


☐

I'm not robot

  
reCAPTCHA

I'm not robot!

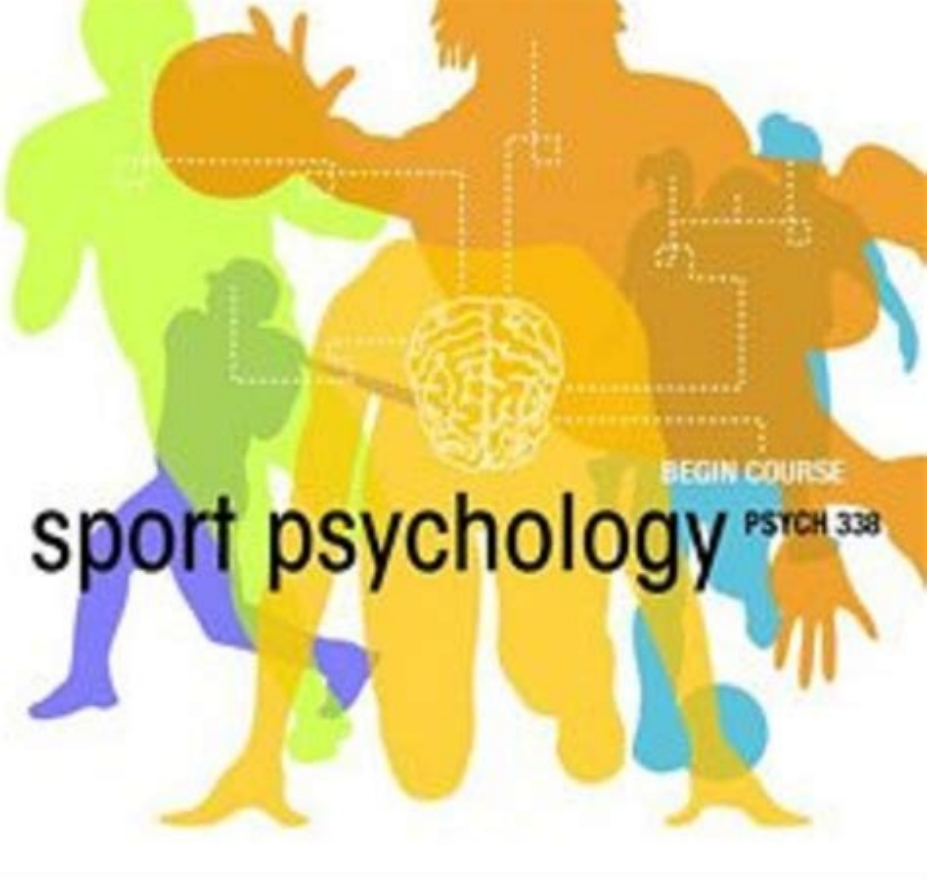
## Sports psychology overview

**What is sports psychology and its importance. Sports psychology career overview. Positive psychology in sports an overview. Sports psychology examples. Sports psychology explained.**

Sports psychology is the study of how psychological factors influence sports, athletic performance, exercise, and physical activity. Sports psychologists investigate how participating in sports can improve health and well-being. They also help athletes utilize psychology to improve their athletic performance and mental wellness. As an example, a sports psychologist working with Michael Jordan, Shaquille O'Neal, and Kobe Bryant helps these athletes perform better on the basketball court by teaching them psychological techniques for "being in the flow" and getting in "the zone." A sports psychologist doesn't just work with elite and professional athletes either. This type of professional also helps non-athletes and everyday exercisers learn how to enjoy sports and stick to an exercise program. They utilize exercise and athletics to enhance people's lives and mental well-being. Sports psychology is a relatively young discipline in psychology; the first research lab devoted to the topic opened in 1925. The first U.S. lab closed a short while later (in the early 1930s) and American research did not resume in this area until the late 1960s when there was a revival of interest.



In 1965, the International Society of Sport Psychology (ISSP) was established. By the 1970s, sports psychology had been introduced as a university course offered at educational institutions throughout North America. By the 1980s, sports psychology became the subject of a more rigorous scientific focus. Researchers began to explore how psychology could be used to improve athletic performance. They also looked at how exercise could be utilized to improve mood and lower stress levels. Just as there are different types of psychologists—such as clinical psychologists, developmental psychologists, and forensic psychologists—there are also different types of sports psychologists. An educational sports psychologist uses psychological methods to help athletes improve sports performance. This includes teaching them how to use certain techniques such as imagery, goal setting, or self talk to perform better on the court or field. Clinical sports psychologists work with athletes who have mental health conditions such as depression or anxiety.

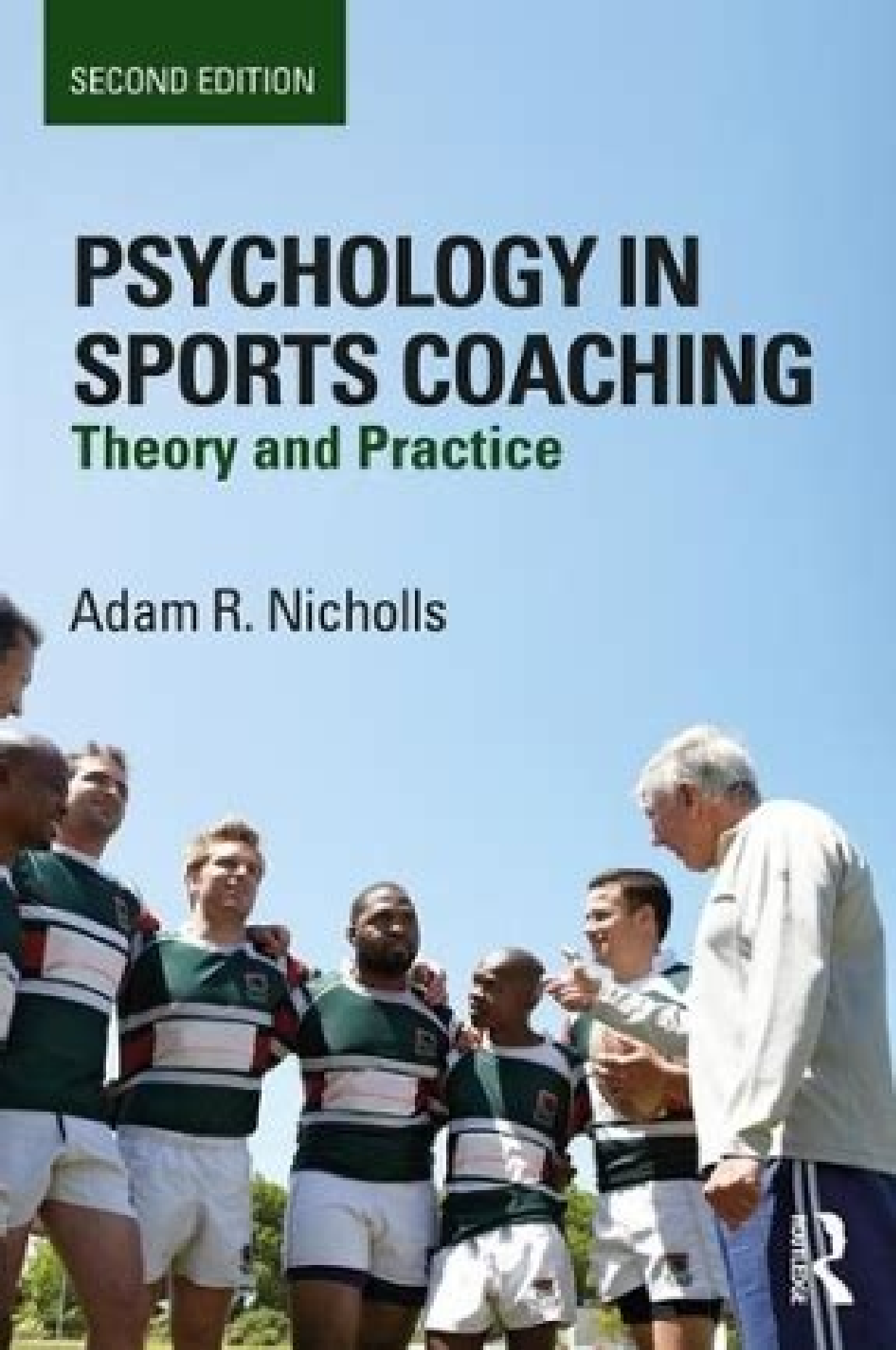


This work involves using strategies from both sports psychology and psychotherapy. A clinical sports psychologist helps athletes improve their mental health and sports performance at the same time. An exercise psychologist works with non-athlete clients or everyday exercisers to help them learn how to make working out a habit. This work can include some of the same techniques used by other sports psychologists, such as goal setting, practicing mindfulness, and the use of motivational techniques. Contemporary sports psychology is a diverse field and there are a number of different topics that are of special interest to sports psychologists. Here are a few areas of sports psychology and how they are utilized.

Attentional focus involves the ability to tune out distractions (such as a crowd of screaming fans) and focus on the task at hand. This allows athletes to manage their mental focus, even in the face of other things that are vying for their attention. Common strategies that might be used for this purpose include deep breathing, paying attention to bodily signals and sensations, and mindfulness. All of these can help athletes stay focused on the present moment. Mental toughness has become an area of increasing interest in sports psychology. The term refers to the psychological characteristics that are important for an athlete to reach optimal performance. Among these characteristics are having an unshakeable belief in one's self, the ability to bounce back from setbacks, and an insatiable desire to succeed. Reacting to situations positively, remaining calm under pressure, and retaining control are a few others that contribute to mental toughness. Setting a goal, then visualizing each step needed to reach that goal can help mentally prepare the athlete for training or competition. Visualization involves creating a mental image of what you "intend" to happen.



Athletes can use this skill to envision the outcome they are pursuing. They might visualize themselves winning an event, for instance, or going through the steps needed to complete a difficult movement.



Some sports psychologists work with professional athletes and coaches to improve performance by increasing motivation. A major subject in sports psychology, the study of motivation looks at both extrinsic and intrinsic motivators. Extrinsic motivators are external rewards such as trophies, money, medals, or social recognition. Intrinsic motivators arise from within, such as a personal desire to win or the sense of pride that comes from performing a skill. Team building is also an important topic in this field. Sports psychologists might work with coaches and athletes to help develop a sense of comradery and assist them in working together efficiently and effectively.





Professional sports psychologists help athletes cope with the intense pressure that comes from competition. This often involves finding ways to reduce performance anxiety and combat burnout. It is common for athletes to get nervous before a game, performance, or competition. But these nerves can have a negative impact on performance. So, learning tactics to stay calm is important for helping athletes perform their best. Tactics that might be the focus of this area of sports psychology include things like relaxation techniques, changing negative thoughts, building self-confidence, and findings distractions to reduce the focus on anxiety. Burnout can also happen to athletes who frequently experience pressure, anxiety, and intense practice schedules. Helping athletes restore their sense of balance, learn to relax, and keep up their motivation can help combat feelings of burnout. Another important focus of sports psychology is on helping athletes recover and return to their sport after an injury. A sports injury can lead to emotional reactions in addition to physical injury, which can include feelings of anger, frustration, hopelessness, and fear. Sports psychologists work with these athletes to help them mentally cope with the recovery process and to restore their confidence once they are ready to return to their sport. Research indicates that using various sports psychology techniques can help improve the performance of all types of athletes, from very young gymnasts (aged 8 to 13) to some of the top Olympians. Sports psychology also has impacts that extend into other areas of wellness. For example, one study noted that it's common for doctors to have negative reactions when treating acutely unwell patients. Yet, when the doctors used the same psychological routines as athletes, they were able to better control these reactions. It also improved their patient care. Others suggest that sports psychologists can play an important role in reducing obesity, particularly in children. By helping kids increase their physical activity and their enjoyment of the activity, a sports psychologist can help kids achieve and maintain a healthy weight. Some professionals use one specific technique when helping their clients while others use a wide range of sports psychology techniques. Relaxation techniques offer athletes many benefits. Among them are an increase in self-confidence, better concentration, and lower levels of anxiety and stress—all of which work together to improve performance. One of the relaxation strategies sports psychologists use with their clients is progressive muscle relaxation. This technique involves having them tense a group of muscles, hold them tense for a few seconds, then allow them to relax. Some health professionals use hypnosis to help their patients quit smoking. A sports psychologist might use this same technique to help their clients perform better in their sport of choice. Research indicates that hypnosis (which involves putting someone in a state of focused attention with increased suggestibility) can be used to improve performance for athletes participating in a variety of sports, from basketball to golf to soccer. Biofeedback involves using feedback provided by the body to notice how it feels physiologically in times of stress (elevated heart rate, tense muscles, etc.). This information can then be used to help control these effects, providing a more positive biological response. One systematic review noted that using heart rate variability biofeedback improved sports performance in more than 85% of the studies. Other research supports using biofeedback to reduce an athlete's stress and anxiety. Cognitive behavioral therapy (CBT) is used to help all kinds of people identify and change destructive thoughts and behaviors. Therefore, it would only stand to reason that athletes would also benefit from its effects.

One case study involving a 17-year-old female cross-country skier noted that CBT helped reduce performance anxiety while improving sport-specific behaviors. Another piece of research involved 16 NCAA Division I athletes with severe injuries and found that CBT enhanced their emotional well-being during recovery. Becoming a sports psychologist could be exciting for many psychology students, and it may be a good career choice for those with a strong interest in sports and physical activity. The American Psychological Association (APA) describes sports psychology as a "hot career," suggesting that those working in university athletic departments earn around \$60,000 to \$80,000 per year. If you are interested in this career, start by learning more about the educational requirements, job duties, salaries, and other considerations about careers in sports psychology. Sports psychology, or the use of psychological techniques in exercise and sports, offers benefits for athletes and non-athletes alike. It also encompasses a wide variety of techniques designed to boost performance and strengthen exercise adherence. If you have a passion for sports and psychology, becoming a sports psychologist could be a good career choice. And it offers a few different career options, enabling you to choose the one that interests you most. Frequently Asked Questions Why is sports psychology important? Sports psychology offers athletes many benefits, from improved performance to a healthier mental recovery after sustaining a physical injury. It can help these athletes stay engaged in the sports they love. Sports psychology also offers benefits for non-athletes, such as by helping them stick to an exercise program. Getting regular exercise improves brain health, reduces the risk of disease, strengthens bones and muscles, and makes it easier to maintain a healthy weight—while also increasing longevity. How does sports psychology help athletes? Different sports psychology techniques work in different ways. Some are used to promote self-confidence. Others are designed to reduce anxiety. Though they all have one goal in common and that goal is to help the athlete improve their performance. What can you do with a sports psychology degree? Sports psychologists can take a few different career paths. If you want to teach athletes how to improve their performance through psychological techniques, you can do this as an educational sports psychologist. If you want to work with athletes who have a mental illness, a clinical sports psychologist offers this service. If you want to work with the everyday exerciser versus athletes, becoming an exercise psychologist might be a good career choice for you. Where can you study sports psychology? A number of colleges and universities offer a sports psychology program. Some are undergraduate programs, offering a bachelor's degree in sports psychology. Others are higher-level programs, providing a master's degree or above. Depending on the educational institution, you may also be able to study sports psychology online. How can sports psychology improve performance?

In some cases, sports psychology improves performance by reducing anxiety. In others, it works by improving focus or increasing mental toughness. A sports psychologist can help uncover issues that might be limiting the athlete's performance. This information is then used to determine which psychological techniques can offer the best results. Heading out the door at 5 a.m. for another long, cold training run in the dark takes single-minded motivation. And maintaining focus when your team is behind and heading into the final few minutes of the game requires mental toughness. Sports are played by the body and won in the mind, says sports psychologist Aidan Moran (2012). To provide an athlete with the mental support they need, a sports psychologist considers the individual's feelings, thoughts, perceived obstacles, and behavior in training, competition, and their lives beyond. This article introduces some of the key concepts, research, and theory behind sports psychology and its ability to optimize performance. Before you continue, we thought you might like to download our three Goal Achievement Exercises for free. These detailed, science-based exercises will help you or your clients create actionable goals and master techniques to create lasting behavior change. What Is Sports Psychology? "Sport psychology is about understanding the performance, mental processes, and wellbeing of people in sporting settings, taking into account psychological theory and methods." Meijen, 2019 Sports psychology is now widely accepted as offering a crucial edge over competitors. And while essential for continuing high performance in elite athletes, it also provides insights into optimizing functioning in areas of our lives beyond sports. As a result, psychological processes and mental wellbeing have become increasingly recognized as vital to consistently high degrees of sporting performance for athletes at all levels where the individual is serious about pushing their limits. Indeed, as cognitive scientist Massimiliano Cappuccio (2018) writes, "physical training and exercise are not sufficient to excel in competition." Instead, key elements of the athlete's mental preparation must be "perfectly tuned for the challenge." For example, in recent research attempting to understand endurance limits, psychological variables have been confirmed as the deciding factor in ceasing effort rather than muscular fatigue (Meijen, 2019). The brain literally limits the body. Beyond endurance, mental processes are equally crucial in other aspects of sporting success, such as maintaining focus, overcoming injury, dealing with failure, and handling setbacks. As psychologists, we can help competitors enhance their performance by "providing advice on how to be their best when it matters most" (Moran, 2012).

4 Real-Life Examples Most top-level athletes and sportspeople recognize the vital role their mind has in performing at the top of their game. Pushing from within As long ago as 2008, Tiger Woods confirmed the importance of his mental strength and ability to push himself from within (Moran, 2012): "It's not about what other people think and what other people say. It's about what you want to accomplish and do you want to go out there and be prepared to beat everyone you play or face?" And golf experts agree. While Tiger Woods's natural gifts are self-evident, you can never count him out when he is losing, because of his robust mindset. He is always prepared and always has a plan (Bastable, 2020). Vision and the right mindset will overcome When sports scientist and motivational expert Greg Whyte met Eddie Izzard, the British comedian didn't even own a pair of running shoes. Yet Whyte had six weeks to prepare her for the monumental challenge of running 43 consecutive marathons. Vision, belief, science-led training, psychological support, and Izzard's epic degree of determination were the essential ingredients that resulted in success (Whyte, 2015). Reframing arousal When sports psychologist John Kremer was approached by an international sprinter complaining that pre-race anxiety was impacting his races, he took time to understand what he was experiencing and how it felt. Kremer helped reframe the athlete's perception of his pounding heart from stress negatively affecting his performance to being primed and ready for competition (Kremer, Moran, & Kearney, 2019). Visualizing success Diver Laura Wilkinson broke three bones in her foot in the lead-up to the U.S. trials for the 2000 Olympics. Working with a sports psychologist, she created a routine involving visualizing a series of complex dives performed flawlessly every time. Not only did she successfully qualify, but she went on to take gold at the Sydney Olympics despite limited (real-world) practice and a foot that was not yet fully healed (Afremow, 2014). Enhance wellbeing with these free, science-based exercises that draw on the latest insights from positive psychology. 5 Theories and Facts of Sports Psychology Sports psychology is not one theory, but the combination of many overlapping ideas and concepts that attempt to understand what it takes to be a successful athlete. Indeed, in many sports, endurance in particular, there has been a move toward more multidisciplinary and interdisciplinary approaches, looking at the interactions between psychological, biomechanical, physiological, genetic, and training aspects of performance (Meijen, 2019).

With that in mind, and considering the many psychological constructs affecting performance in sports, the following areas are some of the most widely studied: Mental toughness Motivation Goal setting Anxiety and arousal Confidence 1.

Mental toughness Coaches and athletes recognize mental toughness as a psychological construct vital for performance success in training and competition (Gucciardi, Peeling, Ducker, & Dawson, 2016). Mental toughness helps maintain consistency in determination, focus, and perceived control while under competitive pressure (Jones, Hanton, & Connaughton, 2002). While much of the early work on mental toughness relied on the conceptual understanding of the related concepts of resilience and hardiness, reaching an agreed upon definition has proven difficult (Sutton, 2019). Mentally tough athletes are highly competitive, committed, self-motivated, and able to cope effectively and maintain concentration in high-pressure situations.

They retain a high degree of self-belief even after setbacks and persist when the going gets tough (Crust & Clough, 2005; Clough & Strycharczyk, 2015). After interviewing sports professionals competing at an international level, Jones et al. (2002) found that being mentally tough takes an unshakeable self-belief in the ability to achieve goals and the capacity and determination to bounce back from performance setbacks. Mental toughness determines "how people deal effectively with challenges, stressors, and pressure... irrespective of circumstances" (Crust & Clough, 2005). It is made up of four components, known to psychologists as the "four Cs": Feeling in control when confronted with obstacles and difficult situations Commitment to goals Confidence in abilities and interpersonal skills Seeing challenges as opportunities For athletes and sportspeople, mental toughness provides an advantage over opponents, enabling them to cope better with the demands of physical activity. Beyond that, mental toughness allows individuals to manage stress better, overcome challenges, and perform optimally in everyday life. 2. Motivation Motivation has been described as what maintains, sustains, directs, and channels behavior over an extended amount of time (Ryan & Deci, 2017). While it applies in all areas of life requiring commitment, it is particularly relevant in sports. Not only does motivation impact an athlete's ability to focus and achieve sporting excellence, but it is essential for the initial adoption and ongoing continuance of training (Sutton, 2019). While there are several theories of motivation, the Self-Determination Theory (SDT) has proven one of the most popular (Deci & Ryan, 1985; Ryan & Deci, 2017). Based on our inherent tendency toward growth, SDT suggests that activity is most likely when an individual feels intrinsically motivated, has a sense of volition over their behavior, and the activity feels inherently interesting and appealing. Optimal performance in sports and elsewhere occurs when three basic needs are met: relatedness, competence, and autonomy (Ryan & Deci, 2017).

3. Goal setting and focus Setting goals is an effective way to focus on the right activities, increase commitment, and energize the individual (Clough & Strycharczyk, 2015).

Goal setting is also "associated with increased wellbeing and represents an individual's striving to achieve personal self-change, enhanced meaning, and purpose in life" (Sheard, 2013). A well-constructed goal can provide a mechanism to motivate the individual toward that goal. And something big can be broken down into a set of smaller, more manageable tasks that take us nearer to achieving the overall goal (Clough & Strycharczyk, 2015). Athletes can use goals to focus and direct attention toward actions that will lead to specific improvements; for example, a swimmer improves their kick to take 0.5 seconds off a 100-meter butterfly time or a runner increases their speed out of the blocks in a 100 meter sprint. Goal setting can define challenging but achievable outcomes, whatever your sporting level or skills.

A specific, measurable, achievable, relevant, time-bound (SMART) goal should be clear, realistic, and possible. For example, a runner may set the following goal: Next year, I want to run the New York City Marathon in three hours by completing a six-month training schedule provided by a coach. 4. Anxiety and arousal Under extreme pressure and in situations perceived as important, athletes may perform worse than expected. This is known as choking and is typically caused by being overly anxious (Kremer et al., 2019). Such anxiety can have cognitive (erratic thinking), physical (sweating, over-breathing), and behavioral (pacing, tensing, rapid speech) outcomes. It typically concerns something that is not currently happening, such as an upcoming race (Moran, 2012). It is important to distinguish anxiety from arousal. The latter refers to a type of bodily energy that prepares us for action. It involves deep psychological and physiological activation, and is valuable in sports. Therefore, if psychological and physiological activation is on a continuum from deep sleep to intense excitement, the sportsperson must aim for a perceived sweet spot to perform at their best. It will differ wildly between competitors; for one, it may be perceived as unpleasant anxiety, for another, nervous excitement. The degree of anxiety is influenced by (Moran, 2012): Perceived importance of the event Trait anxiety Attributing outcomes to internal or external factors Perfectionism – setting impossibly high standards Fear of failure Lack of confidence While the competitor needs a degree of pressure (or arousal) and nervous energy to perform at their best, too much may cause them to crumble. Sports psychologists work with sportspeople to better understand the pressure and help manage it through several techniques including: Self-talk Visualization Breathing and slowing down Relaxation routines Ultimately, it may not be the amount of arousal that affects performance, but its interpretation. 5. Confidence While lack of confidence is an essential factor in competition anxiety, it also plays a crucial role in mental toughness. As Gaelic footballer Michael Nolan says, "It's not who we are that holds us back; it's who we think we're not" (Clough & Strycharczyk, 2015). Confidence is ultimately a measure of how much self-belief we have to see through to the end of something beset with setbacks. Those with a high degree of self-confidence will recognize that obstacles are part of life and take them in stride. Those less confident may believe the world is set against them and feel defeated or prevented from completing their task (Clough & Strycharczyk, 2015). Self-confidence also taps into other, similar self-regulatory beliefs such as staying positive and maintaining self-belief (Sheard, 2013). An athlete high in self-confidence will harness their degree of self-belief and meet the challenge head on. However, there are risks associated with being too self-confident. Overconfidence in abilities can lead to taking on too much, intolerance, and the inability to see underdeveloped skills. Why Is Sports Psychology Important? Athletes spend vast amounts of time and energy on their physical fitness, technical skills, and equipment. And yet, that can only ever be part of the success story. Sports place tremendous pressure on the competitor's mind in competition and in training, and that pressure must be supported by robust and reliable psychological constructs (Kumar & Shirotiya, 2010). The abilities to maintain focus under such pressure and also control actions during extreme circumstances of uncertainty can be strengthened by the mental training and skills a sports psychologist provides. Mental preparation helps ready the individual and team for competition and offers an edge over an adversary while optimizing performance. Not only that, but the skills learned in sports psychology are transferable; we can take them to other domains such as education and the workplace. Jim Loehr and Tony Schwartz (2018) recognized the parallels between achieving "sustained high performance in the face of ever-increasing pressure and rapid change" in the workplace and on the sports field. Brief History of Sports Psychology Perhaps the earliest known formal study of the mental processes involved in sports can be attributed to Triplett in 1898. Triplett explored the positive effect of having other competitors to race against in the new sport of cycling. He found that the presence of others enhances the performance of well-learned skills. In the decades that followed, the focus turned to a range of sports, including archery and baseball, with the first dedicated psychology research center called the Athletic Research Laboratory set up at the University of Illinois in 1925.

It wasn't until the 1960s that sports psychology formally emerged as a distinct discipline from psychology, specifically with the International Society of Sport Psychology in 1965. However, it wasn't until 1986 that sports psychology had its own division in the American Psychology Association (Moran, 2012). Top 4 Sports Psychology Podcasts Podcasts are an excellent resource for learning more about sports psychology. The following recommendations all engage with professional psychologists, coaches, and competitors to provide psychological theory and practical guidance: Mental Preparation Secrets of Top Athletes, Entertainers, and Surgeons In this episode of Harvard Business Review's IdeaCast, Dan McGinn talks about how top performers in sports and the world of business "prepare for their big moments." Science of Ultra A podcast that explores the psychology and physiology of endurance through fascinating conversations with scientists, psychologists, trainers, coaches, and athletes. The Sport Psych Show Sports psychologist Dan Adams takes listeners on a journey to demystify the psychological tools and techniques available to drive sporting participation and performance. Sports Psychology Podcast by Peakports.com Patrick Cohn helps athletes, coaches, and sports parents understand how to adopt the right mindset to improve confidence and boost performance. PositivePsychology.com's Helpful Resources We have many tools and worksheets that can help you or your clients identify and work toward goals, develop resilience, and grow self-confidence. Setting SMART+ Goals Capture SMART goals and their accountability to ensure they receive the appropriate focus to ensure completion. Confidence Booster Add confidence boosters to your daily and weekly schedule. Understanding Self-Confidence Gain insight into your self-confidence and use that understanding to begin to improve your self-esteem. 17 Motivation & Goal-Achievement Exercises If you're looking for more science-based ways to help others reach their goals, this collection contains 17 validated motivation & goals-achievement tools for practitioners.

Use them to help others turn their dreams into reality by applying the latest science-based behavioral change techniques. Sports Psychology Books Another great way to get a better understanding of Sports Psychology, is to read recommended books. Our article listing the top 20 Sports Psychology Books is the perfect place to start. Sports Psychology Techniques & Tips Explore these Sports Psychology techniques and tips that can help athletes up their game, overcome obstacles, and deliver peak performances. Sports Psychology Courses Last but not least, to find out where you can study Sports Psychology, this article shares 17 of the best Sports Psychology Degrees, Courses, & Programs. A Take-Home Message Becoming an elite performer results from years of careful planning and hard work. The winners get to the top by identifying, defining, and achieving a series of smaller goals along the way to reaching the podium. But being at that level takes sustainable motivation and the ability to remain calm under considerable pressure. Successful performance requires the right mindset and psychological tools to allow the sportsperson to overcome both defeat and success. Neither of which is easy. Modern athletes (professional and amateur), coaches, and team managers recognize the challenges within their sport and the competitive edge gained from seeking sports psychologists' help. Time-crunched athletes require focused, pragmatic support and solutions that allow them to deliver a consistent high-quality performance. Even in the world outside the sporting arena, we are all competing. Understanding the psychological mechanisms involved in overcoming obstacles, hitting our goals, and achieving success is invaluable. As academic philosopher David Papineau writes, many have come to realize that "sporting prowess has much to teach us about the workings of our minds" (Cappuccio, 2018). Review the examples, theories, and approaches introduced in this article, and consider how they can benefit performance at any level of competition and be applied to manage stress, overcome obstacles, and improve performance. We hope you enjoyed reading this article. Don't forget to download our three Goal Achievement Exercises for free. Afremow, J. A. (2014). The champion's mind: How great athletes think, train, and thrive. Rodale. Bastable, A. (2020). Secret to Tiger Woods' success was revealed in these 2 remarkable hours. Golf. Retrieved March 5, 2021, from Cappuccio, M. (2018). Handbook of embodied cognition and sport psychology. MIT Press. Clough, P., & Strycharczyk, D. (2015). Developing mental toughness: Coaching strategies to improve performance, resilience and wellbeing. Kogan Page.

Crust, L., & Clough, P. J. (2005). Relationship between mental toughness and physical endurance. Perceptual and Motor Skills, 100, 192–194. Deci, E. L., & Ryan, R. M. (1985). The general causality orientations scale: Self-determination in personality. Journal of Research in Personality, 19, 109–134. Gucciardi, D. F., Peeling, P., Ducker, K. J., & Dawson, B. (2016). When the going gets tough: Mental toughness and its relationship with behavioural perseverance. Journal of Science and Medicine in Sport, 19(1), 81–86. Jones, G., Hanton, S., & Connaughton, D (2002). What is this thing called mental toughness? An investigation with elite performers. Journal of Applied Sport Psychology, 14, 211–224.

Kremer, J., Moran, A. P., & Kearney, C. J. (2019). Pure sport: Practical sport psychology. Routledge. Kumar, P., & Shirotiya, A. K. (2010).

'Sports psychology' a crucial ingredient for athletes success: Conceptual view. British Journal of Sports Medicine, 44(Suppl 1), i55–i56. Loehr, J., & Schwartz, T. (2018). The making of a corporate athlete. In HBR's 10 must reads: On mental toughness. Harvard Business Review Press. Meijen, C. (2019). Endurance performance in sport: Psychological theory and interventions. Routledge. Moran, A. P. (2012). Sport and exercise psychology: A critical introduction. Psychology Press. Ryan, R. M., & Deci, E. L. (2017).

Self-determination theory: Basic psychological needs in motivation, development, and wellness. Guilford Press. Sheard, M. (2013). Mental toughness: The mindset behind sporting achievement. Routledge. Sutton, J. (2019). Psychological and physiological factors that affect success in ultra-marathoners (Doctoral thesis, Ulster University). Retrieved from Triplett, N. (1898). The dynamogenic factors in pacemaking and competition. The American Journal of Psychology, 9(4), 507–533. Whyte, G. P. (2015). Achieve the impossible: How to overcome challenges and gain success in life, work and sport. Bantam Press.