family-based treatment has been found to be effective for adolescents with AN (Schaffner & Buchanan, 2010). This approach incorporates the parents of the child or adolescent into the treatment approach where the parents are active participants in engaging in family sessions and the progression of treatment from weight restoration to returning control over eating to the adolescent and encouraging healthy behaviors. For a more comprehensive summary of evidence-based treatments for eating disorders, Walsh et al. (2000) provide a table that summarizes recent studies on supported treatment approaches for AN and BN.

Summary

- Disordered eating and eating disorders is an area of significant concerns among mental health practitioners who work with athletes in sports in which aesthetics and weight are related to performance and results.
- Disordered eating and eating disorders exist on a continuum, including abnormal eating and weight-control behaviors such as restricted food intake, binge eating and purging behaviors, and other compensatory behaviors such as excessive or compulsive exercise, and laxative and diuretic abuse.
- Eating disorder diagnoses from the DSM-5 include, but are not limited to, anorexia nervosa (AN), bulimia nervosa (BN), binge eating disorder (BED), and avoidance-restrictive food intake disorder (ARFID).
- Eating disorders such as AN and BN may be more prevalent among athletes than nonathletes, and in female as compared to male athletes, particularly in aesthetic and lean sports such as gymnastics, cross country running, and figure skating versus controls and higher rates of eating disorders may be found in elite versus recreational athletes.
- The veneer of nutrition, fueling for competition, and healthy eating may, in fact, mask an eating disorder. Several "good athlete" traits, such as perfectionism and overcompliance, are similar to traits found among people with AN and may be valued and reinforced by coaches, trainers, and teammates.
- Consultants must be sensitive to disordered eating and potential eating disorders, particularly in sports that encourage them and in athletes whose unhealthy practices may be covered by a façade of being "model" athletes.
- Both sports governing bodies and sports medicine groups advocate for screening of eating disorders during the preparticipation evaluation and periodically thereafter, though there is no consensus about how this should be done or which screening tools should be used.
- There are a variety of measures that have been found to be effective assessment tools and able to be administered by both trained and untrained professionals.
- Because eating disorders are serious and often chronic or fatal conditions, it is imperative that athletes be referred for appropriate assessment and treatment as soon as a problem is detected.
- The duration and severity of eating disorder symptomatology, including athlete's overall clinical and social picture in addition to weight and medical status, will dictate the level of care to which they should be referred.
- Stigma is a common barrier to treatment for many people with mental health concerns, but this stigma might be higher for athletes and more specifically for athletes with eating disorders.
- Often the entrenched behaviors and patterns, denial and low motivation for change, resistance to treatment as well as the complexity of medical and psychological issues are common treatment challenges encountered by therapists.
- It is recommended that athletes be referred to treatment providers who are trained in both the treatment of eating disorders and familiar with issues that are specific to athletes.
- While treatment options are available, prevention efforts to reduce the rate or onset of eating disorders in specific populations such as athletes is essential.
- A multidisciplinary team approach to treatment is essential to effectively address and manage the physical, medical, psychological, and nutritional symptoms that might be present.
- Evidence-based practice models for eating disorders can include cognitive therapy (CT), cognitive-behavioral therapy (CBT), interpersonal therapy (IPT), family therapy, pharmacotherapy, and relapse prevention models.

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SUBSTANCE USE

Kathy Pruzan

Substance use and abuse is a serious clinical issue across the general population. The 12-month prevalence rate for drug use disorders is just under 4% and lifetime prevalence is 9.9% (Grant et al., 2016). These numbers increase to 14 and 29% for alcohol use disorder. Recent research has demonstrated that athletes may be at risk for using substances at higher rates than non-athletes (Donohue et al., 2013). Unfortunately, rates of treatment for substance-use disorders for the general population fall woefully short of what would be hoped for, with just under 25% of those who meet criteria for a substance-use disorder seeking treatment in their lifetime (Grant et al., 2016). Taken together, these data suggest that substance use and abuse may be under-reported (Brisola-Santos et al., 2016), under-assessed, and/or under-treated among athlete populations.

The DSM-V provided an update on substance-related diagnoses. Changes included removing the abuse vs. dependence distinction and instead providing eleven criteria related to misuse of the substance.

1. Taking the substance in larger amounts or for longer than you're meant to.
2. Wanting to cut down or stop using the substance but not managing to.
3. Spending a lot of time getting, using, or recovering from use of the substance.
4. Cravings and urges to use the substance.
5. Not managing to do what you should at work, home, or school because of substance use.
6. Continuing to use, even when it causes problems in relationships.
7. Giving up important social, occupational, or recreational activities because of substance use.
8. Using substances again and again, even when it puts you in danger.
9. Continuing to use, even when you know you have a physical or psychological problem that could have been caused or made worse by the substance.
10. Needing more of the substance to get the effect you want (tolerance).
11. Development of withdrawal symptoms, which can be relieved by taking more of the substance.

Individuals can be diagnosed with a substance-specific disorder across a range of severities: Mild corresponding to 2–3 positive criteria, moderate corresponding to 4–5 positive criteria, and severe corresponding to 6 or more criteria met (American Psychiatric Association, 2013). DSM-V parameters can therefore result in two individuals with very similar profiles of actual substance use (for example, two individuals drinking 30 standard drinks per week) having different DSM-V diagnoses related to their substance use.

Theory and Research

Risk factors for substance-related disorders include both those of genetic and environmental origins. Estimates for genetic loading related to substance use disorders range from 40% to 70% (US Department of Health and Human Services, 2016). This increased genetic risk can include temperamental factors, such as sensation-seeking (Foulds, Boden, Newton-Howes, Mulder, & Horwood, 2017), which can be particularly relevant for athletes (Schroth, 1995). Environmental risk factors include an early environment where substance use or abuse was common and, also particularly relevant to athletes, association with peers who use substances (US Department of Health and Human Services, 2016). Conversely, protective factors include strong family, social connections, and societal ties, a feeling of control over successes and failures, and emotional factors such as hopefulness and emotional resilience (US Department of Health and Human Services, 2016).

Athlete-specific Factors

Considerable data suggest that athletes are at higher risk for misuse of at least certain substances, particularly alcohol (Nelson & Wechsler, 2001; Turrisi et al., 2007). Caucasian, male athletes seem to be at substantially higher risk for alcohol (Nelson & Wechsler, 2001) and marijuana use (Buckman et al., 2011). Athletes of both genders in US college settings report higher rates of binge drinking and alcohol-related consequences than their non-athlete peers (Nelson & Wechsler, 2001). In contrast, there is some evidence to suggest that athletic participation in high school might be protective against illicit drug use (Kwan et al., 2014). This may be due, in part, to increased adult supervision, exposure to adult role models, and less free time to be exposed to and engage in high-risk behaviors such as substance use. Additionally, some limited data suggest that athletes on team sports are more prone to alcohol use, whereas athletes participating in individual sports (snowboarding, skiing, kayaking) may be more likely to report marijuana use (Brisola-Santos et al., 2016). At the same time, these divergent findings may also be due to differences in the cultures of the sports themselves rather than their categorization as individual or team sports.

Additionally, internal factors such as sensation-seeking may explain some observed differences, for example, athletes higher in sensation-seeking (i.e., those who participate in sports such as snowboarding, skiing, and kayaking) are more likely to use marijuana (Buckman et al., 2011). Increased substance use and use-related consequences are linked with use as an effort to cope with stress and other life challenges, which is the case for both athletes and non-athletes (Doumas, 2013).

Misperceptions of normative use can also be a risk factor for increased and/or problematic use of substances. An environment rife with and supportive of substance use is a risk factor for substance use disorders (US Department of Health and Human Services, 2016). A feedback loop may occur among teams or athlete peer groups where members see or know that their peers are drinking, drink to be accepted and to have positive team/peer experiences (Zhou & Heim, 2016), and also overestimate the amount that peers are drinking (Turrisi et al., 2007). This pattern can create a feedback loop that encourages a culture of substance use within that athletic cohort.

Finally, injuries play a role in risk for substance misuse among athletes. For example, Cottler et al. (2011) found that 71% of retired NFL players surveyed misused opiates during their careers and 7% reported currently using. Pain during a playing career increased the odds of current use. Data indicate that the risk of opiate abuse increases following an initial pain management opiate prescription of longer than five days (Shah, Hayes, & Martin, 2017). There is also some evidence to suggest a higher prevalence of opioid misuse among athletes as compared with non-athletes in college, with injured male athletes being at the highest risk to misuse prescription opioids (Ford et al., 2017).

Athletes who sustain concussions are also at risk for substance use and abuse (Zuckerman et al., 2015). Consultants should be aware of the potential increased risk of substance misuse subsequent to a concussion. Concussion status has been found to predict number of drinks per outing in both athlete and non-athlete populations, with those who suffered concussions drinking more per occasion (Alcock, Gallant, & Good, 2018). One hypothesis for this relationship is that physiological under-arousal following a concussion leads to increased risk-taking behaviors.

Performance Enhancement vs. Substance Abuse

An important consideration in examining the use and misuse of substances among athletes is whether substances are used to enhance performance or in a manner consistent with a diagnosis of a substance-abuse disorder. This distinction has implications for treatment recommendations and this review focuses primarily on treatments for substance-abuse issues. Studies of the intersection of performance enhancement, pain management, and substance abuse are limited by small sample sizes and few athlete-specific studies. This is an important area of consideration due to the pull for both higher levels of performance and injury/pain management among athlete populations.

Though substances may be used for performance enhancement without tipping into substance abuse, performance enhancement-based use may be a starting point or risk factor for future abuse. There is evidence to suggest that athletes using performance-enhancing substances (PES) are more likely to use and misuse other substances as well (Buckman, Farris, & Yusko, 2013) because the fitness gains and improved performances reinforce the value of PES use. The researchers found that, among a sample of male NCAA athletes, those who reported PES use (3.1% of total) reported more use of other substances than did their non-PES-using peers. This included more frequent and heavier alcohol use and alcohol-related consequences. They were also more likely to use other substances with purported performance-enhancing properties that were not on a banned substances list. Concernedly, athletes also endorse athletic performance as a primary motive for initial off-prescription use of stimulants (Gallucci & Martin, 2015).

Practical Implications

Because of its profound immediate and long-term physical and psychological impact of substance use, misuse, and abuse on athletes, consultants must be sensitive to their presence in athletes' lives and teams' cultures. The ability of consultants to recognize, identify, and take action in response to indications of substance use is essential to the mental and physical health of the athletes with whom they work.

Assessment

Substance use should be included in any clinical intake and assessment with athletes, as they may be likely to omit or under-report (Brisola-Santos et al., 2016). As noted above, the DSM-V provides eleven criteria, which clients can be asked on a per-substance basis, as a screening option related to use or abuse of substances (American Psychiatric Association, 2013). Consideration should be given to other comorbid diagnoses that might contribute to or result from substance use or abuse.

One important concern in assessment and treatment is clarification about confidentiality and who will receive the results of any assessment. For example, will the athlete's team or institution receive results? As consultants explore the presence of substance use with athletes, they should be clear on athletes' rights to privacy to encourage honest responses and ensure proper treatment if appropriate. Particularly for consultants without the education, training, and experience to formally assess substance use and abuse, structured means of assessment can offer more comfort and clarity in determining the presence of substance issues. The objective data that come from the following formal screening tools can provide unambiguous information that can help consultants decide whether further assessment, treatment, or referral would be appropriate.

- **Alcohol, Smoking and Substance Involvement Screening Test** (ASSIST): A clinical interview rubric developed by the WHO (World Health Organization, 2008). Its length may preclude use in many settings, but it is a comprehensive guide for screening of substances and provides significant information about the sequelae of use of a variety of substances for the consultant's reference.
- **Alcohol Use Disorders Identification Test** (AUDIT): A 10-item measure developed as a screening by the World Health Organization to screen for excessive drinking. The AUDIT was developed to be sensitive to a broader range of problems related to alcohol use, in contrast to measures that tend to capture those

at the more intense end of the spectrum of problematic use (Saunders, Aasland, Babor, De La Fuente, & Grant, 1993). Clinician-administered and self-report versions are available online at www.drugabuse.gov/sites/default/files/files/AUDIT.pdf

- **CAGE-AID**: The CAGE-AID is an adaptation of the CAGE questionnaire which includes screening for substances other than alcohol (Brown & Rounds, 1995). It is a four-item screener, with one or more positive answers suggesting need for additional assessment. It is available online at www.integration.samhsa.gov/images/res/CAGEAID.pdf.
- **Timeline Follow-Back** (TLFB): A one-month Timeline Follow-Back (TLFB) has been found to be a reliable self-report measure of alcohol (Sobell & Sobell, 1992) and drug use (Hjorthoj, Hjorthoj, & Nordentoft, 2012) in substance abusing populations. The TLFB can be administered via paper and pencil or electronic calendar, and through clinical interview or client report. It provides a helpful prompt and timeline for a snapshot of clients' recent substance use and can be used to inquire about other substances in addition to alcohol. Available online at www.nova.edu/gsc/forms/timeline-followback-forms.html

Prevention

Personalized feedback and goal-setting are important components of both prevention and treatment efforts (Donohue et al., 2016). Evidence indicates that effective programs are aimed at both risk and protective factors at the individual, family, and community levels (Donohue et al., 2016). Prevention approaches can be universal (for everyone in a population), selected (targeted to those of at-risk groups), or indicated (for at-risk individuals) (Donohue et al., 2016). The latter of these categories has overlap with treatments and will be addressed below.

Universal prevention options may be most scalable and applicable to athletic team contexts. One evidence-based option is the Life Skills Training program, initially developed for schools (Botvin, Griffin, & Williams, 2015). Extensive information about it, including additional studies on evidence, is available at www.lifeskillstraining.com. The Life Skills Training approach has been recognized by a variety of health and governmental organizations including the National Institute on Drug Abuse and the Centers for Disease Control and Prevention (Griffin & Botvin, 2010). It trains teens in resistance skills, developing self-management and coping skills, and aims to build resilience while navigating developmental tasks. Providers attend a one and a half day workshop and materials include an instructor's manual. It was developed as a 30-session program over 3 years. Findings indicate 52% fewer daily substance users in the prevention condition vs controls in a high school population (Botvin, Griffin, & Williams, 2015). While no studies exist expanding this to athletic populations, it provides a user-friendly, structured option that could be adapted for high school and college athlete populations.

Evidence-Based Treatments

Athletes, particularly at more competitive levels, likely have a team of coaches, trainers, medical providers, and sport psychology consultants that can be harnessed to aid in efforts toward healthier substance behaviors. This support should include thorough assessment and treatment of any comorbid psychiatric conditions. In addition to specific techniques of change described below, consultants must also build a therapeutic alliance, enhance hopefulness, and convey accurate empathy of athletes' circumstances which are essential components of all evidence-based approaches for substance-abuse treatment (McGovern & Carroll, 2003).

Motivational Interviewing

Motivational interviewing (MI) involves eliciting clients' own reasons for making changes to substance use and aiding in developing a discrepancy between the current circumstances and clients' ideal circumstances, values, and goals (Miller & Rollnick, 1991). Consultants can use open-ended questions, reflections, and summary statements to reinforce athletes' healthy "change-talk" while selectively discouraging unhealthy "sustain-talk" that could maintain the status-quo of substance use. MI specifically targets resolving ambivalence about substance use. It can therefore be used with abstinence, moderation, or harm-reduction goals.

Findings across studies suggest that the strength of clients' language related to commitment to change predicts future abstinence from substances (Hettema, Steele, & Miller, 2005). MI dovetails nicely with consultants'

roles in helping athletes improve performance in sport, which can be a significant motivator toward changing harmful behaviors, such as substance use, that might impact sport performance. However, like all the treatment approaches discussed here, MI should only be used if consultants are appropriately trained in addressing substance use and abuse.

Cognitive-Behavioral Therapy

CBT approaches have been found to be effective across a range of substance use disorders (Carroll & Onken, 2005). They are often grounded in a functional analysis of the client's substance use which provides an understanding of problematic use behaviors within a psychosocial context. CBT includes identifying high-risk contexts, internal mood states, and social circumstances that impact substance use. Additionally, CBT providers teach relapse prevention and coping skills (Carroll & Onken, 2005), as well as helping clients with goal-setting (Donohue, Pitts, Gavrilova, Ayarza, & Cintron, 2013). This approach also overlaps nicely with the work that properly trained consultants are already doing with athletes in their efforts to enhance sports performance

Community Reinforcement Approach

The community reinforcement approach (CRA) is a behavioral treatment which can be combined with elements of CBT. CRA focuses on increasing rewards that individuals receive from non-using behaviors and lifestyles and selectively non-reinforcing substance use, and ideally does this by recruiting significant others from clients' lives to participate as well (Meyers, Smith, Serna, & Belon, 2013). It has been effectively used with a wide range of populations including adolescents (Godley, Smith, Passetti, & Subramaniam, 2014) and in schools (Hunter, Godley, & Godley, 2014) and its principles could be applied in sports settings.

Community Reinforcement and Family Training

Community reinforcement and family training (CRAFT) is an approach for working with concerned loved ones when a substance user is not yet open to treatment (Smith, Meyers, & Milford, 2002). It is a CBT-based approach focusing on helping concerned others implement positive reinforcement for non-use, allow negative consequences of use to occur, engage in self-care, implement new communication skills for more effective communication, and look for motivational hooks that might help the substance user be open to treatment. It is an important option for consultants to be aware of as family members, coaches, or teammates may be the first to come to the consultant with concerns about an athlete's substance use.

Contingency Management

Systematic reinforcement of abstinence is linked with positive outcomes across a variety of substances including cocaine (Higgins et al., 1993), opiates (Silverman et al., 1996), and marijuana (Budney, Moore, Rocha, and Higgins, 2006). Grounded in behavioral-learning principles, rewards are offered on a predetermined schedule for toxicology test-demonstrated abstinence of the target substance(s). Teams in particular may have a number of windows of opportunity for providing additional reinforcement for healthier substance-use behaviors, either by the individual or the team as a whole.

Pharmacotherapies

Though an exhaustive review of pharmacotherapies for substance misuse is outside the scope of this section, it is important for consultants to be aware that there are several evidence-based options available. These are typically substance-specific and referral to an addiction psychiatrist familiar with athletes is ideal so as to help navigate any necessary eligibility-related therapeutic-use exemptions as well as to educate the athlete, family, and team. Some of the medication options must be taken daily and therefore monitoring by a supportive other increases adherence and effectiveness (McGovern & Carroll, 2003).

Athlete-Specific Intervention

Donohue and colleagues have developed a modification of Family Behavior Therapy (FBT; Donohue & Allen, 2011; Donohue & Azrin, 2011) for work with athletes (Donohue et al., 2013). This approach brings supportive significant others identified by the athlete into the therapy to help reinforce positive changes to substance use. Typically involving 12–20 outpatient sessions, clients participate in crafting a treatment plan from a menu of options in eight intervention areas such as treatment planning, goals and rewards, and self-control (Donohue et al., 2013). The authors modified FBT for work with athletes to address athlete-specific issues and to help increase engagement and retention. Examples of such adjustments are sessions being held the athletic facility to support attendance and being led by staff who are part of the athlete's sports-support team and institution. Additionally, video-conferencing of supportive others (e.g., parents) is offered to increase the likelihood of family engagement. Motivational techniques akin to MI are used throughout the treatment program. It then focuses on CBT techniques such as functional analysis of use, identifying and managing triggers, and enhancing reinforcement and relationship positivity with the family member.

The authors performed a clinical trial with 201 NCAA athletes randomly assigned to an abbreviated version of the modified FBT or to a wait-list control (Donohue et al., 2016). Athletes in the experimental condition engaged with a brief assessment of alcohol use followed by personalized goal development, contingency management, and a one-hour meeting with their supportive other present. Sessions occurred with a performance coach and supportive others could be video- or teleconferenced into sessions. Athletes received personalized feedback about their alcohol use, consequences related to sport performance were identified and then goals were developed. Supportive others were asked to reinforce goal achievement. Results of the study indicated that those in the experimental condition reduced their alcohol consumption over the two-month period of study, as evidenced by statistically significant reductions in scores between baseline and two months. The authors found the same results when sessions occurred in individual (athlete plus their supportive other) and group formats (several athletes and their supportive others together). Both versions of Donohue's FBT approach for athletes provide a framework for helping reduce substance use in athletes which can be used as either prevention or intervention after discovery of problematic use.

Summary

- Substance use and abuse is a relevant clinical issue across the general population and recent research has demonstrated athletes may be at risk for using substances at higher rates than non-athletes.
- The DSM-V provides eleven criteria related to misuse of the substance and clients can be diagnosed with a substance-specific disorder across a range of severities.
- Risk factors for substance-related disorders include both those of genetic (e.g., sensation seeking) and environmental origins (family history of substance abuse).
- An environment ripe with and supportive of substance use, such as a sports team, and the presence of injuries, are risk factors for substance use disorders.
- An important consideration in examining the use and misuse of substances among athletes is whether substances are used to enhance performance enhancement or in a manner consistent with a diagnosis of a substance-abuse disorder.
- Because of its profound immediate and long-term physical and psychological impact of substance use, misuse, and abuse on athletes, consultants must be sensitive to their presence in athletes' lives and teams' cultures.
- Substance use should be included in any clinical intake and assessment with athletes, as they may be likely to omit or under-report.
- Particularly for consultants without the education, training, and experience to formally assess substance use and abuse, structured means of assessment can offer more comfort and clarity in determining the presence of substance issues.
- Evidence-based treatments for substance-use disorders include motivational interviewing, cognitive-behavioral therapy, community reinforcement approach, community reinforcement approach with family training, contingency management, pharmacotherapies, and athlete-specific interventions.

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SEXUAL ABUSE

Joan Steidinger

The acknowledgement of sexual harassment and abuse within the sports community has finally occurred. With the guilty verdict of Dr. Larry Nassar for sexually assaulting more than 150 gymnasts, the issue is no longer sport's dirty little secret that so many knew about. Nassar was a physician for USA Gymnastics and the Michigan State University gymnastics teams. The documented allegations of abuse against him date back to 1996, yet no action was taken until September, 2016 even though a significant abuse report was filed with the USOC in 2015 (Perez, 2018). Now, the sporting world realizes what many have known for years: Sexual misconduct is widespread at levels of many sports. It is estimated that between 2% and 8% of minor-age athletic children suffer sexual abuse and the vast majority are girls (Institut National Santé Publique, 2012). Moreover, Athletes who report sexual harassment and/or abuse need to be believed and supported. Frequently, athletes are often hesitant to report sexual misconduct because they are afraid of the perpetrator who usually has a position of authority and often has control over their sports lives and futures. As such, athletes who in the past haven't reported this mistreatment must be encouraged to step forward. In a letter written by former Olympic gold medalist and president of Champion Women Nancy Hogshead-Makar and signed by hundreds of elite athletes, the letter reads: "Research shows that the more elite the athlete, the more likely they are to be sexually abused by someone within their own entourage" (Ladika, 2017).

Research on the issue of sexual abuse began in the mid-1980s (Crosset, 1986; Lackey, 1990; Lenskyj, 1992; Holman, 1995; Brackenridge & Kirby, 1997) when most female athletes who alleged sexual abuse were not believed.

In a 2008 report (Brackenridge et al., 2008), the authors found that 2% to 22% of youth were victimized in sport by mostly of male coaches, teachers, and instructors (98%) ranging in age from 16–63. Brackenridge further found that one-third were married with children. In the most recent 2017 International Olympic Committee (IOC) consensus statement, the IOC suggests even higher prevalence rates in sexual harassment extending from 19% to 92% while sexual abuse extends from 2% to 49%. The most vulnerable athletes to sexual abuse are LGBTQ and disabled athletes (Freeman, 2018). They go on to report: "Athlete reports indicate that sexual abuse can occur in the locker room, (the coaches office), the playing field, trips away, the coaches' home and/or car and social events, especially where alcohol is involved" (Mountjoy et al., 2016). What complicates matters is there are a number of sports that involve highly physical and violent behaviors often participated in by perpetrators, seen in such sports as ice hockey, wrestling, rugby, and others. These sports, as all violent sports, open the door for sexually abusive behaviors by male athletes.

The first step in gaining an understanding of sexual misconduct is to establish a shared definition of what it is. Sexual harassment is defined as the unwanted sexual advances of a person in a position of power in the form of verbal suggestions and/or behavioral actions. Taking it one step further, sexual assault/abuse is described as actual direct unwanted sexual contact including rape. Some of the features of sexual harassment and abuse include inappropriate use of authority, intimidation, threats, engaging in behavior against the wishes of the victim, and taking advantage of their position of authority and influence. Rape, Abuse, & Incest National Network (RAINN) defines sexual assault as referring to "sexual contact or behavior that occurs without explicit consent of the victim" (RAINN, 2018, p. 12). Some forms of sexual assault include:

- attempted rape;
- fondling or unwanted sexual touching;
- forcing a victim to perform sexual acts, such as oral sex or perpetrator's body; and
- penetration of the victim's body, also known as rape (RAINN, 2018, p. 12).

Theory and Research

In the United States, there are two kinds of sexual harassment: Quid Pro Quo and Hostile Environment (Fasting, Chroni, & Knorre, 2014). A Quid Pro Quo sports situation occurs when a coach or other authority figure (e.g., physician, administrator, trainer) provides special advantages or removes players from certain roles depending on whether the athletes comply with or reject their sexual advances. For example, a volleyball player was pulled out of her starting position when she refused to accept the sexual advances of her coach. In a Hostile Environment, the authority figure's behavior is so extreme that an athlete's ability to perform is compromised. For example, a female runner that was initially seen by a consultant for performance issues eventually opened up and talked about the sexual abuse that she had suffered by a coach. This occurred just three years previously but had gone on for over a year. She talked about how race results had declined during that period and how her coach showed anger and disappointment in her by yelling and screaming in front of others. He would then coax her back into the sexual abuse by using her performance as a way that she could make it up to him. In a Hostile Environment, the coach's behavior may also impact other players on the team or the team as a whole. In the case of the female runner, she described getting special treatment by the coach and other team members acting resentful toward her. In either type of abuse, the victim may decide to leave or change sports, skip training, or struggle with the concentration and focus (Institut National Santé Publique, 2012).

Sexual harassment and abuse in sports occurs with both female (41%) and male athletes (29%), although it is more prevalent with female athletes (Leahy, 2011). It is common that the power differential between authority figure and athlete is an essential and common denominator for all perpetrators. The perpetrators target the most vulnerable athletes who look to those in positions of power to provide friendship, guidance, and support. When this trust is broken, the results are often devastating, as was evidenced from the many testimonials of the gymnasts whom Larry Nassar abused.

Sexual harassment and abuse in sport has its roots during the Cold War and after the passage of Title IX. During this period, many young women entered competitive sports in high school and college. More often than not, they were coached more by men than women. Despite increased sexual harassment and abuse complaints during the 1990s, they were often not addressed by high schools, colleges, and universities led by men and/or

brushed aside despite police reports in many instances. For example, as early as 1964, 14-year-old swimmer Diana Nyad's high school coach started a three-year recurring pattern of sexual assault. At that time, there were no laws in effect requiring the investigation of sexual assault; Nyad's high school was not legally bound to take any action. She eventually shared her abuse with her best friend when she was 21 only to learn that she was also sexually abused by the coach. At that time, they reported the sexual abuse to the principal of their high school who subsequently fired the coach. Despite this action, he moved on to a coaching position at a college and eventually coached at the Olympic level. With the advent of the #MeToo movement, Nyad finally felt at liberty to write a story about her abuse that was reported in the *New York Times* (Nyad, 2017). Despite having named her abuser many times in public, he suffered no consequences until after his death in 2014 despite many complaints by other female athletes. Not until 1978 were laws passed to protect the victims of sexual harassment and abuse, though this legislation didn't prevent the continued widespread sexual misconduct by coaches at many levels of sport that we frequently read about today.

Sexual misconduct occurs in all sports and at all levels with an even greater risk with elite athletes (Marks, Mountjoy, & Marcus, 2012). The manipulation by coaches of their athletes' (referred to as grooming) runs to great extremes in the behaviors and methods they employ to perpetrate and cover up the harassment and abuse. Brackenridge and Fasting (2005) addressed what they called the "process of grooming (for sex harassment and/or abuse) in sport" which has been used to describe the varied means by which authority figures prepare athletes to be sexually abused. Over time, the coach establishes trust and dependence from the athlete and begins to break down barriers of what is appropriate and what is not. Such treatment, which is often complimentary and ingratiating, can involve not only the athlete but their parents who feel flattered and fortunate to have their child's coach providing such attention.

In a later study by Fasting & Brackenridge (2009), the researchers classified a sport typology of coaches who sexual harass and abuse female athletes (Fasting & Brackenridge, 2009). The typology was developed through extensive interviews conducted of 19 female elite athletes who had faced sexual harassment by their coaches. The sport typology consisted of three main types:

- The Flirting-Charming Coach acts charming by joking around, flirting, and eventually making attempts to make physical contact with the athlete.
- The Seductive Coach often uses words then attempts to lay his hands upon the athlete.
- The Authoritarian coach acts in a domineering and controlling manner aimed at encouraging obedience and passivity on the part of female athletes.

Perpetrators, such as Nassar, generally cause their victims to feel powerless. They also create an alliance and a sense of intimacy or establish power with threats by using phrases such as "our special secret," "this is our special time together," "you will be humiliated," or "don't tell anyone or something bad will happen," respectively. The victims experience fear, doubt, uncertainty, shock, shame, guilt, self-blame, low self-esteem, hopelessness, depression, and anger. As Brackenridge et al. (2008) have described: "The intrinsic power dynamics within the coach–athlete relationship inevitably opens that relationship to abuse and enables coercion strategies to be used." The range of strategies employed by such perpetrators reflects the differing capacities for control, intimidation, and coercion that they exploit for sexual means.

Research has demonstrated that, until recently, colleges, universities, national governing bodies, and the USOC have not only been reluctant but often refused to investigate complaints, and even covered up allegations involving star athletes and leading coaches (Ladika, 2017). Even when such allegations are adjudicated in court, judges have handed down seemingly lenient sentences for sexual crimes committed by male athletes. Case in point involved the rape of an unconscious woman by a Stanford swimmer who was given a sentence of only six months after his conviction and released after three months.

Within many sporting organizations, the resistance to talking about and dealing with sexual harassment and abuse continues because of the negative ramifications of making such news public. As recently as 2016, Ken Starr, the president of Baylor University, failed to act on sexual abuse allegations against Baylor football players. When the story came out in the press, his lack of action led to his resignation along with those of the AD and head football coach. At the same time, as a number of ongoing cases in sports, including taekwondo, figure skating, swimming, volleyball, judo, and speed skating indicate, as well as the rise of the #MeToo movement and other cases currently being judged in other parts of our culture, allegations of sexual misconduct are now being taken more seriously.

Practical Implications

The indications of sexual abuse among victims are many and varied. SafeSport (www.safesport.org), a not-for-profit organization established to promote respect for athletes and to prevent and respond ethically to sexual misconduct in sports, identify five signs of abuse:

- loss of excitement for sport and competition;
- avoiding practice;
- wanting to stay away from certain individuals (e.g., coach, trainer, administrator);
- unexpected mood shifts; and
- desire to change teams despite good friends on team.

The USOC has recently partnered with SafeSport to educate the sports community about sexual misconduct, set guidelines of appropriate and inappropriate behavior, offer certification of SafeSport education for all stakeholders in sports, and to provide victims with the means to safely report sexual misconduct. The SafeSport mission "is to make athlete well-being the centerpiece of our nation's sports culture. All athletes deserve to participate in sports free from bullying, hazing, sexual misconduct or any emotional or physical abuse." As another part of this movement toward protecting athletes, Nancy Hogshead-Makar (three-time Olympic medalist and attorney) established Champion Women in 2015 to provide legal advocacy for girls and women in sports.

Primary advice to consultants who are not appropriately trained to treat sexual abuse victims is to immediately refer these athletes to licensed clinicians who have extensive training in these issues as well as sport psychology. There are often other complicated clinical issues that these athletes face. As this section has discussed, there are a myriad of symptoms that might be indicative of sexual abuse. Several examples include declining performance, depression, anxiety, withdrawal from teammates, and others previously mentioned.

The responsibility of consultants is to provide support and get the athletes the help they need. Generally, sexual abuse does not emerge in a first interview, yet as consultants develop a relationship of trust it may emerge. If consultants are working with an athlete who wants legal advice, they should contact Champion Women, (championwomen.org), Safe to Compete for children & teens (National Center for Missing & Exploited Children) at SafeToCompete@ncmec.org or www.safetocompete.org, or US Center for SafeSport at www.safesport.org/who-we-are.

Summary

- The acknowledgement of sexual harassment and abuse within the sports community has finally emerged with the guilty verdict of Dr. Larry Nassar for sexually assaulting more than 150 gymnasts.
- Athlete reports indicate that sexual abuse can occur in the locker room (the coaches' office), the playing field, trips away, the coaches' home and/or car, and social events, especially where alcohol is involved.
- Sexual harassment is defined as the unwanted sexual advances of a person in a position of power in the form of verbal suggestions and/or behavioral actions and sexual assault/abuse is described as actual direct unwanted sexual contact, including rape.
- There are two types of sexual harassment: Quid Pro Quo occurs when a coach or other authority figure provides special advantages or removes players from certain roles depending on whether the athletes comply with or reject their sexual advances, and in a Hostile Environment, the authority figure's behavior is so extreme that an athlete's ability to perform is compromised.
- Sexual misconduct in sports occurs with both female and male athletes, although it is more prevalent with female athletes and it is common that the power differential between authority figure and athlete is an essential and common denominator for all perpetrators.
- Sexual harassment and abuse in sport has its roots during the Cold War and after the passage of Title IX when many young women entered competitive sports in high school and college and they were coached more by men than women.
- Researchers classified a sport typology of coaches who sexual harass and abuse female athletes which include three main types: The Flirting-Charming Coach acts charming by joking around, flirting, and eventually making attempts to make physical contact with the athlete, the Seductive Coach often uses words then

attempts to lay his hands upon the athlete. the Authoritarian coach acts in a domineering and controlling manner aimed at encouraging obedience and passivity on the part of female athletes.

- Research has demonstrate that, until recently, colleges, universities, national governing bodies, and the USOC have not only been reluctant but often refused to investigate complaints, and even covered up allegations involving star athletes and leading coaches.
- Within many sporting organizations, the resistance to talking about and dealing with sexual harassment and abuse continues because of the negative ramifications of making such news public.
- Safe Sport, a not-for-profit organization established to promote respect for athletes and to prevent and respond ethically to sexual misconduct in sports, identify five signs of abuse: Loss of excitement for sport and competition, avoiding practice, wanting to stay away from certain individuals (e.g., coach, trainer, administrator), unexpected mood shifts, and a desire to change teams despite good friends on team.
- The USOC has recently partnered with SafeSport to educate the sports community about sexual misconduct, set guidelines of appropriate and inappropriate behavior, offer certification of SafeSport education for all stakeholders in sports, and to provide victims with the means to safely report sexual misconduct.

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PART III

Athlete Environment

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9

COACHES

Introduction

Jim Taylor

Athletes cannot achieve their sports goals alone. Rather, they have behind them a variety of support including parents, coaches, fitness trainers, sports medicine staff, nutritionists, equipment technicians, sports scientists, and mental trainers. Of this group, coaches may play the most fundamental role in athletic development and in determining how far athletes climb the competitive ladder. This impact is so powerful because coaches are most involved in developing the many aspects of sports performance that are essential for athletic success. Most apparently, they teach the foundational technical and tactical skills that allow athletes to perform effectively in their sport. Regardless of the sport, examples of these skills include body position, stance, balance, sport-specific movement patterns, tracking of relevant objects (e.g., ball or puck), assessing opponents, decision making, and style of play. Additionally, this influence on athletes broadens significantly in most sports where coaches wear many hats including most of the roles of the support team just described.

Perhaps foremost among those roles that coaches assume in supporting their athletes is that of mental trainer. It is no surprise to anyone in the sports world that most great coaches are also great intuitive psychologists. In fact, most of what they do with athletes has a significant psychological element to it including many of the areas described in Chapters 1–4. For example, coaches are instrumental in:

- instilling healthy attitudes and removing unhealthy obstacles;
- motivating athletes;
- building their confidence;
- helping them focus in training;
- getting them fired up or calmed down before a competition;
- managing their emotions during the inevitable highs and lows of the sports season; and
- creating a positive team culture.

Given this wide and deep influence that coaches have on athletes, well beyond the roles and responsibilities that most people associate with coaching, consultants can play an important role in educating coaches on how to maximize their psychological impact on the athletes with whom they work.

This chapter will explore some of the most central aspects of the psychology of coaching. The goal of which is for consultants to provide coaches with the psychological, emotional, and interpersonal insights, information, and tools they need at several levels. First, to be the most effective coaches they can be in fulfilling their roles as teachers of technique and tactics. Second, to create a positive environment for in which athletes thrive athletically and personally. Third, provide athletes with the tools to fully develop themselves technically and tactically in their sport, one key component of this, in the technology-driven world in which sports now reside, is how to maximize the value of video in their coaching efforts, Fourth, because coaches are people too, to offer coaches

the means to manage the stress they experience in their professional and personal lives. Fifth, to develop the most positive and healthy relationships with their athletes. Finally, to show coaches how to effectively integrate mental training into their overall athlete development.

OPTIMAL SPORT COACHING

Zach Brandon

Mental toughness (Loehr, 1986) has become one of the most commonly used terms among coaches to describe what separates great from good athletes. Yes, top athletes are innately talented, well-conditioned, and highly skilled. But it is their readiness mentally, however, that distinguishes the winners from the also-rans. The development of mental toughness in their athletes is particularly striking for coaches in today's sports climate given the immense pressures imposed on them to produce results, whether they coach at the junior level, collegiately, or in the Olympic or professional ranks. These pressures are magnified through the media's emphasis on winning at every level and the pedestals on which successful coaches are now placed by fans and the media. Adding to this burden, society generates a competitive narrative (Douglas & Carless, 2006) for coaches whose approaches are ever-evolving and chaotic in nature (Lyle, 2002; Rynne, Mallett, & Tinning, 2006) and whose impact on their athletes' and teams' performances may not be as strong as many believe. Numerous contextual factors contribute to the complexity of sport coaches' roles and performances (Lyle, 2002), which highlights the need for consultants to help them maximize the level of their own performances as well as provide them with the means to get the most out of their athletes mentally and competitively.

Theory and Research

As sport coaching continues to grow and evolve as a profession, there is an increasing responsibility to establish and regulate the standards of the occupation; however, this remains impossible without a consensus understanding of effective practice (Lyle, 2002). Part of this challenge is due to the inconsistent terminology that has been documented in the coaching science literature. These terms include, but are not limited to, *coaching effectiveness* (Côté & Gilbert, 2009; Flett, Sackett, & Camiré, 2017; Horn, 2008), *coaching excellence* (Côté, Young, North, & Duffy, 2007), *good coaching* (Lyle, 2002), and *great coaching* (Becker, 2009). Synthesizing these various descriptions into one singular definition is far too lengthy of an endeavor for the purposes of this section.

Understanding Optimal Sport Coaching

Côté & Gilbert's (2009) comprehensive definition of coaching effectiveness will be used as the guiding framework for optimal sport coaching; however, it is valuable to deconstruct some of the consistent practices (antecedents) across optimal sport coaches. They proposed that coaching effectiveness be defined as "the consistent application of integrated professional, interpersonal, and intrapersonal knowledge to improve athletes' competence, confidence, connection, and character in specific coaching contexts" (Côté & Gilbert, 2009, p. 316). A considerable amount of attention has been given to exploring the antecedents of effective coaching within the sport literature. One thing that is clear is that coaching is more than just developing physical and technical skills and teaching the sport's Xs and Os. Several desirable actions have also been identified for effective coaches (Côté & Gilbert, 2009):

- engaging participants;
- fostering a mastery-oriented motivational climate;
- promoting fun and play;
- utilizing an athlete-centered approach;
- encouraging positive social interactions; and
- focusing on fundamental skill development.

Côté and Gilbert (2009) also suggest that coaching effectiveness represents a blend of three interacting components including coaching contexts (e.g., performance demands, developmental stages), coaches' knowledge (i.e., professional, interpersonal, and intrapersonal), and athletes' outcomes (i.e., competence, confidence, connection, and character). Côté et al. (2007) provide further support for the role of context when they identified differences in coaching excellence across four categories that varied by competitive contexts (participation coaches vs. performance coaches) and the stages of individual development (i.e., sampling, recreational, specializing, or investment years). Participation coaching is characterized as less intensive with more short-term objectives focusing on the athlete's participation satisfaction. Alternatively, performance coaching is more progressive and rigorous with greater specificity in practice design to help athletes achieve both short- and long-term goals. From a developmental standpoint, it is imperative that coaches consider and align their competencies to the needs of their athletes according to their age and stage of development. Côté (1999) created the Developmental Model of Sport Participation (DMSP) which highlighted deliberate play and deliberate practice as key variables that influence the transition between sampling, specializing, and investment years. For example, the sampling phase consists of greater amounts of deliberate play and less deliberate practice; the specializing phase contains equal amounts of deliberate play and deliberate practice; and the investment phase demonstrates greater amounts of deliberate practice and less deliberate play. These sport participation phases start in early childhood (approximately age six) and continue into late adolescence (age 18). Coaches who are able to understand these developmental stages will be better prepared to adjust their coaching styles and training environments to meet the unique needs of their athletes.

Abraham and colleagues (2006) expanded on the requisite knowledge base for coaches by recommending that they understand athletes, techniques and tactics of their respective sport, and pedagogical principles (e.g., learning processes). Finally, according to Flett and colleagues, the process of "effective coaching involves a complex set of behaviors and characteristics that nurture technical, tactical, psychomotor, and psychosocial growth in athletes" (Flett et al., 2017, p. 166). Irrespective of sporting context (recreational, developmental, elite), effective coaching is distinguished by several common areas: skillful pedagogy and communication; thoughtful and action-oriented philosophies; meaningful and caring relationships to maximize athletes' holistic needs; and fostering an intrinsically motivating and process/mastery-oriented environment (Flett et al., 2017). Although optimal sport coaching is often linked with wins and losses, the aforementioned evidence highlights the significance of coaches who value the person first, which enables them to thrive on and off the field.

Coach Influence on Personal Development

Optimal sport coaches are charged with developing people as much as they are with developing athletes. In addition to helping their athletes optimize performance, coaches are expected to play a critical role in their psychosocial development (Horn, 2008; Nichols, Pettee, & Ainsworth, 2007), which is consistent with coaches' own beliefs and expectations (Gould, Chung, Smith, & White, 2006). As seen through a societal lens, sport is often viewed as a vehicle for participants to learn valuable life lessons and skills. In youth settings, sport can be used as a means to facilitate several developmental outcomes including identity development, personal exploration, initiative, improved cognitive and physical skills, cultivating social connections, teamwork, and social skills (Hansen, Larson, & Dworkin, 2003). Irrespective of athletes' developmental needs (e.g., age, physical maturity, commitment to sport, competitive level), effective coaches should focus on enhancing athletes' outcomes across the four Cs (competence, confidence, connection, character/caring; Côté et al., 2010; Jelicic et al., 2007).

Encouraging Mental Training

One way consultants can assist coaches in developing the four Cs is through helping them foster mental training in their athletes. The review of research addressing the antecedents and consequences of optimal coaching illuminates the role coaches have in influencing psychological outcomes in their athletes, most notably those related to mental readiness to perform their best, maximizing their enjoyment in their sport, and achieving their sports goals.

Despite acknowledgement of its impact on athletic success, previous studies have found that coaches lack an essential understanding of how to teach mental training to their athletes and teams. Gould and colleagues (1987) indicated that 82% of coaches rated mental toughness as the most important mental attribute in determining wrestling success, but only 9% of coaches interviewed felt they were successful in teaching or changing mental toughness in their athletes. More recent studies illustrate that coaches believe they can significantly influence their athletes' mental toughness by designing difficult physical practices, building confidence, and encouraging mental skill development (Driska et al., 2012; Weinberg, Butt, & Culp, 2011). Given the shared interest in developing mentally prepared athletes between sport coaches and consultants, it is worthwhile to explore strategies that consultants can employ to "teach coaches how to teach" specific mental muscles (e.g., motivation, confidence, focus) and tools (e.g., imagery, routines, self-talk).

There are several reasons why it may be valuable for consultants to teach coaches how to implement mental training with their athletes and teams. Consultants can leverage coaches to reinforce the value of mental training (McCann, 2014), which is critical due to coaches' impact on shaping athletes' attitudes toward mental training services (Zakrajsek & Zizzi, 2007) as well as coaches' daily contact with them. In addition, enhancing mental toughness is often a collaborative process between coaches and consultants (Weinberg, Freysinger, & Mellano, 2018) involving information sharing and an integrated plan for practice and refinement of mental training (Winter & Collins, 2015). Recently, Anthony and colleagues (2018) demonstrated how a coach-targeted education program could be used to increase the frequency of mentally tough behaviors in elite athletes. The preceding studies provide further support for why consultants should assist coaches with integrating mental training into their coaching practice, but the question still remains as to how.

Practical Implications

The "why" and "what" of the optimal sport coaching has now been established. The following section will explore the "how" in which practical information and tools are offered that consultants can share with coaches to encourage them to engage in optimal sport coaching with their athletes and teams.

Define Mental Muscles and Exercises

Despite the fact that most coaches express clearly the importance of mental training for athletic success, few coaches understand the behaviors that underpin this relationship. Consultants can play a key role in turning this belief into practice by helping coaches to identify and define the essential mental muscles and exercises that they can use with their athletes. This clarity on the part of coaches would enable athletes to gain a similar attitude toward and understanding of mental training (Bell, Hardy, & Beattie, 2013). Consultants can teach coaches how to develop athletes mentally with their practical application in practice and competitive settings. For example, if coaches are interested in building confidence in their athletes, then consultants can show them how to include confidence exercises, such as positive body language and self-talk, in their daily practices. Consultants can further assist with this process by identifying situations in training where coaches can reinforce and praise these behaviors such as between drills or conditioning sets. The mental muscles and mental exercises described in Chapters 1–4 can be used as guides for consultants to educate coaches about mental training.

With key mental training muscles and exercises defined, consultants can then show coaches how to incorporate mental training on and off the field. Coaches have the ability to reinforce the practice and refinement of mental training during conditioning and sport training rather than simply focusing on the physical, technical, and tactical aspects of the sport. Consultants can show coaches how to incorporate mental training into practice to strengthen motivation, confidence, intensity, and focus with the use of positive self-talk, imagery, breathing, routines, and other mental exercises. This inclusion demonstrates to athletes the value that coaches place on mental training. It also allows athletes to gain immediate feedback on the impact that mental training can have on practice and, by extension, competitive performances.

Fostering the Four Cs

Coaching practices aimed at developing the four Cs (competence, confidence, connection, character/caring) require coaches to possess a high degree of contextual intelligence, which can be defined as "more than 'knowing

what' to do; it is 'knowing how' to get it done" (Brown, 2002, p. 26). Consultants play at important role in this process by helping coaches identify the appropriate strategies and techniques to employ for their athletes based on their competitive context and developmental stage. For example, consultants can help increase participation coaches' awareness of quantity and quality of feedback, which is an important contributor to children and adolescents' perceptions of competence (Weiss, Ebbeck, Horn, & 1999). This period of sport participation is marked by increases in peer comparison, thus coaches play a critical role in helping athletes form a healthy perspective of their abilities through promotion-oriented feedback, confirming and reinforcing desirable behaviors (Carpentier & Mageau, 2013), and performance feedback that emphasizes the way in which athletes execute a skill (Gilbert, 2016). To increase perceived competence in older athletes (young-to-late adolescents and adults), coaches need to increase the frequency of deliberate practice which requires athletes to utilize key mental muscles, such as confidence, and focus with more regularity (Côté et al., 2010). This phase is also a good time to start introducing mental training to manage the rigors of deliberate practice and enhance overall performance.

As mentioned earlier in this chapter, optimal sport coaches can significantly influence various life skills in their athletes in addition to their on-field performance. A fundamental outcome to strive for in sport participation is the development of positive and meaningful relationships through connection between teammates, coaches, family, community, and others. Consultants can assist coaches in this development by strengthening team cohesion with team-building and communication exercises (see Chapter 10). They can also provide further support by leading and facilitating parent education seminars on pertinent topics given the significant influence parents have on children's lives (Siegler, DeLoache, & Eisenberg, 2003). Additionally, they may guide coaches on asking effective questions to help them get to know their players on a deeper and more meaningful level. One strategy for this would be to empower coaches to co-facilitate mental training sessions and openly share their experiences on a topic in a discussion with their team. The shared dialogue will help foster greater closeness and mutual trust, which has been linked to enhanced team performance at higher levels (Dirks, 2002).

When it comes to building character and mutual trust, coaches should deliberately model the compassion, integrity, and ethical behavior that they expect to see from their players. Coaches cannot assume that their job title is enough for establishing trust and, instead, must continuously foster it through communication and consistency in coaching behavior. For example, a coach's inability to follow through on a promise, or losing control of their emotions in a specific situation, will likely lead to players doing the same. Thus, it is imperative that consultants help coaches continuously reflect on their coaching practices to raise their awareness and teach them how to use the same mental tools that they ask of their players.

Practice What They Preach

A reoccurring theme echoed at conferences in sport psychology and within the literature is the importance of consultants "practicing what you preach" by applying mental training in their own personal and athletic endeavors (Fifer, Henschen, Gould, & Ravizza, 2008). The same rule of thumb should be applied to coaches. As previously mentioned, sport coaches are performers (Giges, Petitpas, & Vernacchia, 2004) and, like their athletes, must exhibit a variety of mental attributes (e.g., composure, confidence, resilience) to help themselves perform optimally and consistently. One of the best ways to get comfortable teaching mental training to athletes is for coaches to practice them in their own lives. Mental training can help increase coaches' self-awareness and assist them in strengthening the mental muscles that will help them perform their very best. Consultants can support coaches in this process by providing tools and feedback so coaches can practice what they preach.

Summary

- Mental toughness (Loehr, 1986) has become one of the most commonly used terms among coaches to describe what separates great from good athletes.
- The acceptance and popularity of mental training in sport and recognition of its importance is increasing among coaches, but few possess the declarative (the "why") or procedural (the "how") knowledge to effectively teach this aspect of sports performance to athletes.
- Sports programs at every level of the competitive ladder struggle to provide their athletes with mental training that matches the sophistication and quality of their conditioning and sport training.

- Four barriers limit coaches' ability to offer quality mental training to their athletes: few resources to learn from, no programs to follow, not a programmatic priority, and time.
- Part of this challenge is due to the inconsistent terminology that has been documented in the coaching science literature. These terms include, but are not limited to coaching effectiveness, coaching excellence, good coaching, and great coaching.
- Several desirable actions have been identified for effective coaches which includes engaging participants, fostering a mastery-oriented motivational climate, promoting fun and play, utilizing an athlete-centered approach, encouraging positive social interactions, and focusing on fundamental skill development.
- The process of "effective coaching involves a complex set of behaviors and characteristics that nurture technical, tactical, psychomotor, and psychosocial growth in athletes."
- Optimal sport coaches are in the business of developing people as much as they are about building athletes and, as such, coaches are expected to play a critical role in their psychosocial development.
- Irrespective of athletes' developmental needs (e.g., age, physical maturity, commitment to sport, competitive level), effective coaches should focus on enhancing athletes' outcomes across the four Cs (competence, confidence, connection, character/caring).
- One way consultants can assist coaches in developing the four Cs is through helping them foster mental training in their athletes.
- Consultants can play a key role in turning this belief into practice by helping coaches to identify and define the essential mental muscles and exercises that they can use with their athletes.
- Consultants can show coaches how to incorporate mental training into practice to strengthen motivation, confidence, intensity, and focus with the use of positive self-talk, imagery, breathing, routines, and other mental exercises.
- Consultants are integral for increasing coaches' awareness of feedback and behavior, especially given their influence on athlete's perceived competence and character.
- Consultants should encourage coaches to be involved and facilitators in mental training sessions to help them foster closeness and trust with their athletes.
- One of the best ways to get comfortable teaching mental training to athletes is for coaches to practice them in their own lives.

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COACH–ATHLETE RELATIONSHIP

Debi Corbatto

A dyadic affiliation is one in which two people's goals, actions, and emotions are symbiotic (Kelley, Berscheid, Christensen, Harvey, Huston, Levinger, & Peterson, 1983). The coach–athlete relationship in sport is an example of such a unique, interdependent bond. Athletes are immersed in an environment that their coaches co-create (Corbatto, 2018) and their relationship may be the most important in terms of athletes' abilities to perform their best, enjoy their sports experiences, and accomplish their sports goals. The importance of studying this relationship has taken on critical significance as recent events have uncovered significant issues facing the sports community relative to harmful relationships of coaches and athletes, such as the former USA gymnastics team physician found guilty of sexual assault of Olympic athletes (Hobson, 2018). Verbal, emotional or even physical abuse of athletes deters athletes from continued participation in sport (Women's Sports Foundation, 2016). Overarching problems surrounding the coach–athlete relationship include coach–athlete conflict, the power differential, physical and sexual abuse, and lack of appropriate support (Stirling & Kerr, 2009). These issues drive

the call for significant research to complement anecdotal understanding of this powerful dyadic affiliation as well as interventions to ensure positive and healthy coach–athlete relationships.

Theory and Research

Athletes establish relationships with coaches to leverage their knowledge and experience of their sport, to learn the wide range of skills necessary to perform in their sport, to understand how to perform well in competitions, to gain psychological, emotional, and practical support, and, ultimately, to help them achieve their sports goals. Coaches are in the relationship to impart their know-how to help athletes develop within and outside the sports world, and to gain meaning and fulfillment as they guide athletes toward their sports dreams and goals. Both coaches and athletes share the goal of achieving personal success and satisfaction (Jowett & Nezlek, 2012). The interdependence of the coach–athlete relationship makes this relationship unique (Rusbult, Kumashiro, Coolsen, & Kirchner, 2004). Without the other party, neither can reach their goals.

A recent study by Vierimaa, Bruner, and Côté (2018) confirms the importance of the social interaction of the coach–athlete relationship to sports training and performance. This research affirmed the concept that the group of athletes that engaged in more frequent sport communication with their coaches had high perceptions of confidence, connection and character, all considered to be positive behaviors in athletics. These results highlight the significance of a contextual relationship between the coach and athlete during sport development.

Although the role of athletes has been extensively examined as an individual experience, coaches' influence on athletes and the social aspects of sports would suggest the value in studying the sports in relational terms as well. In fact, sports are inherently a social undertaking (Maguire, 2011) and athletes interact closely with their coaches in many capacities. The coach–athlete social dyad has been demonstrated to be one type of teacher-student affiliation (Bloom, Crumpton, & Anderson, 1999). The help-seeking/help-giving environment reflects this coaching behavior as a form of self-regulated learning (Karabenick & Dembo, 2011) and sport coaches can be instrumental in supporting athletes' self-regulatory habits (Kitsantas, Kavussanu, Corbatto, & van de Pol, 2018). There is also support for coaches as influential parties in the development of athletes' efficacy beliefs (Saville & Bray, 2016). For example, relation-inferred self-efficacy (RISE) has been shown to relate to improved effort, persistence, and optimum performances in athletes (Beauchamp, Jackson, & Morton, 2012; Feltz, Short, & Sullivan, 2008). Relation-inferred self-efficacy is a part of a framework presented by Lent & Lopez (2002) in which individuals who work alongside others (i.e., athlete/coach) have their efficacy beliefs (Bandura, 1986) influenced by those in their partnership. The complete relational efficacy framework presented by these researchers includes self-efficacy, other efficacy, and relation-inferred self-efficacy (RISE).

Importance of Coach–Athlete Relationships

When athletes and their coaches are working in a positive interdependent dyadic relationship, both benefit in many ways (Coe & Mason, 1988) including effective communication and conflict resolution, increased commitment, greater confidence, and enhanced practice and competitive performances. At the same time, incompatibility or conflict in the coach–athlete dyad can cause the relationship to fail (Jowett & Cockerill, 2002) and this failure can have negative effects on athletes and coaches' stress levels, self-assurance, motivation, self-esteem, and sport performance (Jowett, 2003). These dysfunctional situations detract from flow (Swann, Keegan, Piggott, & Crust, 2012) while a sense of control, concentration, automaticity, and enjoyment of the experience has been reported as necessary for peak performances and flow to occur (Swann et al., 2012; Krane & Williams, 2015). One recent example is the 2015/2016 coaching crisis suffered by the Sacramento Kings. Growing discontent and lack of engagement between the players and their coaches resulted in a demoralized team and a losing streak (Stein, 2016). The team leadership recognized the issue between the coaches and athletes and sought ways to solve this problem. They eventually replaced several members of the coaching staff in an attempt to turn around the team's performance (Redford, 2016).

We can also look at successful coach–athlete relationships such as that of the New England Patriots' Bill Belichick and Tom Brady, its head coach and star quarterback, respectively. They have a strong professional rapport and hold each other accountable for high-level performance (MacMullan, 2014). They have worked

together for almost 20 years and have earned multiple Super Bowl championships. Their relationship demonstrates the outcomes that can come from a positive collaboration between athletes and their trusted coaches. The powerful Belichick–Brady relationship adds anecdotal support to the awareness that a sports dyad with a trusting relationship, positive relational self-efficacy, and a healthy help-seeking/help-giving environment can have remarkable performance outcomes for athletes, teams, and coaches.

Models of Coach–Athlete Relationships

Jowett

Jowett and her colleagues (Jowett, 2003; Jowett & Clark-Carter, 2006; Jowett & Cockerill, 2002, 2003; Jowett & Meek, 2000; Jowett & Ntoumanis, 2004) have leveraged social exchange and interdependence theories to explore the coach–athlete relationship. The constructs of their theory, called the 3 Cs model, are:

- Closeness: How the athlete and coach describe the values, beliefs, and emotions, such as respect and trust, that surround their relationship.
- Commitment: The intention of both parties in the athletic dyad to maintain the relationship over time.
- Complementarity: The cooperation, readiness, and responsiveness of the coach and athlete toward each other.

The strength of the relationship and the relational and sport benefits between the dyadic partners is thought to rise as each construct of the model increases.

Jackson

Jackson and his colleagues (Jackson, Grove & Beauchamp, 2010) have extended the 3 Cs framework in developing the Relation-Inferred Self-Efficacy (RISE) model which takes interdependence theory and applies its constructs to the coach–athlete relationship. Relation-inferred self-efficacy refers to the feelings of competence that athletes gain from knowing that their coaches have confidence in their abilities. This work in the sport context demonstrates that both internally generated self-efficacy and relation-inferred self-efficacy play roles in the successful coach–athlete dyad (Jackson et al., 2010). In particular, Jackson's research demonstrates that when athletes perceive a high degree of confidence in their coaches' capabilities, increased commitment by both athletes and coaches result.

Vallerand

Vallerand and his colleagues (Vallerand, 1997; Vallerand & Rousseau, 2001; Mageau & Vallerand, 2003) present a motivational model of the coach–athlete dyad that proposes that coaching behaviors nurture athletes' intrinsic motivation, such as an inherent desire to tackle a challenge and self-determined extrinsic motivation, such as placing a high value on a team goal. Vallerand stresses the roles that coaches play in the support of the autonomy of athletes to encourage both types of motivation (Deci & Ryan, 1985). This autonomy-supportive role emphasizes the coaches respecting the athletes' perspectives and feelings while providing them with choices, active participation in decision making, and minimizing pressure and demands on them. This model demonstrates that autonomy-supportive coaching has a strong positive impact on athletes' motivations which are important precursors to sustained effort and quality performance.

Other Areas of Research

In addition to the models just described, two other areas of research have been receiving attention as important contributors to effective coach–athlete relationships.

Trust

In recent work on the dynamics of elite coach–athlete dyads related to high-level performance, Corbatto (2016, 2018) highlights the importance of trust in the relationship. Trust is conceptualized as having confidence in someone, feeling safe with them, and knowing that person can be counted on to act in their best interests. Athletes trust their coaches in several key areas:

- athletes' general health and well-being;
- the coaches' knowledge and experience to advance their athletic development; and
- care and concern for them.

Without this deep and broad trust that athletes have toward their coaches, athletes would be unable to focus effectively on or commit themselves fully to their sports efforts.

Thriving

Thriving in sport has been defined as the sustained high-level performance and well-being of the participant (Brown, Arnold, Reid, & Roberts, 2017a). Thriving athletes display certain patterns of coach-driven relational support such as verbal reinforcement and affirmations to improve athlete confidence. Brown, Arnold, Standage, and Fletcher (2017b) demonstrated that, although coaches and athletes work together to improve performance and achieve sports goals, athletes' personal attributes and psychological capabilities are paramount to thriving in their sport experience. In this new area of research, it is suggested that the concept of thriving can not only positively predict athletic performance, but may actually result in improved or higher performance levels (Brown et al., 2017a). With this in mind, it is suggested that, to facilitate the experience of the athletes, coaches should consider strategies such as those provided in the Practical Implications section below that can influence both performance and well-being to support athletes' efforts (Barker, Jones, & Greenlees, 2010).

Practical Implications

The coach–athlete relationship is instrumental in improving many aspects of sports performance as well as serving as an important vehicle for both personal and social development (Johnson, Garing, Oliphant, Roberts, 2016; Vierimaa et al., 2018). Consultants can play an important role in helping both coaches and athletes take ownership of their place in the relationship and show them what they can do to strengthen it to the benefit of both.

Drawing on the models discussed in "Theory and Research" above, Mageau & Vallerand (2003) describe seven areas that a coach can use to strengthen their relationships with their athletes and, by extension, athletes' efforts and performances: To strengthen the working relationship, the coach can practice and role play strategies with consultants to hone language such as providing choices within specific rules and limits and offering reasons for any tasks, rules, or limits. Consultants can emphasize coaching language such as: "During our workout today, we will be working on low impact activities to limit your physical load. Would you prefer to work on spot shooting or free throws today?"

In addition, consultants can work with coaches on being open and acknowledging the athletes' perspectives and feelings: "I know you are disappointed with the results of the match yesterday, but it is over, and we will move on to next week's match now." Emotional intelligence in a coach, specifically the ability to discern, understand, and help regulate their own emotions as well as that of their athletes is particularly important as the potential for athletes' emotions to impact performance has been clearly demonstrated (Montse, Ragline & Hanin, 2017). Coaches routinely teach tactical skills in their sport but are less well versed in the mentorship aspect of dealing with emotions. Consultants can work with coaches develop their emotional intelligence.

Coaches may also benefit from an exploration of the benefits of allowing athletes to participate in their sport development to build commitment to their practice and competitive regimens. For example, dialogue between a coach and athletes might be, "For those of you interested, I am putting some voluntary workouts on the board for this offseason as a way to get ahead for next season." Participation in sports, as it moves from the novice to elite level, relies on hours of focused practice. As disciplined practices aren't always enjoyable to athletes, relying

on both internal motivations, as well as self-determined external motivators, is a way to encourage behavioral compliance (Mageau & Vallerand, 2003).

Controlling behaviors in coaching should be limited. Controlling behaviors are those that endorse only the coach's ways of thinking, feeling, or behaving and ignore athletes' perspectives (Deci & Ryan, 1985). When athletes must ignore their own values and give up their autonomy to appease a coach, this constitutes psychological control. This control is sometimes expressed by coaches in the form of guilt-inducing criticisms and controlling statements and is a threat to the coach–athlete relationship. Consultants can work with coaches on avoiding language such as "You did great today, just as expected," or "Keep it up, you can do even better tomorrow" and help them refine autonomy-supportive comments such as, "What a great shot" or "When you move your feet like that, it is really hard to catch you". Likewise, feedback should be modified to focus on behaviors that are under the athletes' control rather than to exert control. "Keep it up and I might put you in the game next week," should be replaced with the simple but powerful endorsement to "Keep up the hard work!" Controlling statements or guilt-inducing criticisms sabotage athletes' intrinsic motivation and enjoyment of their sport.

Consultants should work with coaches on preventing ego-involvement from taking place in their athletes. As sport is fundamentally a reward-driven activity, coaches would benefit from finding ways to translate rewards and winning into a less ego-focused accomplishment by emphasizing the growth that the rewards represent. Language such as, "We are proud to have seen so much growth in the team this year; this trophy is a direct result of your efforts and progress, and you should all be proud of that." When athletes are overly ego driven, it has a negative impact on internal motivation and the ability to react constructively to negative outcomes (Nicholls, 1989). By working with coaches on creating an ego-neutral environment, athletes' self-esteem won't constantly be on the line with each win or loss.

Consultants can also improve coach–athlete relationships by showing coaches how to build and maintain trust with their athletes. Coaches must recognize the role that trust plays in athletes' abilities to give their best efforts and perform at a high level in competitions (Corbatto, 2018). Trust is a mutual relationship with three facets: institutional (athletes can rely on their team for support), cognitive (demonstrated coaching knowledge to develop athletes), and emotional (coach providing support through the highs and lows of athletes' lives). These areas of trust can be developed in the coach–athlete dyadic relationship.

Consultants can work with coaches to develop strategies to address each of these areas. In the area of institutional trust, coaches might ask their athletes what their needs and goals are and how they like to be coached. This approach helps to establish a personal and trusting relationship with each individual athlete. In addition to receiving trust from athletes, coaches can show trust in them by placing positive and realistic expectations on them and challenging and supporting them to be their best using techniques previously discussed in the motivational model of the coach–athlete relationship (Mageau & Vallerand, 2003).

In addition, supporting the cognitive area of trust, coaches can help athletes to be completely prepared to perform their best in practice and competitions. This means that every athlete on the team is important and needs to have the mentorship and coaching of the team leader. When athletes are ignored, they feel that the trust between coaches and athletes is broken.

Finally, the emotional support provided by a coach is critical to establishing trust. Consultants can help coaches to understand and treat athletes as people, not just players, by demonstrating commitment, caring, and confidence in them on and off the field of play. This requires that coaches and athletes communicate openly and genuinely with each other.

Consultants can also leverage the coach–athlete relationship by encouraging coaches to promote the concept of thriving in sport. Thriving allows for the growth of the internal motivators that keep athletes engaged over long periods of time in focused practice as well as improving the individual performances of athletes (Brown et al., 2017b). This area of athletic development can be developed using positive verbal reinforcement and performance feedback to increase athlete confidence and recognition of personal ability after both positive and negative experiences. In addition, consultants can use an assortment of psychological-needs support tools to improve the identified facilitators of thriving including focus exercises, relaxation and mindfulness, confidence builders, helping coaches establish an optimal support environment (e.g., coaches, family, teammates), and developing interventions around athletes' overall health and well-being. Work by consultants involving around motivation, autonomy, competence, and social relationships can also improve the ability of athletes to thrive in the competitive sport environment.

Sharing these recommendations with coaches and exploring ways in which they can best implemented in their relationships with athletes is an important role for consultants to play as a member of a team. Effective coaching is defined as "the consistent application of integrated professional, interpersonal, and intrapersonal knowledge to improve athletes' competence, confidence, connection, and character in specific coaching contexts" (Côté & Gilbert, 2009, p. 316). Consultants can assist athletes and coaches in strengthening their relationship with the end result being both enhance performance and improved well-being of both athletes and coaches.

Summary

- The coach–athlete relationship in sport is an example of a dyadic affiliation is one in which two people's goals, actions, and emotions are interdependent.
- Athletes are immersed in an environment that their coaches co-create and their relationship may be the most important in terms of athletes' abilities to perform their best, enjoy their sports experiences, and accomplish their sports goals.
- Coaches are in the relationship to impart knowledge and experience, and to care for athletes as they strive to reach their potential.
- When athletes and their coaches are working in a positive interdependent dyadic relationship, impressive outcomes can be obtained, but when there is incompatibility the relationship can fail and have a negative impact on athletes' efforts and performances.
- One model of the coach–athlete relationship suggests that closeness, commitment, and complementarity are most essential for healthy outcomes.
- Relation-inferred self-efficacy refers to the feelings of competence that athletes gain from knowing that their coaches have confidence in their abilities.
- A motivational model of the coach–athlete dyad which proposes that coaching behaviors nurture athletes' intrinsic motivation and self-determined extrinsic motivation.
- Trust is conceptualized as having confidence in someone, feeling safe with them, and knowing that person can be counted on to act in their best interests, and plays a key role in the coach–athlete relationship.
- Coaches have a significant impact on whether athletes thrive on and off the field of play.
- Consultants can play an important role in helping both coaches and athletes to take ownership of their place in the relationship and show them what they can do to strengthen it to the benefit of both coaches and athletes.

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SKILL ACQUISITION

Derrek Falor and Jim Taylor

At the heart of what makes the best athletes in the world in any sport great is their ability to learn, perfect, and execute a sport-specific set of motor skills that allows them to perform their best consistently, effectively, and successfully in the most important competitions of their lives. Specifically defined, a skill is an action or task directed toward achieving a specific goal. A motor skill is a defined set of voluntary and coordinated physical movements the purpose of which is to achieve a particular task goal (Magill, 2011). Examples of motor skills include a tennis or golf swing, a triple axel in figure skating, or a back handspring in gymnastics.

The acquisition of these skills and the accompanying expertise in sports is a complex and contextualized process that is impacted by the athletes themselves, their coaches, the environment in which they practice, and other support staff involved with the development of athletes including conditioning personnel, nutritionists, sports medicine staff, and sport psychologists and mental trainers. For coaches to help athletes develop their sport skills fully, they must understand motor learning theory, neurophysiology, psychological contributors to skill acquisition, and the environment in which athletes learn these skills.

Theory and Research

The science of skill acquisition has a long history of inquiry. Specifically, over the last five decades, research into the science of movement and motor learning has burgeoned across the various sub groups (Button & Farrow, 2012). Researchers have identified key stages of how athletes learn new skills and the important contributors to how fully and quickly the skills are acquired.

Motor Learning Principles

Experts in skill acquisition (Ericsson & Pool, 2016) hold the belief that athletes are made and not born. In other words, genetic gifts are less important than the effort that athletes expend in learning and mastering sport skills. While the importance of practice is widely acknowledged for skill acquisition in sports, not all forms of practice have equal value in helping athletes develop the skills needed to perform effectively and consistently in competition. Hall & Magill (1995) uncovered two key findings: a blocked practice session produces more immediate learning of a skill and a randomized practice schedule produces a higher retention of a skill over time. Blocked practice occurs when a learner performs the same skill over and over with little to no variance in repetitions in order to lock in a specific movement pattern. Examples include a basketball player shooting 50 free throws in a row, a sprinter repetitively working on starts, or a soccer player serving 20 corner kicks to the goalkeeper. Conversely, a randomized practice schedule exists when multiple skills are to be executed in one training session (Ruiz-Amengual & Ruiz-Pérez, 2014). An example of this type of practice can be illustrated by a tennis player working on her first serve, backhand return of serve, and volleys or net play all in the same training session. As noted by Kim et al. (2017), random practice, while characterized by relatively slow initial performance during training, is more effective for supporting long-term retention and execution of the practiced skills. Further, the important contribution of their present work is the demonstration that a learner with a history of high contextual interference practice will see a positive influence on the learning of skills not contained in the original bout of random practice.

Ericsson & Pool (2016) suggest using a deliberate and purposeful practice structure that incorporates four important elements (as discussed in Chapter 5):

1. Well-defined and specific goals.
2. Be focused.
3. Receive appropriate and timely feedback.
4. Must get out of their comfort zone.

The ability of athletes to effectively apply their skills during the high-pressure environment of competition is likely to be the factor that differentiates successful athletes from those who are less successful. Therefore, a key challenge for coaches and consultants working to help athletes develop their sports skills is to ensure that athletes are exposed to efficient blocked practice sessions early in the learning phase followed by randomized practice sessions later on to help athletes retain and transfer their new skills across a variety of challenges they experience in their sport.

Athlete–Environment Relationship

Multiple models have been developed that focus on the athlete–environment relationship as crucial to understanding skill acquisition for athletes. *Dynamic systems theory* suggests that skill acquisition occurs for athletes where movement is produced through the interaction of multiple subsystems within the person, task, and environment (Thelen, 1989). Athletes are not machines where motor learning and skill acquisition occur in a predictable linear path. The basic premise is that athletes are complex dynamic systems, constrained by their morphological, physiological, psychological and biomechanical factors, the demands of the task or skill to be executed, and the environment where they train and compete. As an example of how Dynamic systems theory affects skill execution, consider the soccer player learning to acquire and perform a dribbling move. First, he learns the move while dealing with personal fitness level, fatigue, and field conditions, among other subsystems. Next, the player must understand when the correct tactical time is to use the move against a defender, in this way considering the environment. Finally, the player will choose to use the move in a game based their confidence and on the location of the defender in relation to that opponent's teammates, location on field, score, and internal physiological feelings such as fatigue levels.

Ecological dynamics theory is another model that examines the interaction of the athlete with the environment. It proposes that the relationship between athletes and the environment involves how a person takes in information, makes a decision, and applies a consistent performance action by adapting to the changing tasks in sport (Davids et al., 2013). In other words, although trained athletes most often perform skills and action patterns through predictable movements in controlled environments like scripted practice, skilled performers are not locked into rigidly stable solutions (e.g., technical, tactical), but rather can vary their behaviors based on competitive demands. Successful performers adapt their actions to dynamically shifting environments that characterize competitive sport including score, type of defense, conditions, and time remaining. This flexibility is based on the current environmental conditions and task demands, thus the ecological system affects the skill execution (Araújo et al., 2007). For example, a point guard in basketball who has been perfecting the execution of a bounce pass into the high post, brings the ball across half court and would like to make this type of entry pass to the team's center at the free throw line. However, the point guard notices that the center is better at catching chest passes. Thus, the point guard elects to throw a chest pass as that is the skill which is most likely to produce a positive pass completion.

A third way to view the relationship of athlete to environment as it affects skill acquisition is through the *bioecological model*. This model posits that coaches and consultants interact with athletes whose personal experiences, skills, and attributes have been shaped by the sociocultural constraints that surround them (Ueharaa et al., 2014). In general terms, the bioecological model conceives human development as function of the interaction between nature and nurture (Krebs, 2009). For example, in Brazil, soccer is woven into the fabric of its society differently than in many other parts of the world, so it could be suggested by this model of motor learning, that Brazilians are raised with the understanding that soccer expertise is not only desired but also acquirable through training. A young Brazilian player might be more open to learning a specific soccer skill than a youth from a part of the world where soccer is not such a significant part of their culture or lives.

Using these three skill acquisition models, consultants can analyze the contextual forces surrounding athletes as well as the sociocultural constraints leading to skill development in certain populations. They can then show athletes how to leverage the information that is most helpful in developing relevant sports skills and applying them to their practice and competitive performances.

Practical Implications

The discussion so far supports the notion that physical practice is not the only tool that coaches have to facilitate skill acquisition in their athletes. Instead, they can also use a variety of psychological, interpersonal, and contextual tools to help athletes develop their skills. According to Williams and Hodges (2005), while the classical, prescriptive instructional approaches to teaching skills are likely to produce faster performance gains initially, they may result in less efficient and reliable performances in the long term.

The findings of the studies described above with respect to the factors affecting skill acquisition share important implications for coaches working with athletes in their skill development and in the contributions that consultants can make to athlete development and individual and team performance. Because coaches may not be familiar with these nuances of sport skill learning, consultants are in an excellent position to partner with coaches in two ways that will benefit the athletes with whom they work. First, consultants can collaborate with coaches in identifying the key psychological, interpersonal, and contextual contributors to an optimal learning environment in which athletes can develop their skills. Second, consultants can educate coaches on specific approaches and tools that they can incorporate into their daily practice regimens that will encourage skill acquisition. Third, consultants can encourage coaches to consider the sociocultural factors surrounding athletes that may enhance or detract from their ability to acquire and perform certain technical and tactical skills in sport. In this process, consultants work to identify which strategies may be most effective to pair with physical practice to achieve maximum gains in skills and the commensurate increases in performance during training and competitions.

Innate vs. Learned

Wulf and Lewthwaite (2009) indicated that motor learning can be affected by whether learners believe that a skill can be learned or is more dependent on innate ability. They found instructions suggesting a skill reflecting an inborn talent resulted in less effective learning than did instructions that portrayed a task as an acquirable skill. Based on the above research, coaches and consultants can introduce skills in ways that encourage athletes to believe that their ability to develop the skills depends more on effort, focus, and persistence (which are controllable) than innate ability (which is outside their control). This attitude that is fostered in athletes by coaches and consultants can increase athletes' motivation, confidence, and perseverance as they initiate and progress through the stages of skill acquisition.

Mental Toughness

An additional consideration for athletes during the skill acquisition phase is that of mental toughness. Mental toughness is considered one of the main characteristics contributing to athletic success (Jones et al., 2007). Jones and colleagues (2002) defined mental toughness as follows:

> Having the natural or developed psychological edge that enables you to, generally, cope better than your opponents with the many demands (competition, training, lifestyle) that sport places on a performer and, specifically, be more consistent and better than your opponents in remaining determined, focused, confident, and in control under pressure.
>
> *(Jones et al., 2002, p. 16)*

Moradi, Mousavi, and Amirtash (2013) reported that subjects assessed to possess high mental toughness (via the MTQ-48) outperformed, in both skill acquisition and skill retention, those rated as having low mental toughness. Moreover, they found the group with higher mental toughness scores not only produced better basketball passing

results (as compared to subjects with lower scores), but also retained their newly learned passing skills at a high level even after a break in learning.

Consultants can foster mental toughness through a variety of methods. Based on findings from Weinberg et al. (2016), consultants and coaches can build mental toughness by being thoughtful and purposeful both in how they think about athletes (i.e., be instructive and encouraging, foster autonomy, see them as individuals) and their staff (i.e., be multidimensional and educate), as well as what they do (i.e., create adversity and at the same time teach mental tools). Additionally, Crust and Azadi (2010) found significant positive correlations between mental toughness, mental imagery, and goal-setting. Finally, Mattie and Munroe-Chandler (2012) investigated the relationship between mental toughness and mental imagery. The results showed that mental imagery could significantly predict mental toughness in athletes; specifically, sophisticated motivational imagery proved to be the strongest predictor of all aspects of mental toughness. In this way, mental imagery is one of the key approaches to improving mental toughness (see Chapter 4 for more on mental imagery). Based on previously noted research, skill acquisition may be improved through mental toughness training by consultants and coaches given that this set of attributes allows athletes to persevere through difficult circumstances, ultimately leading to successful skill execution outcomes. Mental toughness can be viewed as a critical component of maximizing the performances of athletes since its subset of attributes promote a state of mind that enhances performance.

Goal-Setting

Goal-setting and self-regulation (Zimmerman & Kitsantas 1996) were found to have positive effects on skill learning for novices. Barnett and Stanicek (2013) found goal-setting to significantly improve performance of novice archers over the course of a ten-week study. However, Holt, Kinchin, & Clarke (2015) found that goal-setting alone was not enough to promote practice effort or significant learning in young soccer players. Recently, Zetou, Papacharisis, & Mountaki (2017) noted that goal-setting alone did not produce performance improvement in skills during the course of a season. Given the mixture of results, goal-setting by itself may not be a significant factor in improving skill acquisition across a variety of ages, genders, and abilities of athletes. Thus, it is important to consider the findings of Toering et al. (2011) where self-regulated players displayed behaviors which indicated that they create optimal learning conditions, are aware of their abilities and inabilities, take responsibility and initiative, are focused, and are prepared for practice. Similarly, as noted by Bartulovic, Young & Baker (2017), those athletes who demonstrated higher scores in the self-regulation learning processes were more frequently found in the elite and less-elite group compared to recreationally competitive athletes.

Given this information, consultants can work with both athletes and coaches in establishing realistic goals for acquiring particular sports skills (see SMARTER goal guidelines discussed in Chapter 3) and pair those goals with solid self-regulated behaviors of the athletes during training.

Focus

Research on the importance of focus in skill acquisition has consistently demonstrated that an external focus can enhance motor skill learning and performance more than an internal focus (Wulf, 2013). Additionally, Wulf notes a high skill level is associated with accuracy, consistency, and reliability in achieving the movement goal (i.e., effectiveness), as well as fluent and economical movement executions as evidenced by the investment of relatively little physical and mental effort (i.e., efficiency). An external focus of attention speeds up the learning process so that a higher skill level characterized by both increased effectiveness and efficiency is achieved sooner. An internal focus is associated more with kinesthetic feelings of athletes' bodies in relation to equipment or competition surface and can provide too much stimulus in one aspect of skill acquisition rather than an effective focus on the whole skill.

Results from Roshandel, Taheri, and Moghadam (2017) revealed that young learners benefit from instructions that relied on an external focus and internal focus in the same manner. However, adults benefited from more from externally focused instructions. The majority of studies on focus and skill acquisition suggest that, other than novices, learners' attention should be directed externally toward the skill being executed physically instead of toward bodily movements. For example, sprinters working on starts out of the blocks are often told to stay low for the first few strides. An internal focus would involve their attention to how much bend there is at the waist, the ducking of their head, and overall concentration on keeping their body parts all relatively close

to the ground. In contrast, an external focus would involve sprinters exploding out of the blocks while directing all of their energy to going forward rather than up. Focusing on bending over (internal focus) could negatively affect balance and stride pattern. Focusing externally on driving forward simplifies the thinking and allows for more efficient movement. A meta-analysis of this research evaluating results from 57 studies (Tan, Lai, & Huang, 2012) supported the conclusion in which almost 75% of the studies found that skill acquisition was enhanced more by an external focus compared to an internal focus. Given this impact, consultants can share with coaches and athletes the mental tools that can improve focus and facilitate learning including keywords, mental imagery, video modeling of self and others, centering, and breathing.

Pre-performance Routines

Combinations of mental-training tools have been studied in terms of their influence on skill acquisition in sports. One such combination is called a pre-performance routine (PPR). A pre-performance routine is defined as a fixed series of motor and psychological activities performed prior to executing a motor skill such as throwing, catching, or kicking a ball (Lidor & Singer, 2003) with the goal of optimizing preparation. Perry and Katz (2015) concluded that athletes who were instructed to perform a PPR, whether it included both motor and mental techniques or motor techniques alone, performed more accurately in all phases of skill development: acquisition, retention, and transfer as compared with those who were provided with only technical instruction. Additionally, those who learned a preparatory routine that included motor and mental components executed sport skills more accurately than the participants in the control group or those who learned only a motor preparatory routine. As noted by Perry and Katz (2015), these findings support previous research that mental and motor pre-performance routine improves accuracy of skills, especially in closed-paced skills.

Pre-performance routines can be composed of a variety of physical and psychological tools that are aimed at maximally preparing athletes to focus on and expend effort toward the acquisition of new sports skills. Examples of helpful tools include:

- physical warm-up;
- static physical rehearsal of the skill;
- breathing;
- intensity regulation (either decrease or increase, depending on the type and stage of skill);
- mental imagery;
- focus keywords; and
- positive and motivating self-talk.

Video Modeling

Video modeling involves having athletes watch expert performers execute the skills they are attempting to learn. This technique, which is a form of mental imagery, has been shown to improve the rate and accuracy of acquiring a skill in two recent studies. Nahid, Zahra & Elham (2013) discovered that when learners watched film of a skill being performed by experts, their ability to learn the skill themselves exceeded a control group that was only given verbal instruction on a skill. They noted that to help learners focus on helpful aspects of the skill while viewing videos, coaches or consultants can give verbal cues that direct their attention to useful elements of the skill being demonstrated in the video.

Consultants can improve the value of video modeling by having coaches and athletes follow several guidelines:

- Have athletes watch video models who are physically like them (e.g., body proportions, muscle mass).
- Focus on successful models (what they do right), not failing models (what they do wrong).
- Take in the entire image rather than analyzing and focusing on minutiae.
- Combine video models with video of the athletes themselves performing as a means of integrating the positive images of the video models into their own performances.
- Immediately after viewing a video model, athletes should use mental imagery to incorporate the skill into their own performances.

Mental Imagery

Mental imagery appears to be effective in producing improvements in skill acquisition. In a landmark study by Maring (1990), it was determined that mental practice (i.e., imagery) combined with physical practice led to the best skill acquisition outcomes. In a similar manner, Waskiewicz and Zajac (2001) found that mental imagery combined with physical practice allowed for better skill outcomes than just physical practice alone. They also found that mental practice created a higher rate of skill acquisition in the early stages of learning as long as the learner clearly understood the task requirements.

Nyber et al. (2006) concluded that physical and mental practice are associated with partially distinct regions (motor vs. visual) of the brain and that, by activating these different brain regions, athletes can facilitate learning. Applying both physical and mental practice methods also improved motor flexibility with new tasks. Additionally, the findings of Kim, Frank and Schack (2017) revealed that sport skills improved through both action observation (subjects watching experts perform a skill) and motor imagery training (subjects using imagery to perform mental repetitions of a skill) as compared to physical practice alone. A visual demonstration is most effective when athletes are first learning the specific pattern of movement, but verbal instruction may be most beneficial to when the movement has already been acquired and simply needs to be performed faster or with more precision (Williams & Ford, 2009).

Consultants can help coaches and athletes to gain the many benefits of mental imagery in several ways. First, consultants can educate them about why and how imagery works. Second, they can show athletes how they can use imagery during practice, away from the field of play, and before and during competitions to enhance skill acquisition, retention, transfer, and consistency. Third, consultants can demonstrate ways in which coaches can incorporate imagery into their daily practices, for example, as part of their pre-performance routine, before a drill aimed at teaching a new skill, and at the end of practice as a part of cool-down and recovery.

Feedback

Feedback to athletes has proven to have an impact on their ability to effectively learn and perform a physical task, depending on the type of feedback given. Badami, Kohestani, and Taghian (2011) indicate that feedback following effective execution resulted in more effective learning than feedback after poor execution. Chiviacowsky and Drews (2016) confirmed that timely positive feedback provided to the athletes influences their self-efficacy and motor learning on a task. In their study, participants seemed to be sensitive to feedback informing them as to whether their performance got better or worse over time, with consequences on their perceptions of competence and learning. Both results highlight the important role of feedback for motor learning as it carries an important motivational function.

Consultants can help coaches become better teachers by educating them about different aspects of feedback in the process of skill acquisition. Key areas related to improving the quality of feedback include:

- timing (when it is given);
- quantity (how much is given);
- valence (how positive or negative it is);
- specificity (how detailed it is); and
- modality (whether verbal, visual, or kinesthetic).

Consultants also help athletes to be better receivers of feedback. Clearly, feedback from coaches has little value if it isn't processed, understood, connected to the skill, and remembered by athletes when practiced. Consultants can show athletes simple tools they can use to better absorb and use coach feedback:

- Look at the coach.
- Block out external (e.g., other athletes talking nearby) and internal (e.g., self-criticism) distractions.
- Give self-feedback before receiving coach feedback.
- Reflect back what the coach said.
- Ask questions for clarity of understanding.
- Use imagery to ingrain the feedback into the next execution.

- Demonstrate the feedback physically.
- Create a keyword as a reminder of the feedback during execution.

Practice Environment

The practice environment is an underappreciated and often neglected contributor to skill acquisition (Williams & Ford, 2009). The setting in which athletes practice skills can have a significant impact on their ability to focus on and persist as skills are practiced and learned. A skill acquisition method which can be employed by coaches and consultants, that combines aspects of both the drill (contextualized training) and the games approaches, is the *guided discovery* technique. This strategy can be used to create practice environments that foster enhanced learning of sports skills. Smeeton et al. (2005) found that guided discovery methods are recommended for expediency in learning and resilience under pressure. Using this method, coaches and consultants can establish a drill or practice pattern and then use questions to guide or shape the athletes' learning and thus influence subsequent performance attempts. Effective questions are those that direct the athletes' focus to a particular aspect of the skilled performance, either the decision-making process or the technical aspects of a particular movement or skill execution (Brewer, 2017).

Consultants can help coaches to create these positive learning environments as part of athletes' guided discovery experiences. Key practice-setting strategies for coaches include the following:

- Express confidence in their athletes related to learning sports skills.
- Establish expectations of quality, determination, patience, and persistence.
- Build a supportive team culture.
- Welcome athlete input and feedback.
- Explain the skill-acquisition progression to enhance familiarity, predictability, and control.
- Ensure a focused and distraction-free environment.
- Begin skill acquisition in a simple environment.
- Focus on only one element of the skill at a time.
- Increase the complexity of the environment as the skill is acquired (e.g., include other athletes, introduce other skills, add adverse conditions).
- As the skill is mastered, incorporate it into broader practice goals.
- Ultimately, practice the skill in a simulated competition.

Summary

- At the heart of what makes the best athletes in the world in any sport great is their ability to learn, perfect, and execute a sport-specific set of motor skills that allows them to perform their best consistently, effectively, and successfully in the most important competitions of their lives.
- A motor skill is a defined set of voluntary and coordinated physical movements the purpose of which is to achieve a particular task goal; examples of motor skills in sports include a tennis or golf swing, a triple axel in figure skating, or a back handspring in gymnastics.
- The acquisition of these skills and the accompanying expertise in sports (or other activities such as music and dance) is a complex and contextualized process that is impacted by the athlete themselves, the environment in which they practice, their coaches, and other support staff involved with the development of athletes including conditioning personnel, nutritionists, sports medicine staff, and sport psychologists and mental trainers.
- While the importance of practice is widely acknowledged in all sports, not all forms of practice have equal value in helping athletes develop the skills needed to perform effectively and consistently during competition.
- A deliberate and purposeful practice structure that incorporates four key elements is most effective: well-defined and specific goals, be focused, receive appropriate and timely feedback, and must get out of their comfort zone.
- A key challenge for coaches and consultants working to help athletes develop their sports skills is to ensure that are organized with efficient blocked practice sessions early in the learning phase followed by randomized

practice sessions later to help athletes retain and transfer their new skills across a variety of challenges they experience in their sport.

- Factors that relate to the athlete–environment relationship as crucial to understanding skill acquisition for athletes include aspects of the person, task, and environment, how athletes process the skill, and sociocultural influences.
- There is support the notion that physical practice is not the only tool that coaches have to facilitate skill acquisition in their athletes; instead, they can also use a variety of psychological, interpersonal, and contextual tools to help athletes develop their skills.
- Because coaches may not be familiar with these nuances of sport skill learning, consultants are in an excellent position to partner with coaches in two ways that will benefits the athletes with whom they work.
- Key areas in which consultants can help coaches and athletes in skill acquisition include developing mental toughness, goal-setting, focus, pre-performance routines, video, modeling, mental imagery, coach feedback, and developing positive practice environments.

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VIDEO

Brandon Orr and Jim Taylor

The use of video as a tool for athlete development is well entrenched in some sports, such as football, basketball, gymnastics, and soccer, but is still growing in its use in other sports (Boyer, Miltenberger, Batsche, & Fogel, 2009; Harle & Vickers, 2001; McGinnis, 2000). With new technology evolving at a rapid rate and new platforms (e.g., Hudl, SkyCoach) becoming more accessible in terms of cost and ease of use, coaches at every level of sport will have the ability to leverage video as a valuable means of helping athletes improve many aspects of their sports performances.

As the sayings go, "seeing is believing" and "images don't lie"; therein lies the power of video. The use of video in any setting is rooted in its ability to provide objective feedback on a wide range of physical, biomechanical, technical, tactical, team, and even psychological parameters. Its fundamental purpose is to offer clear and unambiguous information as a means of offering athletes corrective measures in the contributors to sports performance that were just mentioned.

At the same time, video as a tool is currently limited by a lack of grounded theory and evidence-based practices surrounding the inclusion of its use by coaches to advance athlete development. Because it is driven primarily by the "boots on the ground" experiences of coaches and technology companies that see a potential market for its products, rather than sound scientific inquiry, there is a lack of clarity on why video is beneficial, in what areas it can have a demonstrable impact, and how its value can be maximized.

To provide some clarity, this section will explore the use of video both outside of and within sports. It will also offer recommendations for how consultants can help coaches optimize its value in their work with athletes (Groom, Cushion, & Nelson, 2011).

Theory and Research

As with many aspects of sport, the use of various approaches and strategies by coaches began outside of sport in, for example, education, business, and medicine. The same holds true for video. An exploration of how video has been used in other settings will inform how coaches can use video to help their athletes to take full advantage of their practice opportunities with the ultimate goal of performing their best in competition.

Video Use in Outside of Sport

The use of video outside of sports for behavior modification and improvement has been documented in a variety of areas including communication skills and youth classroom behaviors (Ives, Straub, & Shelley, 2002). Most commonly, the use of video in this context involves showing a student video of their disruptive behavior and then coupling this with excerpts from the classroom environment of this same student engaging in adaptive and productive behavior in the classroom (Dowrick, 1991). This approach allows students to observe themselves demonstrating desired behaviors in the learning setting as a means of self-modeling (Dowrick, 1991, 1999). It also serves to allow the student's self-image to increase by observing their own competency to engage in appropriate and desired behaviors.

Video Use in Sport

Seeing the benefits of video use in education, researchers hypothesized a similar benefit in sports for helping athletes use videoed past performances to improve their skills within a new training or competition setting, and eliciting successful sport behaviors within the presence of anxiety (Dowrick, 1999; Ives et al., 2002). With advances in technology, it is becoming easier and more efficient to record, edit, and share videos for use in athlete development (Ives et al., 2002). It is now possible to shot, edit (if necessary), and review videos of practice or competitions as a means of providing coaches and athletes with a concise visual representation of the performances soon after they are completed. Video can be used by coaches to reveal both proper and incorrect aspects of technique, positioning, tactics, and the overall quality of individual and team performances (Groom, Cushion, & Nelson, 2011; Ives et al., 2002; Nelson, Potrac, & Groom, 2014).

Rymal, Martini, and Ste-Marie (2010) conducted a qualitative study investigating the ways in which video feedback helped athletes' self-regulation during performance. Results indicated that, by viewing video of their own performances, athletes were more likely and better able to understand and imagine the correct execution of skills. Effective skill breakdown on video was helpful in identifying shortcomings and errors with the aim of using that information to improve the skill. The participants also reported that the use of video review led them to feel more confident with regard to skill acquisition and retention. Finally, video review allowed athletes to engage in more objective and accurate self-evaluation including comparing current with previous performances to measure skill and performance progress.

A study by Ste-Marie, Vertes, Rymal, and Martini (2011) linked video feedback directly to improved performance such that gymnasts who viewed video of their performances throughout the competitive season produced significantly higher beam scores in competition than those gymnasts who did not use video review. Interestingly, the authors found no difference in objectively assessed self-efficacy between the two experimental groups. At the same time, follow-up interviews indicated that those who used video review felt more efficacious and attributed video review to increases in performance outcomes. One benefit of this approach is that as athletes are provided the opportunity to review their physical performance in training and competition coupled with active coaching on behalf of their coach, the time to skill acquisition is reduced given that the use of video reduced the number of practice sessions necessary for the athlete to acquire competency in performing a difficult skill (Boyer et al., 2009). It could be speculated that seeing frequent and successful images of themselves improved the gymnasts' confidence and focus, resulting in more committed and assertive performances on the beam.

While the use of video for sport performance enhancement within sport psychology is scant, there are examples arguing for the efficacy of the use of video for improving skill acquisition and sport performance: In Rickli and Smith (1980), the use of video was shown to improve skill and performance within tennis players on their service game. Hazen, Johnstone, Martin, and Srikameswaran (1990) found that the use of video resulted in improvements in swimmer stroke technique and performance. Lastly, Harle and Vickers (2001) reported that the use of video improved free throw performance and accuracy;

Practical Implications

Video allows coaches and athletes to overcome two barriers to athlete development. First, both coaches' and athletes' determinations of success in practice or competitions can be limited by their subjective evaluations based on their recall and interpretation of the performance. Incomplete memory, inaccurate recall, cognitive biases, and self-protection can result in divergent perceptions on the part of coaches and athletes. Second, because sports are outcome focused, both coaches and athletes may incorrectly or unfairly judge a performance based on its outcome; athletes may execute skills correctly, perform well overall, and still lose. In both cases, video mitigates these shortcomings and offers information about athlete performances that are observable and verifiable. This objectivity provides coaches and athletes with a shared reality from which to evaluate and learn from the sports performance.

Consultants can play a role in promoting the use of video review for both athletes and coaches. Specifically, consultants can educate coaches and athletes on the best practices for video use. Central to this approach is coaches considering how best to present video (e.g., focus on specific skills or overall performance), which video to present (e.g., practice vs. competition), to whom they would present the video (e.g., individually vs. team), and what the targeted purpose is (e.g., skill acquisition, team performance, confidence building). In addition, consultants can work in tandem with coaches to evaluate athletes' responses to video and customize video use to the specific needs and goals of individual athletes.

Performance Criteria in Video Analysis

An important consideration is for coaches to identify specific goals and desired outcomes when using video in athlete development. Moreover, to ensure clarity of purpose, athletes would also benefit from coaches providing an identified criterion of success that can range from the proper execution of a skill in isolation, the successful execution in the context of a complete or coordinated performance, or achievement of a particular competitive statistic or score due to the effective completion of a skill or sequence of skills (Hughes & Bartlett, 2004; Hughes & Franks, 2004). Additionally, because successful competitive outcomes are grounded in effective execution of technical, tactical, team, and psychological skills that are observable on video, having coaches define the particular skills they are interested in before a video session would help athletes to focus specifically on what coaches want them to (Liebermann & Franks, 2004).

Sports are complex activities with many contributors to performance and success. Moreover, that complexity can be reflected in the video of athlete and team performance. Without clarity of purpose, coaches can get bogged down in a morass of feedback to their athletes. In turn, athletes can feel overwhelmed by all of the things to watch, evaluate, and work on in a practice or competitive video. Consultants can help coaches to clearly communicate the purpose that they and their athletes will be working toward.

The nature of sport necessitates that the ultimate goal is winning. At the same time, there are many steps that must be taken and many areas that must be focused on to arrive at that destination. As a result, the value of video can be facilitated when smaller performance goals, indicators, and outcomes are established related to skill acquisition, task mastery, and personal bests. Performance goals that are chosen by coaches can depend on the type of sport, athletes' stage of development, time of year, and current level of performance (Hughes & Bartlett, 2004). Specific contributors to deciding on the performance goals can also include whether the sport is objective (e.g., basketball, football, golf) or subjective (gymnastics, figure skating, and diving).Whether the sport is individual (e.g., archery, ski racing) or team (e.g., water polo, lacrosse) or self-referenced (e.g., swimming, running) or confrontational (e.g., tennis, boxing).

In approaching coaches' video use with athletes, the first step involves coaches establishing clear goals about the value of the video session, in other words, how video will help athletes improve. These goals will provide both athletes and coaches with a shared and aligned purpose and a common starting point for examining the video. Research has suggested that reasonable performance goals can include most aspects of athletic performance including technical, tactical, physical, mental, and competitive (Groom & Cushion, 2004; Hughes & Bartlett, 2004; Lyle, 2002).

Performance indicators refer to the specific aspects of performance that will be the focus of the video. Examples might include body position, sport-specific movement patterns, overt expressions of confidence or intensity, tactical execution, and competitive statistics. With these markers clearly identified, both coaches and athletes will be able to focus on and address these particular performance indicators more effectively.

Performance outcomes indicate the ultimate results that would come from the video analysis. With an identifiable outcome established, coaches and athletes can "reverse engineer" their video use to approach the videoed performance with the expressed goal of achieving the specified outcome. When grounded in a clear set of goals, performance indicators, and outcomes, video can be a powerful tool for coaches and athletes to gain the most out of their practice and competitive experiences and to counter the reliability issues tied to subjective performance analysis on the part of coach and athlete.

Technical and Tactical Skill Acquisition

Video in skill acquisition is termed self-modeling and can be used in two ways: positive self-review and feedforward (Dowrick, 1991). Positive self-review involves recording individuals' best performances (i.e., highlight reels), editing the videos so as to eliminate any mistakes from the segments, and then allowing individuals to review their successful performance as models for their future efforts. Positive self-review can be used by athletes to identify and replicate effective technique and tactics, well-coordinated team efforts, and psychological and emotional practices that facilitate successful performances. In addition to using video to highlight the positive aspects of behavior and performance, it can also play a corrective role as well. With video, athletes can view errors in their efforts and use that information to make beneficial corrections.

Feedforward involves piecing together videos of basic skills that, once put together in the proper order, show individuals completing a skill they have not yet attempted or successfully executed. This method offers people correct and sequential information that they can then apply to their learning new skills or sport-specific patterns. The value of feedforward lies in offering people a clear understanding of what they must do for the effective execution of skills. It also is beneficial in instilling them with an initial sense of confidence in their ability to learn the new skills. Overall, the use of video in the learning process can serve a variety of functions: clarifying goals or outcomes, demonstrating positive images, correcting errors, reminding of previous competence in performance, and establishing the ability to complete new skills (Ives et al., 2002).

As has been demonstrated above, video can be a valuable tool for coaches in helping their athletes to develop the technical and tactical acumen necessary for success in their sport. At the same time, as with many aspects of athlete development, the benefits that athletes gain from video analysis depend on how coaches use it in their video sessions.

Common Mistakes

There is a tendency among coaches and athletes alike to focus on mistakes when watching video. This emphasis seems to make sense because if athletes watch their mistakes, they can learn from and correct them. And certainly some focus on errors is important for their correction in terms of both recognition and understanding. At the same time, when coaches show mistakes repeatedly to athletes, the perceptions, feelings, and images of the mistakes are ingrained, much like when athletes physically practice poor technique or tactics, they become habit in their mind and muscles.

Video offers coaches and athletes the ability to deconstruct technique and tactics so precisely and to focus on the minutiae of the videoed performances. Though there is a place for such nuanced analyses, this detailed approach can present two potential problems if used excessively. First, video analysis becomes an intellectual exercise that occurs in the mind when it should be a kinesthetic exercise that occurs in the body. Second, athletes

miss out on the benefits of absorbing the "gestalt" of the video, that is, allowing the thinking part of the mind to turn itself off and enabling the unconscious mind and body to absorb the images and feelings that can then be reproduced during physical practice.

A final mistake that coaches can make is to conduct group sessions in which athletes watch video of their teammates. Though there can be some value in watching other athletes perform (e.g., peer modeling, learning from others' successes and errors), repeated viewing of other athletes can contaminate the images and feelings of the observing athlete as they attempt to internalize proper execution.

Rules of Video Watching

Consultants can help both coaches and athletes to use their video sessions to their maximum benefit. In addition to educating them about the common mistakes that they may be making, consultants can also introduce a few basic guidelines to allow coaches and athletes to get the most out of their video viewing.

Coaches and athletes can get bogged down in "thinking" too much about their video performances (i.e., analyzing, critiquing, judging). At the same time, after athletes have gained an understanding of their mistakes and how to correct them, coaches can encourage them to widen their focus and incorporate the corrections into the technical and tactical images and feelings they want to experience in their sport. In other words, athletes can allow the images from the videos to flow into their minds without unnecessary thought and into their bodies where the visual and kinesthetic information most needs to reside.

For many coaches, a primary purpose of video is to identify and correct mistakes and there is value in that. At the same time, as mentioned above, too much imagery of athletes' mistakes can actually cause them to ingrain those negative images. As a result, it is recommended that coaches ensure that their athletes watching at least 75 percent "highlight" videos of successful performances and to intermix the corrective and ideal performances to further support the blending of the corrective images into successful images. Coaches can use video in this more productive way when doing video analysis for error correction, initial technical or tactical development, inclusion of new technique and tactics into broader sports execution, fine tuning of specific skills, and overall practice and competitive performances.

Video as Mental Training

Video can have a significant impact on athletes beyond their sport skill development. In fact, video can offer benefits to athletes in their mental training as well. Consultants can show coaches how to leverage video feedback to strengthen their athletes' mental muscles and develop the tools in their mental toolboxes (see Chapters 3 and 4).

Motivation

Video can be a useful means for coaches to inspire and motivate their athletes. Several video strategies can bolster motivation in athletes. One of the most motivating aspects of sports occurs when athletes gain an understanding of why they are struggling with poor performance. Video enables coaches to provide clear feedback about what athletes need to do to improve. This knowledge provides a sense of control, hope, confidence, and determination, all of which will motivate athletes to continue to pursue their goals with vigor (O'Donoghue, 2006).

Athlete motivation is also bolstered by seeing the clear and unambiguous evidence that they are improving. Video enables coaches to show athletes directly of progress they are making in their sports effort which will buttress their ongoing efforts.

Additionally, motivation is rewarded when athletes demonstrate successful performances, whether acquisition of a new skill or an excellent result in a competition. Again, video offers athletes incontrovertible evidence of their successes, thus encouraging them to continue to work hard in their efforts.

Confidence

Another way in which video can be a valuable mental tool is for coaches to use it to boost their athletes' confidence. When coaches focus the preponderance of their attention on videos of successful performances rather

than on mistakes, they are giving their athletes objective evidence of their capabilities. These clear successes further reinforce athletes' beliefs in their competence and their ability to achieve their sports goals.

Focus

As discussed in Chapter 3, the ability to focus effectively over the duration of a sports performance is essential for success. Video can offer several ways in which athletes can improve their focus in practice and competitions. First, coaches can point out times during a videoed performance in which athletes become distracted; for example, by a bad call or a competitive setback. Coaches can use these videoed situations with their athletes as teachable moments about the importance of maintaining or regaining focus. Second, coaches can also highlight and, in doing so, reinforce sustained focus or the effective reestablishment of focus during a videoed performance. Third, the simple act of watching a video without distraction strengthens athletes' focus "muscle" which will then help them focus when they are performing in their sport.

Mental Imagery

One thing that coaches don't often realize is that video is an external form of mental imagery. The power of video can be augmented by incorporating mental imagery into coaches' video sessions with their athletes. Consultants can offer the following suggestions for how coaches can make imagery a part of their video analyses:

- Coaches can have their athletes watch a performance of themselves on video.
- They can then identify what the athletes did well, what mistakes they made, and how to correct it.
- Then, instead of simply asking athletes if they understand, coaches can have them immediately close their eyes and see and feel themselves performing while incorporating the correction into their imagery.

Combining video and imagery strengthens the value of video by helping athletes translate those external images into internally generated images and feelings. Just like when athletes do mental imagery, watching video can help them to produce psychological and physiological states (e.g., increased confidence, elevated intensity, narrowed focus) that allow them to reenact their practice and competitive experiences. In this way, they can better understand what their ideal performance states are and then use that information to replicate those states in their mental imagery and actual sports experiences.

Video and Critical Moments

The ultimate test of athlete development is their ability to successfully execute in their sport physically, technically, tactically, and mentally when it matters most. These "critical moments" can include:

- important competitions;
- key competitive situations;
- high-pressure scenarios;
- when successful execution of technique or tactics is vital;
- during shifts in momentum;
- when behind;
- when holding a small lead; and
- when time is running out.

These critical moments demonstrate how well athletes have learned what they need to learn, to what degree those skills are being executed in the context of an overall performance, and how far they are in their progress toward their goals. Coaches can use video of these critical moments, whether successful or not, to highlight improvement, point out areas in need of continued work, or exceptional execution. In turn, athletes can share with their coaches their own insights into what went well and what didn't, and why the performance turned out as it did. This dialogue provides both coaches and athletes with useful information to guide their practice planning and programs that will lead to consistently successful performances in those critical moments.

Summary

- The use of video as a tool for athlete development is well entrenched in some sports, but, with new technology evolving rapidly and new platforms becoming more accessible in terms of cost and usability, coaches at every level of sport will have the ability to leverage video as a valuable means of helping athletes improve many aspects of their sports performances.
- The use of video in any setting is rooted in its ability to provide objective feedback on a wide range of physical, biomechanical, technical, tactical, team, and even psychological parameters.
- The effectiveness of video has been used as positive self-review and feedforward both outside of and within sports.
- Positive self-review can be used by athletes to identify replicate effective technique and tactics, well-coordinated team efforts, and psychological and emotional practices that facilitate successful performances.
- Video can play a corrective role in which athletes can view errors in their efforts and use that information to make beneficial corrections.
- Feedforward involves piecing together videos of basic skills that, once put together in the proper order, show individuals completing a skill they have not yet attempted or successfully executed.
- Research indicated that, by viewing video of their own performances, athletes were more likely and better able to understand and imagine the correct execution of skills.
- Coaches can consider how best to present the video, which video to present (e.g., practice vs. competition), to whom they would present the video (e.g., individually vs. team), and what the targeted purpose is (e.g., skill acquisition, team performance, confidence building).
- The effective use of video begins with establishing clear performance goals and indicators.
- Without clear goals, coaches can get bogged down in a morass of feedback to their athletes and athletes can feel overwhelmed by all of the things to watch, evaluate, and work in a practice or competitive video.
- A common mistake coaches make in using video is to focus too much on their athletes' errors and on the details of videoed performances.
- Coaches can increase the value of video by focusing on successful performances and to absorb the overall videoed performances.
- Video can strengthen mental muscles including motivation, confidence, and focus, and mental tools such as mental imagery.
- Video review of "critical moments" in competitions can provide teachable moments of both successful and error-ridden efforts.

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COACH STRESS

Stiliani "Ani" Chroni

Coaching athletes and teams is complex and demanding. Coaches at many levels and in many sports can feel tremendous pressure to be successful in a job that is on the line too often. Coaching is a profession that can appear inherently insecure because it is usually an easier calculus to fire coaches than athletes (Fletcher & Scott, 2010) and this instability and uncertainty can be a cause of stress. Coaches experience a wide range of stressors as the multidimensional demands of their jobs expose them to organizational, performance, and personal stressors. For coaches to remain healthy, motivated, effective, and happy, these stressors must be recognized and addressed in a timely manner.

When coaches enter their profession, few know that their lives will be stressful. For instance, some elite athletes who transit to coaching right after retirement are not prepared for how demanding coaching is (Chroni, Pettersen, & Dieffenbach, in press). Most coaches choose coaching for the love of the sport, the desire to invest in their sport and athlete growth, or the desire to achieve. As they gain experience, they learn to normalize the work load and the pressures that go with the job (see Chroni, Abrahamsen, & Hemmestad, 2016). Regardless of why they start coaching or how prepared they are, if the stress that coaches feel is significant and persistent, it takes a toll on them, both on and off the field of play, and can create substantial strain on their well-being, motivation, life and work satisfaction, physical and mental health, and may lead to burnout and as well as the desire to leave coaching altogether (Kelley, 1994; Olusoga, Butt, Maynard, & Hays, 2010; Rosenberg, 2013). Addressing stress both proactively and reactively is essential because research (e.g., Frey, 2007; Lastella et al., 2017; Olusoga et al., 2010) has shown that the effectiveness of coaches in their multiple roles can be hindered by stress in many ways including:

- focus and decision-making;
- leadership;
- ability to maintain healthy relationships with athletes, other coaches, administrators, parents, and other stakeholders;
- managing the logistics of running a sports organization; and
- damage to their lives away from the sport.

Moreover, unhealthy or unmanaged stress also impacts those with whom coaches interact, most noticeably, it is perceived by the athletes and can influence both the athlete-coach relationship as well as the athletes' performances (Thelwell, Wagstaff, Chapman, & Kenttä, 2017; Thelwell, Wagstaff, Rayner et al., 2017).

Theory and Research

Stress is considered here as "an ongoing process that involves individuals transacting with their environments, making appraisals of the situations they find themselves in, and endeavoring to cope with any issues that may arise" (Fletcher, Hanton, & Mellalieu, 2008, p. 329). Research on coach stress is limited compared to that on athlete stress (Norris, Didymus, & Kaiseler, 2017; Olusoga, Butt, Hays, & Maynard, 2009). This research has been informed by different theories and models of stress:

- Transactional Stress Theory (TST; Lazarus & Folkman, 1987): Stress is a systematic reciprocal process between the person and the environment appraised by the person.
- Cognitive–Motivational–Relational Model (CMRT, Lazarus, 1999): Emphasizes the role of emotions in the person-environment stress transactions.
- Meta-Model of Stress (MMS; Fletcher, Hanton, & Mellalieu, 2006): Focuses on the relationships between stressors, perceptions, appraisals, and coping, together with subsequent responses (positive or negative), feeling states, and outcomes which are influenced by "various personal and situational characteristics.
- Cognitive Activation Theory of Stress (CATS; Ursin & Eriksen, 2004): Knowing the type of stressor is less important than knowing whether the person believes that he or she can deal with it.

Understanding these models gives consultants explicit areas where they can intervene when working with stressed coaches.

Additionally, considering that a great deal of our understanding of coach stress comes from research exploring coach burnout, with stress acting as a mediator of burnout, the Cognitive-Affective Model of Stress and Burnout (CAMSB; Smith, 1986) and Kelley's Model of Coach Stress and Burnout (MCSB; Kelley, 1994; Kelley, Eklund, & Ritter-Taylor, 1999; Kelley & Gill, 1993) can also inform consultants' understanding of coach stress. In Smith's CAMSB work, personality variables affect burnout indirectly through the cognitive appraisal of stress. In demanding occasions, individuals consider their sport participation's benefits and costs and compare these with expectations they hold for the activity as well as with how attractive alternative activities are. Stress occurs when a person experiences an imbalance between the demands of the activity, and their own coping resources and perceives the demands as threatening. As such, perception is critical to whether a stressful experience is regarded negatively which also presents an area in which consultants can intervene by modifying coaches' perceptions of the stress. If the stress is frequent and prolonged, burnout might result. Kelley et al.'s (1999) model takes the role of personality variables identified by Smith a step further by acknowledging that personal and situational variables can also have a direct impact on burnout.

Early research (e.g., Kroll & Gundersheim, 1982; Sullivan & Nasham, 1993; Taylor, 1992) identified a number of factors that cause or mediate stress among coaches:

- role ambiguity;
- role conflict;
- pressure to win;
- lack free-time;
- work overload;
- low pay;
- conflict with athletes, parents, and fans;
- player recruitment;
- time away from family; and
- dealing with media.

The majority of these early studies were quantitative in nature. However, in the last decade, there has been a shift toward qualitative research that has supported and enriched the previous findings and our understanding of coach stress.

Frey (2007) was one of the first researchers to explore coach stress among American collegiate coaches employing a qualitative approach. Frey identified multiple sources of stress, such as lack of control over athletes and communication with them, recruiting, and the perceived excessive pressure from their many responsibilities and roles. In her work, she also looked into coaches' responses to stress which were perceived either as negative (e.g., problems on focusing, tension, change on body language, etc.) or positive in nature (e.g., increase awareness, better future preparation, motivation, etc.). To cope with stressors, the collegiate coaches:

- focused on factors within their control, such as the training process rather than the outcome of the competition (problem-focused coping strategies);
- relied on social support, sport psychologists' aid and visualization (emotional-focusing strategies); and
- used behavioral strategies including exercise, reading, and massaging.

For some, but not all, as coaches gained experience, their experience of stress diminished. Since Frey's work, a number of studies have been conducted, mostly focused on looking at the stress experiences of elite coaches in a number of sports (Potts, Didymus, & Kaiseler, 2018). This more recent research (Chroni et al., 2016; Chroni, Diakaki, Perkos, Hassandra, & Schoen, 2013; Didymus, 2017; Frey, 2007; Knight, Reade, Selzler, & Rodgers, 2013; Olusoga et al., 2009; 2010; Potts et al., 2018) has revealed other common causes of stress among coaches. Adding both depth and nuance to the quantitative research described above, the portrait that these findings paint is one of coaches having too many roles and responsibilities and too few resources to manage them effectively and for an extended period in timely manner:

- lack of control over athletes;
- communication difficulties with athletes;
- team selection;
- athlete health;
- athlete and team performance;
- competitive preparation and performance;
- coaches' own performances;
- team organization and administration;
- coaching lifestyle;
- team culture;
- ambiguous and unclear expectations and evaluation criteria;
- isolation and loneliness and isolation; and
- lack of social support.

As Norris et al. (2017) summarized in a recent systematic review, coaches experience an excess of stressors related to their own performances, athlete and team performances, intrapersonal, interpersonal, organizational, and contextual forces, many of which are outside of their control. The sheer number and diversity of these stressors reflect the complex and intersecting nature of coach stress. And the price coaches often pay should act as additional impetus for researchers to further study this phenomenon and for consultants to find ways to mitigate the persistent presence of stress that negatively impacts coaches at every level of their professional and personal lives.

Practical Implications

How coaches cope with these stressors is an equally complex phenomenon. In response to the diverse array of stressors that coaches experience, they employ an equally varied coping toolbox that serves different needs, goals, and functions including strategies that focus on appraisal, emotions, problem solving, avoidance, and approach (Norris et al., 2017). Overall, coping methods that are problem-focused, emotion-focused, and involve social support are the means of coping used most by coaches (see Didymus, 2017; Durand-Bush, Collins, & McNeill, 2012; Frey, 2007; Olusoga et al., 2009, 2010; Thelwell, Weston, & Greenlees, 2010). A vital role that consultants can play is to work with coaches to incorporate these strategies into both prevention and intervention of stress. To make traditional coping classifications more understandable and useable, Didymus (2017) suggested taking advantage of the 12 categories of stress coping offered by Skinner, Edge, Altmann, and Sherwood (2003; p. 245) and adding some additional categories:

- problem solving (find solutions to stress);
- information seeking (gain additional knowledge);
- helplessness (find limits of actions);
- escape (avoid stressful environments);
- self-reliance (relieve stress on their own);
- support seeking (use available social resources);
- delegation (find limits of resources);
- isolation (withdraw from unsupportive context);
- accommodation (flexibly adjust preferences to options);

- negotiation (find new options);
- role changes (alter their responsibilities);
- submission (give up preferences);
- negotiation (attempt to lessen stress through compromise);
- support seeking (actively pursue support);
- dyadic coping (collaborating with others); and
- opposition (resist stress).

Each of these general approaches to coping with stress can be leveraged by consultants to help coaches as they confront the inevitable stressors in their profession. Which ones that are selected depend on an examination of the interaction of coach, stressor, resources, and context.

Prior to discussing the specific practical strategies that consultants can draw the current research on coach stress and coping, it is worth considering how consultants can effectively introduce them to coaches. Coaches, as a general observation, are not always open to being coached by anyone who approaches them, even with best of intentions. When it comes to enhancing coaching practices, recent literature suggests that the feedback mechanisms coaches use are few and many are informal such as peer or athlete networks and other support systems (Nash, Sproule, & Horton, 2017). It is helpful if consultants are already a part of coaches' existing network; for example, they have a long-standing working relationship or on staff with the organization that employs the coaches. In the absence of a direct connection with coaches, indirect contact may be helpful in "getting inside the door" in the form of professional development courses, communities of practice, mentors, and successful colleagues successful colleagues, mentors, conferences, professional development courses, and online resources (Bertram, Culver, & Gilbert, 2016; Knowles, Borrie, & Telfer, 2005; McQuade & Nash, 2015; Nash, 2004). Ideally, coaches come to consultants willingly because they recognize that they have a problem with stress. Alternatively, valued members of coaches' networks can stage an "intervention" in which coaches are confronted with their struggles, the impact of their stress on others in the professional and personal lives, and encouraged to seek out support from a trusted consultant.

General Approaches to Coach Stress Coping

Before consultants use specific strategies with coaches to prevent or reduce their stress, there are several general approaches to stress coping that have been found to be effective. These methods involve broad ways of thinking and evaluating stress as a means of mitigating it. For example, one study by Chroni et al. (2016) explored the ways in which successful Norwegian national team coaches appraised stressors as challenges rather than threats. Their findings indicated that coping can be facilitated with three preventive steps.

Flexible Mindset

Coaches with a flexible mindset, as compared to a fixed mindset, were better able to handle the pressures and adversity (Chroni et al., 2016) that could lead to unmanageable stress. According to Dweck (2007), individuals with a flexible mindset endorse the belief that basic qualities can be cultivated through effort, which equips them with abundant desire to learn, tendency to embrace challenges, to persist in the face of setbacks, to see effort as the way to mastery, to learn from criticism, and to find lessons and inspiration in the success of others. Those with a fixed mindset believe that basic qualities of the person are rigid, thus see little room for change and growth. Based on the work of Dweck (2007), this finding suggests that when coaches have a flexible mindset, they:

- freely recognize and take ownership of their struggles with stress;
- see challenges instead of threats;
- are willing to seek help;
- are open to feedback;
- can adapt their perspectives and attitudes in a healthier direction; and
- are able to implement selected stress coping strategies.

Consultants can encourage a more flexible mindset by showing coaches the impact it will have their stress, the relief it can provide, and the positive influence it can have on their professional and personal lives.

Preparation

The research by Chroni et al. (2016) also demonstrated the value of preparation as a means of preventing stress. When coaches are prepared for the many challenges they face, familiarity, predictability, and control are enhanced, all essential perceptions for reducing stress. Consultants can assist coaches in several ways to maximize how prepared they are:

- Identify the numerous responsibilities coaches have and, in doing so, break down what seems overwhelming to more manageable chunks.
- Prioritize and re-prioritize their responsibilities and take those of low importance "off their plates."
- Increase their resources by seeking out support and delegating responsibilities, thus reducing the load they carry.
- Organize and fulfill those responsibilities as completely and as efficiently as possible.
- Identify and prepare for unexpected occurrences.

Reflection

Coaches can learn to recognize and respond more effectively to stress through the practice of reflection, both self-reflection and reflection through others (Chroni et al., 2016). Self-reflection refers to considering experiences, appraisals, decisions, and actions as a means of increasing awareness and fostering greater understanding of how those experiences impact lives (Anderson, Knowles, & Gilbourne, 2004; Knowles et al., 2005). Self-reflection is discussed in the coaching literature as a highly beneficial tool for coach education, development, and success (Côté & Gilbert, 2009; Nash et al., 2017). Consultants can guide the coaches in the practice of self-reflection of their stressors, and their reactions to them, as a tool for gaining insights into the stressors with the goal of either removing or reducing their impact on them in the future.

Consultants can help coaches to develop a process of systematic self-reflection by using, for example, Whitehead and colleagues' Think Aloud framework (2015, 2016), a stepwise technique that facilitates reflection-in-action and delayed reflection-on-action or Gibbs (1988) six-stage reflective cycle:

1. **Description:** Depict the stressful situation in detail.
2. **Feelings:** Express the emotions associated with the stressor.
3. **Evaluation:** Objectively assess what approaches to the stressor may work and which ones may not.
4. **Analysis:** Identify the key issues.
5. **Conclusions:** Draw inferences from the self-reflection to determine options for future action.
6. **Action:** Choose the best course of action, make a plan, and commit to taking action.

These three general approaches of flexible mindset, preparation, and reflection coalesce to have a significant impact on coaches' confidence in themselves and their perceptions of their ability to effectively cope with their stress (Chroni et al., 2016). This confidence develops through self-awareness and deliberate action (both a by-product of self-reflection) which leads to improved stress appraisal when the same or similar stressor are re-encountered as well as more effective coping. For instance, consultants can guide coaches in the practice of self-reflection of their coping practices, as a tool for gaining insight into their strengths with the goal of repeating the coping practice in the future and enhancing their confidence in dealing with stressors. The more confident coaches are, the less stress they will experience and the more capable they will be to cope effectively with the stress they do experience. This chain of events can then be revisited, reinforced, and reused repeatedly to create a virtuous cycle of learning, increasing confidence and competence related to coping with stress.

In addition to the benefits of self-reflection, coaches can also gain value from the reflections of other coaches who are either role models or peers. Because all coaches "play" fundamentally the same game, peers bring a level of credibility, practical knowledge, and experience that consultants don't often have. Observing or listening to

how other coaches cope with stress acts as a mirror for their own struggles with stress and also provides lessons and tools that will expand the stressed coaches' coping repertoires. Moreover, not only does this practice offer practical coping strategies, it also offers coaches mutually beneficial support that has been found to be one of the most effective means of relieving stress (see Crocker, 1992; Cutrona, & Russell, 1990; Rees & Hardy, 2000). Consultants can facilitate these learning opportunities by organizing communities of practice, coaches' workshops, mentorship programs, peer groups, and "shadowing" opportunities in which early-career coaches follow and observe veteran coaches in real time in real coaching settings (see Bertram et al., 2016; Garner & Hill, 2017).

Organizational Influences

Coaches rarely work alone or in a vacuum; rather, they are usually a part of an organization, whether a sports club, collegiate program, or national or professional team. Given coaches' place in a larger and more complex organizational structure, it is reasonable to assume that much of the stress they experience arises out of tension that occurs in their roles and responsibilities within the sports organization. Power struggles among team personnel, undefined or conflicting roles, rigid hierarchy, and job uncertainty are often associated with a stress-filled organizational culture. As such, consultants who work in a sport organization must pay close attention to its culture and its impact on stress among its stakeholders.

Research has shown that the absence of hierarchy, clear roles and responsibilities, and a development-, rather than an outcome-oriented, organizational culture were key assets for Norwegian national teams in supporting and nurturing the coaches' work experiences (Chroni et al., 2016; Chroni, Abrahamsen, Skille, & Hemmestad, 2019; Skille & Chroni, 2018). Norwegian coaches spoke of their federations as being actively supportive, helping them to improve in the job, while giving them the opportunity to develop athletes over time.

The research has also found that giving coaches job security and continuity, opportunities to grow in their roles while providing them with time to develop themselves as well as their athletes, the necessary resources (human, logistical, and financial) to be successful in their jobs, and support for reflection and detailed planning are associated with job satisfaction, performance, and effective stress coping. Skille and Chroni (2018) concluded that a healthy organizational culture can empower coaches to appraise stressors as less threatening and to learn from them to produce better coping in the future. Consultants can work with sports organizations to (Chroni et al., 2019):

- Consciously and proactively develop cultures that nurture the healthy development of its coaches and athletes.
- Support coaches by, for example, acting as buffers against stressors such as fans and the media.
- Build strong and supportive relationships with its coaches.
- Establish open lines of communication between coaches and other organizational stakeholders.
- Encourage healthy work-life balance.

Specific Strategies for Coach Stress Coping

In addition to the broad approaches to coach stress coping that were described above as a means of preventing or mitigating stress, there are specific and active steps that coaches can take, including:

- accepting adversity, pressures, and stressors as an inevitable aspect of coaching (and life) that can be out of coaches' control;
- identifying coaches' most common stressors;
- recognizing when and where stressors are not dealt with and stress occurs; and
- shifting focus away from the stressor and onto finding solutions for the stress.

Moreover, coaches can consider four paths in addressing their stress in four ways. First, they can relieve the cause of the stress (e.g., eliminate or minimize stressors by delegating responsibility, preparing differently or re-evaluating what's at stake). Second, coaches can alter their perceptions of a stressor (e.g., learn to see the benefits than can be gained rather what can be lost, see an important upcoming game as a challenge rather than a threat). Third, coaches

can treat the symptoms of the stress (e.g., meditation, biofeedback, exercise, music, reading, family time, get more sleep). Lastly, they can add a variety of general (e.g., manage time and energy, have healthy outlets, build a social support network), physical (e.g., breathing, muscle relaxation, yoga), and mental (e.g., positive thinking, mindfulness, imagery) tools to their stress toolboxes that can be useful in effectively addressing their stress.

Because a section of Chapter 7 already explores stress in depth and coach stress isn't fundamentally different than athlete stress, it would be redundant to examine stress in detail here. Readers are encouraged to revisit the "Stress" section of Chapter 7 through the lens of coaches and apply its ideas and methods to the specific demands of coach stress and coping.

Summary

- Coaches experience a wide range of stressors as the multidimensional job demands expose them to stressors associated with organizational, performance, interpersonal, intrapersonal, and contextual matters.
- The stress that coaches feel is significant and persistent, its toll on them both on and off the field of play can create substantial strain on their well-being, their motivation, life and work satisfaction, physical and mental health, and may lead to burnout and the need to leave coaching altogether.
- Addressing stress proactively and reactively is essential because the effectiveness of coaches in their multiple roles can be hindered by stress in many ways, including their focus and decision-making, leadership, ability to maintain healthy relationships with athletes, other coaches, administrators, parents, and other stakeholders, managing the logistics of running a sports organization, not to mention hurting their lives away from the sport.
- Research has identified a number of factors that cause or mediate stress among coaches: lack of control over athletes, communication with athletes, team selection, athlete health, competition and preparation for it, athlete, team, and own performance, team organization and administration, coaching lifestyle, team culture, unclear expectations and evaluation criteria, job insecurity, loneliness, and lack of social support.
- In response to the diverse array of stressors that coaches experience, they employ an equally varied coping toolbox that serves different needs, goals, and functions including strategies that focus on appraisal, emotions, problem solving, avoidance, and approach.
- A vital role that consultants can play is to work with coaches to incorporate effective approaches and strategies into both prevention and intervention of stress.
- General approaches that consultants can introduce to coaches include having a flexible mindset, being prepared, engaging in reflection, and addressing organizational causes of stress.
- Consultants can show coaches how to implement the many approaches and strategies detailed in the "Stress" section of Chapter 7.

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INTEGRATING MENTAL TRAINING INTO OVERALL ATHLETE DEVELOPMENT

Jim Taylor and Brandon Orr

The legendary New York Yankee and noted malapropist, Yogi Berra, once famously said, "Baseball is 90 percent mental and the other half is physical." This statement clearly lacked logical and mathematical accuracy. At the same time, it does seem to reflect the attitude that most coaches hold about the importance of the mind in athletic performance. However, as the exploration of how consultants can help coaches to integrate mental training into overall athlete development begins, a key question to ask is whether coaches' actions support or belie their beliefs about mental training.

To answer that question, one of this section's authors has conducted an informal decades-long survey in which he asked coaches in many sports and at many levels of sport how important the mind is to athletic success compared to the physical and technical aspects of sport. In sum, few of the coaches surveyed believed that the mental side of sports was less important and the vast majority stated that it was as or more important.

Though consultants can appreciate this powerful affirmation of the value of the mind to sports success, few would argue that it is actually the case. Athletes may have the best prepared minds possible, but if they don't have the requisite physical fitness and technical skills necessary to engage in their sport, they will have little opportunity to experience success. For athletes to perform their best, they must leverage fully the physical, technical, and mental aspects of their sport. Given this conclusion, coaches, athletes, and consultants alike would undoubted agree that the mind is a vital contributor to athletic performance that is also underappreciated and insufficiently used.

How Committed are Coaches to Mental Training?

A second part of the survey just described involved asking coaches how much time they devote to conditioning or sport training their athletes. For coaches who are involved in long-term athlete development, their estimate typically ranged from two to six hours a day. When they are asked how much time is committed to mental training, their answer is usually next to none. Though coaches do mental things with their athletes, for example, they motivate them, build their confidence, help them to focus, and much more, this is not, by definition, mental training any more than a couple of kids kicking a soccer ball around is soccer training. Coaches readily admit that the money, resources, time, and energy they dedicate to mental training pales in comparison to their commitment to the physical and technical aspects of their sport.

Obstacles to Mental Training Acceptance and Adoption

Coaches at every level of the competitive ladder struggle to provide their athletes with mental training that matches the sophistication and quality of their conditioning and sport training. Some programs bring in sport psychologists or mental trainers periodically to fill in this gap, but such an approach lacks the structure and consistency that is needed to have a significant impact on athletes. The absence of complete buy-in of mental training isn't due to coaches' lack of interest, appreciation, or the value it can bring to athletes. Instead, there are a variety of historical, perceptual, and institutional obstacles that have slowed the full adoption of mental training into overall athlete development.

Old Coaching Attitudes

Though sport psychology has been a field of study for more than 100 years, it has not been a traditional part of how coaches train athletes in most sports. Old coaching attitudes, habits, and methods die hard and new approaches to improving athletic performance are not easily accepted. Perhaps it will take a new generation of coaches who have been exposed to mental training as athletes and then in their coaches' education for the tide to turn toward wider acceptance and use of mental training with athletes. Consultants can have a significant impact on this transition by making mental training easy to understand and use by coaches.

No Clear Evidence of Need

The reality is that the best athletes in the world have done well without formal mental training. They simply developed mental capabilities through their own training and competitive experiences. In contrast, there has likely not ever been a successful athlete who didn't have a rigorous conditioning or technical program that they followed (at least not in the last 40 years). As a result, the need for structured mental training may not be perceived as great by coaches. Yet, for every successful athlete who develops mentally on their own, there are many more who are equally talented and motivated to become successful, but need help in developing their mental capabilities. Consultants can show coaches the mental attributes that successful athletes possess and demonstrate how those qualities can be proactively and fully developed in all of their athletes.

Lack of Concreteness

Most aspects of sport are, by their very nature, tangible. Coaches and athletes can readily see the areas in need of improvement physically and technically, for example, amount of weight lifted in the gym or technical problems revealed on video. They can also clearly see improvements in the physical and technical aspects of sports performance. The mental side of sport, however, is not so easily seen, quantified, or measured. It's harder to gauge where athletes are in different aspects of their mental preparation, what areas they need to work on, and any improvement that is made mentally. As a result, the mental side of sport holds a certain unknowable quality and mystery that can be daunting for coaches that makes it harder for them to wrap their arms around. Moreover, they see the mental training as qualitatively different than conditioning and sport training. Because they can't directly see, feel, or measure the mind, it's much less clear how to train the mind. Moreover, far beyond sports, coaches know the difficulty that goes into making changes to the way people think, feel, behave, and perform. It is the responsibility of consultants to educate coaches on how to make the mind more accessible and the show coaches how to train and change the mind.

Guilt by Association

Sport psychology can suffer from "guilt by association" with the broader field of clinical psychology that still carries the stigma that only mentally ill people or those with psychological problems seek professional help. This perception, however inaccurate, can prevent coaches and athletes from seeing mental preparation for what it

is, namely, an essential contributor to sports performance that must be developed proactively. This fear can also scare athletes away from getting mental training help when it is needed. This negative association is why the term "mental training" is used in *CASP* instead of sport psychology. Additionally, consultants can help to alter this perception by designing and implementing mental training in much the same way as conditioning and sport training are.

Few Resources to Learn From

The recognition of the importance of mental training is increasing among coaches, but few possess the specific "what" and "how" knowledge to effectively teach this aspect of sports performance to athletes. There is little doubt coaches do what they can to nurture the mental development of their athletes as much as possible. Yet, as any coach knows, gaining knowledge by trial and error isn't an efficient or effective way to learn any sports skills. Coaches certainly wouldn't use this approach with conditioning or sport training. Yet, that is the way most coaches learn about mental training. There are simply few structured means by which they can gain not only clear and understandable information about mental training, but, more importantly, useful and practical tools that they could apply with their athletes. It is the job of consultants to educate coaches about the what and the how of mental training.

No Program to Follow

Compare mental training to physical or technical training. Every organization at every level of sport has clearly defined conditioning protocols and technical progressions they use with their athletes. Moreover, these structures are woven into the fabric of their overall athlete development regimens. Additionally, the internet offers a plethora of conditioning programs that can guide coaches in the creation of effective physical training programs.

Though there is also a wealth of information online about mental training, coaches would be hard pressed to find that information in an organized format that they can put into practice with their athletes. Information is one thing, useable programs are another. One of the most important roles that consultants can play is to provide coaches with a programmatic approach to mental training.

Not an Organizational Priority

Another major obstacle to implementing an effective mental training regimen is that, despite its professed importance, it rarely is a priority in sports programs. Running a sports organization takes energy, time, and money. Moreover, all three are in limited supply. Effective mental training requires a commitment from the leadership to allocate sufficient resources to create and maintain a viable program. Unfortunately, in the real world of limited budgets, teams have to prioritize what they are going to offer their athletes. And, however much coaches will say that mental training is important, it is always the last thing to be considered and the first thing to be dropped. Without organizational support, as expressed in professional development education, money, staffing, and scheduling, it's not surprising that coaches don't integrate it into their overall training with their athletes. To remove this obstacle, consultants have to be a combination of mental training evangelist and salesperson, offering coaches a compelling rationale for and a practical means to invest in mental training.

Time!

Time (or lack thereof) is the single biggest obstacle for coaches in making mental training an integral part of athlete development in sports. Coaches have many responsibilities that include training and competitive planning and scheduling, travel, equipment, athlete management, and dealing with parents, not to mention the actual coaching of the athletes. Consultants can help coaches to find the time and assume some of the responsibilities of mental training with their athletes.

Why Isn't Mental Training Treated the Same as Physical and Technical Training?

This question has been a source of consternation and frustration for every consultant who works with athletes, coaches, and teams. If everyone agrees that the mind is so important, why doesn't it have equal status in sports? Mental training clearly does have a place in most sports. Sport psychologists and mental trainers are employed by professional, Olympic, and collegiate athletes and teams. Many youth sports programs have consultants involved in some capacity as well.

At the same time, in comparison to the staffing, resources, time, and money dedicated to other aspects of sports performance, mental training is certainly not treated with the same level of respect and commitment. It goes without saying that competitive sports programs at every level have full-time coaches for conditioning and sport-specific skills, yet relatively few, even at the highest level of sport, have full-time sport psychologists or mental trainers on staff. Furthermore, when mental training is available to athletes, what is offered is substantially different from the regimented conditioning programs and sport-specific training programs that athletes are accustomed to.

To fully understand why this divergence exists in sports, it will be useful to, first, examine what enables conditioning and sport development to be effective. Then, there will be a discussion of the ways in which consultants can position mental training so that it is perceived and received in the same way by coaches and athletes alike. Five key elements emerge.

Comprehensive

Conditioning and sport training programs address more than a few areas of athletic performance. Instead, they prepare athletes *comprehensively*, meaning they make certain that every aspects of sports performance is fully developed. For example, conditioning regimens train strength, endurance, agility, and mobility. Sport training programs improve body position, skills, movement patterns, and tactics.

Structured

When coaches train their athletes in the gym or out on the practice field, they don't just do a random set of exercises or drills. Rather, they bring a *structured* program that will progressively lead their athletes to the highest level of fitness and skill. In each case, athletes follow a clearly defined path in their sports development and toward their sports goals.

Consistent

Athletes also don't just do conditioning or sport training periodically. What enables athletes to fully develop themselves in their sport is that they train *consistently*. By day, week, month, and year, coaches have their athletes regularly commit time and energy to their conditioning and sport efforts.

Developmentally Appropriate

Coaches provide conditioning and sport training opportunities that are developmentally appropriate, meaning the specific components of the regimens meet the immediate physical and technical needs of their athletes based on age, physical development, technical progress, and competitive level. Mental training must also be offered to athletes in a developmentally appropriate way depending on their psychological, intellectual, and emotional maturity and their current practice and competitive needs. For example, coaches may emphasize basic mental muscles, such as motivation, confidence, and focus (see Chapter 3) with younger athletes while addressing more sophisticated mental areas, including perfectionism, fear of failure, and expectations (see Chapter 2) with older athletes.

Periodized

One of the most important developments in athlete development in the past few decades has been the use of *periodization* in both conditioning and sport training. This concept involves focusing on different aspects of training at different times in the off-season and competitive season. For example, it is common to engage in high-intensity and high-volume conditioning early in the off-season to build a foundation of strength and then shift to lower volume and intensity with more of an emphasis on agility and mobility as the competitive season approaches. Similarly, early in the off-season, the focus is usually on learning or refining fundamental technical and tactical skills and then moving to incorporating those skills into overall sports performance, within a tactical framework and in competitive preparation as the competitive season grows near.

Personalized

The nature of athlete development dictates that most athletes need to follow the same development trajectory in their conditioning, technique, and tactics. At the same time, as they develop, coaches must create *personalized* programs to focus on each athlete's specific needs, goals, and stages of development. This personalized approach ensures that athletes develop as fully and quickly as they are capable of given their current level of long-term development.

As any experienced consultant knows, these six criteria are usually absent in the efforts at mental preparation that coaches offer their athletes. An essential step for consultants in incorporating mental training into coaches' overall development of their athletes is to create a mental training program that is built on the same six criteria that will bring it to the same level of engagement as conditioning and sport training. Consultants can accomplish this task by:

- creating a mental performance framework that provides structure to mental training;
- designing a mental training program with clear organization and process; or
- integrating mental training into practices and competitive preparations.

Goals for Incorporating Mental Training into Overall Athlete Development

To begin the process of making mental training an integral part of the overall athlete development program provided by coaches, consultants can establish a series of tangible goals that that a sports program can accomplish.

- Educate coaches about what it takes mentally for athletes to achieve their sports goals.
- Provide the means to proactively train the mind in a comprehensive, structured, developmentally appropriate, consistent, periodized, and personalized way.
- Incorporate mental training into all aspects of the athlete development program.

Periodized Mental Training

The more mental training can look and feel like conditioning and sport training, the more coaches and athletes will buy into its value. One way to increase this similarity, while also offering athletes a more effective program, is for mental training to be periodized based on the place it is in the preparation and competitive calendar for a sport. As part of the mental performance framework developed by consultants, they can indicate what mental aspects of mental training (e.g., attitudes, obstacles, muscles, and tools; see Chapters 1–4) are most appropriately offered at any given point in the season.

It is the responsibility of consultants to develop periodized mental training plans for the sports programs with whom they work. There is no clearly defined or widely accepted periodization plan for mental training, though Balague (2000) suggests three categories of mental areas that can guide the periodization process: foundational (e.g., motivation, confidence), performance (e.g., focus, intensity), and facilitative (e.g., relaxation, self-talk, imagery). Several pieces of information can be used in making this determination. First, consultants can examine

the attitudes, obstacles, mental muscles, and mental tools described in Chapters 1–4 (as well as other mental areas that they deem important), leverage their own professional experiences, and create a progression that makes the most intuitive sense to them.

Second, consultants can look at the requirements of the sport. For instance, is it a sport requiring sustained effort (e.g., running, cycling), highly technical needing intense focus (e.g., golf, archery), or very physical (e.g., football, wrestling)? Additional aspects of the sport that should be a part of the periodized planning process include the nature and duration of performances (e.g., one short performance, a series of short performances, an extended performance), whether it is objective (e.g., time or distance) or subjective (e.g., judged), and whether it is an individual or team sport.

Third, they can consider the demands of the particular phase of the season the athletes or teams are in and consider which mental areas are most appropriate. For example, motivation may be most needed during a period of intense physical conditioning and focus may be most appropriate during a phase of dedicated technical development.

Fourth, consultants can collaborate with the coaches in examining the preparation and competitive calendars to find the best times to incorporate various aspects of mental training into them. For example, during the preparatory phase, imagery could emphasize learning and ingraining new technical skills and establishing competitive routines. As the competitive season approaches, imagery sessions could focus on pre-competitive preparations and overall high-quality performances.

Finally, and importantly, consultants must assess and structure an appropriately periodized regimen of mental training around the needs and goals of the athletes with whom they work. For instance, consultants who work with young athletes early in the preparation phase who lack confidence could focus on positive self-talk and successful imagery. In turn, periodized mental training for elite athletes preparing for an international competition could emphasize competitive planning, performance rehearsal of the important event, and identifying and training ideal attitudes.

Delivery of Mental Training

Because time and personnel are in limited supply in any sports organization, coaches must be cognizant of how mental training will be delivered to their athletes in a way that is both effective and efficient. Thanks to technology, it's now possible to provide mental training in more creative and flexible ways that ever before. Consultants can play a central role in offering mental training in ways that best meet the needs, goals, and schedules of the athletes and teams they work with:

- coaches' education;
- delivered by coaches or consultants in person;
- during practice or away from sport;
- online courses;
- team Skype sessions;
- YouTube videos; and
- 1:1 consultations.

Integrating Mental Training into Overall Athlete Development

The final stage of this process involves working with coaches on ways in which mental training can be put into action and fully integrated into athletes' practice and competitive preparations. This discussion could comprise an entire book, so this section will provide only a framework for doing so rather than offering specific and concrete ideas for every aspect of mental training.

During Practice

A variety of mental muscles (see Chapter 3) can be strengthened by incorporating them into conditioning sessions and sport practices. For example, depending on the nature of what is being worked on, mental muscles can be used in the following ways:

- **Motivation:** Athletes can ensure that they fully committed to give their best effort before practice performance.
- **Confidence:** Athletes can be encouraged to be confident before difficult practice experiences.
- **Intensity:** Athletes can be shown how to raise or lower intensity based on the type of practice performance they are engaging in.
- **Focus:** Athletes can make a conscious effort to narrow their focus onto the task at hand in practice.

Mental exercises and tools (see Chapter 4) can be used by coaches and athletes in practice to both strengthen mental muscles and improve the quality of practice time. For instance, the following exercises and tools can be used in practice:

- **Music:** Athletes can listen to their favorite music before practice to generate positive emotions, motivate them to work hard, and to block out distractions.
- **Goal-setting:** Just before beginning practice, athletes can set or review the goals they want to achieve that day.
- **Mindfulness:** Before practice begins, athletes can center and focus themselves in the present and the task that lies ahead.
- **Imagery:** Before working on a new technical skill, athletes can imagine themselves performing the skill correctly, thus narrowing focus, increasing confidence, and priming the mind and body for its execution.
- **Self-talk:** Particularly before attempting a new or challenging skill, athletes can repeat positive statements as a means of building their confidence and persistence.
- **Routines:** Athletes can develop pre-practice and during practice routines that optimally prepare them for every practice and every exercise and drill during practice.
- **Breathing:** Athletes can incorporate deliberate breathing into their preparation for practice exercises and drills as well as during practice performances.

Additionally, the approaches and strategies discussed in Chapter 5, including quality, consistency, experimentation, athletes training like they compete, and psychological recovery from training and competition, offer coaches and athletes ways to improve the quality of athletes' practice efforts and better prepare them for competitions.

In all cases described above, mental training can be conducted by consultants alongside the coaching staff or implemented by the coaches themselves. Additionally, there will be a period of adjustment with both coaches and athletes to the inclusion of mental training in their overall athlete development. At the same time, with time and consistent application, mental training with transition from something new and different to simply what coaches and athletes do to get the most out of their sports efforts.

Away from Sport

Mental training doesn't just happen during practices. The time that athletes spend away from their sport can also be used to strengthen the mind. Fortunately, given the busy schedules that most athletes have, mental training away from sport only requires a small commitment of time each day and can be done almost anywhere. This mental training can be led by coaches or consultants or left to the athletes themselves to do on their own.

Goal-setting

At the beginning of a new preparation period, athletes can complete a detailed goal-setting plan establishing where they want to go that season and how they will get there. Athletes can best accomplish goal-setting in collaboration with coaches who know the athletes well in terms of their level of development, strengths and areas in need of improvement, and expected trajectory for the coming season. Subsequently, athletes can review, evaluate, and update their goals periodically during the preparation and competitive season to keep their efforts on track to accomplishing their goals.

Mindfulness

This tool can be beneficial to many aspects of athletes' lives beyond sports including school, personally, and socially (see Chapter 4). Mindfulness can be used to improve focus, control emotions, manage stress, develop empathy and self-compassion, increase body awareness, lessen intruding thoughts, and reduce anxiety.

Mental Imagery

Mental imagery is one of the most important mental exercises that athletes can use away from their sport to improve their efforts in their sport. As noted in Chapter 4, a structured and consistent mental imagery program can help athletes develop themselves in every aspect of their sports performances.

Self-talk

What athletes say to themselves away from their sport and about themselves, whether positive or negative, will impact them in their sport. Self-talk can inspire or deflate, build or hurt confidence, raise or lower intensity, or focus or distract. Additionally, what athletes say to themselves and, in turn, how they feel about themselves as people, will influence what they think and feel when they're practicing and competing. Moreover, self-talk is an exercise and that athletes become good at, whether nourishing or critical. Self-talk away from sport gives athletes opportunities to practice being positive which will also translate into their sport.

Music

Many athletes not only use music in their sport, but are also avid listeners in their daily lives. In this way, the more athletes listen to music that makes them feel good, the more deeply they will associate it with positive thoughts, emotions, and physical sensations. In doing so, they will be better able to replicate those positive states in their sport to enhance their practice and competitive efforts.

Competitive Preparations

Mental training should be an integral part of every athlete's competitive preparations. Though athletes have always done mental things to get themselves ready to compete, as with physical, technical, and tactical preparation, the more mental training can be done in a structured and consistent way, the more they will be prepared to perform their best when it matters most. To avoid redundancy of what has just been discussed, all of the mental muscles discussed in Chapter 3 and mental exercises and tools described in Chapter 4 can be incorporated into athletes' pre-competitive routines aimed at total preparation for optimal performance in competition. Consultants can, first, help athletes to identify the mental areas they most need to address in their routines. Then, they can show athletes the mental exercises and tools that they can incorporate into their routines. Finally, consultants can work with athletes in developing a personalized pre-competitive routine that will maximally prepare them to perform their best in competition.

Summary

- The vast majority of coaches believe that the mental side of sports is as or more important than its physical and technical counterparts.
- For athletes to perform their best, they must leverage fully the physical, technical, and mental aspects of their sport and consultants, coaches, and athletes would agree that the mind is a vital part of athletic performance puzzle that is also underappreciated and insufficiently used.
- Coaches readily admit that the money, resources, time, and energy they dedicate to mental training pales in comparison to their commitment to the physical and technical aspects of their sport.
- There are a variety of obstacles that have slowed the full adoption of mental training into overall athlete development including old coaching attitudes, not always clear evidence of need, lack on concreteness in

mental training, negative associations with psychology, few resources to learn from, no programs to follow, not an organizational priority, and lack of time.

- Mental training should be treated like physical conditioning and sport training which are comprehensive, organized, developmentally appropriate, consistent, periodized, and personalized.
- Goals for integrating mental training into overall athlete development include educating coaches about its value, aligning mental training with the above six criteria, and actively incorporating mental training into practice and competitive efforts.
- One way to align mental training with other contributors to sports performance is for mental training to be periodized based on the requirements of the sport, the demands of the stage of the season, and the needs and goals of athletes.
- Delivery of mental training programs can occur through coaches' education, during practice or away from sport, through online courses, Skype sessions, YouTube videos, and in individual sessions.
- The mental muscles, mental exercises and tools, and training suggestions offered in Chapters 3–5 can be integrated into overall athlete development during practice, away from sport, and in athletes' pre-competitive preparations.

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10

TEAM

Introduction

Jim Taylor

As the well-known saying from the Greek philosopher, Aristotle, goes, "The whole is greater than the sum of its parts." This notion suggests that the functional or performance effectiveness of a group involves more than the effectiveness of its individual members. Rather, when the members of a group work together, the result is a higher level of functioning and performance that could not be achieved by simply adding together the efforts of its individual members.

This understanding of a group has particular relevance for sports that involve teams. Team sports can mean that team performance is simply an aggregate of individual performances (e.g., golf, archery, tennis) or it can involve team members working together to perform (e.g., soccer, baseball, basketball). In both cases, how a team functions and performances is impacted by more than simply how team members perform, individually or collectively, on the field of play. To the contrary, teams are influenced by intrapersonal, interpersonal, and cultural dynamics that shape how the team gathers, establishes, and evolves.

This process results in a team culture that is based in several key elements. First, a set of values, attitudes, and norms of behavior emerge. Second, the team culture must be embraced by its members. Third, team members must unify their efforts around agreed-upon and shared goals. Fourth, team members must prioritize those team goals above their own individual aspirations. Finally, each team member must understand their individual roles and responsibilities with the team's functioning and performance efforts.

Within the overarching rubric of team culture, two other components play an important role in how effective teams are. Team cohesion refers to the "glue" that holds a team together when either internal (e.g., selfishness, jealousy) or external (e.g., losing, criticism from others) forces attempt to disrupt the team culture. Team communication involves the quality of the interactions that occur between team members and how conflict is resolved.

An essential intention of this chapter is to demonstrate that a team culture shouldn't be left to chance or trial-and-error in its development. Rather, it should be created proactively and deliberately based on the coaching staff's vision of how it can function and perform at its best. This vision then becomes the guiding light for the values, attitudes, and norms that are established within a team. The strength of any team is based on the individual member's commitment to the team's vision, the development of a positive team culture, the ability of team members to work together effectively toward their shared goals, and well team members are able to communicate and resolve conflicts.

This chapter will explore the systems involved in building a high-functioning and high-performing team. In addition to reviewing the essential theory and research for the three areas of team functioning introduced above, consultants will be offered practical means by which they can collaborate with coaches and team members to help them to coalesce around a collective set of values, attitudes, and norms with the expressed goal of performing their best collectively and achieving the results they want.

TEAM CULTURE

Justin Foster and Lauren Tashman

A team's culture is simply "the way things work around here" (Kaplan, Dollar, Melian, Van Durme, & Wong, 2016, p. 1). In his book *The Culture Code*, Daniel Coyle (2018) defined it as, "a set of living relationships working toward a shared goal." It reflects the identity of the team and acts as a guidepost for how that identity is expressed in action. As Coyle states, "culture isn't something you are. It's something you do." According to Schein (1984), culture is:

> the pattern of basic assumptions that a given group has invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration, and that have worked well enough to be considered valid, and therefore to be taught to new members as the correct way to perceive, think, and feel in relation to those problems.
>
> *(Schein, 1984, p. 3)*

A team's culture, then, is the foundation for everything that a team is, values, and believes, as well as how it functions, interacts, and performs.

The consulting firm Deloitte (Kaplan, Dollar, Melian, Van Durme, & Wong, 2016) provides a more succinct definition, stating that culture "includes the values, beliefs, behaviors, artifacts, and reward systems that influence people's behavior on a day-to-day basis." (p. 1). This is consistent with Schein's proposition that there are three interacting levels of organizational culture:

1. **Basic assumptions:** The invisible underlying beliefs of the individuals and groups that they may take for granted and not be consciously aware of, but act as a guide for the attention, perspective, and responses of the team;
2. **Values:** The espoused beliefs that govern group behavior that are hard to observe directly but indicate the team's wants and priorities; and
3. **Artifacts and creations:** The observable environment of the organization including public documents, stories, charters, workspace layout, and visible/audible behavior patterns of the group that describe what the team does and how they do it, but may not clearly link to the underlying why.

Taking these different perspectives into consideration, team culture is composed of:

- vision;
- values;
- attitudes;
- expectations and goals; and
- norms and standards of behavior.

Why Culture Matters

Team culture impacts every aspect of an organization. It has implications for the attitudes, perceptions, behaviors, and emotional responses of the members of the team as well as the overall climate of the team (Aarons & Sawitzky, 2006). Team culture sets the tone for the team's priorities, the decisions that are made, and how its members interact and perform. Thus, the team culture defines the environment of the team. For example, is the environment relaxed or intense? Do team members work effectively together or is there unaddressed or unresolved conflict? Does the team emphasize relationships or results? Does the team make improvement or winning the priority?

In a broad sense, culture can be constructive (i.e., characterized by supportiveness, individuality, and positive approaches to relationships and tasks) or defensive (i.e., promote conformity, submissiveness, and self-protection) (Aarons & Sawitsky, 2006). Janssen (2014) proposed a model outlining eight types of team cultures representative of the emphasis that is placed on relationships or results:

- **Corrosive:** Low emphasis on both results and relationships creating a dysfunctional culture characterized by selfishness, negativity, distrust, lack of respect, apathy and conflict creating an inability to get on the same page or work towards a common goal.
- **Country club:** Greater emphasis on relationships and results characterized by a focus on status and appearance that fosters superficial relationships a lack of accountability, and preference for leisure over winning.
- **Congenial:** High emphasis on relationships and little to no focus on results creating a commitment to fostering and sustaining harmonious relationships and positive interactions.
- **Comfortable:** Equal yet moderate emphasis on relationships and results supporting the maintenance of a safe, comfortable, and content environment.
- **Competitive:** High emphasis on results and only moderate emphasis on relationships that creates a focus on competing both within and outside of team and stifles the ability of team members to bond and work together.
- **Cutthroat:** Results take precedence over all else including relationships representative of the prioritization of talent and winning over character and team dynamic.
- **Constructive:** High emphasis on both results and relationships that fosters a healthy team dynamic and often successful performance but lacks full commitment in both areas.
- **Championship:** Unrelentingly high emphasis on both results and relationships characterized by trust, accountability, deep and connected relationships, vulnerability, honesty, respect, valued contributions by all members, a clear mission and goals, high standards, and a commitment to excellence.

Thus, consultants working with a team on culture necessitates helping them to develop both effective relationships (e.g., social cohesion, trust) and the ability to work together to achieve shared outcome goals (e.g., task cohesion, team coordination).

Theory and Research

To date, most research on team culture has emerged from the corporate world while little empirical research exists examining the role of team culture on individual or team sports performance. However, the research available can provide some useful insights for sport organizations. For example, according to Kotter and Heskett (1992), a strong culture has nearly two-thirds lower-turnover rate (13.9%) compared to organizations with a poor culture (48.4%). This difference affects the retention of personnel and the stability of staff at every level of a team including front office, coaches, support staff, and athletes. Culture also impacts revenue. A longitudinal study that followed more than 200 companies for a ten-year period found that those with a strong culture experienced an increase in net revenue of 765% compared to those with poor cultures (Gordon & DiTomaso, 1992). This finding has economic relevance for sport teams, particularly collegiate and professional teams that rely heavily on revenue.

Finally, team culture influences performance. Heskett (2012) found that as much as half of the performance differential between organizations can be attributed to culture. This finding has been supported anecdotally in sport. For example, when taking over the Ohio State University football program, Urban Meyer observed that training the right behaviors wouldn't stick if the culture doesn't support it (Meyer & Coffey, 2015). The culture, he realized, is the foundation that a team's strategy, skill, and effort are built upon. Moreover, the legendary San Francisco 49ers coach, Bill Walsh, summarized the impact of culture this way: "The culture precedes positive results. It doesn't get tacked on as an afterthought on your way to the victory stand" (Janssen, 2014, p. 5).

Additionally, in an article about Google's Project Aristotle, its study of team effectiveness (Duhigg, 2016), five elements were found to be associated with a healthy team culture and high effectiveness:

- **Psychological safety:** an environment in which team members feel comfortable being vulnerable and taking risks.
- **Dependability:** team members have high standards and hold themselves accountable to the team.
- **Structure and clarity:** team members understand what is expected of them and how to meet those expectations (i.e., roles, goals, and plans).
- **Meaning:** team members have a sense of personally meaningful purpose in their participation.
- **Impact:** team members know their contributions matter not only to the success of the team but also to society and the creation of change.

Moreover, the study revealed that psychological safety involved (1) conversational turn-taking, everyone on the team feels comfortable and has the opportunity to share their perspective, and (2) social sensitivity, team members tune in to nonverbal cues that may indicate how team members are feeling. More broadly, Google's research (Rozovsky, 2015) confirmed the importance of team norms and identified.

The results of these and other studies examining team culture demonstrate strongly that culture is a prerequisite to optimal team functioning, relationships, and performance. Moreover, the above taxonomies can provide consultants with a structure for both assessing a team culture and developing a plan for creating a healthy culture based on their vision, needs, and goals.

Practical Implications

Consultants and team cultures have a reciprocal relationship. First, consultants' ability to work effectively with coaches and athletes is influenced by team culture. Providing mental training to a team is dependent on their having a culture of innovation, openness to change and personal growth, and the pursuit of excellence. In turn, consultants can help shape the team culture in which they work by helping teams to proactively develop the culture that best meets their vision, needs, and goals. Thus, consultants would be wise to include team culture in their initial assessment of a team and to making the development of a team culture a centerpiece of the services that they offer.

Consultants should also be sensitive to the fact that the most painstakingly constructed team cultures may not turn out as intended because not every contributor to a team culture can be controlled. A team may be more than the sum of its parts, but, at the same time, its parts, namely, its team members and other stakeholders, have an impact on its culture. And all stakeholders (e.g., team members, coaches, administrators, boosters, fans, media) bring to a team unique attributes (e.g., personalities, beliefs, values, goals) that may or may not be positive or mesh with the culture that is sought. According to Bronfenbrenner (1992), there are layers of systems/environments surrounding individuals that will affect their development. If this notion is extended to teams, it can be assumed that the various levels of systems within and outside of the organization will play a role in both individual and team performance, as well as the consultant's role, experience, and impact. For example, in collegiate sport, the athletic department, university administration, conference, division, city, and state are examples of systems that can have implications for the team and its culture.

Additionally, team cultures can be deeply entrenched in an organization, but that doesn't necessarily mean they are effective (Schein, 1984). Teams can either build a culture by default or by design. If team culture isn't intentionally designed, a default culture is created as a result of factors such as the personalities of the team members, leadership style, past performance, institutional history, lack of awareness for the need for culture change, ingrained cultural habits, and agendas that have prevailed over time. This is especially true in more stagnant organizations that may characterize their culture by the phrase, "the way we've always done it."

In contrast, organizations that have intentionally designed their team culture can often point to a deliberate process by which the team considered who they are, why they exist, what they stand for, and what they do as well as the impact of these on team, functioning, relationships, and performance. Designed cultures often have a documented vision statement, core values, code of conduct, team goals, or a set of key principles. Further, in the most effective team cultures, these elements are not just words documented or displayed somewhere or conversations that were once had. Instead, they are attitudes, beliefs, and behaviors that are both embedded in and expressed by team members in their daily team activities. At the same time, the degree to which those within the organization embrace the team culture and use it to drive what they do and how they do it varies greatly from team to team and also from team member to team member.

Overall, in helping to shape a team culture, consultants must first focus on understanding the type of culture that currently exists. They may, for example, use the six team cultures described by Janssen (2014) to see what culture a team currently demonstrates. Next, they can collaborate with the relevant stakeholders to identify the fundamental vision, values, attitudes, norms, and goals that would be the foundation of a new team culture. Then, consultants can create a process for establishing those areas within the team and create buy-in and commitment among its stakeholders, most notably, the coaching staff and athletes.

In the process of helping a team develop an effective culture, there may be a tendency on the part of consultants to want to "do things" at a practical level with the teams they work with that can have an immediate, albeit potentially short term, impact on team functioning and performance. In some cases, this may be the role

that consultants have been asked to play in their team role, Instead, it would be incumbent on them to begin this process by having the team take a "deep dive" into the foundational aspects of team culture that have been described thus far to ensure the development of and commitment to both quality relationships and high standards for performance. Not only will these proactive steps get everyone on the team on the "same page," but the process of building a team brick by brick from the foundation up creates lasting trust and the ability and willingness to work together when it matters most (e.g., leading up to a big competition).

Interestingly, the connections and trust that are engendered in this process are not solely psychological, but actually produce biochemical changes. For example, Zak (2017a) suggested that a direct relationship exists between oxytocin levels and the degree of trust that people feel toward one another. In sport, Pepping and Timmermans (2012) proposed that oxytocin plays a role in emotional contagion (i.e., spread of emotions and moods) on a sports team impacting both social emotions (e.g., empathy, trust, cooperation, envy) and social perception (e.g., emotion recognition and gaze behavior) that ultimately impact team performance. Zak (2017b) recommended eight strategies leaders can use to create a culture of trust:

1. recognize excellence publicly when it happens;
2. induce "challenge stress" on the team using difficult but attainable goals;
3. empower team member autonomy in designing the environment;
4. allow stakeholders autonomy in how they approach their roles;
5. engage in frequent communication;
6. intentionally build relationships;
7. support personal growth; and
8. demonstrate vulnerability.

Building a High-performing Team Culture

Whether a team wants to initiate a new culture or reshape an existing culture, the authors recommend five stages that teams must accomplish:

- Phase 1: Assess the Current Culture
- Phase 2: Establish the New Culture
- Phase 3: Implement the Culture
- Phase 4: Sustain the Culture
- Phase 5: Re-align or Change the Culture

Consultants and the teams they work with must also recognize that a team culture isn't a static entity or a final product. Rather, it is an ongoing work in progress in which the process of developing and inculcating a team culture must be periodically revisited, re-assessed, and revised to meet the changing needs, priorities, and goals of new personnel, sport changes, level of competitiveness, and broader cultural changes. As the intentional design or redesign of a team culture progresses toward implementation, consultants should regularly check in on how well daily actions by the team alignment with the desired culture and continue to refine the understanding of what the culture looks like in action. Then, periodically, consultants can help teams to re-evaluate, re-align, or evolve their culture. Fundamental to this entire process is that consultants provide stakeholders with a rationale for a certain team culture, educate them about its components, offer them procedures and strategies for building the team culture, and, importantly, ensure complete buy-in and ownership of the team culture.

Phase 1: Assess the Current Culture

To help a team build, modify, or re-establish its culture, consultants must begin by assessing its current culture. For a team to function, interact, and perform to its capabilities and sustain that level over time, it is essential that the culture be clearly defined, bought into, and lived by all of its stakeholders. Consultants can help the team conduct an analysis of its culture and the structures and processes that support it.

In this way, consultants first become "cultural anthropologists" to uncover where the team currently is and where they want or need to be. According to Steiner's model of group productivity (Steiner, 1972), faulty group processes (i.e., losses in potential due to motivation and coordination) will determine the alignment or discrepancy between a group's potential and its actual performance. If a team has a problematic culture or is not reaching its real or perceived potential, consultants need to determine where the problems or challenges might lie relative to the factors and concepts discussed in this chapter.

There is no one-size-fits-all process for assessing the culture of teams. According to Schein (1984), four approaches in combination can be useful for assessing the current team culture:

1. analyzing the process by which new members are brought on board;
2. taking a multimodal approach (e.g., reviewing documents, observing team functioning) to analyzing the team's history;
3. conducting interviews with key stakeholders (e.g., "culture creators or carriers") to analyze beliefs, values, processes, environment, goals, and outcomes; and
4. jointly exploring with team members the basic assumptions underlying the culture.

As a part of the assessment, consultants may also consider using objective assessments to evaluate key factors that have implications for culture, such as motivational climate, coach leadership, coach-athlete relationship, trust, collective efficacy, organizational commitment, athlete satisfaction, and team resilience.

Thus, when working with a team on building their culture, consultants can use a myriad of qualitative and quantitative methods of assessment. For example, quantitative approaches such as questionnaires (e.g., Collective Efficacy Questionnaire, Short, Sullivan, & Feltz, 2005; Group Environment Questionnaire, Whitton & Fletcher, 2014) or performance profiling done as a team (e.g., Dale & Wrisberg, 1996) can be used to assess various facets of team environment and dynamic. Qualitative approaches, such as focus groups and one-on-one conversations, can also be very informative. This more informal approach enables consultants to ask follow-up questions and allow others to share their experiences based on another team member's comment. More formal approaches, such as social network analysis (Lusher, Robins, & Kremer, 2010) can also be useful.

How consultants choose to assess the team's culture should align with the needs and goals of the team and the intervention style of the individual consultants. Ultimately, consultants should seek to understand the experiences, values, perceptions, attitudes, norms, interpersonal dynamics, tensions, and roles of the team members. Then, the findings should be shared with relevant stakeholders for feedback to determine the most appropriate way forward.

Phase 2: Establish the New Culture

Once the assessment has been completed and the team has an agreed-upon sense of the type of culture that currently exists, and clarity on the culture they want for the future, consultants can begin to put that plan into action. But, before implementation begins and as the new culture is rooted in the team, consultants can set the team up for success by assisting it in building psychological safety (Duhigg, 2016) and quality connections that are going to be needed throughout this process as well as impact their ability to implement their new culture through cooperation and collaboration (Coyle, 2018). When a team has psychological safety, its members are more likely to share similar beliefs about the team, trust one another, and be committed to the team above themselves as individuals (Edmondson, 1999; Edmondson & Lei, 2014). Teams whose behavior reinforces this sense of safety improve at a greater rate than those who don't because they are willing to stretch their comfort zones, own their mistakes, and collectively find solutions rather than protecting their egos (Edmondson 1999; Edmondson & Lei, 2014). A team's sense of trust and safety will impact their ability to build an effective team culture.

The process of taking a team culture from the whiteboard to reality involves three phases:

- core component 1—purpose;
- core component 2—values; and
- core component 3—standards.

Core Component 1—Purpose

High-performing cultures are driven by a deep purpose, a compelling vision, and a collective goal. Consistent with this notion, Valée and Bloom (2016) found that the first key to building a championship culture was enacting the clear vision that drives a team forward. Some teams may focus more on a mission (something they aim to accomplish, such as a league championship) while others may choose to focus on a more expansive vision (a future state of the organization or world). For example, the Chicago Cubs' vision is "to change the world through the game of baseball" (Lifrak, 2015).

Many organizations have a mission, vision, or goal statement. However, leaders and team members within the organization often have a difficult time operationalizing what they mean on a daily basis. This disconnection leaves coaches and athletes unsure of how the purpose expressed in the mission, vision, or goal statements impacts their daily decisions and actions. When this occurs, a useful exercise is for consultants to ask team members what it would look like if they were living out the purpose on a daily basis. For example, they could ask, "How do you know when team members are or are not acting according to the team's purpose?" Or, "How do you know when the team is fulfilling their purpose?" These and other questions can help make the purpose more concrete and actionable to individuals at every level of the team.

Core Component 2—Values

A culture is the enacting of agreed-upon underlying and espoused values (i.e., beliefs and principles that guide a team in every aspect of its functioning including daily operations, interactions, and performance). Therefore, a values-based approach should be used to establish the new team culture. This process can begin in several ways, for example, by providing a list of potential core values or using questions that prompt the exploration of individual and group values (e.g., If you achieved your ultimate goal as a team, what would you have done or not done along the way that would have been critical to that success?; What is an "ideal" team in your mind and what does it do or not do that makes it ideal?). The following questions can be used to select and evaluate team values: Who are we? What is most important to us? Who do we want to be? Recently, Cotterill (2013) recommended the following five-stage approach for creating team values:

1. establish clear goals for the team;
2. brainstorm the values that would enable the accomplishment of those goals;
3. discuss those identified in step two to choose team values;
4. prioritize the selected values; and
5. elicit team agreement on the adoption of the values and the use of them to drive team actions.

Keep in mind that the values chosen and the wording used for them should demonstrate what is unique about the team rather than generic or category values or words (Yohn, 2018). Additionally, the values should not be ethereal concepts, but rather able to be translated into daily value-driven action. Further, consultants should encourage organizations to strive for what Hodgkinson (1996) referred to as "principle values" (i.e., those that have been derived through extensive critical reflection and embody important ideals that will not be compromised) in comparison to consensus (i.e., what others have chosen), consequence (i.e., if-then considerations that prioritize outcome over process), or preference (i.e., likes or desires based on affect or emotion) values.

This exploration should be a multi-phased process that is not rushed. Further, while the coaches and staff members should have a substantial role in creating the team culture, it is recommended that the athletes also be provided with the opportunity to be a part of the process because their commitment to the team's values will ultimately determine whether the values take hold and are fully embraced. Additionally, alignment of both informal and formal leaders is important (Cole & Martin, 2018). For example, consultants might start the process with the coaches, bring the discussion to team leaders among the athletes, then create a discussion among both coaches and leaders, before it is brought to the entire team for consensus. Values can mean different things to different people; thus, operationalization of the values is important (Hodgkinson, 1996). Therefore, a final process for this phase should include consultants facilitating the team in getting on the same page by collectively defining their values in relevant terms.

As an illustration of this essential aspect of developing a team culture, when Mike Krzyzewski became the head coach of USA Basketball, he knew he needed to set an intentional culture centered on selflessness and unity. Leading up to the 2008 Olympic Games in Beijing, China, "Coach K" invited his influential captains to partner with him in leading the team in identifying their core values which would be the basis for how they conducted themselves as a team: (1) no excuses, (2) great defense, (3) communication, (4) trust, (5) collective responsibility, (6) care, (7) respect, (8) intelligence, (9) poise, (10) flexibility, (11) unselfishness, (12) aggressiveness, (13) enthusiasm, (14) performance, and (15) pride. The number of values identified will vary from team to team, however given the limits of memory and attention, a smaller number may be more effective.

Core Component 3—Standards

This final part of the establishing a team culture involves turning the values just identified into a living entity that guides the team's daily actions by translating those values into accepted standards of behavior. The goal is to identify "keystone behaviors" that are the critical, meaningful, observable, and repeatable patterns that will most aid the team in achieving its vision and goals (Hull, 2017). Standards should be established for both on and off field contexts including team and community interactions, and practice and competitive performances.

For example, Dabo Swinney, head coach of the Clemson Tigers football team, has distilled their team's values and standards into fifteen "Team Commandments":

1. Go to class and be engaged.
2. Be a good citizen.
3. Great effort all the time.
4. Work ethic: nobody works harder.
5. Decide to be successful (choice).
6. Expect to be successful (mentality).
7. Clemson football is 60 minutes, or as long as it takes to finish.
8. Toughness! Mental and physical.
9. Maintain a positive attitude no matter what the circumstances.
10. Never lose faith.
11. Do everything with passion and enthusiasm.
12. Don't expect more from a teammate than you're willing to give.
13. Have a genuine appreciation for each other's role.
14. Be coachable. Learn to handle criticism.
15. Have fun!

As with identifying values, ownership of the standards by the entire team can be encouraged by allowing all members to participate in determining them. These behaviors should be stated in a simple, clear, and objective fashion. Further, it can be helpful to specify what it looks like to fall short of, meet, and exceed each standard to facilitate accountability to facilitate clear understanding and accountability as well as ensure everyone is on the same page.

Phase 3: Implement the Culture

The purpose, values, and standards are the foundation of a team culture, but they will have little value if they are not reinforced (Cole & Martin, 2018; Schroeder, 2010). Reinforcement by and for coaches and team members must occur early and often in the implementation of a new culture (e.g., every day checking on alignment to culture) to ensure full adoption and then periodically as the team's purpose, values, and standards become internalized and woven into the fabric of a team's daily functioning and performance (e.g., end of each week or at selected time points throughout a season). This can be done informally (e.g., as part of end-of-day debriefs) or more formally (e.g., a brief self-assessment completed by each team member). Individual accountability is important, but team accountability can also be useful by, for example, using accountability partners that every few days provide feedback on culture alignment (i.e., what they saw out of each other that represented being

aligned or not with the values and standards). Further, Cole and Martin (2018) found that having a short, simple overarching theme that captures the team's core values each day as well as daily rituals are useful for helping teams to successfully implement values and standards. Additionally, teams can strengthen the buy-in of team members into their culture by incorporating other rituals (e.g., player awards) and artifacts (e.g., signs in the locker room, hashtags in social media) that serve as reminders of the values and reinforce their daily use in team activities. This part of the process is essential given the discussion above about oxytocin and its implications for emotional contagion and team performance, but also given what science has uncovered about the impact of mirror neurons and the role they play in our modeling of others, learning, and transmission of emotions (Iacoboni, 2009). Further, ongoing efforts to build psychological safety and trust among team members is necessary for this level of transparency and accountability to be realized (Edmondson & Lei, 2014).

Phase 4: Sustain the Culture

In the world of sport, the "game" is always changing. There are new team members, successes and setbacks in performance within and across seasons, new rules and goals to accomplish, and a whole host of other issues that teams must navigate that can impact team culture. Over time, teams will need to continue to work on team culture including various aspects of both task cohesion (i.e., working together to achieve results) and social cohesion (i.e., quality relationships, trust, and connection).

Each member of a team needs to feel a sense of belonging, meaning, and contribution for a culture to operate effectively. Consultants can work with coaches and team members to identify ways in which everyone can feel that they are an integral part of the team. For example, strategies for identifying and valuing contribution include frequent recognition of outstanding contributions to the team, both tangible and otherwise, shared team responsibilities, and connecting individual efforts with accomplishment of team goals (Lencioni, 2002). To enhance connection and social cohesion, consultants can assist the team in fostering a sense of belonging. According to Coyle (2018), belonging cues (e.g., subtle verbal and nonverbal messages) signal a sense of investment in each other, a willingness to accept and embrace individuality of team members, and demonstrate a commitment to each other now and in the future. From an evolutionary standpoint, the members of a group will always be on the "lookout" for belonging cues when interacting with each other to get a sense of the level of safety of the group. When a sense of safety is felt, individuals will shift into "connection mode" (Coyle, 2018). Getting these signals once isn't enough; thus, from a team perspective, they must be intentionally and continually transmitted and reinforced by all members of the team. To enhance individual meaning, consultants can, for example, assist team members in the identification and sharing of personal values and the development of role clarity.

Consultants can also help teams to support and sustain their team culture by providing regular opportunities for discussion and reflection on how the team is doing (e.g., alignment to culture, adhering to standards of behavior, working together towards goals) and use that information to continually deepen and evolve the team culture. For every team, each new season brings new goals, people, changes, and challenges, so agility and adaptability are essential for a team culture to remain strong and resilient. For example, working with a team that is striving to win a first national championship may bring different challenges than working with a team that is striving to achieve a repeat. As a general approach, consultants may find it useful to help the team highlight their "keys to success" and standout performances that reflect the optimal culture in action. These can serve as benchmarks for regular reflection and evaluation. Consultants can also use more specific reflection frameworks in team sessions such as:

- Bright (what is going well), blurry (what is inconsistent), blind (what is not working or hasn't been discussed).
- What, so what, now what.
- Well, better/different, learned, (next).
- Start, stop, continue, change.

Phase 5: Re-align or Change the Culture

Over time, a team may lose sight of its culture or need to engage in an intentional change as a result of an ineffective or stagnant culture. For example, the stability of team members (i.e., high turnover of members or excessive stability), complacency or conflict that can arise as a result of the paradox of success, or the changing

landscape of the performance domain (e.g., reinstatement of a sport back into the Olympics) may necessitate the re-evaluation, re-design, or evolution of the team culture. Re-alignment may mean refocusing the team back onto its culture or creating a change in a culture that is no longer proving to be effective for the team or is dysfunctional. It is important for both consultants and members of the team to be aware that this may not be a smooth or comfortable process and may elicit resistance from team members depending on the factors that led to the need for change (Schein, 1984). Thus, consultants engaging in this process with teams should be competent in conflict resolution and change management.

If a change in the team culture is warranted, Schroeder (2010) identified three phases to guide this process:

- **Unfreezing:** Illuminating the current culture and exposing the flaws in it.
- **Cognitive restructuring:** Creating a mindset shift and identifying a new vision supported by new values and assumptions.
- **Refreezing:** Implementing the new culture and adopting artifacts that will help in this process.

Unfreezing requires that evidence be provided to aid the team members in understanding that the culture needs to be changed. In sport, coaches have found that losing serves as a powerful form of "data" needed to unfreeze from an old culture and winning serves as the impetus for refreezing to the new culture (Schroeder, 2010). However, a team may need to undergo culture change or evolution despite "success" requiring the use of other "data" during the unfreezing process. Further, from the team's past successful and unsuccessful experiences, values, relationships, practices, and strategies should be identified and serve as a guide for team-member recruitment, behavioral reinforcement, and the teaching of the values to those on the team. One of the best-known examples of intentional team culture re-design is that of the New Zealand All Blacks rugby teams, for decades the dominant team in the world. Spurred by an incident that occurred after a loss in 2004, the new culture began with the notion of "better people make better All Blacks" (Hodge, Henry, & Smith, 2014) and led to the identification of a new set of values that drive the new team culture.

Summary

- A team culture is the foundation for everything that a team is, values, and believes, as well as how it functions, interacts, and performs.
- A team culture is grounded in a team's vision, values, and standards of behavior.
- Research from the corporate world demonstrates that team culture impacts retention, revenue, and performance.
- Five elements have been found to be associated with a healthy team culture and optimal performance: psychological safety, dependability, structure and clarity, meaning, and impact.
- Consultants would be wise to include team culture in their initial assessment of a team and to make the development of a team culture a centerpiece of the services that they offer.
- Organizations that have intentionally designed their team culture can often point to some clarity and consistency surrounding who they are, why they exist, what they stand for, and what they do as well as the impact of these on performance.
- Consultants can help the team take a "deep dive" into the foundational aspects of team culture to ensure the development of and commitment to both quality relationships and high standards for performance (i.e., championship culture).
- Five phases of building high-performing teams include assessing the current culture, establishing the new culture through the identification of purpose, values, and standards, implementation of the culture, sustaining the culture, and re-aligning or changing the culture as needed.

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TEAM COHESION

Jim Taylor and Brandon Orr

The importance of team cohesion and its relationship to team functioning and performance is well established anecdotally and empirically (Carron & Eys, 2012; Eys, Patterson, Loughead, & Carron, 2006; Eys & Kim, 2017).

In general, the research indicates that the more cohesive the team, the better team members get along and the more successful the team performs. At the same time, team cohesion can be thought of as an end result, not a process. From this perspective, an argument can be made that there should be more emphasis placed on team building as it involves the process by which team cohesion is achieved (McEwan & Beauchamp, 2014). The intent here is not to diminish the importance of team cohesion, but rather to frame the position that team building should be the priority over team cohesion for consultants because of its practical value in improving team functioning and performance. The framework for consultants is established by defining team cohesion and team building, understanding the research both outside of and within sports, and providing actionable team-building strategies that will increase team cohesion.

Theory and Research

Outside of sports, Gross and Martin (1952) defined team cohesion as the collective struggle against allowing factors from outside a group to disrupt group function and the degree to which a group can withstand outside pressure. This definition, however, fails to account for the fact that the disruption of a given group can also come from within. Festinger, Schacter, and Back (1963) defined team cohesion as the nexus of all elements causing not only group member attraction, but also factors influencing the decision of members to stay in the group.

Carron and Eys's (2012) characterize cohesion as the strength of bonds among group members. A more applied definition emerged from McEwan and Beauchamp (2014) where team cohesion results from from specific behaviors that teams engage in (e.g., communication, mutual sharing, goal-setting).

As with any group setting, team dynamics (i.e., culture, cohesion, and communication) play a significant role in impacting not only the outcomes of team efforts, but also the manner in which those outcomes are pursued and achieved. How individual team members engage with teammates and fulfill their roles and responsibilities influence the quality of team functioning, interactions, and performance. This interplay between the individual and the team is the framework for cohesion representing one of the most important elements of any team (Severt & Estrada, 2015). As such, it is no surprise that cohesion is one of the most expansive bodies of research within sport psychology and one of the most influential contributors to team success (for an authoritative review of the literature on cohesion in sport, see Carron & Eys, 2012).

Cohesion is conceptualized as the degree to which a group is united in its commitment to achieved shared goals and how connected group members feel to one another. Simply put, group cohesion involves how well its members are able to "stick together" in the face of internal conflict, opposing external forces, and variation in team performance relative to their goals (Severt & Estrada, 2015). Two types of cohesion can be identified: *Task cohesion* refers to the collective commitment that a group had to accomplishing relevant tasks in pursuit of shared goals, while *social cohesion* involves the emotional connections that members have to the group. Later research has supported this categorization (Loughead & Bloom, 2013; Severt & Estrada, 2015). Additionally, Beal, Cohen, Burke, and McLendon (2003) offered a third component of cohesion, group pride, which has been identified to play a meaningful role in the development of cohesion. Group pride is defined as members of a team exhibiting attraction to the values and standards the team represents and experiencing fulfillment in the status and prestige team membership affords them. According to Beal et al. (2003), group pride occurs when team members are able to set aside their individual needs for the greater good of the team realizing that "the team is more important than the sum of its parts" (p. 7). Researchers also suggest that group pride cultivates an enduring desire for the team to remain intact and high functioning in spite of turnover by individual members of the team (Mullen & Copper, 1994).

Perceptions of cohesion by team members have been shown to have a direct impact on the behaviors and performance outcomes of sport teams (Eys & Kim, 2017). The importance of cohesion within sport is evident in the shear volume of research on how and why components of the construct of cohesion impact individual performance and individual and team functioning, relationships, and performance (for a full review, see Eys & Brawley, 2018). For the purposes of this section, cohesion will be examined within the dimensions of task and social cohesion and how these individually and respectively interact at the individual and group levels to influence team performance and sport outcome (Carron, Widmeyer, & Brawley, 1985; Eys & Brawley, 2018).

Task Cohesion

Considerable research has demonstrated the impact of task cohesion on many aspects of team performance. For example, increases in task cohesion among team members has been reported to allow them to view team failures with a process orientation which results in a more positive adaptive response to setbacks and failure and subsequent increased persistence (Shapcott & Carron, 2010). In addition, greater task cohesion within a team predicts a more positive interpretation of and behavioral response to pre-competition and competition anxiety (Wolf, Eys, & Kleinert, 2015).

Social Cohesion

A similar relationship between social cohesion and team performance has also been found. For instance, strong social cohesion in a team is related to greater attraction and adherence to team roles and tasks resulting in greater prosocial behavior demonstrated among teammates (Bruner, Boardley, & Cotê, 2014). Interestingly, this same social cohesion promotes greater antisocial behavior towards opponents, highlighting the vexing nature of cohesion's impact on team function and behavior (Bruner et al., 2014; Eys & Brawley, 2018).

Additional research has explored the relationship between the two types of cohesion and their cumulative impact on team functioning and performance in an effort to decipher whether one has a more favorable effect on teams (Carron & Eys, 2012; Eys & Brawley, 2018). Representative of this line of inquiry, Jacob and Carron (1998) reported that greater task cohesion promoted less emphasis on social standing among team members, thus improving team functioning and performance. Overall, the extant findings suggest that task cohesion has a greater effect on team functioning and performance than does social cohesion, while social cohesion has the benefit of strengthening connections between team members and increasing enjoyment in athletes' participation in team activities.

Team Cohesion and Coaches

Not surprisingly, coaches have a significant impact on cohesion in a team. Research shows that athletes report greater perceptions of cohesion when playing for coaches who infuse task-oriented language and instruction into their motivational climate while also exuding greater social support for their athletes through positive feedback (Jowett & Chaundy, 2004; Vincer & Loughead, 2010). Similarly, coaches who use a task-centered approach produce greater task and social cohesion among their athletes (Eys et al., 2013; Horn, Byrd, Martin, & Young, 2012). In contrast, coaches who emphasize an ego-involving motivational climate reduce task and social cohesion among team members (McLaren, Eys, & Murray, 2015).

Gender Interactions with Cohesion in Sport

Of particular note is the manner in which sport literature has reported differences in the the way cohesion develops and drives team performance among male and female athletes (Eys et al., 2015). Specifically in female teams, cohesion develops first and then serves to positively influence team functioning. However, the opposite is true of male teams where performance develops first from which cohesion then follows. Furthermore, Eys et al. (2015) suggest that cohesion on the whole develops more quickly in male teams.

Negative Impact of Cohesion on Performance

The multidimensional nature of cohesion and the manner in which task and social cohesion interact in their impact on performance produces different effects on team functioning and performance when one type of cohesion is more salient than the other within a team. Specifically, when social cohesion on a team is high and task cohesion is low, team members report being less likely to critique key members' performance when needed. Moreover, social issues become of greater importance than task concerns and team members who do not adhere to shared group values become ostracized (Hardy, Eys, & Carron, 2005; Rovio, Eskola, Kozub, Duda, & Lintunen, 2009).

Practical Implications

Born out of the sentiment that team cohesion is too narrow a focus (McEwan & Beauchamp, 2014), there is a need for consultants to direct their intervention efforts to focus on team building as a means to the end of enhanced team cohesion and improved team performance. Loughead and Bloom (2013) note two protocols for consultants within team building:

1. **indirectly**, in which consultants facilitate team building by working with the coaching staff who will then implement the team-building protocols, and
2. **directly**, in which consultants facilitate team building by working in concert with the coaches and athletes.

There is no one established model or formula for team building, but consultants would be well served to base approaches to team building off of the specific team for whom they are consulting (Martin, Carron & Burke, 2009). The intention is not to present this material as though it is a formulaic system for team building; nor should it be received as a proposed system for a "canned approach" (Yukelson, 1997, p. 86). Instead, consultants should use the information that is offered below and design a team-building program that meets the unique culture, values, needs, and goals of the teams with whom they work (Yukelson, 1997).

Task Cohesion

As noted previously, there is strong evidence for the important role that task cohesion plays in team building and performance (Dunlop, Falk, & Beauchamp, 2013; Eys et al., 2006; Wolf et al., 2015). An essential finding is that task cohesion acts as a motivator in enhancing individual and team performance (Shapcott & Carron, 2010; Wolf et al., 2015). As such, consultants would do well to establish task-oriented interventions geared towards highlighting the value of task-oriented team climate. Several strategies have been found to build task cohesion in teams.

Consultants can lay the foundation for high task cohesion in a team by, first, working with coaches and athletes to establish clarity on their individual and collective roles and responsibilities in three areas (Carron & Eys, 2012). Role identifiability is defined by team members' understanding of what is expected of them (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964). For individual performance within a team setting to increase, it is paramount that each member be clear on what their role is and the specific tasks attached to that role. When these systems are not clear, both the individual and the team are in a state of role ambiguity that can have a negative effect on team functioning and performance (Cunningham & Eys, 2007). Using football as an example, there are specific roles each player is asked to fulfill such as starter, substitute player, special teams player, or scout team. Role identifiability also plays a critical role in the execution of team performance. Continuing to use football as an example, on any given play, there are eleven members who have identified specific tasks they must complete successfully for the team performance to also be successful (e.g., blocking, running routes).

Once roles within a team have been identified, the next component is for team members to accept the role they are being asked to play within the team. The degree of acceptance of team members' roles will be based on several factors: (1) how much the role aligns with their individual goals, (2) whether they are willing to subjugate their individual goals for the team's goals, and (3) how well other members of the team, including both coaches and teammates, effectively communicate the value of that role to overall team functioning and performance. Athletes report that the largest variable negatively impacting roles in sport is a lack of clear communication from the role designator who is most often the coach (Eys, Carron, Bray & Beauchamp, 2005). Consultants can have an impact on role acceptance by clearly describing the value of each member's role and encouraging coaches to regularly praise athletes for accepting and fulfilling their roles (Cunningham & Eys, 2007).

The ultimate success of a team in terms of both functioning and performance depends on how well its members can execute their roles. Role execution involves, first, team members gaining an understanding of precisely what those roles entail in terms of specific tasks they must engage in and how to perform them. Next, team members must learn and practice those tasks until they are effectively performed. Finally, they must execute those tasks successfully in competition.

Consultants can enhance the effectiveness of task cohesion by encouraging coaches to adopt a motivational climate that is task-oriented (i.e., emphasis on the successful completion of identified tasks) rather

than ego-oriented (e.g., emphasis on doing tasks better than others (Carron & Eys, 2012; Eys, Jewitt, Evans, Wolf, Bruner, & Loughead, 2013). Research has shown that teams that foster a task-oriented motivational climate are reported to have greater task and social cohesion while also improving performance and reducing performance-related anxiety (Eys et al., 2013; Kingston & Hardy, 1997; Thelwell & Maynard, 2003).

Second, team members, or members of subgroups within a team (e.g., offensive linemen in football, infielders in baseball or softball, goalies in soccer), can collaborate to *establish goals* for the tasks they are responsible for. This collective effort pulls individual team members together around a shared set of goals that all are motivated to achieve and must work together to achieve.

Third, allowing team members to be a *part of the decision-making process* in selecting tasks in which they have roles. This approach has the effect of increasing ownership and commitment among team members toward those tasks. In turn, members will individually and collectively feel more motivated to complete the tasks they have chosen successfully.

Fourth, creating opportunities for *problem solving* among team members can provide solutions to team functioning and performance difficulties that arise in practice and competitive situations. This strategy has two benefits. It offers solutions that may not have been thought of otherwise. And the act of collaborating gives team members the chance to build social cohesion. A general framework for problem solving can involve team members having to complete a task or solve a problem in a way that includes the identification of roles, identified tasks for that role, and expectations for how that role is to be fulfilled.

These strategies can be used in many aspects of functioning and performance. Consultants can use them in conjunction with physical conditioning, sport training, video analysis, and mental training. Additionally, these approaches can be applied in psychoeducation, mutual sharing and disclosure, peer support, and shared accountability to a team's vision, values, standards, and expectations.

Social Cohesion

Though the research suggests that social cohesion should play a subordinate role in relation to task cohesion due to its lesser impact on team performance, social cohesion should by no means be ignored by consultants (Carron, Colman, Wheeler, & Stevens, 2002; Eys, Ritchie, Little, Slade, & Oddson, 2008; Filho, Dobersek, Gershgoren, Becker, & Tennenbaum, 2014; Jacob & Carron, 1998). To the contrary, though social cohesion may not directly influence team performance, it certainly has a meaningful effect on the enjoyment that members of a team experience, which may, indirectly, improve individual and team performance. There are a variety of tools that consultants can use to build social cohesion with a team.

One noted approach is personal disclosure and mutual sharing (PDMS). PDMS involves providing opportunities for team members to share experiences, thoughts, and feelings about their sport and non-sport lives. This practice deepens relationships, builds trust, encourages vulnerability and healthy risk-taking, and offers team members both catharsis and support, all of which will increase social cohesion. Dunn and Holt (2004) and Holt and Dunn (2006) operationalized this approach within a team setting by having individual members share meaningful personal stories prior to a major competition within the team's championship season. Pain and Harwood (2009) argued in favor of a less-elementary approach by incorporating multiple theme-focused sessions of PDMS into team building surrounding various aspects of team performance including goal-setting, positive thinking, and emotional regulation. Regardless of the approach to PDMS instituted by the consultants, athletes engaging in these practices, especially before major competitions, reported feeling a greater social bond characterized by increased trust, shared collective bond to team outcomes, and normalization of pre-competitive anxiety among members leading up to "big games" (Windsor, Barker, & McCarthy, 2011).

Similar PDMS sessions can be valuable after competitions as a means of debriefing the team's performance, allowing team members to "ventilate," acknowledging successful individual contributions, and problem solving difficulties that arise during the competitions. The sessions described by Pain and Harwood also involved inclusion of coaches in the PDMS sessions which was found to strengthen social cohesion between the coaching staff and team members.

Social cohesion can also be strengthened by having the tasks that team members engage in require cooperation, trust, and teamwork. When team members have a shared vision, common goals, and like each other, they will feel connected with their teammates, associate positive emotions with their team experiences, and work together effectively.

Another useful way to build social cohesion is through non-sport interactions among team members. Activities outside of sport allow team members to see each other in different roles where diverse personality styles and other competencies may be showcased. This approach enables team members to see their teammates as more than just athletes, but also as people with wide-ranging interests and capabilities. These added components of who team members are beyond the field of play provide a depth and breadth of "personness" that that can strengthen relationships and augment social cohesion among athletes within a team.

Mental Training for Team Building

The ultimate success of any team lies in its ability to perform its best when it counts the most. To that end, teams subject their athletes to intense conditioning and sport training to ensure that they possess the requisite physical, technical, and tactical capabilities to execute their roles maximally in competition. Mental training is also now used as an essential means of helping athletes and teams perform at their highest levels consistently. Though not often considered in this light, mental training can also be a powerful means of team building and, specifically, in developing both task and social cohesion.

As research has clearly demonstrated, many types of mental training, such as goal-setting, imagery, self-talk, intensity control, and emotional regulation, can result in improved skill acquisition and better competitive performances (Durand, Bush, & Salmela, 2002). In other words, mental exercises and tools can be used to help team members optimally perform their assigned roles and responsibilities which, in turn, can build task cohesion.

Similarly, many aspects of mental training can used to improve social cohesion. Any mental training that is done collectively can create shared experiences, build trust, establish stronger bonds, and result in the ultimate influence on social cohesion, namely, successful performances in competition. Examples of mental training that can facilitate social cohesion include team goal-setting, group mental imagery sessions, pre-competitive team routines, group relaxation, and emotional support.

Summary

- Team cohesion can be thought of as an end result, an argument can be made that there is should be more emphasis placed on team building as it involves the process by which team cohesion is achieve.
- Team cohesion refers to the degree to which individual members share a commitment to a common goal and how close they feel to one another.
- Research has demonstrated three components of team cohesion: task, social, and group pride.
- Task cohesion refers to the collective commitment that a team has to accomplishing relevant tasks in pursuit of shared goals.
- Social cohesion involves the emotional connections that members have to the team.
- Group pride is defined as members of a team exhibiting attraction to the values and standards the team represents and experiencing fulfillment in the status and prestige team membership affords them.
- Consultants would be well served to ask what specific team-building interventions will encourage team cohesion and, by extension, team functioning and performance.
- Strategies for building task cohesion include team members collaborating to establish goals for the tasks they are responsible for, including team members in decision making, and allowing team members to be a part of problem solving.
- Though social cohesion may not directly influence team performance, it does have a meaningful effect on the overall experience and enjoyment that members of a team experience.
- Personal disclosure and mutual sharing (PDMS) involves providing opportunities for team members to share experiences, thoughts, and feelings about their sport and non-sport lives which practice deepens relationships, builds trust, encourages vulnerability and healthy risk-taking, and offers team members both catharsis and support.
- Mental training can be a powerful means of team building and, specifically, in developing both task and social cohesion.

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TEAM COMMUNICATION

Amanda Myhrberg and Jim Taylor

Consider the importance of communication at every level and in every function of a sports team. It is vital to all aspects of team functioning, interactions, and performance. Communication is required to express the team culture, establish relationships, teach new skills in practice, and perform effectively in competition. Effective communication:

- offers clarity and understanding;
- leads to empathy and trust;
- identifies problems and provides solutions;
- facilitates decision making;
- enhances skill acquisition;
- ensures coordinated effort;
- resolves conflict; and
- allows for successful team performances.

Most basically, communication involves the sharing and exchange of information, ideas, and emotions (Kim, Magnusen, & Andrew, 2016). It can occur through several forms of media including spoken or written words, voice inflection, facial expression, emotional tone, and body language. Imagine the execution of an offensive play in football. The quarterback verbally communicates a pass play in the huddle. He may call an audible in response to the defensive formation. He calls the snap count. As the play unfolds, the quarterback communicates messages with his eyes to both his receivers and his opponents. He does a pump fake. He turns his body in one direction while pointing in another direction. The quarterback makes eye contact with various receivers. Finally, he launches the ball through the air. If the ball is caught, he congratulates his teammates. If the throw is incomplete, he may provide encouragement and corrective feedback. Without all

these methods of communication, team success would be impossible. In sum, without communication, a team would cease to be a team.

Despite its obvious importance to team functioning and performance, communication is not typically seen as a priority that deserves time, energy, and resources to maximize its value. It is often not even seen as a tool that can enhance performance. Much like breathing, it happens frequently and automatically and, as a result, conscious attention or thought is rarely given to it, except when a communication problem, such as a misunderstanding or conflict, arises.

Consultants can play an important role is ensuring that teams appreciate the power of effective communication and the dangers of poor communication, engage with it in a deliberate way, and actively train its members to use communication in ways that optimize its value. From administration to its coaching staff to its members, consultants can offer teams practical ways to improve the quality of their communications to reduce and resolve conflict when it arises.

Theory and Research

Communications within teams is characterized as interpersonal communication involving at least two people engaged in a meaningful exchange of information (Bell & Riol, 2017; Weinberg & Gould, 2011). Interpersonal communication starts with one person who decides to send a message. They then encode it, meaning they choose the way it will be sent (e.g., verbally or nonverbally), and send the message with the intention that it will be accurately understood by the receiver. Next, the recipient receives and decodes the message; in doing so, establishes their understanding of the message. Finally, the receiver selects an appropriate response to the initial message and conveys it in some form to the original sender. This chain of communications initiates a feedback loop until all relevant information is transmitted between the two parties (Yukelson, 2006). Essential to effective communication is that, regardless of the medium that is used, the message that is received is understood in a way that aligns with the intention behind the message that is sent.

Verbal messages have been found to be the most direct and effective form of communication because most words have a shared and agreed-upon meaning, thus reducing the chances of ambiguity or misinterpretation. In turn, nonverbal communication is more amorphous and, as a result, more prone to misunderstanding. This divergence is important because research indicates that nonverbal messages, for all their relative uncertainty, are less in our conscious control, yet convey 50–70 percent of the information that is communicated (Mouratidis, Lens, & Vansteenkiste, 2010; Weinberg & Gould, 2011).

Shared Mental Models

In an ideal world, communications between two or more people would work seamlessly, meaning the messages that are sent are the same messages that are received, and all messages would be conveyed without ambiguity, confusion, or misinterpretation. However, in the real world, some communication breakdowns are inevitable for several reasons. First, senders and receivers each have their own unique perceptual, interpretive, and analytical filters, based on their genetic make-ups, past experiences, biases, and preconceived notions, that can result in a disconnect between message sent and message received. Second, people have varied capabilities for encoding and articulating information, ideas, and emotions. Similarly, people have a range of capacities for decoding and understanding the messages that are sent. Third, depending on the tone of the messages, they may be garbled due to hesitancy to communicate the message (e.g., with criticism) or muddled in their conveyance by strong emotions (e.g., anger). In all cases, these breakdowns in communication can have a significant impact on individual team members and overall team functioning, interactions, and performance (Rasker, Post, & Schraagen, 2000).

The construct of a *shared mental model* can be a helpful tool in minimizing communication breakdowns and strengthening the effectiveness of communications within a team. Shared mental models consist of a collective understanding of how a system composed of a group of people work. They involve an agreed-upon set of intentions, needs, knowledge, procedures, and vocabulary. They also create a cognitive framework (i.e., a way of thinking) that helps to predict understand, and coordinate individual and team behavior (Eccles & Tenenbaum, 2004).

From a team perspective, a shared mental model encompasses a team's values, attitudes, goals, and standards of behavior that comprise its team culture. In a sense, a shared mental model allows team members to "think alike" and, as a result, makes communication more clear, understandable, and aligned. A shared mental model leads to more effective communication because team members see and interpret their world in a similar manner. Giske, Rodahl, and Hoigaard (2015) investigated the existence and development of a shared mental model in elite ice hockey and handball players and found that shared mental models do exist at the elite level.

With a common view of the world, misinterpretations and misunderstandings are less likely, thus the potential for conflict is reduced. A key benefit of this shared mental model is a stronger team culture, greater task and social cohesion, and a greater sense of connectedness among team members. Establishing shared mental models also allows individuals on a team to predict behavior during moments where lengthy communication might not be possible (e.g., middle of a game) (Blickensderfer & Reynolds, 2010; Lim & Klein, 2006). Researchers have found that certain types of feedback help in the development of shared mental models: self-correction and performance monitoring (Rasker et al., 2000). Self-correction is viewed as a process that occurs after the task is completed. With self-correction, team members engage in reflection of the past events, correcting errors, discussing strategies, and planning for the next time. By doing this, team members correct their team attitudes, cognitions, and behaviors without outside intervention (Rasker et al., 2000). Performance monitoring is when members of the team are capable of giving, seeking, and receiving feedback related to the execution of a task.

Communication and Team Development

Tuckman's four stages of group development describe the journey needed for a group of individuals to become a team: forming, storming, norming, and performing (Tuckman, 1965; Tuckman & Jensen, 1977). Communication plays a vital role in each stage. The *forming* stage is characterized by new team members getting to know each other. Interactions tend to be polite and cautious and relationships remain at a superficial level. Initial goals and tasks are established, but team efforts begin slowly and build toward greater coordination. This stage is best served for teams to communicate openly about identity, culture, values, attitudes, standards of behavior, and goals. It also allows teams to establish communication as an essential component of its structures and processes. In doing so, a shared mental model of communication is an important factor becomes woven into the fabric of the team (Tuckman & Jensen, 1977).

Next, teams move to the *storming* stage in which members gain greater understanding of their individual needs and what will be required of them to become an integral part of the team. Conflicts often arise as team members find, by choice or selection, their role in a team and what tasks they must assume. They also begin to figure out how to work collectively rather than independently. Emotions are heightened, equal parts facilitative and disruptive due to the changes that are occurring within the team as it gels. Storming also involves establishing defined expectations of its team members as limits are challenged and shaped according to the emerging team culture. Effective communication can minimize the negative impact of this stage by providing a means of increasing trust and reducing conflict.

In fact, teams that embrace conflict and learn to resolve disagreements in a healthy manner end up stronger. Additionally, experiencing conflict within a team has been shown to encourage communication and build trust (Bradley, Anderson, Baur, & Klotz, 2015). Tekleab, Quigley, and Tesluk (2009) wanted to investigate how a team navigates conflict, works together, and eventually develops into an effective team. Results from the study demonstrated that managing conflict in earlier stages increased overall team cohesion and effectiveness (Tekleab et al., 2009).

As team formation develops, it moves into the *norming* stage in which intimacy is established and cooperation between team members develops. When communication is emphasized from the initial stages of this process, team members are more united around a common vision and develop a shared mental model. Due to greater mutual understanding and respect, there is an acceptance of individual differences, and members feel like an integral and valued part of the team. Having effective communication leads to greater social and task cohesion (Bradley et al., 2015).

Lastly, teams that are well formed and capable move toward the *performing* stage of Tuckman's stages of group development (Tuckman, 1965; Tuckman & Jensen, 1977). In the performing stage. team members can direct their energies toward collaboratively executing their identified tasks and pursuing their specified goals.

By this time, team members have the motivation, knowledge, and skills to perform their individual and team tasks successfully. In the performing stage, communication is important for both maintaining high-quality effort and further developing as team members and as a team overall. Additionally, clear and effective communication encourages commitment to team goals, facilitates the quality and efficiency of individual and team practice and competitive performance, and produces sound problem solving and decision making.

Practical Implications

Communication is a skill that develops with practice. As a result, consultants can provide teams with the values, attitudes, and tools to enable and encourage effective communication. There are two key areas that consultants can teach teams: Communication skills and conflict resolution strategies.

Facilitating Team Communication

Establishing effective communication within a team begins with coaches and how they communicate with their fellow coaches and their athletes. Coaches show the team how communication is prioritized, why it is important, and how it is used to enhance team functioning and team performance.

Create a Culture of Communication

The development of effective communication begins by having coaches create a team culture in which communication plays a vital role. It begins by being woven into the fabric of the culture as an essential value that sets the tone for its use among the team. This foundation is then operationalized in the standards of behavior that team members are expected to uphold related to communication and, at a hands-on level, how communication is used and incorporated into the practices, routines, and interactions of daily team life.

Model Communication

The most powerful way that coaches can encourage their team to adopt effective communication is through modeling of good communication behaviors. When coaches use the approaches and strategies that will be described below, team members get the message that communication is important. Also, by observing coaches, it also conveys to team members specific ways for them to communicate with teammates. Consultants can work with coaches at two levels: first, to help them to better understand how they communicate and identify their communication strengths (e.g., explanations of correct technique) and areas in need of improvement (e.g., messages of anger or frustration); and, second, to instruct them in ways to improve their communication skills.

Communication Techniques

As noted earlier, effective communication at the most basic level is about sending and receiving a message. Implementing good communication techniques can be an art as well as a science. There are empirically tested strategies, but it is also important to remember there will be individual differences when working with teams and individuals (Gustafsson, Lindholm, & Sikstrom, 2013). Consultants can provide the means by which teams can formally learn and practice these communication skills (Gustafsson et al., 2013; Weinberg & Gould, 2011; Yukleson, 2006):

- Understand who the message is for to judge how the message will be received and to shape the best possible message for the recipient.
- Start from a position of mutual respect and shared purpose.
- Be honest and open.

- Take ownership of messages by using "I" statements (e.g., "I feel that . . .") rather than "You" statements (e.g., "You did that . . .") which are often blaming or accusatory.
- If the communication is important, rehearse it to ensure clarity of message.
- Be aware of the emotions that might be brought into a communication and how they might alter your message.
- If the communication is in person, be aware of body language to ensure that it aligns with the message.
- Because effective communication is interactive, make listening a priority so that the message that is sent is accurately received.
- See feedback as a means of being and doing better rather than a criticism or personal attack.
- If the communication is sensitive, focus on the positives (e.g., what is good) rather than the negatives (e.g., what is bad).
- Deliberately choose a form of communication (e.g., in-person, phone, text, email) that will maximize the chances of the message is received effectively.

Team Conflict

An inevitable part of any team is that conflicts will arise among team members. Conflict can be thought of as an intense disagreement about a topic of importance to those involved for which an immediate solution is not forthcoming (Laios & Tzetzis, 2005). Researchers have identified four types of conflicts (Bradley et al., 2015; De Dreu & Weingart, 2003; De Wit, Greer, & Jehn, 2012; Mohd, Omar, & Asri, 2016; Tekleab et al., 2009):

- task conflicts (e.g., differing goals or approaches);
- relationship conflicts (e.g., dislike, jealousy);
- process conflicts (e.g., leadership, roles); and
- status conflicts (e.g., power, competition).

Within these four broad categories, common team conflicts include:

- lack of communication;
- misunderstandings;
- personality differences;
- competing goals;
- lack of role ambiguity or acceptance;
- differing opinions;
- ego investment;
- power struggles;
- strong emotions;
- personal agendas;
- uncertainty;
- competitive stress;
- intrateam competition for available positions; and
- ups and downs of individual and team performance.

Conflict can be potentially harmful to both individual and team functioning, relationships, and performance. Individual effects include a loss of motivation, stress, distancing from team members, a decrease in individual performance. The impact of conflict on a team includes reduced, ineffective, or damaging communication, loss of respect and trust, a loss of team confidence, a decline in collaboration, and poor team performance (De Dreu & Weingart, 2003).

At the same time, conflict can be beneficial to both individual team members and the team as a whole (Bradley et al., 2015):

- acts as a wake-up call for the need for change;
- identifies unproductive or inefficient processes;

- reveals useful new ideas;
- expresses team member needs;
- encourages tolerance, flexibility, and compromise;
- provides opportunities to improve communication skills;
- teaches self-awareness;
- resolution improves morale;
- indicates problems;
- offers solutions;
- improves performance; and
- supports personal growth.

Preventing Conflict

The best way to deal with conflicts is to prevent them from occurring. Consultants can suggest approaches and strategies in every aspect of team functioning that will reduce the chances of conflicts arising. This intervention begins with team culture in which, as described above, communication is considered an important value and team members are shown effective ways of communicating. Conflict resolution is further strengthened by having consultants proactively teach the communication skills described above. Coaches and team members are encouraged to be honest, give constructive feedback, and set team goals at the beginning of the season to ensure buy-in (Wachsmuth, Jowett, & Harwood, 2017).

Task conflict can be reduced by establishing task clarity and improving individual and shared task execution among team members. Relationship conflict can be mitigated by building trust, fostering open communication, and encouraging friendships and interdependence. Process conflict can be lessened by ensuring role clarity and acceptance and setting clear procedures for all aspects of team functioning. Finally, status conflict can be eased by ensuring respect among all team members, nurturing collaborative rather than competitive goals, and recognizing the contributions of every team member to team success. Additionally, the adoption of standards of behavior that address expectations of team members, team interactions, general team rules, and how team members should behave can have an overall positive effect on preventing team conflict.

Resolving Conflicts

Consultants can provide approaches and strategies to prevent conflicts from arising within a team, but the very nature of team sports means that conflicts will emerge despite those efforts. It is not a matter of whether conflicts will occur, but rather how the individuals involved and the team as a whole respond to them. Consultants can also play a key role in showing teams how to approach and react to conflict among its members and, in some cases, act as objective mediator who helps to broker a positive resolution.

Before specific strategies are discussed, consultants can shape conflict resolution by the attitudes that team members have about conflict. Conflict can be uncomfortable and, typically, people often prefer to avoid rather than confront it. Unfortunately, conflicts that are ignored on the surface, often fester underneath, causing the conflict to grow in size and intensity. Consultants can encourage teams to embrace conflicts and to address them head on as early as possible to prevent them from escalating or spreading. This approach tends to reduce the pressure and tension associated with conflicts by allowing them to be expressed and resolved immediately rather than being left suppressed and unresolved by the involved parties.

Another "setting the stage" strategy for resolving conflicts involves having everyone caught up in a conflict stepping away from the situation that caused it and taking a break. This tactic allows the conflicted team members to gain emotional distance from the conflict, calm down, and then to return to the situation more relaxed, rational, and open to finding a resolution. During this separation, those involved can actively relax their body with deep breathing, meditation, or exercise. They can also "vent" their concerns to another team member thus allowing them to release some of their pent-up emotions.

If some sort of mediation is needed, the consultant, coach, or team captain can also meet with the team members who are having the conflict separately to understand it and come to some consensus on

how best to move forward to resolution. It should also be decided whether the conflict is best addressed privately or in the presence of the team. Once the stage has been set for resolution of the conflict and the conflicted parties meet, a variety of other strategies can be used (Dizon, 2018; Dontigney, 2018; Semczuk, 2017):

- Set ground rules emphasizing mutual respect, calmness, an openness to understand the other person's perspective, and the shared desire to resolve the conflict to everyone's satisfaction.
- Get to the real issue underlying the conflict.
- Don't make assumptions.
- Focus on the problem, not the person.
- Focus on the present.
- Start with shared goals.
- Focus on solutions rather than problems.
- Use "I" statements when expressing what you think and feel.
- Listen as much as talk and don't interrupt.
- Seek out win–win.
- Be willing to compromise.

If handled properly, using the strategies described above, conflict can be a valuable contributor to team development in several ways. It can affirm team culture, strengthen team cohesion, reinvigorate team values, and model healthy team behavior.

Summary

- Communication is required to express the team culture, establish relationships, teach new skills in practice, and perform effectively in competition.
- Communication involves the sharing and exchange of information, ideas, and emotions, and can occur through several forms of media including spoken or written words, voice inflection, facial expression, emotional tone, and body language.
- Consultants can play an important role in ensuring that teams appreciate the power of effective communication and the dangers of poor communication, engage with it in a deliberate and formal way, and actively train its members to use communication in ways that optimize its value.
- Essential to effective communication is that, regardless of the medium that is used, the message that is received is understood in a way that aligns with the intention behind the message that is sent.
- Verbal messages have been found to be the most direct and effective form of communication because most words have a shared and agreed-upon meaning, thus reducing the chances of ambiguity or misinterpretation.
- In an ideal world, communications between two or more people work seamlessly, meaning the messages that are sent are the same messages that are received, and all messages would be conveyed without ambiguity, confusion, or misinterpretation; however, in the real world, some communication breakdowns are inevitable.
- Shared mental models involve a collective understanding of how a system composed of a group of people work and involves an agreed-upon set of intentions, needs, knowledge, procedures, and vocabulary.
- Communication plays an important role in Tuckman's four stages of group development outline the journey needed for a group of individuals to become a team: forming, storming, norming, and performing.
- Consultants can provide teams with the values, attitudes, and tools to enable and encourage effective communication.
- Establishing effective communication within a team begins with coaches and how they communicate with the team. Including creating a culture of communication, modeling effective communication, and teaching athletes useful communication techniques.
- Four types of team conflict have been identified: task, relationship, process, and status.
- Conflict can be potentially harmful to both individual and team functioning, relationships, and performance, yet it can also provide benefits to teams.

- The best way to deal with conflicts is to prevent them from occurring. Consultants can suggest approaches and strategies in every aspect of team functioning that will reduce the chances of conflicts arising.
- Though consultants can provide approaches and strategies to prevent conflicts from arising within a team, the very nature of team sports means that conflicts will emerge despite those efforts and consultants can shape conflict resolution by the attitudes that team members have about conflict.

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11

PARENTS

Introduction

Jim Taylor

Sports can be a wonderful part of raising healthy children. Parents who expose their children to sports at a young age are not only providing their children with experiences that have immediate advantages, but also lifelong value in many aspects of their lives. Regardless of the sports in which they participate or the level they attain, sports offer children a wide range of life-affirming benefits that will serve them well throughout their childhoods and into adulthood:

- **Physical health:** exercise, fitness, vitality, and mastery of their bodies.
- **Mental health:** self-identity, self-esteem, goals, passions, commitment, confidence, focus, discipline, and resilience, just to name a few.
- **Social:** teamwork, cooperation, communication, conflict, relationships, mentorships, shared family experiences.
- **Play:** learn, practice, and ingrain essential physical, personal, and social skills in preparation for adulthood.
- **Fun:** touches children in ways that create joy.

A Changing Youth Sports Culture

Unfortunately, the value of youth sports that was just described in previous generations are losing their place in a youth sports culture that has changed significantly in the 21st century. This shift in the purpose and focus of youth sports over the last several decades is not only preventing children from benefiting from sports participation, but, for many, sports may incur harm to their athletic, personal, and social development. This new youth sports landscape has been due to changes that have been occurring due predominantly to the infusion of money into sports, turning it into "Big Sport" in which the goal is now about making money at every level of sport. Moreover, the allure of wealth and fame that comes from athletic success, by parents and children alike, has distorted youth sports into something that, in some ways, is unrecognizable from what it was 50 years ago.

This new youth sports culture has resulted in the emergence of a new kind of sport parent for whom the goal of sports has shifted from the many benefits described above to preparing their children for athletic greatness. It has also created a new industry—what is referred to as the "youth sport-industrial complex"—that has caused the professional of youth sports. This new direction is aimed at fulfilling the needs of this new generation of sport parents and making money for those who are perpetuating this new culture including youth sports leagues, teams, schools, coaches, and private trainers.

This new youth sports culture, which has made early specialization and results its central tenets, is having the cumulative effect of hurting young athletes in several ways. The focus on results from teams, coaches, and

parents has become the principal message that young athletes receive in their sports participation. In turn, they can't help but internalize this preoccupation with results. This emphasis brings expectations and pressure which can lead to fear of failure and debilitating performance anxiety. The ultimate outcome is an unpleasant and unfulfilling sports experience which often ends with children leaving youth sports because it's no longer fun and is too stressful.

Good Intentions

All parents *want* what best for their children in their sports participation. But, the reality is that those good intentions don't always translate into *doing* what's best for their children. Some parents have fallen prey to the unhealthy youth sports culture as a result of the pressures they feel from this youth sports culture, youth teams, coaches, and other parents. At the same time, the vast majority of parents have their children's best interests at heart, but simply don't have the perspective, information, and tools to create a life-affirming sports experience for their children.

Before this shift in the youth sport culture occurred, most of the forces involved, including coaches, teams, and parents, supported children's healthy involvement in sports. But now, because of the dramatic and unhealthy changes that have happened to the youth sports culture, the role of parents in guiding their children's sports participation has taken on new importance. In other words, parents need to counteract the negative messages of today's youth sports culture to ensure that their children are playing sports for healthy reasons. These responsibilities include:

- examining their own intentions about their children's sports participation;
- emphasizing the healthy reasons and benefits of youth sports;
- advocating for their children to ensure a healthy sports experience;
- shielding their children from the harmful youth sports culture;
- challenging the current youth sports culture to reexamine its priorities; and
- being a role model for why children participate in sports.

The goal for every sport parent is to ensure that their children have the most positive and healthy sports experience possible. This objective means that their immediate sports participation is healthy, fun, and rewarding. In the long run, this goal involves parents putting children in a sports environment that allows them to develop the physical, personal, and social skills that will enable them to achieve their sports goals and positively impact their lives for years to come.

Consultants can play another important role when working with a team by developing a parent education program that will support the healthy development of young athletes. One-on-one consultations, group workshops, and collaborating with teams and parents to create a parent "contract" are just a few of the ways in which consultants can help ensure that parents develop and maintain healthy perspectives and attitudes about their children's sports participation.

IMPACT OF PARENTS ON YOUNG ATHLETES

Christopher Stanley and Jim Taylor

The National Council of Youth Sports (2008) survey reported approximately 60 million children are involved in some form of organized youth sport each year. Moreover, 44 million of these youth participate in more than one sport. These statistics suggest that youth sports are viewed by parents as valuable experiences for their children. Organized youth sports are characterized by: (1) adult supervision and leadership; (2) an emphasis on skill building; and (3) an element of structure (Eccles, Barber, Stone, & Hunt, 2003). Participation in organized youth sports has been linked with a variety of psychosocial benefits including enhanced self-esteem, academic achievement, and leadership skills (Bohnert & Garber, 2007; Stanley & Bohnert, 2011). When coupled with the physical health benefits sports involvement offers, it is understandably a popular outlet for children (and their parents) to pursue.

Parents play a vital role in organized youth sports as volunteer coaches, managers, and administrators. Additionally, parents are involved in governance, planning, finances, and travel of youth sports. This parental involvement continues in different forms as young athletes climb the competitive ladder with elite teams, off-season camps, private coaching, and college recruitment (Ryan, Groves, & Schneider, 2007). Given this level of engagement by parents, an exploration into the impact that parents can have on their young athletes, both positive and negative, is warranted. Moreover, an essential part of this discussion involves how consultants can help parents provide a nurturing sports environment in which their children can participate that will foster their healthy athletic and personal development.

Theory and Research

A variety of theories clarify parental impact on their children's development, originating in the broader disciplines of family systems, social learning, and cognitive development. Seminal theorists have long asserted the importance of social interactions and processes in cognitive and socioemotional development (e.g., Bandura, 1973; Bronfenbrenner, 1979; Vygotsky, 1962). Notably, critical interactions which facilitate dialogue and transmission of messages may occur in the context of sport. Whether these experiences are unorganized (e.g., backyard ball games) or organized (e.g., youth leagues), they often create an "arena" in which children and adults interact, collaborate, play, and learn.

A *family systems* perspective may aid in clarifying how parents impact young athletes' thoughts, emotions, and behaviors in athletic contexts. Specifically, a principle tenet of family systems theory is that each family group is an important element of the larger group system (e.g., teams, leagues, and youth-sport culture), and all members are interdependent upon one another, and also responsive to the forces that arise in the environment. Additionally, systems theory is useful in clarifying family dynamics, communication patterns, and boundaries within and outside of the family (Rothbaum, Rosen, Ujiie, & Uchida, 2002). A systems perspective fits nicely within youth sport contexts as parents and young athletes are often mutually reliant upon one another to participate and perform in a sport and concurrently reliant upon others residing within larger sports systems (e.g., coaches, teammates).

According to *social learning* theory, young athletes mimic behaviors related to sports based on observations and vicarious experiences (Bandura, 1973). Parents serve as salient role models for young athletes in the context of being coaches themselves, by personally participating in sports, or in the many roles parents play in youth sports. In doing so, parents offer a model of sport to their children that includes values, attitudes, beliefs, and behaviors that may be healthy or harmful. Such scenarios are certainly evident in many youth sport leagues and camps.

An extension of Vygotsky's (1962) theory involving the *zone of proximal development* (ZPD) is the notion of *guided participation*, which is a "process and system of involvement of individuals with others, as they communicate and engage in shared activities" (Rogoff, Mistry, Göncü, & Mosier, 1993, p. 6). In sport contexts, guided participation involves parents providing the opportunities for many fundamental experiences including an introduction to sports as well as increased participation and commitment as children mature. Guided participation may be explicit, as evident when parents transmit clear messages during practice (e.g., instruction) or competitions (e.g., rules). It may also be implicit, as when children observe their parents in different roles in their sport. The youth sport arena provides countless illustrations of the interactional nature of ZPD and guided participation. Parents find themselves intimately involved in all aspects of their children's sports participation including broad activities such as coaching, managing, and fundraising as well as specific activities such as introducing them to coaches and teammates, taking their children to practices and competitions, prompting them to follow rules, and showing them how to be good sports. Taken together, there are broad theoretical underpinnings and significant empirical support for parental impact upon children's athletic lives.

The sport literature is replete with studies and other writings demonstrating that parents are critical agents in facilitating sport initiation, enjoyment, and adherence in developing athletes (e.g., Crane & Temple, 2015; Fredricks & Eccles, 2004; Gagné, Ryan, & Bargmann, 2003; O'Sullivan, 2014). Researchers and authors have examined socialization, social support, enjoyment, satisfaction, motivation, and sport specialization as they impact the youth sport experience (e.g., Curran, Hill, Hall, & Jowett, 2015; Dorsch, Smith, & Dotterer, 2016; Evans et al., 2017; Jayanthi et al., 2013; Hoyle & Leff, 1997; Pugliese & Tinsley, 2007).

In many ways, parental involvement in sport may be viewed as a process of *socialization* for their children. Broadly, socialization processes include explicit messages and knowledge as well as social support, which are transmitted from parents to their children. Forms of socialization and support include observational learning and instrumental support. The latter form of instrumental support is evident in observable actions (e.g., team registration assistance, transportation to practice, co-participation) and related tangible items (e.g., payment of fees, purchase of equipment) which otherwise facilitate sport involvement and development (Duncan, Duncan, & Stycker 2005). There is a large body of scientific evidence that parental socialization extends to physical activity and sport, as parents socialize children into sport by exposing them to the athletic environment and teaching and demonstrating relevant skills (Hemery, 1986; Pugliese & Tinsley, 2007).

Along these lines, the *expectancy-value* model (Eccles et al., 1983) was originally formulated to clarify socialization effects and has been applied specifically to sport (Fredricks & Eccles, 2004). According to this model, expectation of success and task value are deemed as particularly important for children's motivation, behavior, and adherence related to sport involvement. According to Fredricks and Eccles (2004), a child's *expectation of success* may be impacted by their self-concept of their abilities alongside the perception of the task difficulty. Moreover, *task value* is composed of four key components: (a) intrinsic value (i.e., enjoyment derived from participation), (b) utility value (e.g., how participation relates to future goals), (c) attainment value (i.e., perceived importance of performing well), and (d) costs (perceived potential negative aspects of participation). According to this model, key "socializers," including parents, facilitate participation and enhance motivation by not only helping to provide sport experiences (akin to instrumental support) but also be helping interpret the experiences by offering messages related to their likelihood of success and the positives values and benefits of participation (Fredricks & Eccles, 2004). Together, parents are important figures in socializing their children into sport.

Parental Involvement

The level of enjoyment derived from sport is a critical determinant of sport participation, motivation, and adherence for young athletes. Research has consistently corroborated the notion that young athletes with parents who offer an appropriate quantity and quality of support are more likely to enjoy the sport and are less likely to drop out (e.g., Crane & Temple, 2015; Fredricks & Eccles, 2004; Martens, 1978; Sacks, Tenenbaum, & Pargman, 2006). Specifically, parents who contribute warmth, positive affect, and support a mastery climate create an enjoyable atmosphere for young athletes (Dorsch et al., 2016). Thus, an appropriate type and degree of parental involvement is critical for children's healthy sports experiences.

A fundamental way by which to ascertain parental impact upon young athletes is to determine their intensity of involvement. Hellstedt (1987) originally described parental involvement on a continuum, ranging from under-involvement to over-involvement. For athletes with under-involved parents, there may be a lack of connection between parents, their children, and the sport. These athletes may feel unsupported, that their sports participation isn't valued by their parents, and, at an extreme, that they aren't worthy of their parents' attention and support. These athletes often turn to their teammates, coaches, and others in their sport for support (e.g., encouragement, advice, and emotional support). In fact, the sport and team context may offer a sense of caring, support, and belonging for these children that is not otherwise realized in the family environment (Sacks et al., 2006).

On the other end of the continuum, for athletes of over-involved parents, there may be a deep enmeshment of family and sports with parents being highly invested psychologically, emotionally, financially, and practically, with activities and schedules centered around sport. The children are often acutely aware of how invested one or more of their parents are in their athletic lives as expressed by their emotions, expectations, and involvement.

Over-involved parenting styles in sport may be akin to *helicopter parenting* (also referred to as Little League parenting, stage parenting, and tiger parenting) which consists of excessive ego investment by parents, extreme control over children's lives, and high demands and expectations based on results (LeMoyne & Buchanan, 2011). Helicopter parents of young athletes are often overly intrusive, for example, talking about their sports constantly, dictating their schedules, coaching them outside of team practices, and assuming responsibilities that should be the athlete's. Certain types of over-involvement may become particularly problematic as children mature and enter adolescence (Schiffrin et al., 2014) as they attempt to gain independence and control over their own sports lives. Padilla-Walker and Nelson (2012) describe helicopter parenting as a unique

pattern which may or may not be high on nurturance and support, but also high on control (behavioral or emotional) and low on granting autonomy. While considerable research suggests parental involvement in children's lives is beneficial, too much involvement, to the point of inhibiting healthy development and enjoyment, may be problematic.

The degree and intensity of support that parents give to their young athletes can impact the amount of *pressure* that children feel to participate, perform, and succeed. Even parents with the best of intentions may unwittingly be subjecting their young athletes to significant pressure to accomplish goals established by their parents and not disappoint them. *Support* to participate and improve is focused on the needs and goals of children, perceived as positive, and associated with adaptive outcomes for young athletes (e.g., enjoyment, autonomy). In contrast, *pressure* is about the needs and goals of the parents, focused on producing successful results, and related to maladaptive outcomes. A high-pressure environment created by parents can be threatening and stressful to children, laden with conflict and negative affect, and otherwise negatively associated with enjoyment (Dorsch et al., 2016).

Between these two extremes of under- and over-involvement lies a moderate level of involvement, whereby parents support the needs and goals of their children and offer essential emotional and instrumental support, but do not otherwise exert undue pressure to succeed, win, or pursue a particular athletic trajectory (Sacks et al., 2006). This level of involvement appears to be linked with better outcomes in terms of enjoyment and satisfaction in sport, and adherence to sport involvement (Wuerth, Lee, & Alfermann, 2004).

In line with the notion that a moderate level of involvement is preferable, it may be challenging to create an environment in which parents are involved, but not adding undue pressures. In such a situation, it may be useful to examine the *types* of interactions which occur between parents and their young athletes. For instance, offering praise and emotional support are less likely to be perceived as forms of pressure from parents by athletes. However, directive behavior which interferes with children's autonomy in their sport may be experienced as pressure (Sacks et al., 2006; Wuerth, Lee, & Alfermann, 2004). It can be a particularly pressurized situation when such directive (and corrective) behavior, communication, and attention heightens after mistakes, poor performances, or losses. Such a scenario often is viewed when parents offer (whether discretely or noisily) advice during a practice or competition. Although often with the intent of being supportive, such behavior generally is thought to be detrimental (Sacks et al., 2006).

Sport Specialization

An area which has received considerable attention in recent years is sport specialization, particularly at increasingly younger ages of athletes Specialization is characterized as intense, year-round (eight or more months per year) commitment to a single sport to the exclusion of other sports (Jayanthi et al., 2013). Early in children's sports participation, parents play a significant role in deciding which sports their children engage in, how often and how seriously they are involved in a sport, and whether their children participate in several sports or commit to one sport. The current youth-sport culture has led parents to believe that early specialization is a competitive advantage and a requirement for later success in a sport. These messages are amplified by the prominence of Olympic and professional athletes who began their sports lives at a very young age (e.g., LeBron James, Simone Biles, Michael Phelps, Tiger Woods).

However, the preponderance of opinion from sport professionals (e.g., coaches, sports medicine physicians, athletic trainers, pediatricians, and consultants) and findings from sport researchers does not support the notion that early sport specialization offers any long-term competitive benefits. To the contrary, it appears to be linked to higher rates of injury, burnout, and drop out (Buckley et al., 2017; Di Fiori et al., 2013). Accordingly, the recommendation of sports experts is for parents to encourage their children to sample a variety of sports, take each season one at a time, develop overall athleticism, and for parents to then "follow their children's lead" with decisions about specialization and a deeper commitment to one sport rather than making irreversible and unilateral decisions regarding their level of participation (Sacks et al., 2006). With this diversified and measured approach, children are allowed to fully experience sport(s), develop a greater sense of autonomy around their sports participation, enjoy the process of developing a broad array of sport skills, and perhaps find a passion and desire to commit to one sport at some point in their athletic lives.

Practical Implications

Consultants are in a unique position to have a positive impact on parents' perspective on and involvement in their children's athletic lives. For consultants who work one-on-one with athletes, they likely have a trusted relationship with parents, giving them the opportunity to provide direct and honest feedback about how parents can best support their young athletes. For consultants who are embedded in teams, essential services they can provide include discrete parent education workshops, ongoing parent training curricula, and written materials (e.g., articles, blog posts) that focus on relevant topics for parents. These approaches provide parents with an awareness of the influence that they have on their children in their athletic lives, whether positive or negative, and offer practical insights, information, and tools they can use to be the best sport parents they can be.

Entire books have been written on sport parenting (e.g., O'Sullivan, 2014; Taylor, 2018), so what is offered below in terms of practical implications for consultants will be an overview of what are believed to be some of the most important lessons that consultants may employ in their work with youth athletes and their parents.

How Involved Are Parents?

Given the research that shows the divergence in experiences between parents who maintain a healthy balance of involvement in their children's sport endeavors as compared to overly involved parents (e.g., Crane & Temple, 2015), an important point of intervention for consultants is to help parents evaluate how involved they are in their children's athletic lives (Sacks et al., 2006; Taylor, 2018). Some of the observable "red flags" of over-involvement by parents include:

- Parents seem more interested in the sport than their children.
- Micromanaging their children's athletic lives.
- Placing their happiness on their children's performances.
- While all parents understandably enjoy seeing their children succeed, are there seemingly excessive (in intensity or duration) positive or negative emotional displays based solely on their children's athletic performances?
- Losing perspective on why their children participate in sports (e.g., it's about fame and fortune rather than fun, skill development, and life lessons).
- Overemphasis on results, rather than skill improvement, enjoyment, and value.
- Trying to rush children's athletic development.
- Pushing children to specialize in a sport that they're not interested in, continue pushing a sport the child no longer seems to enjoy, or have explicitly stated they no longer enjoy.
- Parents experiencing and expressing emotions before and after a competition that are excessive or out of control (e.g., anxiety before a competition; anger following a loss).
- Related to the above, observable instances or patterns of negative interactions with their children, their coaches, or other parents.

Consultants can encourage and create opportunities for reflection and recognition on the part of parents related to their respective level of involvement. This will help them identify what healthy involvement is, and thereafter, the consultant may offer recommendations on how to achieve it.

Healthy Participation Begins with Values

The values that parents hold about their children's sports participation play a vital role in all aspects of their athletic and personal development (Fredricks & Eccles, 2004). As such, the values that parents have and those that their children embrace about their sports involvement influence their priorities and goals, how much they enjoy sports, their level of commitment, and act as road signs in dictating the direction their athletic lives take.

Determining what values parents want to instill in their children as they enter sports should be grounded in what they want their children to get out of sports. Using this measure of the healthiness of a sports value, consultants can then ask parents: "Will this value help your children become the athletes and, more importantly, the

people you want them to become?" With these criteria, here is a list of values that will support a healthy sports experience:

- work ethic;
- pursuit of personal excellence;
- love of sport;
- fun;
- being a good sport;
- gratitude;
- humility;
- teamwork;
- perseverance; and
- physical health.

In contrast, there are values that are associated with unhealthy sports participation:

- winning is the ultimate goal;
- win at any cost;
- bravado;
- selfishness; and
- pursuit of fame and fortune.

Consultants can help parents recognize how they may verbally and nonverbally transmit such value-laden messages to their children. In addition, consultants can help parents understand the divergent influence that healthy and unhealthy values have on their children in terms of their motivation, enjoyment, and performance, and guide parents in adopting those that are positive and affirming of their children's sports participation.

Healthy Attitudes

The attitudes that children develop about their sports participation act as the foundation upon which positive sports experiences are based, both in terms of enjoyment and success. The attitudes that children adopt usually come from those held by their parents. Five attitudes that are essential to healthy sports involvement include:

- Self-esteem based on feeling loved, secure, and competent, not on results.
- Defining success as children giving their best effort and failure as valuable lessons to learn from rather than judgments on their value as people.
- Risk-taking (and accepting that risks don't always work out) is essential for enjoyment, fulfillment, and success in sports.
- Mistakes are a natural, necessary, and valuable part of sports and life.
- Adversity is essential to children achieving their sports goals because only by experiencing adversity will they develop the skills necessary to overcome challenges in the future.

Setting Healthy Expectations for Young Athletes

Setting expectations for their children is an essential responsibility of being a sport parent. Expectations communicate messages to young athletes about what's important to parents and establish a standard toward which children can strive. Expectations can be double-edged swords though. They can be a tremendous benefit to children's athletic and personal development or they can be heavy burdens that crush their motivation for and enjoyment of their sport. The impact that expectations have on children depends on the type of expectations parents set for them.

There are two types of expectations that parents should *not* set for their children. *Ability expectations* are those in which children get the message that parents expect them to achieve a certain result because of their natural

ability, "We expect you to win because you're the most talented athlete out there." The problem with these messages is that children have no control over their athletic ability; they are genetically endowed with a certain amount and all they can do is maximize whatever ability they are given.

Parents also shouldn't set *outcome expectations* in which the message is that their children must produce a certain result—"We expect you to win this match." The problem is that, again, children are asked to meet an expectation over which they may not have control. They might perform well, but still not meet their parents' outcome expectations because other competitors performed better than they did.

Instead of the focus on results, parents should help their children establish *effort expectations* over which they have control and that actually motivate them to do what it takes to achieve the outcomes parents want. Consultants can encourage parents to think about what their children need to do to be successful (e.g., commitment, positive attitude, hard work, focus, good technique) and establish expectations about doing those things.

Parent and Child Responsibilities in Sports

For children to have great sports experiences, which include essential elements such as having fun, developing essential life skills, and achieving their goals, both parents and their children must understand and fulfill their respective responsibilities and those responsibilities alone. Taylor's (2018) *Law of Family Responsibilities* states that if family members fulfill their own responsibilities and do not assume others', then young athletes will have positive sports experiences, increase their chances of achieving their athletic goals, and develop into healthy, mature, and successful people. However, problems arise when parents take on the responsibilities of their children who are not allowed to be accountable on their own. This usurping of responsibilities results in parents taking ownership of sports away from their children which ends up interfering with, rather than fostering, positive and healthy athletic experiences for them. Consultants can help parents to understand the different responsibilities that they and their young athletes have and how to ensure that each assumes their own and avoids the others'.

Send the Right Messages

Whether parents realize it or not, children are being constantly bombarded by messages about their sports participation from coaches, teammates, the youth-sports culture, and parents themselves. Unfortunately, parents can no longer assume that their young athletes will receive healthy messages from the first three above. Unfortunately, as discussed earlier in this chapter, the youth-sports culture is toxic in many ways and subsequently many coaches, other young athletes, and other parents have fallen victim to it. In doing so, they become unwitting conveyors of unhealthy messages. As a result, it is essential for parents to ensure that they are not also complicit in these harmful messages and, even more importantly, are sending messages that will counter those from outside of their family. Though there are many positive messages that parents can send to their young athletes, there are several core messages that consultants can help parents to understand, embrace, and express in relation to their children in sports (Taylor, 2018):

- Have fun.
- Give your best effort.
- Be a good sport.
- Support your teammates.
- Listen to your coaches.
- Mistakes and failure are actually good as they are part of the learning process.
- If you win, it's icing on the cake.
- We love you no matter what!

The above messages are usually communicated by parents verbally to their children. At the same time, parents send messages in other ways that are equally powerful, through their emotions and actions. Consultants can show parents how they express themselves in their children's athletic lives that can also convey healthy messages (Taylor, 2018):

- showing interest in their children's sports participation;
- expressing love and affection;
- assisting in establishing appropriate goals;
- offering tangible, instrumental support (e.g., paying for their sports participation, buying them the necessary equipment, getting them to practice, attending competitions);
- providing frequent encouragement;
- staying positive and calm during competitions;
- being supportive after failures; and
- providing a nourishing perspective about the importance of sports in their lives.

Summary

- Parents play a vital role in organized youth sports as volunteer coaches, managers, and administrators as well as in governance, planning, finances, and travel.
- Given this level of engagement by parents, an exploration into the impact that parents can have on their young athletes, both positive and negative, is warranted.
- An essential part of this discussion involves how consultants can help parents provide a nurturing sports environment in which their children can participate that will foster their healthy athletic and personal development.
- A principle tenet of family systems theory is that each family group is an important element of the larger group system (e.g., teams, leagues, and youth-sport culture) and all members are interdependent upon one another.
- According to social learning theory, young athletes mimic behaviors related to sports based upon observations and vicarious experiences, of which parents serve as salient role models for young athletes.
- Guided participation involves parents providing the opportunities for many fundamental sports experiences including an introduction to sports as well as increased participation and commitment.
- Research shows that parents are critical agents in facilitating sport initiation, enjoyment, and adherence in developing athletes in addition to socialization and social support, enjoyment, satisfaction, and motivation in sports.
- The degree and intensity of support that parents give to their young athletes can impact the amount of *pressure* that children feel to participate, perform, and succeed.
- Specialization is characterized as intense, year-round (eight or more months per year) of commitment to a single sport to the exclusion of other sports.
- Early in children's sports participation, parents play a significant role in deciding which sports their children engage in, how often and how seriously they are involved in a sport, and whether their children participate in several sports or commit to one sport.
- The preponderance of opinion from sport professionals and findings from sport researchers argue that early sport specialization does not offer long-term competitive benefits and, to the contrary, is linked to higher rates of injury, burnout, and drop out.
- Consultants are in a unique position to have a positive impact on parents' involvement in their children's athletic lives, whether working one-on-one with athletes or in a team setting.
- Consultants can provide parents with awareness of the messages that they send to their children in their athletic lives, whether positive or negative, and offer practical insights, information, and tools they can use to be the best sport parents they can be.
- Key areas in which parents can have a positive impact on their young athletes include the degree of involvement they have, the values and attitudes they bring to their children's sports participation, the expectations they set for their children, the responsibilities that parents and children have in sports, and an awareness of the messages they send to their children.

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DOS AND DON'TS OF SPORT PARENTING

Lindsey Hamilton and Jim Taylor

The benefits that young people derive from participating in sport cannot be overstated. Of equal importance is the influence that parental figures can have on children's sports experiences. As previously mentioned in the chapter, parents can influence young athletes' enjoyment, commitment to, and performances in their sports lives. Most parents want to appropriately support their children by communicating directly and indirectly in ways that will nurture their children's development as both athletes and as people. Yet, parents may lack the knowledge and tools to express their love, support, and good intentions to effectively facilitate their children's healthy athletic development. When this occurs, consultants can play a meaningful role in helping parents to understand what will encourage and what will discourage healthy sports experiences for their children.

Theory and Research

Sport parenting expertise does not simply focus on achieving desired athletic outcomes for children. Optimal sport parenting is revealed through a level of engagement that increases the likelihood that young athletes will enjoy their sports participation, achieve their athletic goals, and experience positive developmental and psychosocial growth (Harwood & Knight, 2015). In the pursuit of healthy sport parenting, Harwood and Knight (2015) assert that, to best support their children, sport parents should have an understanding of both why they want their children participating in sport and, in turn, why their children want to participate in sport. Consultants should encourage sport parents to engage in conversations with their young athletes on these questions, as well as other attitudes, benefits, and behaviors that stem from this foundation. For example, if parents are primarily focused on their children learning life lessons through sport, they will likely speak to their children differently and reinforce different sport values compared to parents who are focused on results and possess a "winning at all costs" attitude. Furthermore, if parents' motivations and values for sport participation align with those of their children, they are more likely to support their children in the ways their children want to be supported (Knight & Holt, 2014). If not, children might interpret well-intended offerings of support and encouragement from the parents as pressure-filled or disinterested (Goodman & James, 2017). Having an enhanced awareness around parental motivations and those of their children initiates best practice for youth sport parents. Consultants can help both parties effectively navigate these conversations.

Another competency of expert sport parents that Harwood and Knight (2015) espouse is that they adapt their level of involvement to the various stages of their children's sports participation. Côté's (1999) developmental model of sports engagement is a widely recognized framework in which he identifies three stages of sports involvement and talent development: sampling, specializing, and investing. Each stage offers a new role, area of emphasis, and behaviors for parents to engage in or avoid to best support the growth and development of their children as athletes and as people. Consultants who understand these stages of youth-sport and psychosocial development will be better positioned to guide the parents with whom they work to engage in more productive interactions with their young athletes.

Sampling

Children's optimal entry into youth sports begins in the *sampling* stage. Typically occurring during the ages of 6–12, these years are characterized by a broad exploration of sport in general (Côté, 1999). During this time, parents serve as the provider of sport. It is their responsibility to cultivate an interest in sports for their children, provide the tangible and financial resources for them to experience sports, and, in some cases, introduce their children to the rules

and technical aspects of sports as a coach. It is not important which sports children choose, but that they are able to sample a wide range (Côté, 1999) to help them find one or more that they want to continue.

In the sampling stage, parents should emphasize fun and learning above all else. By focusing on the process of participation rather than goal attainment or winning, parents are able to reinforce the values of participation and improvement through sports. Consultants can help parents reinforce these values by offering them a set of questions to facilitate conversations with their children related to their sports lives:

1. **What was fun about sport today?** Asking such a question reinforces fun as a primary value of sport participation. It also helps to ask an open-ended form of the question to elicit more conversation.
2. **What did you learn today?** Asking children what they learned emphasizes the process of development instead of the outcome. Try to avoid questions about performance, comparison with others, or winning.
3. **What new things did you try today?** Exploration is an essential component of the sampling stage. Asking children about new things they tried highlights the importance of experimentation. Questions regarding new skills or positions in sports or even about new sports, in general, are good ways to start.

In the sampling stage, parents should be encouraging active participation of their children in a wide variety of sports, seeking out environments that prioritize intentional play, and reinforcing the principles of fun, process orientation, and experimentation. Additionally, because parents' view of how they see their children influences the behaviors through which they support them (Côté, 1999), it is important to see children through a productive lens. Consultants can guide parents to avoid the temptation to see their children as talented or not, as this can lead to behaviors that pigeonhole them into a specific perception about themselves as athletes. Instead, consultants should help parents see their children as learners, as ever-evolving and continually progressing athletes who grow and develop through sports (Côté, Baker, & Abernethy, 2007).

Specializing

Through the sampling stage, children begin to cultivate a more focused interest in specific sports. This demonstrates the progression into the *specializing* stage, which generally occurs between the ages of 13–15 (Côté, 1999). The specializing stage is characterized by a commitment to one or two sports through a focus of both committed practice and intentional play (Côté, 1999). While skill development becomes a more powerful factor in young athletes' engagement, enjoyment remains a central theme for participation. For parents, their role transitions from provider of sport to managers and supporters. It is here that parents often find themselves helping their children to manage their sports experiences (Horn, 2011) in terms of equipment, scheduling, and other practical aspects of their sports participation. Parents also guide their children in the new psychological and emotional aspects of sport including effort, enjoyment, and the role of sport in the formation of their self-identities.

Effort

With the increased attention on training and specializing, it can be easy for the conversation in sport to focus on the outcome. However, in this period of development, it is important for parents to maintain an emphasis on the effort young athletes give in their sports experience. Praising moments where children worked hard or persisted in the face of challenges are great ways to highlight the value of effort. Suggested statements that consultants can share with parents include:

- "I saw you work really hard in practice today!"
- "You were in a tough situation today, but pushed through it!"
- "Your commitment to improving is really paying off. Keep it up!"

Enjoyment

While sport participation is supposed to be fun, an increased focus on performance at this stage can detract from the focus on and experience of enjoyment in sports. Increased conditioning, more challenging drills, and greater

competitive demands can present experiences of failure, mistakes, and setbacks, all of which can cause frustration, disappointment, and other ill feelings that may reduce children's enjoyment of their sport. Consultants should remind parents to shift the conversation with their children to finding overall enjoyment and fulfillment of the experience as athletes and place less emphasis on the fun they may experience at any one point in time. Questions or statements that consultants can suggest to parents include:

- "I know that situation wasn't easy to get through, but you did it! How are you better prepared now to compete next time?"
- "I understand you might be frustrated that the game didn't go your way. What did you learn from today's tough loss?"
- "Challenges are a sometimes-unpleasant part of sports, but it can feel so good to keep at it and overcome them."

Holistic Identity

While young athletes may be specializing in one or two sports, their self-identities should still be broad based (e.g., as a sibling, student, friend) rather than narrowly focused on being an athlete. During this stage, consultants can help parents emphasize the holistic achievements of their children by highlighting development in other areas of their life as well. Doing so reinforces to their children that they are more than just athletes; they also possess many skills, interests, and goals in other areas that can be sources of meaning, fulfillment, and joy as well.

There are a wide range of circumstances that offer opportunities for parents to support their young athletes and reinforce efforts, enjoyment, and identity (Elliott & Drummond, 2017). Consultants can discuss and role-play specific scenarios with parents to arm them with the skills to support their children toward success.

Before training and competitions, consultants can help parents frame conversations with their children about their goals and effort, and avoid the trap of focusing on the outcome. While sport is often a win-or-lose endeavor, ultimate success comes from being able to focus on the process that leads to winning, not on the victory itself. Praising enjoyment, preparation, effort, persistence, and resilience are strategies that are far more beneficial. Additionally, young athletes appreciate when their parents are familiar with the sport they participate in (Harwood & Knight, 2015), so consultants should encourage parents to learn more about their children's sports, for example, their star athletes and teams, as well as rules and strategies. However, consultants should make it clear to parents that this is not an invitation to coach the tactical or technical aspects of the game, as this role is the responsibility of their children's coaches. Instead, consultants can clarify with parents that such knowledge is simply an expression of interest in and support for their children's athletic pursuits.

During competitions, young athletes tend to interpret their parents' responses to performances as more negative than parents perceive their own reactions to be, and athletes deem these perceived negative reactions as the least helpful for their performances (Goodman & James, 2017). As such, consultants can help parents be mindful of the verbal and nonverbal messages they send to their children during competitions. Many children are still looking for validation from important others and how parents conduct themselves on the sidelines can send powerful messages, either healthy or otherwise, that impact young athletes' competitive enjoyment, effort, and performances. Consultants can help parents to become aware of what emotions they may be communicating during competitions that their children see. For example, consultants can teach parents ways to remain relaxed, open, and positive during competitions. Children love to know their parents are interested in and enjoying themselves at their competitions. Additionally, consultants can let parents know that it is acceptable and encouraged to cheer for all children on the team and opposing teams, not just their own. This behavior provides a powerful role-modeling opportunity on valuing teammates and the success of others. Cheering after moments of great effort also demonstrates valuing the process more than the outcome.

After a tough loss, emotions can be powerful. Sadness, disappointment, and frustration are common feelings experienced by both parents and their young athletes (Knight, Berrow, & Harwood, 2017). As a role model during these difficult experiences, parents can position themselves successfully to be calm and positive after a poor performance or defeat. This demeanor sets a potent example to children for how to react to a loss. As guides, parents can prepare to have supportive conversations with their children after a disappointing competition ends. Moments of loss are demanding for everyone, including parents, so consultants can encourage them to collect themselves emotionally before their children approach them to clear their minds in preparation for the discussion

to come. Consultants can help the parents understand that it is healthy for children to feel unpleasant emotions after a disappointing performance and parents should avoid the temptation to assuage, placate, or distract from those emotions. In addition, consultants can remind parents that they do not have to have all the answers. Being a willing ear or shoulder to cry on can be some of the best "medicine" after a loss. When children are ready, parents can begin to engage them in a conversation about the competition, offer a comforting perspective, and share potential lessons learned from the defeat.

Investing

According to Côté (1999), when children decide to make a significant commitment to and investment in one sport, they will progress to the stage of *investing*. This stage usually occurs after the age of 15 and is typified by committing to achieve an elite level in a sport. In this vein, young athletes will focus their time on more deliberate practice and intense play (Côté, 1999).

As young athletes increase their investment in their sports lives, parents should gradually divest themselves of their investment. Children's shift toward greater autonomy in their sport also provides the opportunity for parents to create separation between their children's results and parents' investment in those results. It is not uncommon for parents to feel that their children's results are a reflection of their capabilities as parents (Horn, 2011), resulting in their self-identity and self-worth becoming overly invested in their young athletes' results. This is understandable given the significant investments of money, time, and energy that parents make in helping their children to achieve their athletic goals. If this investment becomes too large, then parents will likely impose expectations and pressure on their young athletes and, in doing so, hurt rather than support their children.

Consultants can help parents understand their investment in their children and enable them to see if they are placing their own self-worth or happiness on their young athletes' shoulders. While families expend many resources and much family time on youth sports (Dunn, Dorsch, King, & Rothlisberger, 2016), it is essential that parents maintain their own sense of self through their marriage, career, avocations, or other avenues. A healthy sense of self creates the best foundation from which parents can act in their children's best interests rather than their own.

The parents' role during the investing stage progresses into more of a mentor and cheerleader. While still assuming practical responsibilities such as finances, scheduling, and travel, and providing emotional support to their young athletes, the primary responsibilities of skill development and competitive preparation lay in the hands of sport experts including coaches, conditioning specialists, nutritionists, and mental coaches. Respecting the roles and responsibilities of others, including coaches, teammates, and other sport-performance professionals, builds trust, reduces role confusion in the young athletes, and allows parents to be a safe haven from which their children can explore their sports participation more deeply.

Over the course of these developmental stages, parental involvement transitions from having a leading and controlling role to one that is more following, advisory, and supportive. It is important for parents to allow their children to gain increasing ownership of their sports experience as they invest more of themselves and have the maturity and tools to take on more responsibilities. Allowing this separation to occur accomplishes two important objectives. First, it allows children to have greater autonomy in their sport experience as they develop both athletically and personally. Second, giving young athletes the freedom to gain ownership and make decisions regarding their sports experience while also taking responsibility for it can enhance their motivation and sense of self-efficacy (Ryan & Deci, 2000). To achieve this, consultants can help parents avoid micromanaging their young athletes in this stage once they demonstrate the ability to assume many logistical responsibilities. For example, packing and carrying their competition bags is one form of micromanaging that strips children of an opportunity to become self-sufficient for the future. Moreover, while parents badgering, harassing, or guilting young athletes into doing extra physical conditioning or watching and analyzing video tends to be more common at this stage, such behaviors present an authoritarian parenting style that is generally poorly received and lacks effectiveness (Lauer, Gould, Roman, & Pierce, 2010).

The most successful parents in this stage serve as mentors when their children solicit advice or other feedback on a given situation. They also can be supporters who provide emotional sustenance during the challenging times that are inevitable in sports. Consultants can help parents understand that any feedback provided to their young athletes should focus on their emotional experiences in their sport and avoid any technical or tactical discussions,

which are best left to coaches. When parents need to offer unsolicited mentorship, consultants can help parents process that need and its relative value by arming them with these three questions:

1. **Does this need to be said?** It is not uncommon for parents to have thoughts or reactions to their children's sports experiences; however, parents want to be sure that addressing them is in the best interest of their young athletes rather than fulfilling some personal need. If it diminishes their children's sports experiences, sense of self, or isn't positive role modeling, parents should be encouraged to keep it to themselves.
2. **Does this need to be said by me?** If a conversation needs to be had, is the parent the best person to address it? Anything that is related to practice or competitive performances, for example, technique, tactics, or equipment, it is best left unsaid by the parents. Coaches are best suited for those topics. There are also times when teammates sharing a message is far more powerful than when it comes from a parent.
3. **Does this need to be said by me right now?** Consultants should help parents be mindful of the timing of conversations. For example, right after a performance might not always be the best time. Consultants should remind parents that paying attention to the emotional state of their young athletes, recognizing who else is around to hear, and assessing the receptivity of their children for feedback can increase the likelihood that they will receive the intended message well.

Parents can use these three questions as litmus tests for what, when, and how to offer feedback to their children relative to their sports experiences.

Overall, consultants can help parents see that, by the time they arrive at the investing stage, they should be taking more of an advisory role while their children gain full ownership of their athletic lives. By helping the parents maintain a healthy perspective about their children's sports participation, consultants can support parents through the many challenges they face and, ultimately, provide their young athletes with the best opportunity of finding both enjoyment and success in their sport and developing the life tools that will enable them to thrive outside of the sports world.

Practical Implications

This section thus far has introduced some key theoretical and empirical concepts as well as some general ways for consultants to approach working with sport parents. But, as the saying goes, being a sport parent isn't a spectator sport. And, in addition to developing an understanding of what it takes to be a sport parent, they also want clear guidelines and tools for what they should and shouldn't do with their young athletes and the sports world in which they are deeply involved. To that end, the remainder of this section will describe practical dos and don'ts that parents can apply to themselves, other parents, coaches, and their children that will enable them to be the best sport parents they are capable of being (Taylor, 2018).

- **Do for themselves:**
  - Get vicarious pleasure from their children's sports participation.
  - Enjoy themselves at competitions.
  - Be positive and calm when watching their children compete.
  - Have a life of their own outside of their children's sports.
- **Do with other parents:**
  - Make friends with other parents at competitions.
  - Volunteer as much as possible.
  - Police their own ranks to ensure that all parents behave appropriately.
- **Do with coaches:**
  - Leave the coaching to the coaches because they are the experts.
  - Give coaches any support they need to help them do their jobs better.
  - Communicate with coaches about their children.

  - Inform coaches of relevant issues at home that might affect their children in practice and at competitions.
  - Make coaches their allies.

- **Do for their children:**
  - Provide guidance for their children.
  - Assist them in setting realistic goals in their sports.
  - Emphasize fun, skill development and other benefits of sports, and downplay results.
  - Show interest in their children's sports lives.
  - Provide regular encouragement and always be positive and supportive.
  - Provide a healthy perspective about success and failure.
  - Emphasize process and reward effort rather than results.
  - Intervene if their children's behavior is unacceptable in practice or at competitions.
  - Understand that their children may need a break from sports occasionally because sports are physically demanding and life is busy.
  - Give their children space when needing to figure things out on their own.
  - Keep a sense of humor because if parents are having fun, their children will more likely as well.
  - Give their children unconditional love no matter how they perform.

- **Don't for themselves:**
  - Base their self-esteem and ego on their children's success in sports.
  - Care too much about how their children perform.
  - Lose perspective about the importance of their children's sports participation.

- **Don't with other parents:**
  - Make enemies of other parents.
  - Talk *about* others in the sports community, talk *with* them.

- **Don't with coaches:**
  - Interfere with their coaching during practice and competitions.
  - Work at cross purposes with their children's coaches.

- **Don't for their children:**
  - Ask their children to talk with them immediately after a competition.
  - Show negative emotions while attending competitions.
  - Make their children feel guilty for the time, energy, and money they are spending and the sacrifices they are making for their children's athletic lives.
  - Think of their children's sport as an investment for which they expect a "fame and fortune" return.
  - Live out their own dreams through their children's sport.
  - Compare their children's progress with that of other children.
  - Badger, harass, use sarcasm, threaten, or use fear to motivate their children.
  - Expect anything from their children except their best effort, good behavior, and expressions of gratitude.
  - Expect their children to get anything more from their sport than fun, physical fitness, mastery and love of a lifetime sport, and transferable life skills.
  - Ever do anything that will cause them to think less of themselves or of their parents!

Summary

- Most parents want to appropriately support their children by speaking and acting in ways that will help their children's development as both athletes and as people.
- Yet, parents may lack the knowledge and tools to express their love, support, and good intentions with the goal of effectively facilitate their children's athletic development.

- Consultants can play a significant role in supporting parents in understanding what will encourage and will discourage healthy sports experiences for their children.
- Optimal sport parenting is revealed through a level of engagement that increases the likelihood that young athletes will enjoy their sports experiences, reach their sporting potential, and experience positive developmental and psychosocial growth.
- Theorists posit three stages of youth sport participation and development: sampling, specializing, and investing.
- In the sampling stage, parents should be encouraging active participation of their children in a wide variety of sports, seeking out environments that prioritize intentional play, and reinforcing the principles of fun, process orientation, and experimentation.
- The specializing stage is characterized by a commitment to one or two sports through a focus of both intentional practice and play.
- The investing stage is typified by young athletes committing to achieve an elite level in a sport.
- Parents want clear guidelines of dos and don'ts with themselves, other parents, coaches, and their young athletes.

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SPORT PARENT EDUCATION

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The majority of American youth engage in organized sport at some point over the course of their development into adulthood (Jellineck & Durant, 2004; Sports & Fitness Industry Association, 2016), and sport is the most common extracurricular activity for youth across the developed world (Hulteen, Smith, Morgan, Barnett, Hallal et al., 2017). Parents exhibit a range of involvement behaviors in an effort to facilitate this participation, and have become increasingly involved over time (American Academy of Pediatrics, 2000). In many cases, this comes in the form of increased family resources being devoted to the youth sport experience, leading to potentially deleterious effects on parent involvement and children's outcomes (see Dunn, Dorsch, King, & Rothlisberger, 2016).

Theory and Research

Youth sport, particularly as it is structured in much of the Western world, would not exist without the involvement of parents. Parent involvement is integral to children's participation, as it is parents who organize,

administer, and evaluate their children's youth sport experiences. Behind the scenes, parents serve as travel agents, launderers, nutritionists, chauffeurs, and psychologists. In assessing parents' role in youth sport, contemporary researchers have focused on: (a) the influence of parental involvement on children, (b) factors influencing parent involvement, and (c) the strategies developed by parents to facilitate their involvement in their children's sport (Knight, Berrow, & Harwood, 2017). In addressing the third of these areas, the purpose of this section is to highlight how parent education in organized youth sport can be a powerful means to maximizing the sports experiences of young athletes. To this end, the section will describe one evidence-based parent-education program's development, implementation, and assessment, and share practical considerations that consultants can use to develop parent education programming in the youth sports in which they work.

Parental involvement in youth sport is important as it has the potential to shape the experience that children have as they develop in sport (Holt, 2008). Despite this knowledge, researchers and practitioners have been slow to develop evidence-based parent education programs in the context of youth sport. This is not to say efforts to enhance parent behavior in youth sport are not happening (see Harwood & Knight, 2015). For example, efforts to improve sideline behavior of parents can be found in the United States and abroad (e.g., behavior contracts, "Silent Saturdays," posted signs at venues encouraging good behavior). While well-intentioned and potentially helpful, these efforts represent little more than a "quick fix" as most of these efforts tend to be scattershot in their design and implementation and have not been based on or evaluated for their effectiveness scientifically.

Designing Evidence-based Parent Education

Parent involvement is especially salient at the earliest stages of youth sport, as parents hold the potential to positively and negatively influence children's early sports experiences and, by extension, how they come to view athletic participation in the future. Accordingly, researchers have sought to identify how parents can be most appropriately involved in their children's sport participation and how they can be supported in doing this. The most important aspect of designing evidence-based parent education in youth sport is translating the field's growing theoretical and research evidence base into practice.

Recognizing the need for evidence-based parent education in the context of youth sport, Dorsch, King, Dunn, Osai, and Tulane (2017) designed an evidence-based *Sport Parent Guide* for parents of youth sport participants. Initially, the research team conducted a comprehensive literature search across multiple disciplines (e.g., human development, family studies, interpersonal communication, sport psychology). Articles and texts pertaining to organized youth sport parenting were annotated to inform the evidence-based education program. This analysis yielded seven distinct categories based on previous research:

1. A review of *youth sport participation* and referenced research that illuminated the reasons for participation/drop out from sport (Babkes & Weiss, 1999; Fredricks & Eccles, 2005; Gould, Feltz, & Weiss, 1985).
2. A *developmental model* of participation in sport (see Côté, 1999; Côté, Baker, & Abernethy, 2007) that focused on the processes that youth athletes navigate as they develop in sport.
3. Current *participation rates* in sport and the likelihood of participation at elite levels (Aspen Institute, 2015; National Council of Youth Sport, 2008; National Federation of State High School Associations, 2014).
4. The importance of *communication* in sport and offered parents practical strategies to apply to their interactions with their athlete (Dorsch, Smith, Wilson, & McDonough, 2015; Gershgoren, Tenenbaum, Gershgoren, & Eklund, 2011; Knight & Holt, 2014).
5. The most effective strategies for *working with coaches* (Gould, Lauer, Rolo, Jannes, Pennisi, 2006; Hellstedt, 1987).
6. *Sport parent behavior* and discussed findings on positive practices for before, during, and after a sporting event (Dorsch et al., 2015; Stein, Raedeke, & Glenn, 1999; Wuerth, Lee, & Alfermann, 2004).
7. The intervention provided parents with tips and strategies for success and overall *positive sport parenting* (see Knight & Holt, 2014, for review).

Upon finalizing the guide, the authorship team used its contents to build a complementary *Sport Parent Seminar*. The *Guide* and *Seminar* were created to offer parents practical strategies to enhance their sport parenting. As such, the program was designed using a "strengths-based" rather than "deficit" approach.

Implementation

Families from nine U8 and U10 soccer teams in suburban Utah were recruited for participation. Both boys and girls were included in this study. Each team was assigned to one of three quasi-experimental conditions (full-implementation, partial-implementation, or non-implementation). Parents in the full-implementation group ($n = 18$) were provided with the *Guide* and took part in a face-to-face *Seminar* prior to the beginning of the season. Parents in the partial-implementation group ($n = 36$) were given a copy of the *Guide* and encouraged to read through it, but the research team did not did not otherwise interact with these parents. Parents in the non-implementation group ($n = 27$) served as a control and were therefore not provided with either educational resource.

Assessment

To assess the efficacy of the program, children completed surveys of multiple variables at pre- and post-season. Specifically, children were asked to provide their perceptions of parent support and pressure as well as warmth and conflict in the parent–child relationship. Furthermore, children reported on their own enjoyment, competence, and stress in sport. The authorship team then examined variance among the three conditions (full-implementation, partial-implementation, non-implementation) from pre- to post-season. Herein, we highlight a number of notable trends in the data, as reported by Dorsch and colleagues (2017).

Parent Involvement

Parents exposed to the *Guide* and *Seminar* were rated as significantly more supportive and less pressuring from pre- to post-season. There were significant group × time interactions in children's perceptions of parent support and pressure, with group membership explaining 21% and 32% of the variance, respectively. Interestingly, parents in the partial-implementation and non-implementation conditions were rated by their children as more pressuring from pre- to post-season, suggesting that parents (in the absence of any efforts at behavior mitigation) may actually demand more of the children over the course of a youth sport season.

Parent–Child Relationship

Parents exposed to the *Guide* and *Seminar* were rated as demonstrating significantly more warmth and less conflict in the parent–child relationship from pre- to post-season. There were significant group × time interactions in children's perceptions of parent support and pressure, with group membership explaining 16% and 11% of the variance, respectively. Interestingly, although parents in the partial-implementation condition were rated as demonstrating relatively little change in conflict, parents in the non-implementation condition were rated as more conflictive from pre- to post-season. This highlights the fact that parents (in the absence of targeted programming) may interact with their children in such a way that their children perceive more conflict in their relationship over the course of a youth sport season.

Children's Outcomes

Children whose parents were exposed to the *Guide* and *Seminar* rated sport as significantly more enjoyable, and themselves as significantly more competent and less stressed from pre- to post-season. There were significant group × time interactions for all three variables, with parents' group membership explaining 14%, 13%, and 20% of the variance, respectively. Children whose parents were in the non-implementation condition rated themselves as less competent and more stressed from pre- to post-season. These findings highlight an unfortunate status quo in youth sports: namely, that many children are having a neutral, if not negative, sports experience in many respects. This is unfortunate, given the many positive outcomes typically associated with organized youth sport.

Collectively, results from Dorsch and colleagues' pilot intervention highlight the potential for an increase in positive outcomes (i.e., parent support, parent–child warmth, child enjoyment, child competence) and a simultaneous decrease in negative outcomes (i.e., parent pressure, parent–child conflict, child stress) if parents are

provided tools to optimize their involvement. These inferences should prove encouraging for key stakeholders (e.g., researchers, practitioners, administrators, coaches, parents, and athletes) seeking to improve the climate in youth sport.

Practical Implications

Efforts toward educating parents whose children are involved in sports build on previous work examining parenting behavior in organized youth sport (e.g., Hoyle & Leff, 1997; Leff & Hoyle, 1995; Stein et al., 1999) and demonstrate the potential for this type of translation to be pursued by researchers and practitioners across a range of youth sport contexts (i.e., recreational, competitive, elite). In combination with growing knowledge of best practices (see Harwood & Knight, 2015), the further development, implementation, and assessment of evidence-based programs will help to refine targeted approaches to working with parents in organized youth sport settings.

There are a number of considerations that should be made when consultants approach parent education efforts in youth sport. Perhaps most important, future efforts to provide sport parents with education should continue to be based in evidence-based practices (see Thrower, Harwood, & Spray, 2016, 2017). League directors and administrators should seek to avoid the temptation to implement quick-fixes; instead treating educational efforts as a way to enhance the overall culture of the league or team. Future efforts should also aim to become more accessible to populations that otherwise might not be able to take part in the programming due to time, distance, cost, or other constraints. Considerations for future work include the potential to use web-based curricula that could be accessed at parents' convenience. Such efforts that leverage modern technology are both cost-effective and time-efficient. A final consideration is related to the growing population of Americans who may not speak or understand English fluently. This limitation has the potential to alienate or otherwise limit parents whose children are involved in youth sports in their attempts to engage in any form of educational programming. By translating educational curricula, more parents would be served and there would also be a greater opportunity to assess a program's efficacy across a wider range of parent demographics. As an example, the curriculum created by Dorsch and colleagues (2017) has been translated into German and is in the process of being translated into Spanish.

For those seeking to implement their own intervention, a community case study carried out by Dorsch, King, Tulane, Osai, Dunn, and Carlsen (in press) illuminates what parents, coaches, and administrators feel would be the necessary components of a parent education program. Parents offered the feedback that any intervention should be cognizant of parents' demanding schedules. Some parents mentioned that during the children's practice may be an effective time for an intervention. Speaking more broadly, coaches spoke of their preference for such interventions at earlier stages and even expressed the idea that such intervention at the high school level would be "too late" (Dorsch et al., in press, p. 14). Administrators in this study urged for the intervention to be a positive experience for the parents and that it shouldn't be too time consuming. These findings align with work conducted with tennis parents in the United Kingdom (Thrower et al., 2016), and suggests that education should begin early and be ongoing over the course of development, so as not to inundate parents with ineffective and cumbersome one-time sessions.

As for the logistics of the actual delivery of an intervention, coaches specifically felt that the parent education program should be delivered by a third party rather than the coaching staff (Dorsch et al., in press). The stated preference was for a well-respected professional with expertise and experience (i.e., credibility) to implement the program. As was rightly noted by administrators, the program should be customized to the particular sport, developmental level of the children, and specific needs and goals of the parents (Dorsch et al., in press).

Developing a Sport Parent Education Program

Dorsch et al. (2017) offer a helpful framework from which consultants can draw from as they develop their own parent education program. Building on that general structure, the following section will provide more detailed guidance in how consultants can create their own unique parent education program that best provides a meaningful educational experience for the parents in the youth sports organizations with whom they work.

Needs and Goals Assessment

Though there are topics that will apply to most sport parent audiences, each youth sports programs has its own unique set of needs, goals, and challenges that must be considered when developing a sport parent education program. As a result, consultants are encouraged to immerse themselves in the youth sports program they are involved in as a means of gaining a broad and deep understanding of the organization's structure and processes, its parent population, the sport in which the children participate, and the level and goals of that sports involvement (e.g., introduction to sport, fun and skill development, competition, long-term athlete development). This knowledge can be gained by observing parents at practices and competitions, seeing the interactions they have with their athletes and the coaching staff, and interviewing key stakeholders in the organization. This information will inform consultants on what needs the organization has in wanting a structured parent education program, what "pain points" exist among the parents involved, and what goals it sees being accomplished with such a program.

Content

With a detailed picture of the youth sports organization completed, consultants can select what content should be included in the parent education program. These materials can be gathered based the prior experience of consultants in delivering such sport parent programming, reading the many books that have been written about sport parenting, exploration of the extant research on the topic, and other resources found on the internet. Common topics include child development, impact of sports on children, values, investment, goals, motivations, roles and responsibilities, messages to their children, relationships with coaches, and communication.

Curriculum

Once a range of content has been selected by consultants, they can decide how to incorporate it into an effective curriculum. This curriculum details what topic areas will be offered, the specific information that will be provided in those topic areas, the order in which it will be delivered, the length of the curriculum, and the amount of contact that consultants will have with their parent audience. An emphasis in consultants developing a sport parent education curriculum should be on what content will be most impactful to sport parents and how they will translate the information into meaningful changes in their attitudes, emotions, and behavior in their roles as parents of young athletes. Taylor (2016) provides an example of a robust curriculum that is packaged into a four-class course that he offers to youth sports organizations either in person or online.

Modes of Delivery

Good content and a carefully planned curriculum are essential starting points for an impactful sport parent education program. The next issue that must be addressed is the mode by which consultants will deliver the program. Time may be the most influential contributor to deciding how the program is offered. The reality of life for many parents is that they are very busy and simply don't have much discretionary time available to devote to being educated about their role as sport parents, however receptive they are to learning how they can best support their young athletes. An important part of the needs and goals assessment is for consultants to determine how much time the youth sports organization can devote to parent education.

Dorsch et al. (2017) have demonstrated that one seminar and even just having parents read a guide about how to be a better sport parent had a significant short-term effect on their behavior and how their children perceived them. At the same time, it seems reasonable to assume that a series of educational opportunities in which parents can learn more, become more engaged, and maintain awareness of their influence on their children would have a more meaningful and longer lasting impact.

In addition to frequency of contact with the youth sport organization's parent community, another question to be asked by consultants is how the curriculum can best be delivered to the widest audience. Certainly, in-person contact would seem to be the most effective mode of delivery. However, again due to time constraints, attendance may be lacking which, by definition, diminishes the impact of the program on the youth sport organization's parent community.

Thanks to the internet, delivery of information is now possible through several forms of media. Webinar platforms would allow consultants to reach a broader audience by offering remote participation to those who are unable to attend in person. Pre-recorded audio or video classes that allow parents to access the curriculum on-demand and participate at their own pace is another way to reach a wider audience (Taylor, 2016). Admittedly, one weakness of leveraging technology in this way is that the communication is unidirectional which may limit the audience's engagement and takeaway.

As demonstrated by Dorsch et al. (2017) and Taylor (2016), the creation and use of a written workbook can be used as a primary or supplemental means of curriculum delivery. Such a guide that leads readers through the curriculum can allow for another means of delivery that could be appreciated by those who are visual learning and who prefer reading as a mode of learning. A well-thought-out workbook that includes content descriptions and exercises would enable consultants to reach an even larger audience and keep participants in the sport parent education program engaged through another mode of delivery and for an even longer period. As noted by Dorsch et al. (2017), a workbook could be translated into other languages to meet the needs of those who are English as Second Language speakers.

Additionally, the curriculum of a sport parent education program could also be delivered primarily or as secondary sources through periodic online newsletters, blogs, and social media. This approach allows consultants to continually engage with their parent audience with regular postings that either support already discussed ideas or introduce new or timely ideas that would benefit a youth sports organization's parent community. Other benefits of using this type of online technology is that consultants' messages will likely be shared with an even broader audience and it further engages followers by allowing comments, likes, and shares.

Timing

With the content, structure, and means for delivering a robust sport parent education program in place, the last issue that consultants must consider is the timing of the program at several levels. First, when in the course of the season should the programming be delivered? As shown by Dorsch et al. (2017), just before the season begins is the ideal time to deliver the curriculum because, as the saying goes, "An ounce of prevention is worth a pound of cure." By offering the program before the season starts, parents are able to apply their new-found knowledge and insights from the first practice and competition.

Second, as discussed above, an essential challenge for consultants and youth sports organizations is deciding when to deliver the program that will maximize attendance, for example, during practices when parents might be watching, in the evening, or on weekends. In all likelihood, whenever the program is scheduled, some parents will be unable to attend due to conflicting responsibilities. As such, one option is for consultants to offer the program at different times so as to provide the opportunity for as many interested parents as possible to attend.

Finally, as noted previously, the impact on a youth sports organization's parent community will be greatest if the presence of the sport parent education program and its engagement with the parents is maintained throughout the season. If the program's curriculum involves multiple, connected workshops, then scheduling each "class" monthly will provide an ongoing registering on their radar screens. If the program's curriculum consists of a "one-off" workshop, consultants could increase its "shelf life" by scheduling periodic follow-up workshops or sport parent round table discussions and Q&As periodically throughout the season. If that level of time commitment isn't available, then consultants can maintain contact and influence with the parent community through online media.

Summary

- Youth sport is a nearly ubiquitous context that plays an important role in the development of millions of North American children.
- Parents, displaying a range of behaviors, play an important role in providing for and impacting the sport experience.
- As youth sport has increasingly become driven by adults, parent behavior has appeared to become more problematic in the context of sport.

- While many efforts exist to improve parent involvement and behaviors in youth sport, such efforts up to this point have not been based in research and have not been empirically tested.
- A recent pilot study displayed the ability that evidence-based parent education has to improve parent–child interactions and child's experience in sport.
- Future efforts should seek to find ways to utilize technology, reach out to diverse populations, and continue to be based in empirical findings.
- Consultants can use the following steps to develop a robust sport parent education program: conduct a needs and goals assessment, determine program content, develop a compelling curriculum, specify the modes of delivery, and establish the timing for the implementation of the program.

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12

SPORTS ORGANIZATION

Introduction

Jim Taylor and Tim White

The composition of sports organizations at every level of sport is changing for several reasons. First, as the stakes for success grow greater, primarily in terms of profits, organizations from elite youth sports clubs to university athletic departments to professional teams, are seeking every competitive advantage available to them. Second, advances in the sports sciences have provided these organizations with knowledge, methods, and technology that can help their athletes to elevate the level of their performances. Today, valued high-performance professionals in the sports world include coaches with differing areas of technical, tactical, and performance competencies, physical conditioning specialists, sports medicine professionals, nutritionists, technologists, and, increasingly, sport psychology consultants or mental trainers. Additionally, for sports that involve equipment, such as sailing, bobsledding, and ski racing, scientists, designers, and engineers are also a part of the mix. These high-performance teams vary in their make-up depending on the type and level of sport in which the organizations, the vision of their leadership, their financial resources, and their structure and priorities. The expressed purpose of these gatherings of high-performance experts is to ensure that every contributor to sports performance is being addressed with the clear goal of giving their athletes the information and tools they need to maximally prepare themselves to perform their best and achieve competitive success.

As high-performance teams are assembled by sports organizations to support athlete and team performance, it is critical for its members to team to recognize the structure of the organization, their roles within that structure, and how they can build strong working relationships that facilitate collaborative efforts among numerous professionals, all in the name of supporting performance and well-being of its athletes. Because consultants' responsibilities may span many relevant aspects of athlete and team performance, including psychological, interpersonal, and organizational, they can play a vital role in ensuring that these high-performance teams, and the organizations of which they are a part, are themselves groups that are performing optimally through an understanding of effective roles and responsibilities, communication, and collaboration. This chapter explores these issues and the roles that consultants can play within three primary areas of a high-performance team: coaches and conditioning staff, the sports medicine staff, and the organization's management.

SPORT AND CONDITIONING COACHES

Zach Brandon

fundamental component of effective consulting involves consultants' ability to develop positive, trusting, and collaborative working relationships with the athletes they serve and those they work with to support the athletes. Historically, consultants have operated in the periphery whereby their access to athletes and teams

was often less frequent compared to other staff such as sport coaches and strength and conditioning (S&C) coaches. Given the limited "facetime" that consultants often have with athletes and teams, it is imperative for them to form partnerships with other performance-related staff to ensure that the organization's needs and goals relative to its athletes are effectively met. To date, considerable attention has been given to exploring how relationships with coaches are an integral part of successful consulting (Andersen, 2000; Petitpas, Giges, & Danish, 1999; Fifer, Henschen, Gould, & Ravizza, 2008; Ravizza, 1988; Sharp & Hodge, 2011, 2013; Sharp, Hodge, & Danish, 2015). Sport coaches, in particular, have been labeled as "gatekeepers" for consultants hoping to gain entry into teams (Barker & Winter, 2014; Fifer et al., 2008), but the same could be said of S&C coaches given their daily interaction with athletes and the inherent buy-in that coaches and athletes have with physical conditioning. As the interest level and use of sport psychology and mental training services continues to grow, it is imperative that consultants understand how they can support, be supported by, and collaborate with both sport and S&C coaches.

Theory and Research

To develop the most integrative and effective mental training programs, consultants must understand what sport and S&C coaches do, need, expect, and want from their services. Recent growth within the field of sport psychology has been accompanied by a more thorough investigation of coaches' perceptions toward consultants. For example, Wrisberg and colleagues (2010) surveyed 815 NCAA Division I coaches and discovered that 88.8% were in favor of encouraging their athletes to see consultants for performance-related issues and another 77.5% would do the same for personal concerns. Additional support for services has been reported by coaches across a variety of domains including youth (Barker & Winter, 2014; Zakrajsek, Martin, & Zizzi, 2011), collegiate (Zakrajsek et al., 2013) and elite levels (Gould, Greenleaf, Guinan, & Chung, 2002). Despite ample support for sport psychology services, it should be noted that some have documented concerns toward the field, which have been linked to coaches' negative perceptions and limited knowledge, the challenge for consultants of integrating with players and coaches, lack of clarity in role and services, practical constraints, and the perceived value of consultant services (Pain & Harwood, 2004). Furthermore, Johnson and colleagues (2011) provided additional evidence that coaches' limited knowledge of sport psychology and mental training, consultants' inability to clearly define their services, and their difficulty in integrating into the team were significant barriers to entry. The insights gleaned from both positive and negative attitudes toward consultants is important for them to consider in order to mitigate common barriers such as coaches' lack of knowledge toward their services, coaches' belief that they can provide similar support, biases they might hold about sport psychology and mental training, and environmental constraints (e.g., space, time, and money) (Barker & Winter, 2014; Johnson et al., 2011; Pain & Harwood, 2004).

Despite ample evidence of coaches' views toward sport psychology and mental training, there is a dearth of information in the literature on other sport professionals' perceptions toward consultants. In fact, a recent review of sport psychology referenced no peer-reviewed articles examining how S&C coaches view consultants (Fortin-Guichard, Boudreault, Gagnon, & Trottier, 2018). The lack of attention toward S&C coaches in the literature is concerning given the importance of designing mental training programs that are systematically integrated into all aspects of athlete or team preparation including physical conditioning (Holliday et al., 2008; Reid, Stewart, & Thorne, 2004). The weight room, in particular, provides a great "laboratory" for athletes to engage in mental training in a controlled environment with a high volume of repetitions and varying levels of intensity. With this information in hand, consultants should consider how they can complement and support the services provided by S&C coaches. The value of collaborating with these professionals is essential given the current shifts in developing high-performance staffs within sports organizations.

Interdisciplinary collaboration has been recognized as a valuable service delivery model in sport, whereby experts from various disciplines can inform and enhance the services of other professionals. Collaboration has been defined as the "coming together of diverse interests and people to achieve a common purpose via interactions, information sharing, and the coordination of activities" (Jassawalla & Sashittal, 1998, p. 239). Collaboration is an essential practice among coaching staffs, which has been recommended for consultants as an effective framework for service delivery (Poczwardowski, Sherman, & Ravizza, 2004). Although not an exhaustive list, the benefits of interdisciplinary collaboration include (Gordin & Henschen, 1989):

- sharing and synthesizing information to create new knowledge;
- reinforcement and consistency of messaging to athletes;
- increased understanding of other disciplines;
- heightened awareness and appreciation for one's own discipline; and
- greater objectivity in approaching performance or training issues.

Despite the acknowledgement of several benefits of collaboration, there are potential challenges facing consultants operating within these teams. For example, Reid and colleagues (2004) highlighted the pivotal role consultants can have in maintaining the health and effectiveness of coaching staff. A primary difficulty for consultants is that they can serve as both a facilitator and participant within such staff, which is dependent on their ability to foster trusting relationships with other members in the group. In addition, they may be challenged by other service providers if there is a perceived imbalance of power among its members (Reid, Stewart, & Thorne, 2004). Other potential concerns for consultants include determining appropriate boundaries for confidentiality, varying levels of commitment among staff members, lack of role clarity, messaging inconsistencies, and differences in expectations and goals. Nevertheless, as the use of high-performance staffs continues to grow in sports organizations, consultants must understand their role and how to operate optimally as a member of the coaching staff.

Practical Implications

The following section outlines relevant considerations and practical approaches, methods, and strategies for consultants to follow in working with other coaches in a sports organization. Specifically, pertinent areas such as gaining entry, developing and maintaining trust, and integrating mental training into the services of other coaches are highlighted. Unless otherwise noted, the following considerations can be applied to working with both sport and S&C coaches. Recommendations will be derived from the existing literature as well as the author's personal experience operating within a coaching staff.

Gaining Entry

One of the most difficult challenges confronting consultants is their ability to gain entry and develop a working alliance with the coaches on staff. Ultimately, this process starts with the development and maintenance of a positive relationship between consultants and coaches. In most situations, the head coach of an athlete or team will be the first person consultants meet and must connect with (Ravizza, 1988). The quality of this consultant–coach relationship will greatly impact the effectiveness of the mental training program that is implemented due to coaches' influence on their athletes' willingness to buy into and take ownership of consultants' services (Fifer et al., 2008; Zakrajsek et al., 2013). Realistically, if coaches don't believe in mental training, the chance of consultants having success with athletes or teams is significantly diminished. With this in mind, consultants must demonstrate the following qualities which have been shown to strengthen relationships with clients: honesty, commitment, knowledge and expertise, and ethical behavior (Sharp, Hodge, & Danish, 2015).

Establishing Trust

Honest communication is essential for consultants to reflect an authentic version of themselves and build trust within the consultant–coach relationship. Sharp and Hodge (2013) conducted a case study involving consultants and sport coaches where one consultant expressed the importance of "not over-promising and under-delivering" (p. 319). Furthermore, some professionals have stressed the need for consultants to accurately define their roles, responsibilities, and boundaries for other coaches (Sharp & Hodge, 2011). The initial meeting with a coaching staff can have a significant impact on the consultant–coach relationship and is often where consultants should explain the mental training process rather than approach coaches with a "menu" of topics (Speed, Andersen, & Simons, 2005). Despite consultants' good intentions, a breakdown of potential mental training topics does not provide coaches with the most relevant information they are looking for such as "how" consultants are going

to work with their athletes and what the "program" involves. A comprehensive understanding of the mental training program will foster consultants' trust with coaches, thus encouraging them to reinforce the messages conveyed by consultants to athletes and allow them to be collaborators and co-facilitators in their athletes' mental training. Trust can also be fostered by having consultants keep coaches informed of their work, which supports previous studies referencing coaches' interest in being involved in the mental training process (Haberl & McCann, 2012; Zakrajsek et al., 2013).

As mentioned previously, consultants often operate as a satellite service where the mental training program is separated from other aspects of an athlete's or team's training regimen. In these situations, consultants are not viewed as integral members of the coaching staff, which creates challenges for them in being seen as an integral part of the high-performance team and in weaving the mental training program into athletes' and teams' overall training regimens. Being present and accessible during training and competitions is one strategy that consultants can exhibit to reinforce their involvement in a program (Sharp, Hodge, & Danish, 2015). They can also collaborate with coaches to incorporate mental training into conditioning and sport training.

A greater presence within all aspects of the sport organization can also help foster trust between consultant and coaches by creating informal opportunities for both parties to discuss ideas and support one another. Several coaches have endorsed the value of consultants attending training and competitions (Sharp & Hodge, 2013), but it is also important to note that there can be exceptions. Initial meetings, when defining roles and boundaries, are an appropriate time to talk with the coaching staff about the expectation for attending events. Commitment to the program may also be showcased by consultants' willingness to be flexible and assist with responsibilities not directly related to mental training. For example, consultants may perform other duties such as assisting with setup and removal of equipment, facilitating a station during physical testing, or transporting athletes. These experiences are especially common among neophyte consultants who are often willing to complete any task that develops trust and demonstrates their value to a coaching staff (Collins, Evans-Jones, & O'Connor, 2013).

As seen by the recent modifications and increased rigor of the certification program developed by the Association for Applied Sport Psychology (AASP), consultants must possess competency across a variety of domains. It is not enough to simply have a basic understanding of the psychological principles that underlie performance excellence. As the field continues to expand and draw public attention, consultants will be evaluated by an increasingly higher standard. Several studies have already recognized the importance of consultants' knowledge from athletes' and coaches' perspectives (Anderson, Miles, Robinson, & Mahoney, 2004; Sharp & Hodge, 2013; Sharp, Hodge, & Danish, 2015) in addition to how it relates to gaining entry into a sports organization (Fifer et al., 2008; Ravizza, 1988). In particular, sport-specific knowledge is essential for consultants to develop in order to increase their contextual intelligence (Winter & Collins, 2015) and gain respect from coaches (Fifer et al., 2008; Zakrajsek et al., 2013). If consultants will be working in a sport of which they have no experience, an extensive self-study would be warranted that might include reading books, watching the sport on television, viewing videos of practices and competitions, and interviewing coaches in that sport outside of the organization they will be joining. Being able to understand and speak a sport's "language" will go a long way toward establishing credibility with coaches, athletes, and other members of the high-performance team. This competency will also allow consultants to develop an ideal mental training program that will meet the needs and goals of the organization and more readily incorporate their knowledge and skill sets into the team's overall athlete development program.

Another effective strategy for consultants to increase their sport-specific knowledge, as well as to build trust and rapport, is by asking questions. Posing questions can provide insight for consultants on the terminology used by coaches to teach technical or tactical skills. Increased awareness of this terminology will also strengthen consultants' ability to integrate their mental training program into a process that is meaningful and relevant to coaches, athletes, and teams (Fifer et al., 2008). The benefit of asking questions applies to other settings as well including the weight room. For example, it can be valuable for consultants to ask S&C coaches what mental challenges they see in their athletes while doing conditioning. Or consultants may ask how might the S&C coach incorporate a specific mental tool (e.g., breathing) into an exercise. These lines of inquiry invite S&C coaches to share how mental training may impact athletes' performances in the weight room, thereby "opening a door" for consultants to integrate their mental training program into the strength and conditioning regimen (Stutzman et al., 2017).

The growth of sport psychology and mental training as applied fields is accompanied by an increased need for consultants to engage in professional and ethical service delivery. In an investigation of NCAA Division I coaches' perceptions toward mental training services, one coach stated, "I think the first thing you'd want is that

person to be of high moral character" (Zakrajsek et al., 2013, p. 261). Consistent ethical behavior is another catalyst for trust and respect in the consultant–coach relationship and it requires a high degree of contextual awareness. For example, consultants should be accountable for their behavior and mindful of situations where their professionalism may be called into question. These situations might include attempting to coach athletes on physical or technical skills within their sport, engaging in gossip regarding coaches or athletes, or breaking the confidentiality of an athlete. Each of these scenarios challenge consultants' abilities to maintain professional boundaries which, as discussed earlier, are a central tenet of effective consulting relationships (Sharp, Hodge, & Danish, 2015). To reduce the potential threats to consultants' professional integrity, they should familiarize themselves with the ethical guidelines that have been created by governing bodies such as AASP and the American Psychological Association (APA).

Integrating with the Coaching Staff

The final consideration for consultants in this section is understanding how they can integrate with and leverage the services of other coaches. Specific recommendations for integrating mental training into coaching are discussed in Chapter 9, therefore this section will focus on identifying a few tips for working with sport and S&C coaches. As mentioned previously, the weight room offers an ideal setting for athletes to strengthen their mental muscles and practice and refine the use of mental exercises and tools. Consultants are not the only ones who believe this as S&C coaches have acknowledged the value of using mental training during physical conditioning (Radcliffe, Comfort, & Fawcett, 2015). Radcliffe and colleagues (2015) interviewed 18 S&C coaches who identified specific mental muscles and exercises including goal-setting, self-talk, mental imagery, focus, intensity, and pre-performance routines as pertinent in the development of various desirable outcomes (e.g., building confidence, achieving ideal intensity, and learning new skills).

When it comes to collaborating with S&C coaches, the timing and setting of introducing mental training is important for consultants to consider (Stutzman et al., 2017). Prior to the start of a physical workout provides a great opportunity for consultants to work with S&C coaches to develop a physical and mental warmup for athletes to follow. During this period, athletes can build a routine that primes their bodies and minds using mental tools such as mental imagery, self-talk, and breathing. At the conclusion of a physical workout is another place where athletes can employ recovery-based mental strategies. For example, progressive muscle relaxation has been shown to be an effective mental tool for decreasing blood lactate concentration post exercise (Solberg et al., 2000).

Lastly, drawing from an experientially-informed practice, it may also be worthwhile for consultants and S&C coaches to brainstorm strategies for using mental training during workouts. Stutzman and colleagues (2017) implemented "Mental Toughness Mondays" with their S&C coach for a high school baseball program, which consisted of a five-week progression of mental challenges intertwined with physical exercises. Within these integrated sessions, athletes would participate in a high-intensity interval circuit led by the S&C coach, while being tasked in-between sets with completing a "mental challenge" designed to help them strengthen their mental muscles or use mental tools discussed earlier in the year. For example, at the conclusion of an exercise set, athletes would work with partners to stack hex nuts on a clipboard using chopsticks. Partners would alternate after each hex nut was stacked, however failure to stack a designated amount in 30 seconds resulted in both athletes having to complete another physical circuit. During the debrief of these sessions, consultants emphasized previously discussed mental tools such as purposeful breathing to remain calm and keywords to maintain focus on the task at hand. This example of integrating mental training into strength and conditioning sessions can be used in a similar manner with sport coaches as they work with athletes on technical and tactical aspects of their sport.

Summary

- A fundamental component of effective consulting involves consultants' ability to develop positive, trusting, and collaborative working relationships with the athletes they serve and those they work with to support the athletes.
- As the interest level and utilization of sport psychology and mental training services continues to grow, it is imperative that consultants understand how they can support, be supported by, and collaborate with both sport and S&C coaches.

- To develop the most integrative and effective mental training programs, consultants must understand what sport and S&C coaches do, need, expect, and want from their services.
- The weight room, in particular, provides a great "lab" for athletes to engage in mental training in a controlled environment with a high volume of repetitions and varying levels of intensity.
- Interdisciplinary collaboration has been recognized as a valuable service delivery model in sport whereby experts from various disciplines can inform and enhance the services of other professionals.
- As the utilization of high performance staffs continues to grow in sport organizations, consultants must understand their role and how to operate optimally as a member of these high-performance teams.
- The quality of the consultant–coach relationship will greatly impact the effectiveness of the mental training program that is implemented due to coaches' influence on their athletes' willingness to buy into and take ownership of consultants' services.
- Consultants must demonstrate the following qualities which have been shown to strengthen relationships with clients: honesty, commitment, knowledge and expertise, and ethical behavior.
- A comprehensive understanding of the mental training program will foster trust consultants' trust with coaches, thus encouraging them to reinforce the messaging proposed by consultants and allow them to be collaborators and co-facilitators in their athletes' mental training.
- Sport-specific knowledge is essential for consultants to develop in order to increase their contextual intelligence and gain respect from coaches.
- The growth of sport psychology as a field is accompanied by an increased need for consultants to engage in professional and ethical service delivery.
- Research found that strength and conditioning coaches who identified specific mental muscles and tools including goal-setting, self-talk, mental imagery, focus, intensity, and pre-performance routines as pertinent in the development of various desirable outcomes (e.g., building confidence, achieving ideal intensity, learning new skills).
- Integrating mental training into strength and conditioning sessions can be used in a similar manner with sport coaches as they work with athletes on technical and tactical aspects of their sport.

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SPORTS MEDICINE STAFF

Tim White

Within an organization, consultants are often part of a larger sports medicine team. The sports medicine team is composed of numerous professionals (Brukner & Khan, 2012; Prentice, 2006) who must work together to be most effective (Prentice, 2006). Collectively, this group facilitates the health, well-being, and sports performance of the athletes they serve. Understanding the structure and function of the sports medicine team and recognizing how consultants fit within their current organization is important so that they can maximize their value with individual athletes, teams, and organizations.

Sports Medicine Team

When describing how a sports medicine team is organized, proximity to the injured athlete and the relationship between the professional and the athlete recovering from injury are defining characteristics (Clement & Arvinen-Barrow, 2013). This emphasis on proximity and relationships, which are heavily influenced by professional roles and responsibilities, creates a primary and secondary sports medicine team. Typically, athletic trainers (also known as sports physiotherapists or athletic therapists outside the US), and team physicians (including general practitioners, sports medicine specialists, and orthopedic surgeons), are closest in proximity to athletes recovering from injury (Clement & Arvinen-Barrow, 2013; Prentice, 2006). Together, an injured athlete plus an athletic trainer and team physician make up the primary sports medicine team. This group is the most intimately involved in an athlete's recovery and return to sport. Other members of the sports medicine team who interact with recovering athletes less directly or less consistently are described as functioning in a secondary role and may include physical therapists, massage therapists, consultants, strength and conditioning specialists, nutritionists, sport coaches, chiropractors, and other specialists (i.e., exercise physiologists, biomechanists, orthotists; Brukner

& Khan, 2012; Clement & Arvinen-Barrow, 2013; Prentice, 2014). Although the proximity and frequency of interaction between injured athletes and those of the secondary sports medicine team are less than for the primary sports medicine team, their role can be equally important and influential on both the recovery experience and outcomes obtained by injured athletes.

Additionally, it is noted that many sports medicine team members traditionally function in roles related to performance enhancement (e.g., consultants, strength and conditioning specialists) while others typically function in roles related to injury diagnosis, management, and recovery (e.g., athletic trainers, team physicians). Despite these traditional delineations, professionals in either group can support and facilitate the work of professionals in the other group. Thus, consultants may primarily interact with healthy athletes for the purposes of performance enhancement but consultants may also serve a critical role in the support and enhancement of athletes striving for comprehensive recovery via their rehabilitation efforts.

As a member of a larger team charged with the rehabilitation and return to sport of injured athletes, and the performance enhancement of all athletes, it is critical for consultants to build relationships with those who also work to enhance athletic performance (e.g., sport coaches, strength and conditioning specialists, and nutritionists; see above section) as well as those who help athletes avoid and recover from injuries (e.g., athletic trainers and team physicians).The precise nature of these relationships within the sports medicine team may vary depending on the education, training, experience, certification, and licensure that consultants possess. Regardless of the nature of each relationship, a strong collaborative approach is critical for group success, which is ultimately measured by successful athlete outcomes and performances.

Within the standards of confidentiality—that is, the Health Insurance Portability and Accountability Act (HIPAA)—collaborating professionals can be a valuable source of information for consultants and, together, the sports medicine team can collectively assist athletes seeking comprehensive health, well-being, and performance excellence.

Professionals Relationships to Build

As the medically trained professionals who are most often present at team practices and competitions, athletic trainers function as the point person for injured athletes and regularly coordinate their care and rehabilitation with the rest of the sports medicine team. More often than not, they will address athletes' concerns; however, there are numerous instances that require athletic trainers to seek assistance from other members of the sports medicine team including consultants. Many athletic trainers are aware of the psychological aspects of injury and rehabilitation (Clement, Granquist, Arvinen-Barrow, 2013; Larson, Starkey, & Zaichkowsky, 1996) but do not feel adequately trained (Clement et al., 2013; Stiller-Ostrowski, & Hamson-Utley, 2010; Zakrajsek, Fisher, & Martin, 2017) or have sufficient time to effectively address this area of recovery. Thus, it is critical for consultants and athletic trainers to collaboratively address the physical *and* psychological aspects of rehabilitation and recovery. Not only can consultants support athletic trainers, but the opposite is true as well. Athletic trainers, operating within the guidelines of HIPAA, can be a beneficial source of information for consultants in their work in the psychological rehabilitation of the physical injury. As appropriate, athletic trainers and consultants can judiciously share information with each other that helps the other professional when working with a specific athlete. Examples of this type of collaboration include:

- Athletic trainers may provide information about an athlete's thoughts, emotions, and behaviors regarding their injury that may help consultants gain insight into any challenges they may face during their rehabilitation and return to sport.
- Consultants may learn that an athlete is concerned about their ability to fully recover and avoid re-injury. When this information is appropriately shared, athletic trainers can tailor their treatment plans, particularly the sport-specific activities, for that athlete.

An additional consideration regarding the relationship between consultants and athletic trainers is the fact that consultants may benefit from existing relationships between athletes and athletic trainers. Athletic trainers can be a strong referral source for consultants and may even provide a form of access to teams when consultants are looking to establish new connections.

If the sports medicine team employs a physical therapist on-site, many of the same principles regarding the relationship between consultants and athletic trainers apply to them as well. When physical therapists are offsite (such as a high school athlete being treated at a community clinic), the opportunity to communicate and support each other's work remains, however, it may take additional effort to contact and communicate with them. Regardless of their location, it is important to note that unlike athletic trainers, physical therapists do not attend practices or competitions. Also, physical therapists do not see the athletes they are treating on a daily basis like athletic trainers do. Due to these differences, their connection to individual athletes and teams is reduced and thus it is more difficult for consultants to gain access to athletes and teams through physical therapists.

For consultants who do not hold a license as a mental health provider it is important to establish a relationship with both the clinicians who focus on physical health (i.e., athletic trainers, team physicians) as well as licensed mental health professionals such as psychiatrists, psychologists, counselors, and/or clinical social workers. At a minimum, a consultant's referral network should include *at least* one psychiatrist and one of the other mental health clinicians just mentioned. These professionals contribute to athletes' comprehensive health and well-being, particularly when they present with concerns that are beyond the scope of practice for unlicensed consultants. Examples include, but are not limited to, eating disorders, depression, anxiety, trauma, and personality disorders. Unlicensed consultants must have and take advantage of these resources to avoid liability and malpractice, but more importantly, to ensure that the needs and best interests of their athletes are met.

Consultants who are also licensed as mental health providers should establish the same relationships within the sports medicine team previously described. Like unlicensed consultants, licensed mental health providers create a network of mental health professionals (i.e., psychiatrists, psychologists, etc.) around them. This gives licensed consultants a list of resources they can consult when facing challenging cases or situations in which another provider may have greater levels of experience or expertise.

When consultants are licensed mental health providers, there is potential for the relationships they have with professionals such as team physicians and nutritionist to be slightly different. Because licensed individuals are trained to treat mental health concerns such as depression, eating disorders, and other clinical diagnoses, it is probable they will discuss and co-manage these concerns with team physicians and other clinicians (e.g., nutritionist) as appropriate. This creates opportunities for additional interaction with these professionals that are less likely to occur for unlicensed consultants. Given the complexity of some mental health concerns, it is critical to ensure that athletes are cared for by a team of professionals who can collectively promote their health, safety, and well-being. For example, athletes presenting with disordered eating may benefit from the collective care of a team physician, nutritionist, and mental health provider who has training and experience with disordered eating in athletes. If comorbid conditions such as anxiety or depression are present and warrant the use of prescription medication, a psychiatrist is an appropriate addition to this group of professionals. Unlicensed consultants and others may provide secondary care and support and are encouraged to seek the guidance of the providers primarily responsible for the treatment plan.

A final professional within the sports medicine team that bears mentioning are strength and conditioning specialists. These individuals are addressed in other sections of this chapter, therefore the discussion of this relationship is isolated to their involvement with an athlete who is preparing to return to sport participation during the latter stages of rehabilitation. In this situation, with appropriate release of information documentation, consultants may provide relevant information about the athlete to strength and conditioning specialists and vice versa.

It is worth reiterating that as consultants communicate with other members of the sports medicine team, they must ensure confidentiality standards are met. In addition, discussion of athletes should be limited to pertinent information necessary for the sports medicine team members directly involved in their care so they may effectively assist the individuals being discussed.

As part of this emphasis on confidentiality, consultants should have a release of information form athletes can sign should they wish for the consultant to speak to other members of the sports medicine team, their sport coaches, or any other individual the athlete may designate. This form should also offer athletes the ability to designate which details consultants may discuss and with whom. Taking these measures is not only ethical practice, they ensure privacy and confidentiality, enhance understanding and transparency between consultants and athletes, and provide consultants with an added layer of protection from legal claims.

Why Build These Relationships?

While the answer to this question may seem obvious, it is important to consider the empirical evidence supporting these connections. From the perspective of those within the sports medicine team who focus on performance enhancement, countless studies have demonstrated the relationship between mental preparation and athletic performance. For sports medicine team members concerned with rehabilitation from injury, there is also an observable connection between athletes' mental states and their general approach toward treatment and rehabilitation and recovery outcomes (Arvinen-Barrow & Walker, 2013; Clement, Arvinen-Barrow, & Fetty, 2015; Podlog & Eklund, 2006; Tracey, 2003; Walker, Thatcher, & Lavallee, 2007; Wiese-Bjornstal, Smith, Shaffer, & Morrey, 1998). This research demonstrates the mind-body connection in a setting outside of traditional sports performance. Consultants can assist athletes, team physicians, and athletic trainers by encouraging them to perceive their rehabilitation and recovery experience as an alternative form of performance that has its own objective measures and sources of evaluation.

Additionally, preventing injuries is an objective consultants can collaboratively approach with professionals such as athletic trainers, strength and conditioning specialists, exercise physiologists, and sport coaches. Several studies have identified the relationship between an athlete's mental state and their risk for injury (Gledhill, Forsdyke, & Murray, 2018; Ivarsson, Johnson, Andersen, Tranaeus, Stenling, & Lindwall, 2017; Singh & Conroy, 2017). Consultants who are aware of relevant mental states (e.g., stress; Ivarsson et al., 2017; Singh & Conroy, 2017) can share this information with athletic trainers, coaches, and strength and conditioning specialist for planning athletes' training activities. Consultants can also influence injury risk by teaching athletes strategies used to reach a mental state associated with lower risk for injury. Examples include stress coping skills, relaxation techniques, and focusing tools.

Having made these suggestions, consultants must be sure to address these considerations in a collaborative fashion, particularly when adjustments to training plans are being discussed. This is critical to reducing potential conflict among professionals as well as athletes they support. Ultimately, sports performance and recovery from injury are significantly more complex than engaging in rehabilitation exercises or executing physical skills. Relevant professionals addressing the numerous facets of injury rehabilitation and athletic performance are needed to maximize athletes' efforts and the outcomes they obtain. These professionals must effectively communicate and collectively work toward a common goal to maximize their professional success and ultimately position the athletes they serve to optimize their athletic performances.

Roles and Responsibilities when Injury Occurs

The previous sections illustrated the types of relationships consultants have within the sports medicine team. A discussion regarding consultants' roles and responsibilities at the time of athletic injury is now warranted. Numerous professionals have varying degrees of education, training, and experience regarding injury rehabilitation and it is critical for consultants to understand their own capabilities and limitations, and which professionals are capable of and responsible for the diverse range of activities involved in the rehabilitation of an injury and athletes' subsequent return to sport (Arvinen-Barrow & Clement, 2017).

Athletic Trainers

Within a sports medicine team, athletic trainers often function as the point person responsible for directing and coordinating the day-to-day care and rehabilitation of injured athletes. Additionally, athletic trainers regularly implement treatment plans and make decisions regarding when and how to incorporate other sports medicine team members into the rehabilitation process.

Athletic trainers and other therapists are becoming increasingly aware of the psychological component of athletic injury (Arvinen-Barrow, Hemmings, Weigand, Becker, & Booth, 2007; Clement et al., 2013; Larson et al., 1996; Zakrajsek et al., 2017). With this increased awareness, consultants are being identified as important members of the sports medicine team (Arvinen-Barrow & Clement, 2015). These authors further note that athletic trainers believe that having better access to consultants can improve comprehensive care for injured athletes. This finding reiterates the importance of building strong relationships with athletic trainers.

Although these positive perceptions are encouraging, it should also be noted that athletic trainers view the mental aspect of injury and rehabilitation as part of their responsibilities (National Athletic Trainers' Association, 2011). Specifically, the competency standards outlined by the National Athletic Trainers' Association (2011) state athletic trainers should have the ability to describe and implement mental strategies and interventions such as goal-setting, mental imagery, positive self-talk, and relaxation/anxiety reduction. Thus, there is an overlap in some of the mental approaches that are common practice for consultants.

However, consultants remain the experts in this area and serve as excellent sources of collaboration. A collaborative approach allows consultants to provide greater levels of detail and variety for athletes using specific mental strategies within their recovery plan. Furthermore, consultants can guide injured athletes through more advanced interventions that extend beyond the scope of practice or competency of athletic trainers. Additionally, given that athletic trainers are busy addressing the physical aspects of athletes' rehabilitations, consultants can play a practical role of taking on responsibilities for which athletic trainers don't have the time to focus on.

Adding value to consultants is the fact that not all athletic trainers believe it is their role to provide mental interventions and instead will refer injured athletes to consultants for the purposes of mental recovery after injury (Cormier & Zizzi, 2015). Another benefit for consultants who are also licensed mental health providers is that the athletic training competencies also include statements regarding their role in identifying individuals displaying signs and symptoms of various mental health concerns and subsequently making a referral to a qualified mental health provider (National Athletic Trainers' Association, 2011).

Promoting the role of consultants also comes in the form of the perceived insufficient training and proficiency in effectively implementing mental training among athletic trainers and other sports medicine practitioners (Clement et al., 2013; Zakrajsek et al., 2017). Students studying athletic training and physical therapy in the US, or physiotherapy around the world, receive different levels of education and training in the psychological factors associated with athletic injury, rehabilitation, and recovery (Arvinen-Barrow, Penny, Hemmings, & Corr, 2010; Harris, 2005; Hinderliter & Cardinal, 2007; Kolt & Andersen, 2004; Taylor & Taylor 1997). According to Arvinen-Barrow et al. (2010), skills such as mental imagery and relaxation techniques are often misunderstood by athletic trainers and physical therapists. Clement et al. (2013) supplements these findings by noting that relaxation techniques, mental imagery, and emotional control strategies are least commonly used by athletic trainers.

The statistics around sport psychology education and training for athletic trainers and other rehabilitation professionals provide insights into their use and comfort level with such interventions. Interestingly, many of the mental strategies used by certified athletic trainers (Clement et al., 2013; Zakrajsek et al., 2017) are more subtle and less overt. Zakrajsek et al. (2017) revealed that the interventions used by athletic trainers, including self-talk, arousal/anxiety management, and visualization, were least commonly implemented (less than 50% of the time), while more subtle methods such as normalizing the recovery process, goal-setting, reassurance, and connecting rehabilitation to sport skills were incorporated more than 50% of the time. These approaches are in line with the suggestions provided by Arvinen-Barrow, Massey, and Hemmings (2014) in their study of professional athletes' perceptions of the role of athletic trainers in addressing the mental components of recovery. The participants in their study noted a preference for athletic trainers to use subtle psychological interventions throughout the recovery process and avoid explicit intervention strategies aimed at the psychological components of healing.

A final, yet critical, role within the mental component of injury recovery that athletic trainers often fulfill is providing social support. Social support is a key component to rehabilitation (Podlog, Dimmock, & Miller, 2011) and athletic trainers providing social support have been identified as having the greatest influence on injured athletes' rehabilitation and well-being (Clement & Shannon, 2011). Furthermore, this study found that injured athletes were more satisfied with the social support provided by their athletic trainer when compared to the social support received from coaches and teammates.

Consultants

When exploring the composition of the sports medicine team, 86% of consultants indicated they should be a part of the primary sports medicine team along with the injured athletes, athletic trainers, sport coaches, and strength and conditioning specialists (Arvinen-Barrow & Clement, 2017). Within this perspective, it is noted by consultants that the injured athletes should be at the center of the care team.

Despite these findings, it is not consistent practice for consultants to be part of the primary sports medicine team (Arvinen-Barrow & Clement, 2015, 2017). This current reality should not discourage consultants as it

is believed that they are gaining access to injured athletes and the sports medicine setting (Arvinen-Barrow & Clement, 2017). Furthermore, the field of sport psychology is growing but an athletic trainer's access to consultants remains limited (Clement et al., 2013; Hamson-Utley, Martin, & Walters, 2008; Hemmings, & Povey, 2002; Roh & Perna, 2000). This represents a significant opportunity for consultants to further their contribution to comprehensive and holistic health care initiatives for athletes.

Fortunately for consultants, athletic trainers and other sports medicine professionals believe mental training is effective and can facilitate the recovery of an injured athlete (Hamson-Utley et al., 2008). Research by Zakrajsek, Martin, and Wrisberg (2016) supports the idea that as consultants become more accessible, athletic trainers will increasingly refer and incorporate consultants into their work in the care of injured athletes.

Consultants can increase their contributions within sports medicine settings by providing quality services that athletes and teams deem valuable. This may seem overly simplified and obvious, however, athletic trainers who have high-quality experiences when collaborating with consultants are more likely to encourage injured athletes to work with a consultant again in the future (Zakrajsek et al., 2016). In addition, athletic trainers have identified consultants' expertise related to managing anxiety, regulating other emotions, improving coping skills, reducing return to sport participation concerns, and building confidence as areas of interest (Zakrajsek et al., 2016). Thus, consultants may want to develop specific proficiency in approaches and strategies directly related to these areas.

Adding to the possibilities for consultants to expand their roles and involvement in the sports medicine team is the opportunity to augment the knowledge of athletic trainers. Similar to the idea that many sport coaches have a basic understanding of a related field like strength and conditioning, many athletic trainers have a basic recognition of mental factors associated with injury and rehabilitation. Consultants are capable of providing additional professional education that can increase the likelihood that appropriate action is taken by those who act as primary care providers for injured athletes (Zakrajsek et al., 2017). In addition, consultants may normalize the mental aspects (e.g., thoughts, emotions) of recovery from injury for athletes similar to the way athletic trainers normalize the physical aspects of recovery. Finally, consultants can address individual athlete needs extending beyond the scope of practice for athletic trainers. Continued efforts to educate others regarding the competencies, proficiencies, and scope of practice existing for licensed and unlicensed consultants are critical to expanding the field as well as the roles of consultants within the sports medicine team.

Another consideration regarding consultants' participation in the recovery efforts of injured athletes relates to motivation for returning to sport participation. Similar to addressing motivation by asking *why* an athlete participates in sport, consultants can help athletes increase their understanding of their reasons for committing to and completing a rehabilitation regimen. For many athletes, the answer to the question "why?" is simple: return to their sport to continue the pursuit of their goals. However, not every athlete has that opportunity (e.g., high school or college senior who sustains a season-ending injury and will not play at the next level of sport; Ardern, Webster, Taylor, & Feller, 2011). These athletes should receive particular attention and assistance in identifying a specific reason for rehabilitation adherence and full recovery.

Regardless of athletes' options for resuming competitive sport participation after an injury, it is critical for self-motivation toward rehabilitation to exist. Self-motivation was identified as the personal factor most commonly associated with rehabilitation adherence (Spetch & Kolt, 2001). Thus, athletes need tangible reasons for devoting effort, energy, and time to a rehabilitation program. Helping injured athletes explore their values and motivations in relation to their sport as well as life outside of sport is a critical role consultants can fill that can directly influence injured athletes' motivations as well as the rehabilitation experience and outcomes they obtain.

Consultants can also contribute to the sports medicine team by offering their assessment of athletes' psychological readiness to return to sport, in terms of both practice and competition. Athletic trainers often use physical assessments (e.g., strength tests, stability tests, etc.) to help them determine athletes' physical readiness to resume their sport participation. However, recovery is not isolated solely to physical parameters. Psychological recovery needs to be considered when making return-to-sport decisions and the concept of psychological readiness has received noticeable attention recently (Ardern, Taylor, Feller, & Webster 2013; Ardern, Taylor, Feller, Whitehead, & Webster, 2013; Burland, Toonstra, Werner, Mattacola, Howell, & Howard, 2018; Forsdyke, Gledhill, & Ardern, 2016; Glazer, 2009; Monahan, 2018; Podlog, Banham, Wadey, & Hannon, 2015; Werner, Burland, Mattacola, Toonstra, English, & Howard, 2018). Consultants can assist athletic trainers and team physicians with this decision by using a combination of conversations with recovering athletes, observing them as they perform sport-specific movements in rehabilitation and practice settings, and administering psychometric assessments. Of the psychometric assessments that exist, consultants may want to consider employing one or more of the following:

- Injury-Psychological Readiness to Return to Sport (I-PRRS) Scale (Glazer, 2009).
- Shoulder Instability-Return to Sport After Injury (SIRSI; Gerometta, Klouche, Herman, Lefevre, Bohu, 2017).
- ACL-Return to Sport After Injury (ACL-RSI; Webster, Feller, Lambros, 2008).
- Rehabilitation Overadherence Questionnaire (Podlog, Gao, Kenow, Kleinert, Granquist, Newton, Hannon, 2013).
- Profile of Mood States – Adolescent (POMS-A; Terry, Lane, Lane, & Keohane, 1999). Note that this measure has been validated for adult populations as well (Terry, Lane, & Fogarty, 2003).
- Tampa Scale of Kinesiophobia (TSK; Miller, Kori & Todd, 1991).
- Re-Injury Anxiety Inventory (RIAI; Walker, Thatcher, & Lavallee, 2010).
- Knee Self-Efficacy Scale (K-SES; Thomeé, Wahrborg, Borjesson, Thomeé, Eriksson, & Karlsson, 2006).
- Athlete Fear Avoidance Questionnaire (Dover & Amar, 2015).

Consultants contributing to this aspect of returning to sport will provide the sports medicine team and the coaching staff with additional information that will enable them to make the best decisions that will result in athletes' safe and complete return to their sport.

Lastly, consultants can contribute to sports medicine teams by participating in events such as pre-season health screenings, tryouts, and performance testing. Most collegiate and professional organizations complete some form of pre-participation exam at the beginning of the year (or season) and aim to gather a comprehensive view of athletes' current health status and readiness for sport participation. As mental health considerations are increasingly recognized and acknowledged in the athletic community, consultants, particularly those with clinical training, may contribute to the comprehensiveness of these exams. Various surveys, mental health history questionnaires, and psychometric measures may be used to gather information regarding the past and present mental health status of athletes in a similar manner used by athletic trainers and team physicians in gathering information about athletes' physical health. When conducting these assessments, consultants must consider their scope of practice, what information is most appropriate for them to gather, and what steps need to be taken to ensure confidentiality is maintained. Consultants are encouraged to collaborate with other mental health providers (as appropriate) as well as the professional charged with directing the sports medicine team (often a team physician) to determine if, and how, they should participate in the various assessment and testing protocols that are becoming a routine part of elite-team selection and preparation.

Athletes

According to Arvinen-Barrow et al. (2015), 27% of athletes will use mental training (e.g., goal-setting, positive self-talk, relaxation, and mental imagery) during their recovery. Curiously, of those using mental training, very few learn the specific strategies, or how to apply them, from consultants. Other individuals sharing these principles with injured athletes include athletic trainers, physical therapists, coaches, and family members (Arvinen-Barrow et al., 2015).

This finding is surprising, particularly considering that consultants are ideally suited to implement mental training. However, it must be recognized that the field of sport psychology remains underused and, as a result, access to consultants may be limited. Despite this current state, consultants should not be discouraged. Arvinen-Barrow et al. (2015) suggest that athletes using mental training as part of their rehabilitations may not directly learn these tools from others. Instead, they may be learning how to *apply* mental strategies they have previously used within their athletic performance to support and enhance their recovery efforts. Thus, the potential for consultants to expand their reach is reiterated.

As a final thought regarding roles, members of the sports medicine team are encouraged to discuss, identify, and formalize a general list of responsibilities and functions for each professional as a part of their job description. This approach establishes these critical delineations *before* an athlete sustains an injury and reduces the likelihood of confusion and conflict among professionals. Ultimately, this role clarity provides each professional with the opportunity to identify the expertise they offer to injured athletes while also determining other resources and forms of support that exist. Naturally, various injuries, athletes, and situations will require flexibility and adjustments; however, having a general sense of roles and responsibilities will position the sports medicine team to function optimally when supporting injured athletes.

Summary

- Within a sports organization, consultants are often part of a larger sports medicine team.
- Understanding the structure and function of the sports medicine team and recognizing how consultants fit within their current organization is important so that they can maximize their value with individual athletes, teams, and organizations.
- An injured athlete plus an athletic trainer and team physician make up the primary sports medicine team that is the most intimately involved in an athlete's recovery and return to sport.
- Other members of the sports medicine team who function in a secondary role may include physical therapists, massage therapists, consultants, strength and conditioning specialists, nutritionists, sport coaches, chiropractors, and other specialists (i.e., exercise physiologists, biomechanists, and orthotists).
- It is critical for consultants to build relationships with those who also work to enhance athletic performance (e.g., sport coaches, strength and conditioning specialists, and nutritionists) as well as those who help athletes avoid and recover from injuries (e.g., athletic trainers and team physicians).
- Consultants and athletic trainers should work collaboratively to address the physical *and* psychological aspects of rehabilitation and recovery.
- For consultants who do not hold a license as a mental health provider it is important to establish a relationship with licensed mental health professionals such as psychiatrists, psychologists, counselors, and/or clinical social workers.
- Consultants can assist athletes, team physicians, and athletic trainers by encouraging them to perceive their rehabilitation and recovery experience as an alternative form of performance that has its own objective measures and sources of evaluation.
- Preventing injuries is an objective consultants can collaboratively approach with professionals such as athletic trainers, strength and conditioning specialists, exercise physiologists, and sport coaches.
- Athletic trainers regularly implement treatment plans and make decisions regarding when and how to incorporate other sports medicine team members into the rehabilitation process.
- Consultants can contribute to the sports medicine team by offering their assessment of athletes' psychological readiness to return to sport, in terms of both practice and competition.
- Athletic trainers have identified consultants' expertise related to managing anxiety, regulating other emotions, improving coping skills, reducing return to sport participation concerns, and building confidence as areas of interest.

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TEAM MANAGEMENT

Charlie Maher and Jim Taylor

The inclusion of sport psychology and mental training programs in sports organizations is an increasingly important area in which consultants can provide athletes and teams with an essential piece of the sports performance puzzle. As noted in the Introduction, given the demands of sports organizations to meet the performance and personal needs of its athletes and the pressures on those organizations to succeed, mental training is becoming an integral part of their operations, particularly at the collegiate, Olympic, and professional levels.

As discussed earlier in this chapter, consultants are typically a part of a high-performance team that includes sport coaches, strength and conditioning coaches, athletic trainers, team physicians, nutritionists, and other sports-performance specialists. Yet, despite the growth in the operations of such teams, theory, research, and practical experiences about how to consult with key stakeholders in sports organizations related to implementing mental training programs in collaboration with an organization's management has been largely unexamined in the sport psychology literature. Mental training, when managed with a premium being placed on structure, process, and mutual accountability, will be a valuable asset to sports organizations now and in the future, so an in-depth of understanding of how consultants work with its management is essential.

This section will explore how consultants can collaborate with a sports organization's management on the design and implementation of mental training services. In this regard, collaboration of this nature will be considered as

reflecting in where consultants reside in a team's structure and how mental training is implemented in the larger rubric of the high-performance teams.

Theory and Research

There is a vast literature that has examined how consulting is integrated into a range of organizations outside of sports (Driskell, Salas, & Driskell, 2018; Salas, Tannenbaum, Cohen, & Latham, 2015; Zaccaro, Marks, & DeChurch, 2012). Theory and research that has relevance for the work of consulting as part of high-performance teams in sports organizations can be found in studies and naturalistic investigations that have occurred in the military (McChrystal, 2015), business (Katzenbach & Smith, 2001), commercial aviation (Salmon, Stanton, Gibbon, Jenkins, & Walker, 2010), education (Driskell, Salas, & Driskell, 2018), and human services (Kozlowski, Grand, Beard, & Pearce, 2015).

Within these contexts, research on consulting with organizations has focused on the process of team development, resolving conflict among team members, committing to a unified process (Shuffle & Carter, 2018), and the pursuit of mutual accountability among team members (Katzenbach & Smith, 2001). In the sport psychology domain, some research has been conducted on consulting with multidisciplinary teams in elite sport settings (Reid, Stewart, & Thorne, 2004). In all of these areas, several themes are apparent that have relevance for this section: (1) the importance of team structure (purpose and design); (2) the necessity of a clear process for working together as a team (procedures and implementation); (3) the task of collaboration (communication and integration); and (4) and the challenge of mutual accountability (roles and responsibilities). In this regard, research strongly suggests that consultants have opportunities to take the lead in ensuring that an organization's management and its high-performance team of which they are a member have clear goals and an explicit process by which team members work together for the common good of athletes. Relatedly, consultants can use their expertise and experience to educate an organization's leadership about key elements of effective teamwork.

Practical Implications

The information presented in the remainder of this section is intended to guide consultants in how to partner with the management of sports organization for the establishment and continued development of mental training programs for their athletes.

It is important to note here, however, that, due to the dearth of research in this area, the guidelines that will be presented are based on the combined 60 years of experience of the authors in working within corporate, military, educational, and sports organizations. At the same time, the recommendations that are offered have been influenced by theory and research on consulting in organizations that were introduced above.

The guidelines are organized into sequential stages that approximate the process that consultants would proceed through when working with a sports organization:

1. Identify the client.
2. Assess the context.
3. Clarify team structure.
4. Review team operations.
5. Provide feedback.

Identify the Client

As is the case with any type of consultation with sports organizations, identifying the client is a necessary first step in the process. This determination is important because who precisely the client is may not be clear in many sports organizations. Depending on its level, scope, and goals, clients might include team owners, team leadership, sports medicine staff, coaching staff, or athletes.

The identification of the client for the provision of mental training services enables consultants to address several key areas that are relevant for offering the highest quality services to a sports organization. First and foremost, this clarity ensure that consultants behave in the most professional ethical way possible. This concern

includes issues of confidentiality and disclosure, financial compensation, decision making, autonomy, and whose interests are prioritized.

Second, this stage allows consultants to explore with the identified client what their specific needs and goals are, how they can be best met, and obstacles that may exist. In this regard, the following are actual examples of the needs and goals of sports organizations drawn from the professional experiences of the authors of this section:

- Assess and address the mental health needs of its athletes and coaching staff.
- Assess the mental performance needs of its athletes.
- Design and implement an integrated mental training program for its athletes.
- Offer psychological insights as part of the draft and recruiting evaluation team.
- Collaborate with other members of the organization's high-performance team to support the physical, mental, and technical development of its athletes.
- Design and implement a process for team development.
- Evaluate the current status and future direction of mental training services within the organization.

The identification of the client and their expressed needs for mental training services allows consultants to establish an agreement with sports organizations that will address their needs and goals while also allowing for ethical professional behavior and providing safeguards for the athletes and staff who would be the recipients of these services.

Assess the Context

Once the client for consultants' services in the sports organization has been established and needs, goals, roles and responsibilities, and direct reports have been specified, the next phase for consultants is to assess the organizational context within which they will be embedded. Context assessment of this kind will provide consultants with information about how to best build relationships within the organization and how to optimize the services they provide as members of the high-performance team.

A context assessment can occur primarily by means of interviews of relevant stakeholders, observations, and informal information gathering. Toward that end, twelve factors can be used as the basis for the assessment by consultants:

- **Values:** Are the values espoused by the organization aligned with those of the consultant?
- **Ethics:** Will the organization allow the consultant to work in an ethical manner?
- **Goals:** Do the goals of the organization align with those of the consultant?
- **Understanding:** Does the organization have a clear understanding of what mental training is, how it can benefit its athletes, and how it can be effectively implemented?
- **Resources:** Does the organization have the financial and human resources to commit to a comprehensive mental training program?
- **Timing:** In the overall operations and evolution of the organization, is now the right time to introduce a mental training program?
- **Collaboration:** Does the organization's management believe that high-performances services are best delivered in a collaborative and integrated way?
- **Buy-in:** Is there buy-in and commitment to a mental training program at all levels of the organization?
- **Resistance:** Is there anyone in the organization who may resist or undermine efforts to establish a mental training program and, if so, why?
- **Obstacles:** Are there any structural obstacles (e.g., facilities, equipment) to implementing a mental training program?
- **Time:** Is there time in the relevant schedules within the organization to implement the mental training program?
- **Benefits:** Do the stakeholders see the value of mental training within the overall context of the organization?

Clarify Team Structure

During this phase of exploring the viability of embedding a mental training program, the attention of consultants shifts to clarifying the structure of the organization and the high-performance team of which they will be a member. Team structure involves determining the extent to which the following elements of an organization are present and conducive to implementing a mental training program and integrating it into the structure of the high-performance team and the organization as a whole:

- **Purpose:** This statement details the rationale for the mental training program within the high-performance team and the overall organization.
- **Service delivery goals:** These goals establish clear outcomes and the processes for achieving them for each component of a mental training program including assessment, intervention, and evaluation and how the high-performance team expects to coordinate their efforts to assure that quality and effective services will be provided.
- **Communication:** This element of organizational structure determines the procedures for how consultants are to communicate with athletes, high-performance team colleagues, and management.
- **Organization contact information:** A listing of the names and contact information of every member of the organization including athletes, coaches, sports medicine staff, management, and other stakeholders.
- **Reporting relationships:** This information identifies who will be the consultant's direct report within the organization's leadership as well as other individuals who will be involved in the coordination of service delivery for the athletes.
- **Mutual accountability:** This agreement will specify who the consultant will be accountable to within the high-performance team and the organization's leadership to ensure adherence to the purpose and goals that were established above.
- **Budget:** This component will provide a budget that delineates the funding and its sources within the organization and the costs of the mental training program and how they will be accounted and paid for.
- **Program evaluation:** This procedure provides a formal structure and process for assessing the effectiveness of the mental training program with input from all stakeholders.

Review Team Operations

Operations refers to the specific processes by which an organization and its many functions work. Operations can refer to finance, marketing, sales, research and development, human resources, sports medicine, coaching, and the high-performance team. More specifically, it also includes those procedures by which consultants deliver the mental training services as well as the means by which athletes can seek out individual services. During this stage, consultants can use the following indicators in reviewing team operations (using actual examples):

1. Determine if there are principles that have been documented which guide the organization in how it functions.
    a. Vision, mission, and goals.
    b. Collaboration and integration.
    c. Use evidence in organizational decisions.
    d. Transparency.
2. Consider the ground rules that help members to work with one another.
    a. Everyone has a voice.
    b. Prioritize the athletes, their needs, and the tasks at hand.
    c. Be nonjudgmental with one another.
    d. Leave egos and self-serving interests at the door.

3. Find out how the organization makes decisions.
    a. Defined decision-making process.
    b. Cross-organizational input.
    c. Consensus building and buy-in.
    d. Nature and scope of work plans and agendas.
    e. Collaboration on program plans.
    f. Data collection and record keeping.
4. Determine in what ways the organization answers the following questions on a regular basis.
    a. Which athletes have been provided mental training services?
    b. How have these services been provided?
    c. Who was involved in the delivery of the mental training services?
    d. What benefits have accrued to athletes through their participation in the mental training program?
    e. What are the next steps for the continued development of mental training program?

Provide Feedback

The stages that have been described above will provide consultants with a range of information about the structure and operation of a sports organization and its high-performance team. Within this context, this current stage allows consultants to provide feedback to the client. This feedback may be provided verbally as well as in written form, depending on the agreement that consultants have with the organization.

1. The extent to which the structure of the organization is clear and documented with respect to the following:
    a. Clarity of organizational purpose and goals.
    b. The extent to which the organization has a process which they implement in a consistent manner.
    c. The professional qualifications and credentials of staff members.
    d. The degree to which the organization manifests mutual accountability.
    e. Whether there is a plan or procedure for evaluation within the organization.
2. The current strong points of the organization and why.
3. The current aspects of the organization that appear to be limiting itself from realizing its purpose and attaining its goals.
4. Action steps for continued development and improvement of the organization.

The successful design and implementation of a comprehensive mental training program within a sports organization begins well before consultants start to work with its athletes. To set the stage for the effective delivery of services, consultants should engage in in-depth due diligence as a means of gaining an across-the-board understanding of an organization's foundation, structures, processes, and relationships. Only by establishing a detailed knowledge base of the inner workings of an organization can consultants be sure that they are in a position to offer it the highest-quality mental training services possible that is embraced and supported by all levels of the organization, with the ultimate goal of helping the athletes, and the organization as a whole, achieve its goals.

Summary

- Given the demands of sports organizations to meet the performance and personal needs of its competitive athletes and the pressures on those organizations to succeed, mental training is becoming an integral part of their operations, particularly at the collegiate, Olympic, and professional levels.
- Despite the growing use of mental training in sports organizations, theory, research, and practical experiences about how to consult with key stakeholders in sports organizations related to the management of mental training have been largely unexamined in the literature.

- Theory and research that has relevance for the work of consulting as part of high-performance teams in sports organizations can be found in studies and naturalistic investigations that have occurred in the military, business, commercial aviation, education, and human services.
- Research on consulting with organizations has focused on the process of team development, resolving conflict between and among team members, committing to a unified process, and the pursuit of mutual accountability among team members.
- The guidelines for collaborating with an organization's management are organized into sequential stages that approximate the process that consultants would proceed through.
- Identifying the client is a necessary first step because may be many possible clients within a sports organization including: team owners, team leadership, sports medicine staff, coaching staff, or athletes.
- Assessing the organizational context within which mental training services will be embedded is the next stage including issues such as values, ethics, goals, resources, timing, buy-in, resistance, obstacles, and benefits.
- Clarifying the organizational structure involves identifying structure, service delivery goals, communication, contact information, reporting relationships, mutual accountability, budget, and program evaluation.
- Operations refers the specific processes by which an organization and its many functions work including finance, marketing, sales, research and development, human resources, sports medicine, coaching, and the high-performance team. This final stage allows consultants to provide feedback to the organization in relation to all aspects of its functioning and performance.

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