The Psychology of Performance
How to Be Your Best in Life

Course Guidebook

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Eddie O’Connor speaks professionally and consults as a clinical sport psychologist, helping athletes, teams, and organizations improve performance by developing mental toughness and overcoming performance barriers. He received his B.A. in Psychology from Binghamton University and his Ph.D. in Clinical Psychology from the Illinois Institute of Technology. Dr. O’Connor’s clinical emphasis was in the disorders and issues that athletes most frequently experience, particularly pain and injury rehabilitation. He did postdoctoral training at the Pain & Rehabilitation Clinic of Chicago while simultaneously completing requirements to become a
certified consultant of the Association for Applied Sport Psychology. Dr. O’Connor is a member of the United States Olympic Committee’s Sport Psychology Registry, a resource for Olympic athletes and coaches searching for qualified sport psychology consultants across the country.

From 2000 through 2015, Dr. O’Connor was the director and chief psychologist of the Pain Center at Mary Free Bed Rehabilitation Hospital, leading a multidisciplinary team of physicians, therapists, and psychologists in the behavioral treatment of chronic pain. At the same time, he developed his sport psychology practice and founded the Performance Excellence Center, treating athletes with performance anxiety and other clinical issues as well as consulting with teams and organizations for performance enhancement.

Dr. O’Connor joined a small group of colleagues to create the Sport Psychology Expo following the 2009 Association for Applied Sport Psychology (AASP) conference, a showcase of the best consultants providing sport psychology education to athletes, coaches, and parents. In 2010, he was granted fellow status in the organization.

Professional organizations in which Dr. O’Connor holds memberships include the AASP and the American Psychological Association Division 47: Society for Sport, Exercise and Performance Psychology. He is also a charter member of the Association for Contextual Behavioral Science. Dr. O’Connor has authored and coauthored several articles and chapters on sport injury and rehabilitation in texts and books such as Principles and Practice of Primary Care Sports Medicine; Applying Sport Psychology: Four Perspectives; SportEX Health; and SportEX Medicine. He also has research articles published in journals such as The Sport Psychologist, the Journal of Sport & Social Issues, and the Journal of Applied Sport Psychology.

With more than 350 media appearances and speaking engagements, Dr. O’Connor enjoys bringing lessons of excellence to the public and large groups. He is a regular guest on FOX 17 TV in Grand Rapids, Michigan. Dr. O’Connor has presented to and consulted with numerous high school, club, collegiate, and professional teams.
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Follow Dr. O’Connor on social media (Instagram and Twitter: @SportsDrEddie; Facebook: @DrEddieOConnor) and use #mtin60sec to watch his “Mental Toughness in 60 Seconds” videos.
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There is a science to excellence. This course begins with a brief review of the history and development of the field of sport and performance psychology and a description of the training, practice, and ethical issues encountered in practice.

From there, you will learn about the many skills and approaches used to achieve excellence, beginning with mindfulness and acceptance-based approaches. All performance is built on a why, and values will be introduced as both the motivation and focus for excellence. Values-based goals then become the roadmap to excellence. But there are many challenges along the way. Mindfulness is a foundational skill that improves poise in performers, enabling them to observe their experiences, focus, and choose the best reaction in any situation. Thoughts are particularly difficult to distance from, so strategies to specifically deal with negative thinking will be reviewed. Ultimately, to be their best, athletes and performing artists must accept what is, giving up the struggle for control, and must maintain a diligent focus on the task at hand. This commitment involves a willingness to feel what is necessary in service of performance achievement.

Psychological skills training is the canon of sport psychology, and the second part of this course reviews the most well-known topics, beginning with motivation and a thorough review of self-determination theory. Science has found that mental rehearsal utilizing the seven elements of the PETTLEP (physical, environment, task, timing, learning, emotion, and perspective) model can be
a powerful way to develop physical skills and mental toughness. Developing confidence is almost always at the top of the list when athletes want to improve mentally and physically, and the ways in which self-talk can both help and hurt self-efficacy will be reviewed. But no matter how you feel, nothing may be more important to performance than maintaining focused attention in the moment, and some focusing strategies will be reviewed.

Ultimately, sport and performance psychology is about becoming the best you can be and performing at consistently high levels under any condition. The third part of this course explores the various topics of optimal performance, beginning with the importance of specific, structured routines, which are very different than superstitious rituals. Most people have been in the zone at some point. You will learn about peak performance and how to get into a flow state more readily. You will also discover that talent is overrated. Anyone who has achieved excellence has done so through a process of deliberate practice, and you will learn how such a process can enhance your life.

But there is a dark side to performance, with a number of issues that prove to be a barrier to excellence, and these topics are covered in the fourth part of this course. Maybe most common is performance anxiety and choking under pressure. Perfectionism drives excellence but comes at a terrible cost. Self-compassion does not typically come to mind when you think of the rigorous demands of performance excellence, but you will learn how vital it is to overcome these two performance barriers and prevent burnout. Pain and injury are inevitable, but as you will learn throughout the course, it isn’t what happens to you that determines the outcome but how you react to it that matters. The best strategies to manage pain and make a remarkable recovery from injury will be reviewed. Athletes and performing artists invest in and depend significantly on their bodies. As a result, the pursuit of an ideal body can lead to clinical issues such as disordered eating and performance-enhancing drug use.

Performers achieve and develop in a social context, so the fifth part of this course explores these topics, beginning with the subject of fan psychology. You will discover why people get so emotional when
their teams win and lose. Athletes rarely perform alone. Teamwork is essential to success, and the four correlates of teamwork—cohesion, cooperation, role relationships, and leadership—will be reviewed. Then, you will learn about the advantages of the Developmental Model of Sport Participation to prevent injury and burnout in youth athletes while providing social guidelines for the best development of skills. You will discover everything sport parents need to know to give their child-athletes the best chance to succeed, what parents need to stop doing, and the unique role that only parents can play at every stage of development. The final lecture explores how excellence is maintained throughout the lifespan by examining the experiences of masters athletes and how to best handle the transition out of sport when that time eventually comes.
We are all performers, and we all have a psychology we bring to our performance. This lecture will provide some history and background of the field of sport psychology and then will review the practice of performance psychology, ethical challenges in performance consulting, and relevant issues addressed in performance psychology.
The History of Sport Psychology

- Sport psychology got its start in about 1891, when the general psychological principles started to be applied in a unique setting: physical education.

- Luther Gulick offered a seminar for students studying to be physical training directors. It was during this seminar that James Naismith was encouraged to develop a new indoor game, and basketball was invented. In that same year, Naismith gave a commencement address entitled “Psychology of Exercise.”

- A few years later, E. W. Scripture and others were studying the reaction times of athletes. It seems that right from the beginning of the field, the goal of sport psychology was to develop a performance edge to win. Throughout his writings, Scripture expressed a belief that psychology could have an influence on sport performance.

- Norman Triplett published one of the first experimental studies in sport psychology in 1898. Because of what is now called social facilitation, his studies of cyclists concluded that the presence of another, whether paced or in competition, produces faster results.

- Psychology made its first appearance in the Olympics in France in 1897 with the presentation of the “Psychology of Exercise” as part of a scholarly meeting to promote the science of athletics.

- Positive self-talk is one of the most well-known and well-researched topics in sport psychology, and it was addressed in 1913 at the first International Congress of the Psychology and Physiology of Sport.

- It didn’t take long for the idea of using psychology for performance enhancement to extend beyond sport, with studies of psychology applied to business in 1917 and the psychology of musical talent in 1919.
From the 1920s through the 1940s, there was a worldwide development of psychological laboratories dedicated to sport using experimental laboratory methods. Coleman Griffith is credited with opening the first American sport psychology laboratory in 1925. He taught a course on psychology and athletics and consulted with the football team, playing a role in their two national championship wins. Griffith’s book *Psychology of Coaching* was used in collegiate courses, and his work was influential worldwide.

During the 1940s and 1950s, discoveries in general psychology were increasingly applied to specifically improve sport performance, such as the use of mental practice and visualization. In the United States and abroad, psychologists began working with national, Olympic, and professional athletes and teams. And the research in the area of performance was expanding in both variety of topics and number of studies.

By the mid-1960s, worldwide interest in sport psychology had grown, leading to the formation of the International Society of Sport Psychology and the North American Society for the Psychology of Sport and Physical Activity.

Psychologists in other countries were already working with Olympic athletes and teams in the late 1960s, but Richard Suinn is believed to be the first sport psychology professional to work with U.S. Olympians in 1972.

There was growth in the number of sport psychology graduate programs in the United States, first emphasizing research and then gradually focusing on more applied issues. There is a creative tension and a creative collaboration between researchers and applied clinicians today as they all strive to be scientist-practitioners, with the work of one side influencing the other.

Peak performance and flow became areas of interest in psychology during the 1960s and 1970s, and that interest continues today.
In the 1980s, sport psychology research increased, along with greater acceptance of sport psychology in the United States. Sport psychology professional credentials were established, and Shane Murphy became the first full-time U.S. Olympic Committee sport psychologist.

In 1982, the U.S. Olympic Committee established a registry to identify consultants with the requisite training and experience to work with Olympic coaches and athletes, which increased the availability of sport psychology services to Olympic athletes across the country.

In 1986, the American Psychological Association (APA) founded Division 47: Exercise and Sport Psychology, now called the Society for Sport, Exercise and Performance Psychology to illustrate its broadening applicability. In 2003, the APA established proficiency guidelines officially recognizing sport psychology as a specialty within the practice of psychology.

Also in 1986, the Association for the Advancement of Applied Sport Psychology held its first conference. Now more efficiently named the Association for Applied Sport Psychology, AASP is an international, multidisciplinary, professional organization. AASP promotes the development of sport psychology science and ethical practice and in 1989 offered certification to qualified members with a master’s or doctorate degree.

Consultants must meet specific course requirements and complete an extensive, supervised work experience to develop their competency to psychologically enhance performance. Certification was initiated to improve accountability, recognition, credibility, professional preparation, and public awareness. In 2016, the AASP fellows met and agreed to seek accreditation of this certification through the National Commission for Certifying Agencies, further raising its standards.

In the 1980s and 1990s, sport psychologists were still relatively new. Many athletes and coaches didn’t trust them or understand
exactly what they were doing or how they could help. Teams were willing to get free workshops, but getting them to make a financial investment was more difficult.

- Often, teams and athletes would be unwilling to sacrifice any physical practice, as if mental training were a luxury, not a necessity or integral part of their sport. This is changing, with more and more teams and organizations at all levels seeking more consultations and hiring mental training teams.

- The science has been growing, too. More sport and performance psychology journals are published, with more rigorous research methodology. There are more professional guidelines and standards and discussions of ethics to help define and promote the field.

**Performance Psychology**

- Performance psychology refers to the mental aspects of superior performance in settings where excellence is central—usually sports, the performing arts, business, and high-risk professions (such as the military).

- The field of performance psychology is generally comprised of three different tracts: applied sport psychology, psychotherapy, and consultation and coaching—each offering a different framework.
  - The work in applied sport psychology is focused on psychological skills training (PST). These are the psychological processes that govern performance, such as arousal management, concentration and attention, goal setting, and motivation.
  - From psychotherapy comes cognitive behavioral therapy, from which many of the PST interventions originate. Solution-focused methods are a good fit with performance consultation. Mindfulness approaches have gained recent popularity, informed by acceptance and commitment therapy.
Psychotherapy looks to correct or improve pathology and dysfunction; however, the area of positive psychology focuses on what’s right, what works, and what’s improving and informs performance enhancement work.

The third contributing source of information comes from the field of consultation and coaching, with a focus on building a person’s strengths, resources, and passions to promote his or her growth and reach his or her potential.

- Sport psychology and performance psychology are not the same thing, but they are related, with significant overlap and some differences. Sport may be the most widely researched and tested, so sport psychology often informs performance psychology when there are similarities in performance pressures.

- Performance consultants, however, are aware that there are entire bodies of literature and cultures completely separate from sport psychology. To practice ethically and effectively, familiarity with the goals and culture of each of these is necessary.
Sport psychologists do a great many things, from teaching, to research, to working with elite athletes, to working with youth athletes, and everything in between. The field is a rich, interdisciplinary mix of academics and practitioners.

Sport psychologists have their training and degrees in counseling and clinical psychology, educational psychology, coaching and physical education, sport psychology specifically, kinesiology, and exercise science.

A true sport psychologist is licensed by the state to practice psychology, so typically you need a clinical or counseling degree. Others who are trained to teach mental skills to athletes and coaches are better called sport psychology consultants, as the term “psychologist” is legally protected by law to indicate licensure by the state.

Ethics

Psychologists in the United States are held to the APA’s Ethical Principles of Psychologists and Code of Conduct. Ethics are about doing what’s right, with the best interest of your client always in mind. Therefore, training and competence can be an ethical issue.

If you have consultants primarily trained in the physical education disciplines on one end and psychology-trained professionals on the other, who is best trained to deal with the psychology of physical performance? Most applied work probably falls in the middle of the continuum, where personal and performance issues overlap. The APA proficiency and AASP certification help define the minimum training to perform in the middle, which includes a mixture of course work from the fields of psychology, sport psychology, and sport sciences, in addition to 400 hours of supervised experience.

But when an issue starts to go outside a consultant’s area of competence, it is up to the consultant to either get the proper
training and develop the necessary skills or refer to someone who is properly trained to address it.

- You also have to take into account applicable laws, psychology board regulations, professional psychological organizations’ guidelines, consultation with peers, and your own conscience.

- Confidentiality is a well-known ethical code in helping professions. This is easier to keep if, for example, an athlete sees a clinical sport psychologist on his or her own, in the psychologist’s office. But what happens when a consultant works where the athletes train, practice, perform, and rehab?

- The sport environment, CEO’s conference room, or theatre backstage are all environments where information about training and performances, physical condition, health, and personal lives are often shared freely, so there can easily be pressure on the psychologist to share information as well.
Identifying who the consultant works for is necessary to determine who has access to what happens in consultations. If hired by the team or organization, for example, there may not be the privacy the athlete desires. Informed consent must be an ongoing process, and the limits of confidentiality must be made clear.

Maybe the biggest ethical issue to consider is multiple relationships and boundaries. There is the potential to cause impairment in performance, risk exploitation, or harm the client/athlete in unexpected ways—and that must be avoided.

Consider a sport psychologist who consults with a collegiate sports team and is employed by the university but is also seeing an athlete on the team individually, in a private practice setting, for clinical issues that can become quite personal. The psychologist must consistently be aware of the pros and cons of each situation.

A key aspect of remaining ethical is to have relationships with colleagues who have a strong commitment to ethics to bounce ideas off of. The professional who operates in isolation is most at risk for unintentionally crossing boundaries or finding him- or herself in an unfortunate situation.

**Issues a Performance Psychologist Might Address**

The job of a performance psychologist starts with helping performers in any performance area establish and maintain high standards, with a focus on mastery; cultivate motivation; and strive for excellence, without suffering the consequences of unhealthy perfectionism.

Often, it is to move performers’ focus from the outcome to the process, from their ego to the task at hand; to excel in competition; and to help them respond to competition with a drive to excel, focus, and achieve rather than become afraid, envious, or self-centered.
The awareness and regulation of emotion is central to performance, and its application to business and the military beyond sport is easy to see. Performers across settings need to be “on” at a very specific time and to be their best at those exact critical moments. Therefore, developing attention and concentration, especially under pressure, and maintaining confidence are frequent consulting goals.

Maybe not as salient to athletes, but more important to performing artists and business executives is the audience with whom they have to engage and interact. An audience’s reactions and responses can increase arousal and anxiety, and their judgement may be critical to the performer’s success. And then there is the consequences of performance, dealing with success and failure, and how expectations of these results can influence performance.

**Suggested Reading**


**Questions to Consider**

1. Describe three situations where you would prefer to have a clinically trained sport psychology consultant versus a consultant from a sport science background and then three situations where a sport science background might be preferred.

2. Many sport psychology consultants list the teams and athletes they have worked with—sometimes just by name, sometimes with testimonials and pictures. What ethical risks should they consider when promoting their working relationship to the public?
The key to excellence is practice, and you’re probably doing it wrong. Most people are. There is a science to it that many people are not aware of. The purpose of this lecture is to inspire you. It will change the way you think, the way you develop your skills in any area, and maybe even the way you parent. You will discover that talent, if it even exists, is highly overrated. This means that you can truly do anything—but at an incredible investment.
Purposeful Practice

- You are not limited by genetics. There is no basketball gene or innate musical talent that will carry you to greatness. In all areas of performance, it comes down to how you practice.

- Practice not only matters, but determines everything. There is one thing that distinguishes experts, truly the very best in any field, from everyone else. And it isn’t talent, size, strength, agility, or some innate gift. It is the amount of time they spent in deliberate practice.

- Talent, or early demonstration of skills, can be nothing more than a self-fulfilling prophesy. If you assume that someone doesn’t have the musical or athletic gift because he or she doesn’t excel right away, he or she is often encouraged to go in another direction. Children with athletic skill early on earn more compliments, attention, and investment from coaches in practice and more playing time in games. Without encouragement, a later bloomer never learns to kick a soccer ball or to sing.

- Another problem with talent is that it can be a disadvantage in the long run. Those with less developed skills early on have to work harder to develop them and keep up, and they have to find other competitive advantages, such as knowing the opponent or paying particular attention to technique, rather than relying on athleticism. They learn to work hard, fight for what they earn, and persevere through adversity.

- Sometimes, more talented players aren’t tested early in their athletic careers and are behind these lesser-talented peers in their study skills, practice skills, mental game, and work ethic—all factors that have a lot to do with success at higher levels and attributes associated with deliberate practice, the ultimate factor in determining improvement and expertise.

- We now know that it is only the right kind of practice carried out over a sufficient period of time that leads to improvement. As
a result, we create our own potential. There is no such thing as predefined ability.

◆ Purposeful practice has very specific, well-defined goals. You have to know exactly what you want to accomplish with every repetition—know what you want to do and exactly how you want to do it, ideally based on how experts do it.

◆ Contrast this with naive practice, where we do something repeatedly, expecting that the repetition alone will improve performance. Practice doesn’t make perfect. Practice makes permanent. Only perfect practice makes perfect. Without knowing exactly what you want to do, you aren’t progressing.

◆ Purposeful practice is first defined by specific goals. Intense focus is the second quality. How often during naive practice are we going through the motions without being fully engaged, either because we lack a specific goal or we’re just not bringing our full attention to the moment?

◆ Growth is difficult, and that brings us to the next quality of purposeful practice: getting out of our comfort zone. And we don’t like that. We have a basic need to feel competent, and pushing ourselves to do things we don’t know how to do goes against that—but it is required to push the limits of our abilities and progress.

◆ We push into an uncomfortable place and adapt until it becomes comfortable, and then we push again, until it gets comfortable, and then push again, over and over, in a faithful, persistent way. This is how we learn and develop. This is the only way we improve, in anything.

Adaptability

◆ If you lift weights, you get bigger, stronger muscles, and with purposeful and deliberate practice, you get more brain in much
the same way. Neuroscientists using brain-imaging techniques are discovering how the brains of people with particular skills differ from those without the skill.

◆ It isn’t that their brains differ in childhood or before the mastery of the skill, as you might expect if you believed in talent. With training, the brain changes, adapts, and grows in response to the demands placed on it.

◆ There are biological differences in experts, both in their bodies and in their brains, but these differences developed. Therefore, the most effective forms of practice are going to modify the structure and function of the brain, increasing your ability to perform a skill. Purposeful practice gets you there.

◆ In addition to brain growth, deliberate practice involves developing more efficient mental representations, which are mental structures that relate to an object, an idea, a collection of information, or anything else that you might think about. The development of mental representations allows a person to see meaningful patterns in a collection of things that would seem random or confusing to people with less developed
The main purpose of deliberate practice is to develop mental representations that will enhance performance. But then these improved mental representations will inform our deliberate practice. Our ability to detect—and then correct—mistakes is enhanced. And then we get a positive cycle of improvement, with refined and more challenging deliberate practice further developing mental representations, better informing practice, and so on.

This is the process of improvement. What determines who gets to a good level, gets better, or becomes the best is the amount of time you spend in deliberate practice. The challenge is that it is labor intensive and not much fun.

Experts who put in thousands and thousands of hours will tell you that they were not enjoying it. The best students are motivated to practice intensely, and with full concentration, not because it’s fun, but because they see practice as essential to improving their performance. They are willing to pay that price—even when they don’t feel like it.

The 10,000-hour rule, which states that it takes 10,000 hours of appropriately guided practice to become an expert in any skill,
was popularized by Malcolm Gladwell in his 2008 book *Outliers*. But some tasks and accomplishments take more time, and others take less. And as a field develops more experts, you have to know or do more over time just to keep up. That means more hours of deliberate practice than your peers, so 10,000 hours may not be enough. It certainly isn’t a threshold to automatic expertise.

- From a developmental perspective, the first step to becoming an expert is being introduced through play to the field of interest. Parents play a crucial role here, instructing their children as to the purpose of the items they are playing with, such as the ball, golf club, or piano. And the family values of discipline, hard work, responsibility, and achievement are instilled early. Praise is powerful to increase motivation, and the satisfaction of developing a skill can help keep a child going for more.

- But once interest is developed, the next step is to get lessons from a coach or teacher—not necessarily an expert yet, but one who can maintain interest and motivation in the pupil while skills are being built. Parents at this stage remain important to provide discipline and structure, such as helping the child establish practice routines and giving them praise, support, and encouragement to keep motivation high.

- To strengthen commitment, parents will need to positively push their child to prioritize practice over other activities. But when is pushing helpful, and when is it too much? It’s difficult to define the line exactly, but ultimately the motivation must come from within the child, or else it won’t last. So, discovering and emphasizing the aspects of the activity the child loves most—so that he or she owns his or her performance and is motivated from within—is best.

- As these students progress, better qualified teachers and coaches are needed to take them to the next level, as is an increase in practice hours. At this point, those on track to become experts will show a tremendous appetite for work. They start to identify themselves with their area of growing specialization—as a baseball player or ballerina.
It is in this early or mid-teen period that future experts make a major commitment to becoming the best they can be, seeking the best teachers or schools for training, even if it means moving across the country. The student faces expectations that gradually increase until the student is doing as much as humanly possible to improve. At this point, the motivation lies solely within the student to get out to the very edge of human ability and rank among the best.

This is the benefit of starting young. Few adults have four to five hours per day to devote to deliberate practice. If you start early, your body is better able to adapt to the demands placed on it. Our brain and body can adapt throughout life, but they are more adaptable during childhood and adolescence.
How to Practice

- Deliberate practice develops skills that others have already figured out, so find a coach who knows how to guide you in the best way to develop them.

- Deliberate practice takes place outside your comfort zone, just beyond current abilities, and demands near-maximal effort, which is not enjoyable. Stay outside your comfort zone to improve.

- Deliberate practice requires well-defined, specific goals designed to improve some aspect of your target performance. Set them consistently, revising and improving them as you progress.

- Deliberate practice is deliberate, meaning that it requires your full attention and conscious, intentional actions. Be fully engaged.

- Deliberate practice requires feedback and modifications of efforts in response to that feedback. A coach is extremely helpful here, but over time, with improved mental representations, experienced students can monitor themselves, spot mistakes, and adjust accordingly. Feedback can be difficult to take. Learn to love it.

- Deliberate practice both produces and depends on effective mental representations, with one improving the other. Be sure you have a clear picture of what you are trying to achieve and keep it in the front of your mind, constantly striving for it and improving it.

- Deliberate practice nearly always involves building or modifying previously learned skills by focusing on specific aspects of those skills that can be improved, over and over again—constantly striving for the next level, breaking records, creating training techniques, and being the first in your field to do what you’re doing.
Motivation

- A lack of motivation may be the biggest barrier to developing expertise. Most people get to a point where they think that they are good enough and that it isn’t worth it anymore. To strengthen your motivation, you can either strengthen the reasons to keep going or weaken the reasons to quit.

- People don’t often need bigger motivators; instead, it’s the costs that get us. Here is how to guard against them.
  - Start by choosing an activity that you truly and deeply want to be better in.
  - Set aside a fixed time to practice that is cleared of all other obligations and distractions.
  - Get more and better sleep.
  - Limit practice sessions to no more than an hour at a time; you can’t maintain intense focus for much longer than that.
  - Set things up so that you are constantly seeing concrete signs of improvement.
  - Surround yourself with like-minded people—people who believe in you and what you’re doing. Believe in yourself.

Suggested Reading

Ericsson and Pool, Peak.


Questions to Consider

1. Choose an area of your performance to improve. Define the mental representation of expert performance in that area.

2. Where would you find a coach or consult expert opinions on how to improve, and what would be the next skill you would practice?
If the psychology of performance is essentially a ton of hard work and deliberate practice, why do elite performers do it? If you are going to persevere through all the adversity en route to greatness, you have to have a why. This lecture focuses on values and goals. You will discover how values can form a solid foundation for goal setting and increase its effectiveness.
Values

- Values are a consistent way of doing things. They are a standard to live by. It’s sport integrity: Every time you step onto the field or go into the weight room, you have a standard of behavior that you hold yourself accountable to. It doesn’t matter the score, how you’re playing, or even how you’re feeling. It is the person you want to be—consistently.

- And it is not limited to sport. If you value honesty, you will bring that into your place of work and your marriage. We don’t achieve our values, as we do our goals. We live our values in every situation, through the adversity day after day.

- Define the behaviors that reflect your values in these performance areas: what kind of teammate you want to be, what kind of competitor you want to be, how you want to train, how you want to develop both technical and tactical skills, and how you keep fun and recreation in your life.

- Then comes the big question: Are you that type of person now? At this point, you might come face to face with the reality that you are not living your values. To do so, you must behave in a valued direction every day—at every practice, in every game, under every circumstance. But there are barriers to this.

- Inevitably, there are some feelings or thoughts that get in the way. And for a moment, we lose focus on our values and give in to our desire for comfort or relief, or we act out in impulsive anger or in response to fear. In the process of performance, it is essential that we keep our attention on what we value most. If we prioritize our feelings, our values are often compromised.

- After clearly identifying what our values are and look like behaviorally, our next step is developing an awareness of how we act and this choice between values-driven, or emotionally driven, behavior. You’d be surprised how often we choose emotions. We often act mindlessly.
But values not only provide direction; they also provide energy. Performers who are focused on the values that underlie their goals train harder and more consistently than those who lack value clarity. They make better choices, especially in the face of hardships and negative thoughts and emotions, and are more likely to persevere in the day-to-day activities that lead to goal achievement.

From Values to Effective Goal Setting

Once you have reviewed your values, you can set your goals. If values are your compass, directing where you go, goals are the map and the specific plan for exactly how to get there in a behavioral, descriptive way.

Goals can increase motivation, confidence, and focus on the task by defining exactly what to work on and what to prioritize. Goal setting is big in the sport psychology literature for this reason. But just setting goals isn’t magical. Emotionally connecting to why the goal is important provides the motivation, confidence, and focus necessary to ultimately succeed.

Identifying values alone isn't sufficient to succeed either. You may know that you value hard work and strength, and you could
live them daily, but without setting goals, your values won’t direct you toward a particular achievement. Goals provide the necessary direction of our energy and actions.

- In sport, goals that seem to have the greatest effect are moderate in difficulty—challenging but realistic. Neither improbable, difficult goals nor easy goals show any effect on performance. Easy goals don’t push you. You protect your self-esteem with easy goal achievement, but you don’t get very far. On the other hand, setting really difficult goals doesn’t work either. Failure always feels bad, and unmet expectations are disappointing. And who has the motivation to go after goals you are likely to fail at?

- In sport, absolute goals show the greatest improvement in performance. Absolute goals are specifically defined outcomes—winning a race, for example. It’s absolute because you either do it or you don’t. Only one person can achieve this goal.

- Relative goals are goals that are based on personal improvement relative to prior performances—running a personal best time, for example. Relative goals are also linked to performance improvement, but not as strongly as absolute goals are. Relative
goals should still be somewhat specific, such as shooting for a specific time.

- General “do your best goals” do just about as well as relative goals. They are not as useless as once thought, and the fact that they do help probably explains why people keep setting them. They inspire effort and focus. They just aren’t as effective as having a specific, targeted outcome to improve performance.

- In addition to moderately challenging goals and absolute goals, there is a third moderating factor in goal setting besides difficulty and specificity: proximity. Both short-term and combined short- and long-term goals improve performance the most. But long-term goals alone do not.

- This makes practical sense. You can certainly have an idea of what you want in the future, but without a practical plan in the short term, you won’t take the immediate steps necessary to move you in that direction. There is good evidence from research that combined goals are best. Long-term goals are often too far away to provide you the motivation you need today to take action. Linking short- and long-term goals sets out a solid plan for achievement, with the long-term goal providing meaning to those short-term, ideally daily, action steps.

- Some additional variables that can help. Competitive and cooperative goals have a significantly greater positive effect on performance than mastery goals. Mastery goals are better than competitive goals in a practice climate, so the context in which you’re goal setting and the purpose of the goal is very important. Competitive and cooperative goals seem to get the most out of you when you have to be your best compared to goals to improve your skill, perhaps due to the added motivation or incentive to beat someone.

- In turn, cooperative and participant set goals have a greater effect than assigned goals. There is no performance-enhancing effect for private goals, so tell people what your goals are. Write
them down, too. This is another common suggestion that has some research support. Finally, athletes should set goals for both practice and competition, as setting practice goals is a critical factor that differentiates successful Olympic athletes from unsuccessful ones.

- In general, the sport research supports SMART goals—specific, measurable, achievable, relevant, and time-limited—but with some tweaks and additional emphases. Despite not being specific and measurable, “do your best” goals have some value, although the moderately difficult goals match up nicely with “achievable,” and this finding has the most research support. “Relevant” blends nicely with values. And deadlines are very effective.

- Another suggestion that showed less, but still some, effect was to tell someone who can be supportive of your intentions. In addition, getting feedback on your goal progress also improves your performance, particularly with more complex tasks. Remember the importance of this with deliberate practice.

- The literature is far from conclusive. Numerous studies and experience show that goal setting helps, but most likely it interacts with other things to contribute to success. Goals alone aren’t going to do much. You need a collection of skills and attributes that interact in any number of complex ways within a given individual to be effective.

**Types of Goals**

- In sport and exercise psychology, three types of goals are typically discussed—outcome, performance, and process goals—and each one serves a purpose.
  - Similar to absolute goals, outcome goals define the specific end result, typically as it relates to others or in a bigger context. Having a clear idea of what you’re going for—this type of absolute goal—has the greatest direct impact on performance as far as goal setting is concerned.
Performance goals are goals that focus the athlete on his or her own performance relative to how he or she has done before. These goals don’t have anything to do with anyone else, so they’re useful for increasing your internal motivation and levels of confidence.

Process goals focus on how an athlete performs a specific skill. These goals are usually reserved for training sessions. This type of goal is even more specific than a performance goal, as the process determines success of the performance.

The best way to utilize these three types of goals is to link one or more process and performance goals to a single outcome goal. Linking them in this way improves your results.

**Suggested Reading**


**Questions to Consider**

1. Write down your five values and give a behavioral example (i.e., action you can see) of each that you could do daily or weekly. For example, if you value perseverance, you may live that value by going to the gym regularly or be more patient with your mistakes.

2. Set short- and long-term outcome, performance, and process goals for each value based on the principles covered in this lecture.
As performers, we want to be mindful, because to be our best, we must be aware, intentional, and purposeful in everything we do. In this lecture, you will learn about mindfulness as a performance-enhancement strategy. While the practice of meditation is ancient, its application to sport performance is in its infancy. But it is a hot topic in both research and application because of the positive results it is getting. More than a technique, mindfulness builds a mental strength, changing the brain and the way it operates to enhance performance.
Mindfulness in Sport

- There are several definitions of mindfulness, but the one from Jon Kabat-Zinn is rooted in Buddhist philosophy—paying attention in a particular way: on purpose, in the present moment, and without judgment.

- Mindfulness is an ancient concept that is at least 2,500 years old and has been widely researched and applied in medical settings and psychotherapy. Mindfulness in sport is a relatively new topic. Mindfulness and acceptance-based models of performance enhancement look to change our relationship with internal experiences rather than change the frequency, intensity, or form of the experience itself.

- This is in stark contrast to more traditional psychological skills training (PST) interventions that seek to create the ideal emotions, sensations, thinking, and self-talk for peak performance. The core belief of a mindful approach is that a person performs best when staying with a nonjudgmental, moment-to-moment awareness and acceptance of one’s internal state, with his or her attention focused on what is essential for performance and a consistent, intentional behavioral effort of actions that support what he or she values most.

- The traditional PST model includes strategies such as goal setting, imagery, pre-performance routines, and self-talk. This model suggests that reduction of negative thought and negative emotions and improved self-control skills will result in improved athletic performance. While they are widely used and often beneficial, there are serious challenges to the idea that they are the direct mechanism of action leading to quality performance.

- In a review by researcher Zella Moore, codeveloper of the Mindfulness-Acceptance-Commitment approach, she contends that mindful and acceptance-based interventions are not
only effective, but it is the mindfulness practice itself that is responsible for the improvement.

- To truly understand and benefit from mindfulness, you must practice it yourself and experience it directly. It is not something you can intellectually understand and benefit from.

How Mindfulness Practice Works

- Mindfulness meditation actually changes basic brain structures and functions. For example, after only eight weeks of training, researchers discovered an increase in gray matter concentration of meditators’ left hippocampus, which is critically involved in learning, memory, and regulating emotion.

- Because of the neural changes that can occur with mindfulness practice, there is an automatic and improved response to emotions and improved behavioral decision making in the face of stress. With consistent practice, the performer becomes more effective and more efficient in responding to the challenges of their environment.

- Benefits begin right away. Research participants demonstrated improvement in memory and executive functioning after just four days of practice. With as little as three months of training, practitioners showed significant improvements in more quickly and easily switching their attentional focus.

- Both expert and novice meditators show similar activation in the brain during mindfulness training when novices are properly motivated; however, experts sustained their attention longer and more efficiently, with less brain activity needed. Skilled meditators respond to distractions automatically, without having to give additional effort to keep their attention focused on what they are doing.
The data suggest that the mechanisms of action in mindfulness are improved mental efficiency through the development of greater awareness and acceptance of internal experiences, thus freeing the athlete to focus more attentional resources on his or her performance and get better results.

The changes in the brain allow athletes to automatically notice and direct their attention to what is most essential, without needing to consciously reduce or control reactions to other potentially distracting experiences to do so.

This is different from traditional psychological skills approaches. The traditional approach has been to try to reduce or eliminate negative experiences first and then intentionally shift to more positive thoughts and feelings to perform better. Mindfulness and acceptance-based approaches, on the other hand, stress the absence of intentional effort. Through daily mindfulness practice, improved attention becomes automatic, requiring fewer cognitive resources to achieve the desired focus state.

The practice of entering a nonjudgmental, present-moment focus trains the brain to operate this way without needing to consciously or deliberately turn it on under pressure—when we need it the most. Performing under pressure is a hot topic in sport psychology. Some research suggests that reduced anxiety and a narrow focus of attention are both related to optimal athletic results.

But these data on mindfulness suggest that reduced anxiety and closed focus may not, after all, be prerequisites for peak performance. Both high-functioning athletes and expert meditators seem perfectly capable of demonstrating higher levels of anxious arousal and broader awareness than novices while still maintaining optimal task performance.

More research with larger samples is still needed before we can be sure about this. It seems clear, though, that the broad and automated attentional focus found in those who regularly
practice mindfulness is considerably different from the efforts to control internal experiences, which are found in typical PST interventions.

- Traditional PST requires athletes to do an intentional scanning to notice and then correct internal experiences judged to be problematic. But the scanning and efforts to change the experience can actually be the problem in performance. What’s needed is an automatic and efficient brain that can maintain focus on the task, regardless of what the athlete feels.

**Models of Mindfulness**

- A simple way to think of a mindful approach to sport performance enhancement is that there are three levels: mindfulness, concentration, and optimal performance. It starts with mindfulness. Accepting and being tolerant of internal and external distractions is foundational. From there, the performer is then freed up to focus on the task at hand—full concentration. And only then, with distractions minimized and concentration fully engaged, are we most likely to optimize our performance.

- Researchers Keith Kaufman and Carol Glass have developed the Mindful Sport Performance Enhancement intervention, which is a group protocol consisting of six weekly 90-minute sessions and daily home practice. The intention is to train athletes in the basics of mindfulness and then help them apply mindfulness skills to both their sport performance routines and life outside of sport. The protocol moves athletes from sedentary to active to sport-specific mindfulness.

- Evaluations of a shorter four-week protocol are positive, with athletes reporting performance improvement from the intervention, increases in mindfulness and flow, and decreases in sport anxiety and perfectionism. In a one-year follow-up study, the athletes showed an increase in mindfulness since participating in the workshop as well as improved performance.
The development of the Mindfulness-Acceptance-Commitment (MAC) approach by Frank Gardner and Zella Moore was an effort to better understand, explain, and affect the mechanism of action in athletic performance and improve the efficacy of interventions. MAC does not rely as exclusively on mindfulness as the previous protocol and draws heavily on the Acceptance and Commitment Therapy literature.

In a third approach called Mindfulness Meditation Training for Sport, mindfulness and traditional PST are combined. This 6-week program, consisting of two 30-minute sessions per week for a total of 12 sessions, teaches open awareness, caring thoughts for self and teammates, concentration exercises, and the practice of accepting negative mind states through techniques such as labeling emotions and non-reactivity.
We can’t stay detached and observe every thought. That would prevent us from ever taking action. Mindfulness is a great way to help us be more intentional and evaluate and then choose the right thoughts and feelings to embrace and act on. In this way, after a mindful observation of our urges and thoughts, we can then commit to the psychological skills of goal setting to move us in the direction we value most.

All three of these approaches are rooted in Buddhist philosophy and involve meditation. There is a Western camp that is sometimes referred to as mindfulness without meditation, as there is no formal mindful practice. Its interventions involve social-psychological approaches to mindfulness that emphasize working with information that is outside the individual. It encourages engagement with and awareness of the environment, the ability to take multiple perspectives, and the ability to revise mindsets to develop cognitive flexibility that adapts to the environment to achieve the best outcome.

**Benefits of Mindfulness**

- Increased mindfulness skill is associated with improved flow, which is a mental state thought to be associated with optimal athletic performance. One defining aspect of flow is an intense and focused concentration on the present moment. Anything that can help increase flow is a very good thing.

- Participants in different sports may benefit in different ways from nonjudgmental, present-moment awareness. Sports are different, with different challenges and different dynamics. The individual components of mindfulness may benefit each athlete differently. Sometimes you need an open, accepting awareness; sometimes you need a focused, narrow one. Mindfulness develops your ability to know which focus you need and the ability to do that when needed.
Mindfulness Practice Tips

- When engaging in mindfulness practice, people often get frustrated that they keep losing focus. The benefit is not in clearing your mind; it is in refocusing your mind over and over. You lose focus and then refocus, and your strength is built by repetition of this process.

- Avoid judgement or criticism of yourself or your results, especially during the exercise. Bring your attention back to the breath with kindness and acceptance of what is, accepting your current skill level and the natural state of your mind.

- The amount of time you spend in mindfulness practice depends on how good you want to be. You can’t overdose on mindfulness, although an hour in the morning and an hour at night may be the maximum recommended. At the same time, do not set yourself up for failure with a goal that is too aggressive. Your motivation to practice is critical. You must have a purpose for practice and be invested in it, practicing with intention, for it to be effective.

- Start where you are, even if it is just 10 minutes per day, and practice daily. Then, build on it from there as you improve your skill and see the benefits show up in your life.

- Don’t expect dramatic results in a week or two, or even four. Depending on your current skill level, it may take 8 or 12 weeks or more to get the results you want. But during that time, you should feel gradual improvements in the way you think and feel. Be mindful and observe the results you are getting with your current effort and adjust your practice intensity accordingly.
Mindfulness is also associated with higher levels of positive emotions and lower levels of negative affect. Positive affect is associated with increased enjoyment and performance in sport. Negative emotions can decrease performance and contribute to overtraining and burnout. This reduction of negative emotions and increase in positive ones is a nice side effect of mindfulness practice.

Mindfulness can help with pain tolerance by decreasing pain sensitivity. Decreased pain sensitivity can allow more of the athlete’s physical and emotional resources to be dedicated to outperforming his or her competition rather than managing his or her discomfort.

**Suggested Reading**

Gardner and Moore, “Mindfulness and Acceptance Models in Sport Psychology.”

Marks, “The Buddha’s Extra Scoop.”

Mumford, *The Mindful Athlete*.

**Questions to Consider**

1. Describe how each component of mindfulness (paying attention, on purpose, in the present moment, without judgement) is critical to sport performance.

2. What is the difference between mindfully observing an emotion, letting it go, and refocusing on the task versus ignoring or blocking out the emotion?
Lecture 5

When Positive Thinking Doesn’t Work

This lecture will introduce some ideas that may surprise you: Your mind is not your friend; your mind is built for survival, above all else to protect you from harm; and what hurts you most is what you care the most about, so in an unfortunate way, your desire to self-protect decreases your quality of life and performance. You have to train yourself to get distance from your thoughts, look at them, and ask if each thought moves you in the direction you want to go. If it does, great. If it doesn’t, then you have to let it go.
Cognitive Defusion

- It isn’t what we think that matters, but how much we invest in it. From Acceptance and Commitment Therapy (ACT) comes the concept of cognitive fusion. Simply stated, fusion means that our thoughts dominate our behavior. We are inseparable from our thoughts. What they say is our reality. We treat the thoughts as if they are exactly what our mind says they are. We are fused with what we think.

- But this isn’t good. We all have thoughts that aren’t true or helpful. So, we need cognitive defusion—separating, detaching, or distancing from them. We have to step back and see thoughts for what they are, which is nothing more than words or pictures.

- But this is very difficult. When we are born, we live in the world of direct experience. We just use our five senses: what we see, hear, touch, taste, and smell. But as we get older, we learn how to think, and we spend more and more time in this internal world of language that has varying degrees of reality to it.

- Fusion means that we’re stuck in the world of language at the expense of the world of experience. Cognitive defusion is like mindfulness of thinking, unhooking us from the language of thoughts back into the world of direct experience.

- The purpose of defusion is not to control or change your thoughts but to get distance from them so that you can fully engage the world of experience, which facilitates effective action. You’ll probably feel better, too—but that’s not the goal.

- When fused, thoughts seem like the absolute truth. They can feel like a command you have to obey or rule you have to follow or something you just know. You just respond to it automatically without question. The thought can feel like a threat that you have to get rid of as soon as possible, and you experience it as if it is right here, right now—even though it’s often about the past or the future.
These fused thoughts are experienced as something very important that requires all of your attention. This is why when people say “don’t think about that” or encourage you to “just think positively,” you can’t. These thoughts become something that you won’t let go of, even if they worsen your performance and your life.

On the other hand, in a state of defusion, you see thoughts for what they really are: experiences inside your head, not out in the real world. Sometimes they may reflect a truth in the real world, but they often do not.

Defusion is a state of relating to the thought in a particular way, where you recognize that it may or may not be true. Thoughts are not a command or rule you have to follow, just an idea. As a result, thoughts are not a threat to you, and in a state of defusion, you feel this.

The thought is not something happening to you in the physical world. It is just words or pictures inside your head, and you have distance from the content of those words and pictures. Thoughts may or may not be important. In a state of defusion, you can make a choice and decide how much attention you want to pay to a thought. Thoughts, ultimately, can be allowed to come and go on their own, without any need for you to hold onto them or push them away.

**Workability**

Get out of the mindset of positive thinking versus negative thinking and settle into the idea of the workability of thoughts. The entire ACT model rests on this idea. It is at the heart of every ACT intervention, which is not to make you feel better. Rather, it is to help you live a rich, full, and meaningful life.

The question to ask of each fused thought is this: Does this thought lead me closer to or farther from a rich, full, and
meaningful life? What is the function and end result of thinking that thought? That is how we judge it—not if it is true or false. Does it help or hurt us? Then, only attach and interact with the thoughts that help.

**The Value of Negative Thinking**

- When a turtle gets scared, it retreats into its shell. It’s a survival instinct, and it seems that each animal has its own unique kind that has enabled it to survive as a species. The survival instinct of humans is that we worry.

- Our mind scans our environment, constantly looking for danger—for something to warn us about. If you go down a dark alley late at night, you think about who might be there to rob you. You are not afraid of the dark; you are afraid of what you think might be in the dark. Your mind warns you of what could go wrong, not necessarily what is wrong.
Most of the time, you can acknowledge the danger or threat, address it, and move on. We know that airplanes crash, but we recognize the safety, defuse from that worry, and fly anyway. Or we don’t defuse, have fear, and take the bus.

All the time, the mind scans the environment to warn you—and it works. It keeps you alive and safe. You can’t be taught to stop negative thinking. It’s your survival instinct, and those thoughts won’t stop. It’s how you respond to those thoughts that matters.

When our survival instinct of negative thinking comes up to warn us of danger, we can defuse from it and consider the usefulness of the thought. If it is helpful, then act on it. If it is not, let it go and behave in a way that brings you closer to what you really want, regardless of what you think.

Your worry means that you care. We don’t worry about things we don’t care about. When we care deeply about something—such as another person or a sport or career—we give it the power to hurt us. When we care and invest, failure and disappointment hurt. And because our mind’s job is to warn us of danger, caring about something creates danger.

This is often the most consistent, dependable truth about our negative thinking. It is a sign that we are in the right place, doing something we value. Rather than getting caught up in the content of the thoughts, try to see that the purpose of them is protection from disappointment—a sign that this matters to you very much.

A reason to not force positive thinking is because it’s not realistic. You know that you can lose or have a bad performance. Your mind isn’t going to believe some overly positive spin. Acknowledge that the thought—the threat—is there. You can’t block it out or act like it doesn’t exist.
Defusion Exercises

- There are many interventions to help performers get distance from their thoughts and experience the place where their thoughts do not control their actions. These can be used whenever an athlete is too close to a thought, interfering with his or her performance—or you, if thinking blocks you from your valued living.

- We tend to get fused in these areas: rigid rules about life and sports that have to be followed; reasons why change is impossible or impractical, often preventing the attempt; judgements, which can often be helpful and necessary as we navigate the world but are problematic when we are fused with evaluations; the past or future, which involves ruminating about past mistakes or worrying about the future; and self-descriptions that can make change difficult.

- Defusion exercises are not techniques as much as they are a process. They are a way of teaching performers how to interact differently with their internal experiences. They aren’t something that automatically unhooks you and then you’re free to go—
because the next thought can come right in and hook you again. It is a way of teaching athletes to interact with their thinking differently, continually, not just when we need it.

- One of the easiest ways to change your perspective and get distance is to label your experience. Take a moment to identify one of your negative, self-judgmental thoughts. Put it in a short form of “I am X,” such as “I am not good enough” or “I am a failure.” Then, let yourself fuse with it for a few moments. Really get caught up in it and feel what you feel when you believe it. Then, put this phrase in front of it: “I’m having the thought that...,” such as “I am having the thought that I’m not good enough.” Do this one more time, this time adding this: “I notice I’m having the thought that ...,” such as “I notice I’m having the thought that I am a failure.”

- Do you feel the distance from the thought? Labeling it as an experience, rather than being in the thought, can give you that mindful observation, and that makes it easier to choose your reaction to it. You can do this with emotions, too: “I notice I am having the feeling of anxiety.”

- The idea of defusion is that our thoughts do not determine our actions. We like it when our thoughts, feelings, and actions all go together. But our thoughts are in fact independent of our actions.

- The essence of cognitive defusion is to experience our thoughts as just thoughts and get distance from them, when investing in them moves us away from behaving in a valued direction. The good news is that you already do this all the time. You don’t act on every thought that has ever crossed your mind or on every urge or emotion you have ever felt. You defuse from these thoughts and feelings all the time.

- You already act in a valued way independent of what you think and feel dozens of times every day—just at the moment the
reasons such as the law or severe consequences motivate you to do so.

- But the fact remains that your actions are independent. We want to cultivate this independence. Mindful awareness of both our thoughts and emotions is the first step to learning how to best interact with them. Once aware, we can then look at their workability, and if they are not working for us, we must learn to peacefully accept them as they are and move forward with them.

**Suggested Reading**

Hayes, Strosahl, and Wilson, *Acceptance and Commitment Therapy*.

**Questions to Consider**

1. What makes some thoughts more difficult to let go of than others? Which negative thoughts do you stay most fused with? Why?
2. When might some athletes need to defuse from positive thoughts?
We all want to feel good, but that isn’t realistic and can create problems. We need to learn to accept negative emotions, live with them, and perform with them as part of the experience, without becoming overly attached to them, focused on them, or fighting with them. Then, they are distractions. The focus of this lecture is on acceptance.
Acceptance and Control

- A 2014 study found that there are four basic, irreducible emotions. Certainly, we experience many more, but they all evolved from these four basic, biological emotions that were identified across many cultures. Only one of them is positive: happiness. The other three are sadness, anger, and fear. So, if you want or expect to be happy and positive all the time, you are cutting out about 75 percent of what it means to be human. The odds of being able to avoid or fix the other three are not great. We need to learn to accept them.

- This doesn’t mean that you should just accept every bad thing in your life. If control is working—if you can reduce your anxiety or manage your thoughts and feelings and that helps move you in a direction you want to go—then do that. But if it’s not working, if you cannot change what is or if the struggle is hurting your performance, then you have to accept that there are things that we do not like. You have to let them be there and invest your committed attention into what you value most anyway.

- There is a willingness to feel things as they are. We don’t have to like it, but we have to be willing to feel it. But we don’t like it. We don’t like pain and things that don’t feel good. And we naturally want to avoid or change these unpleasant experiences. We obsess about them or push them away.

- It’s called experiential avoidance: trying to avoid, get rid of, suppress, change, or escape unwanted private experiences. We do this because it works well. As humans, we are very good at problem solving. Over and over, all day, every day, problems arise and we fix them.

- Our mind is like a problem-solving machine, and it works well in the physical world. But it doesn’t work well in our mind, which takes that same approach to our internal experiences and in the process can ruin our performance and increase our suffering.
Consider this example: A player is criticized by a coach in front of his teammates for not hustling to the ball. As a result, embarrassment shows up. The player doesn’t like this feeling. So, to get rid of it, he adopts an “I don’t care” attitude. In the short term, this works. The feelings of detachment ease the embarrassment. But at what cost? Now detached, he lacks focus and energy. He doesn’t make good use of practice time and isn’t progressing toward his goals, and the lack of effort shows up in his play, looking even worse in the coach’s eyes.

Accepting these feelings does not mean tolerating them—continuing to be distressed and just moving forward anyway. This is still experiential avoidance because the struggle with the feelings is still there. If there is still attention to them, a hope that they will go away, an active unwanting, or a
resistance, then this isn’t accepting. And if you are “accepting” just so that they will go away, that definitely isn’t acceptance.

- Imagine that you are with your family and they are tolerating you, hoping that you will soon go away and checking to see if you’ve left yet—versus them totally accepting you with all your quirks and flaws and willing to have you around for as long as you want to stay.

- There is a bit of peace that comes with acceptance. You don’t have to like it, approve of it, agree with it, or think it’s fair. But accepting it does mean that you won’t fight with it and resist it either. And you will find that the more you are unwilling to feel or experience something, the more you will feel, think, or experience it, because if your attention is on getting rid of it, then your attention is on it.

- If experiential avoidance works, use it. We are always approaching experiences and strategies from a workability perspective. If relaxation reduces your anxiety and you don’t have to be nervous, then get rid of it. But do not persist in the struggle when control is not the solution.

Creative Hopelessness

- When working with a performer to realize that it is the struggle for control—not the thoughts or feelings or urges themselves—that is the problem, the next step is to enhance that experience. The Acceptance and Commitment Therapy and Mindfulness-Acceptance-Commitment approaches are not ways to give you insight or think differently. These are experiential interventions, and the goal of a sport psychologist is to lead the athlete through a series of exercises so that he or she can experience a different reality or better way of doing things. Just knowing that control doesn’t work doesn’t usually help.
We can persist in unhelpful behavior for quite some time, maybe because at least we feel like we are doing something, or we keep hope alive. Either way, for performers to progress, they have to feel that what they are doing now isn’t working and won’t get them where they want to go.

Creative hopelessness is what’s needed. The purpose is to highlight the ineffectiveness and specific costs of experiential avoidance. We want the athlete to feel hopeless in the struggle to control thoughts and feelings so that he or she can wholeheartedly give up that agenda. It is creative in the sense that once the agenda of control is gone, the athlete is open to alternative ways of handling his or her situation. There is room for mindfulness and acceptance, the opposite of control.

All creative hopelessness interventions are built around three simple questions: What have you tried? How has it worked? What has it cost you? What’s great about this is that the sport psychologist doesn’t have to convince the athlete of anything.

In fact, the psychologist is trying to convince the athlete, then the psychologist is undermining the process, because he or she knows that something isn’t working. It’s why the athlete has come to the psychologist’s office. If it is working, then there is no reason to stop. But if it isn’t, then the athlete has to discover experientially for him- or herself where it isn’t and what the costs are. The psychologist’s role is to just ask the questions that help the athlete see the truth.

Acceptance Exercises

The following is an intervention that illustrates how little control over our thoughts, feelings, and experiences we actually have:

› Take a moment to remember where you work. Then, delete that memory; get rid of it completely. Did you do that?
Next, make your right leg go completely numb—so numb that if it were to be chopped off, you wouldn’t feel a thing. Can you do that?

Do not think, even for a second, about ice cream—not how much you like it or don’t care about it, not your favorite flavor, not how cold it is. Don’t even check in to be sure you’re not thinking about it, because that would be thinking about it. How’s it going?

Let’s say that you are on one of those dunk tanks, sitting above a tank of ravenous sharks and hooked up to a biofeedback machine. As long as you stay completely calm, you’re fine. But if you show even the tiniest hint of anxiety, the bench will drop you into the tank. It’s foolproof and you can’t beat the machine. How long would you last?

Let’s say that you would get a billion dollars if you fell genuinely and hopelessly in love with the next stranger you passed on the street. You could say that you love him or her, kiss and hug him or her, and even marry him or her. We control our actions. But even for a billion dollars, could you control your emotion and fall in true love instantly? No.

And we can’t control our anxiety. We can’t control what we think about, what we feel or don’t feel physically, or what we remember or forget. So, let’s learn to accept these things and perform with them.

Acceptance is very different than dealing with it. It involves a combination of things that center around exactly where you put your attention and energy into. This is critical for performance. To be our best, we have to be focused on the moment, immersed in our performance activity. We can’t be struggling to change what
we think and feel. When we willingly feel the painful emotions in service of our performance-related values, that is acceptance.

- The following is a language tip that will also facilitate acceptance:
  - We often say things like this: “I want to do X, but it’s hard.” “I want to shoot the ball, but I’m afraid I’ll miss.” “I want to work out, but I’m tired.” The “but” discounts what comes before it, placing an emphasis on what follows. It sets the two things up as if they can’t coexist. The latter becomes the barrier and reason why you can’t do the former.
  - However, observe what happens when we change the “but” to an “and”: “I want to do X, and it’s hard.” “I want to shoot the ball, and I’m afraid I’ll miss.” “I want to work out, and I’m tired.”

- Do you see how that simple change of a word opens up room for both your values and your unpleasant experiences? It is from this place of acceptance that the performer can start to take effective action steps to bring him or her closer to his or her goals. With mindfulness and acceptance, he or she can take flexible action, adapting to the challenges of each situation, persisting and changing behavior as needed in pursuit of values.

**Suggested Reading**

Harris, ACT Made Simple.

**Questions to Consider**

1. Think of a behavior that you struggle to persist in. What negative emotion do you need to accept to persevere in that activity?
2. The pursuit of excellence is not purely positive, no matter how much the goal is desired or valued. List as many negative experiences the athlete must accept in his or her training process to be successful as you can.
Commitment is not a try. It is not an attempt or a best effort. It’s not “I will—until it gets too hard, or I don’t feel like it anymore, or it doesn’t work for me anymore.” It is “I will—no matter what.” And in the Mindfulness-Acceptance-Commitment (MAC) model for performance enhancement, or in the Acceptance and Commitment Therapy approach to living a valued life, this committed action stage is where all the mindfulness and acceptance techniques have been leading, enabling you to move you in a valued direction under any circumstances.
There is a real cost and sacrifice to achieving our goals and living our values. Pain, difficulty, setbacks, fear, and adversity are all part of the process. They are necessary parts that we have to endure en route to achievement.

You might think of commitment as the psychological construct that benefits from the use of mindfulness and acceptance skills so that you behaviorally persevere in a valued direction. And that’s another big point to make about commitment. It isn’t a promise or a feeling. It’s a behavior.

When working with performers, after establishing their values and developing mindfulness and acceptance skills to interact differently with their internal experiences, it’s time to get specific about the behaviors that both help and hurt performance. Everything we do moves us closer to or farther from our values and goals.

We look at the athletes’ behaviors in both practice and competition, as well as interactions with teammates and the coaching staff, to determine if what they are doing matches up with their values. When it doesn’t, we define how to change and then commit to acting in that way consistently, especially when they don’t feel like it.

Commitment should not be confused with motivation. Sometimes people think of commitment as a strong want. “I want to win a championship; I’m committed to doing whatever it takes.” They’ll say this in an emotional moment, and maybe at that moment they mean it. They feel it and are excited, and they confuse that with commitment.

Commitment is seen when you consistently demonstrate the specific behaviors and activities that are likely to directly result in optimal performance. And because it is not emotional,
commitment doesn’t waver in the heat of a moment or during a tough workout.

- Ultimately, commitment comes down to a choice. Do we let emotions drive our behavior or our values? When the two conflict—and they will—only one can be satisfied. Commitment is the behavioral follow-through on our values.

- To the performer, we ask this very important question: Are you ready to do what is necessary to maximize your performance and pursue your personal performance values and goals? The quick answer is usually yes, but then we ask a follow-up question: Are you fully aware and open to accept all the experiences that will happen during this process—the good and the bad, the pleasant and the painful? Then we discuss the things the performer doesn’t like and doesn’t want to do and how he or she is going to handle that.

- This is a step that cannot be taken lightly. It’s a reality check. Now is not the time to think about how awesome it will be when we achieve what we’re committing to. At this point, we need to look at the daily grind—the unpleasantness of deliberate practice—realizing that there is a faithfulness to what we’re about to do and bringing ourselves to our performance tasks consistently and wholeheartedly.

- A choice has to be made. You cannot persevere and do what it takes to be the best and do it comfortably. You can’t do it well and struggle to control your thoughts, feelings, memories, urges, or physical sensations. When you engage in that struggle, your progress to move ahead stops.

- Your commitment is what determines your potential. In other words, how much unpleasantness in service of your goal that you’re willing to feel as you act in a committed way determines how far you’ll go. Deliberate practice plays a critical role in skill development. The more focused and frequent your practice, the more your skills develop.
Experts dedicate an enormous amount of time to deliberate practice over many years. They have a history of behaving in a highly committed way. It’s not that it’s easier for them. They’re just willing to feel and sacrifice more and engage in valued practice activities to develop their skills—no matter what. How committed you are, where you set the bar at willingness, determines how far you will get. Where do you draw the line? The more you are willing to accept, the higher the commitment and the better the results.

Authors of the MAC approach to enhancing human performance, Frank Gardner and Zella Moore, describe a commitment to performance values exercise that goes like this. After identifying a specific value to focus on, such as being a good teammate, the consultant will help the athlete set both long- and short-term behavioral goals that reflect that value.

In the short term, for example, better communication between the athlete and teammates and more fun on and off the court could be the goals, and in the long term, this would develop more solid relationships and ultimately result in a better team.
Then, the most critical part is to identify the behaviors that have to be added or changed to achieve the performance value. In this example, complaining less about teammates, reaching out and being more social with teammates on and off the court, and making a conscious effort to be upbeat at practice might be identified.

At this point, the consultant will remind the athlete to consider what might get in the way and how to use the previously learned mindfulness and acceptance skills to be the most effective. This athlete may identify her anger and frustration with teammates when they make a mistake, previously “causing” her to yell or be critical.

It is often emotions, thoughts, and discomfort that get us off track. And this is when we remind the performer that thoughts and emotions can’t make us do anything. We make a choice to act on them in a particular way. The commitment, then, is to let them pass, refocus, and act on what moves the athlete closer to her valued goals.

From a MAC perspective, commitment isn’t a stage or skill in and of itself. The mindfulness, acceptance, being in touch with values, willingness, and commitment are all done simultaneously as part of the performance process, interacting with each other to help the athlete move forward in a positive direction. There are other factors, too.

### Studying Commitment

The best sport goals are moderate—challenging but realistic—and your commitment moderates this relationship. When commitment is high, highly-difficult goals are associated with the best results. Commitment doesn’t matter as much with easy goals. You don’t get high performance with easy goals, regardless of your commitment level. But commitment has an increasingly greater effect on performance as the task difficulty increases.
So, goal setting alone isn’t sufficient. Commitment influences the results, and this is because of our tendency to want to escape the unpleasant experiences that occur with goal difficulty. Commitment seems to buffer the discomfort, allowing us to feel uncomfortable and persevere anyway.

A study done in 2010 with more than 300 U.S.A. Gymnastics female athletes expanded on an earlier model predicting what contributes to an athlete’s sport commitment. This model differentiates psychological commitment, which is an emotional desire and resolve to continue participation, from behavioral commitment, which is effort, intensity, and perseverance in action.

The psychological and behavioral commitments are independent. It’s only behavioral actions that get results on the playing field. For this reason, it’s the behavioral commitment that coaches and parents are most concerned about. But despite this independence, what we think and feel can influence action. So, we want to look at the factors that contribute to psychological commitment, as it can have an impact on behavioral commitment.
Enjoyment and participation in team activities such as travel, team affiliation, and achieving goals are strong predictors of increased commitment. The more fun you are having and the more benefits you perceive you’re getting, the more committed you are likely to be. So, when choosing an activity, be sure you find the fun in it; connecting with the people involved and tracking your improvements can strengthen your resolve to continue.

Having attractive alternatives to your activity significantly predicts less commitment. In other words, commitment is stronger when you have fewer options to choose from.

Personal investments and perceived costs also significantly affect psychological commitment. Personal investments are factors such as time, effort, and energy that you put into the activity that would be lost if you discontinued it. The more you invest, the more committed you are to continue. Perceived costs are the downsides of participation, such as time constraints, injury, missing out on social activities, and the pressures of competition. These are the costs of playing and have the opposite effect, undermining sport commitment.

Personal investments and perceived costs not only significantly contribute to psychological commitment, which is believed to somewhat influence behavioral commitment, but they also are the only two factors that directly predict behavioral commitment—the construct of greatest importance. The act of staying engaged and investing in your sport while minimizing the negatives of participating should have a strong effect on your commitment level.

Filtering the factors of investments and costs through your values and asking yourself whether it is worth it will strongly and directly increase your committed actions.

In the gymnastics study, personal investments and perceived costs only explained 8 percent of the variance in training behaviors. That means that 92 percent of an athlete’s committed
behavioral action is due to other things. On the other hand, 74 percent of the psychological commitment was explained by the factors previously described. So, we understand much of where that psychological commitment comes from but much less about what contributes to actually taking action.

- Factors such as social constraints, social support, and perceived competence inconsistently predict commitment in the research, but in this 2010 study were not significant. They remain included in the Sport Commitment Model to encourage further study.

- With this and other studies, including their own in-depth research series, the original authors of the 1993 Sport Commitment Model revised it in 2013. The result is a cleaner, more specific, and accurate model with some new and interesting constructs.

- They more narrowly define the different types of commitment as either enthusiastic (the “I want to” kind) or constrained (the “I have to” kind). In this updated model, researchers found that sport enjoyment continues to be a strong predictor of commitment.
In this revision, the authors make an important clarification between “other priorities” and “involvement alternatives.” If there are attractive or pressing alternatives that directly conflict with sport participation, then these priorities will lessen sport commitment. But if there isn’t a direct conflict, there is no effect.

Similarly, the personal investments put into sport, such as time, effort, and energy—the investments that cannot be recovered if participation in sport is discontinued—strengthen commitment if players actually see that personal investment as a loss. But if players don’t see it as a sacrifice, then such investments have no effect on commitment. So, there is this qualifying effect: Investment of time, effort, and energy will not affect the level of everyone’s commitment the same.

This qualifying effect also extends to social constraints, the expectations of others that create feelings of obligation to participate in sport. This can strengthen commitment to sport in an athlete who doesn’t feel as if he or she has control over whether or not to participate.

Social support did make the cut in this model. At least 80 percent of each team interviewed cited social support as a strengthening factor in their commitment. And a new source of commitment, the desire to excel, was found to be a strong factor.

**Suggested Reading**
Scanlan, Chow, Sousa, Scanlan, and Knifsend, “The Development of the Sport Commitment Questionnaire-2.”
Scanlan, Russell, Wilson, and Scanlan, “Project on Elite Athlete Commitment (PEAK).”

**Questions to Consider**
1. How does acceptance enhance commitment?
2. Can an athlete be overly committed?
Coaches and bosses want to know how to motivate their players and employees to get the most out of them. And as you will learn in this lecture, the more internally motivated we can be, the better. Meeting our needs for autonomy, competence, and relatedness will increase our motivation, and when we meet these needs, our performance improves. We want to support autonomy in others in the way we coach and encourage them, building them up in these psychological needs. It isn’t always the easiest or most natural thing to do, but it is worth the effort.
Self-Determination Theory

- Self-determination theory is a meta-theory comprised of five mini-theories. It starts with the idea that individuals have a natural tendency for growth and development. There is a self-motivation to seek challenges and new experiences to master in order to grow. That internal desire is called intrinsic motivation, and it is that activating force that we want to stimulate and encourage for maximal growth.

- To do so, there are three psychological needs that, when met, will produce a higher quality of motivation, better psychological well-being, and greater investment and engagement in adaptive behavior. Basic psychological needs theory, the first of the five mini-theories, identifies autonomy, competence, and relatedness as the three.
  - Autonomy is the need to experience the activities as a personal choice.
  - Competence is the need to feel effective and achieve outcomes that are meaningful to you. Competence also has to do with social influence.
  - Relatedness is the need to feel close to, connected to, and cared for by important others.

- The strength of these needs may vary from person to person, but the belief is that these needs are innate, universal, and necessary for optimal human development. When these needs are met, athletes will be active participants and persist through adversity in training and competition. They will be in more positive physical and psychological health and will perform better.

- When the opposite happens and these needs are frustrated—athletes feel that a lack of choice or personal input is ignored, experience repeated failure or attention is called to those failures, or feel rejected and isolated—then burnout and negative emotions, as well as subpar performance, can occur.
Cognitive evaluation theory is the second mini-theory and suggests that activities that meet the need for the individual’s own standards for competence and autonomy will enhance intrinsic motivation. Note that competence and autonomy have to be experienced together; just one is not sufficient.

The third mini-theory, organismic integration theory, proposes that there are multiple reasons for individuals to act in a particular way—so it isn’t just intrinsic motivation that matters. Extrinsic factors outside of the individual combine with the internal to produce a total motivating force within the individual.

Goal contents theory, the most recent addition to self-determination theory, also distinguishes between intrinsic and extrinsic goals. Internal goals—such as growth, affiliation, contribution to the community, and maintenance of physical health—are supportive of basic need satisfaction and tend to be focused on developing personal interests. They’re inherently satisfying to pursue. Extrinsic goals—such as financial success, attractiveness or image, and social recognition—focus on external validations of worth and are less supportive, and they can even undermine the basic psychological needs.

There is a growing body of research that supports the idea that intrinsic life goals are better associated with an individual’s health and adjustment compared to extrinsic life goals.

We can start to see motivation on a continuum, with amotivation on one extreme and intrinsic motivation on the other. In between are four forms of extrinsic motivation that vary according to regulation style, or driving force. Amotivation doesn’t have a driving force; you aren’t motivated, and you lack energy. This often results from feelings of incompetence and uncontrollability and is frequently linked to dropout.

The next step up from amotivation is the first form of extrinsic motivation. It’s called external regulation. This is when you’re doing something but only because you feel controlled by
factors outside yourself. Athletes do not persist long this way. When these external controlling factors disappear, so does the targeted behavior.

- In the next three levels of extrinsic motivation, we start to see some ownership and increasing levels of autonomy. Introjected regulation describes a partial internalization of drive. What defines success is set outside the athlete and then adopted internally. It’s still external control because the focus is on getting approval or achieving self-worth outside of oneself, depending on the behavior. It is a motivator and it can help you persist, but it generally doesn’t last.

- We start to move into autonomous motivation with identified regulation. And with autonomous regulation comes higher effort, persistence through challenges, and better performance. Here the behavior is fueled by the contributions the activity makes to our own personal goals and values. But it is the usefulness of the activity, not the interest in the activity itself, that guides the behavior. This isn’t bad, and it’s often necessary. We perform activities out of choice without necessarily enjoying them.

- Integrated regulation, the most autonomous form of extrinsic motivation, is fully internalized and internal motivation in that the behaviors are fully coordinated and in agreement with personal values and needs. There is still a distinction from intrinsic motivation in that the activity is still done to achieve something as opposed to the sheer pleasure or enjoyment of it. When integrated, sport or the performance activity is a part of who the person is.

- In the real world, we might not that often engage in activities solely because of the enjoyment and the opportunity to learn and personally develop, but intrinsic motivation is the highest degree or strongest level of self-determined motivation. As coaches, parents, and supervisors who want to help others get motivated, we want to look at these four kinds of extrinsic motivation, because we are external sources, and see what
behaviors will increase or decrease the autonomy, competence, and relatedness on the part of the people we are trying to motivate so that we can help maximize their internal drive.

- The fifth mini-theory of self-determination theory, causality orientations theory, states that everyone has varied combined levels of autonomy orientation, controlled orientation, and impersonal orientation inside of them.
  - Autonomy orientation refers to internal and well-integrated external motivation.
  - Controlled orientation is being more motivated by internal and external controls, constraints, and directives.
  - Impersonal orientation is a tendency for people to believe that they are incompetent and just go with the flow or be passive and not act intentionally.

- An autonomous orientation is predictive of effective functioning, adaptive behavior, and good psychological health. Control and impersonal orientations show the opposite.

- This autonomy-versus-control distinction is an important one. When self-determined people experience more excitement,
interest, and confidence, it increases their persistence. As you
go through the extrinsic motivation continuum, performance
improves as you become increasingly internalized and self-
regulated.

- Autonomous motivation predicts better well-being and vitality,
  higher levels of flow, and greater effort, interest, persistence,
  and even sportsmanship. Controlling types of motivation,
  however, are associated with burnout, low levels of flow,
  dropout, aggression, and acceptance of cheating.

- If you want to maximize motivation, be careful: More isn’t
  necessarily better. Motivation doesn’t seem to be additive. For
  example, if you’re intrinsically motivated to do something, if you
  add an additional reward on top of it, such as a bonus, that doesn’t
  mean that you will be even more motivated. It is more about
  the overall sum quality of the motivation and how all the factors
  interact. In general, the more purely intrinsic it is, the better.

Self-Determination Theory in Practice

- As a coach or boss or parent, you can influence the environment
  in which your athlete, subordinate, or child operates, increasing
  or decreasing his or her motivation and influencing performance.
  Autonomy support—the reinforcement of choice, initiation,
  and understanding while simultaneously minimizing the need
  to perform and act in a dictated way—not only promotes
  autonomy but can satisfy the other two needs of competence
  and relatedness, too. An autonomy-supportive coach offers
  emotional support, advice, and guidance to help athletes
  develop responsibility and take ownership of their performance.

- There are a few reasons why it is difficult to coach or parent or
  supervise in a way that is consistent with self-determination theory.

- Parenting styles in the 1950s and 1960s used a lot of rewards and
  punishments to shape behaviors. Coaches did this with athletes
then, too. And coaches today tend to coach the way they were coached. Growth and change are difficult, and it can take a coach out of his comfort zone, requiring a lot of time, patience, reflection, and intentional practice to overcome the habit of a controlling coaching style.

- And in the short term, some of those controlling behaviors can work, and the coach gets immediate results but isn’t tuned into the long-term consequences, such as an overall worsening of motivation, mood, and dedication. Coaches are the dominant role in an unequal relationship with the athlete, and this can encourage a more controlling orientation.

- Loud behaviors—such as yelling from the sideline, getting mad at refs, barking orders, and being too busy to talk to the players on the sideline—seem to communicate that the coach has structure, demands, and expectations that need to get met to push the team to better performances.

- Alternatively, autonomy supporting can be misinterpreted as hands-off and lazy. Sometimes if you ask athletes questions about what they think they should do rather than telling them, they might think you don’t know. But asking questions
is coaching the player to think for him- or herself, improving independence and decision making. Without giving constant direction, a coach may be misperceived as incompetent.

- What the public considers good and bad coaching may not line up with what science and research tells us is most beneficial. Coaching may have to be countercultural—and that’s difficult. On the other hand, sometimes athletes prefer to be controlled, so we have to be sensitive to individual differences.

- This relationship isn’t one-directional. Coaches respond to the behavior of athletes as well. Not every athlete is going to become wonderfully motivated and independent. Some are less cooperative than others, and this challenges a coach, who is responsible for moving the team forward. It’s easiest to try to control the ones lagging behind and force the motivation on them. Unfortunately, that will only serve to further undermine self-determined motivation, making them less motivated, leading to more controlling behaviors to fix it in a downward spiral.

**Suggested Reading**


Papaioannou and Hackfort, eds., *Routledge Companion to Sport & Exercise Psychology*, p. 67–82.

**Questions to Consider**

1. Which of the five mini-theories of self-determination theory do you think has the greatest impact on motivation? Why?

2. Which psychological need do you feel is most influential in your motivation: autonomy, competence, or relatedness? How can you specifically improve this need in your performance area?
Imagery, a mental training skill many elite athletes use, is a cognitive process that activates the same brain areas that are also involved with the unconscious planning and execution of movements. Imagery activates neural and behavioral responses similar to the genuine experience. Through the use of brain-imaging techniques, we know that imagining yourself make an action mirrors the neural pattern found during the actual execution of that same movement. As a result, imagery is a mental technique that performers use to prepare for action, rehearsing and training their thoughts, feelings, and behaviors for peak performances.
Imagery

- Imagery is a skill that can be learned and improved with practice. And while it is frequently used to improve physical performance, tasks that also include a cognitive component may be even more susceptible to improvement through imagery.

- Sometimes called visualization, as this is a large component of the experience, athletes will see themselves from one of two perspectives. One is from a first-person perspective, called internal visual imagery—that is, seeing what he or she would see if he or she were actually performing. The other is external visual imagery, a third-person perspective in which the performer is watching the action from outside his or her own body. In this image, individuals view their performance from multiple angles to improve their processing of relevant details.

- You may have heard imagery referred to as visualization, but that doesn’t quite capture it. Visualizing is certainly a part of it, but the visual image alone is too limiting. Kinesthetic, or feeling, imagery is also needed.

- Kinesthetic imagery includes calling to mind the physical sensations, such as the muscle tension and rapid heart rate, you might feel before competition. It might also include an awareness of your body’s movement in execution or positioning in space. Feeling pain and fatigue are common components of kinesthetic imagery that are incorporated with endurance athletes or with patients rehabilitating from an injury. Emotions are also an important component of feeling an image.

- Performers have to use all of their senses in imagery. And while visualizing your performance has some link to the motor execution of that action, through the use of functional MRI, we find that kinesthetic imagery results in greater activation of motor-processing brain structures than visual imagery alone.
What makes imagery so effective, and how does it help performance? In short, it is the degree of neural overlap between imagery and the preparation and production of actual movements called functional equivalence. Not only are similar brain activities noted when a behavior is both imagined and performed, but recorded EMG activity showed similar responses in muscles when performing and imagining tasks.

In one study, greater EMG activity in the muscles was noted when greater dumbbell weight was imagined being lifted. Researchers in a study from 2009 found that participants increased their one-rep maximum on a bicep-curl strength task about equally when comparing imagery alone to physical practice alone. This means that some participants got physically stronger without lifting weights.

Imagery affects more than muscles, producing cardiovascular and respiratory responses. If you imagine that stressful meeting tomorrow or that big tournament this weekend, your heart rate increases and your breathing becomes short and shallow, just like it does in real life.

This functional equivalence extends to the neural activity that occurs when you see, hear, and smell things in visual, auditory, and olfactory imagery. The same neural process that are activated when you perceive things with your senses are recreated when you imagine them.

The PETTLEP Model

When we physically learn to do something, the brain changes. Neural connections are strengthened, connections are added or removed, and new cells are formed. And we now know that the brain is activated in very similar ways when imagining motor movements.
So, the brain changes that occur when you learn a new skill physically are also occurring when you imagine them, resulting in real physical learning and development of that imagined skill. This learning can occur even in the absence of physical practice—but it can’t replace your training.

Combining physical practice with imagery consistently yields superior performance results than practice alone. In some cases, alternating physical practice with imagery alone resulted in similar performance results, despite a 50-percent reduction in physical training.

To get the best effect, you want to maximize the neural overlap between your images and your physical performance. The approach suggested by the PETTLEP model of imagery does this. Each of the seven elements of this acronym intends to amplify the functional equivalence between imagery and motor performance.

The P stands for the physical nature of imagery. Imagery can be done in a relaxed state, but it is more powerful when you move and rehearse the actual movements. The more physical it can be, the better. So, get your body into position to perform, make the movements, wear the clothes you will be competing in, and hold any equipment specific to the task you are rehearsing.
 › The E, **environment**, refers to where the imagery is performed. Visit the site where you will be performing, taking pictures as needed to remember details, and recreate the location in your mind when you return home.

 › The first T, **task**, defines the content of the image. It should be appropriate to the skill level and preferences of the performer. Imagery is intended to develop real skills; it isn’t a fantasy.

 › The second T is **timing** and refers to the speed of the image. Whenever possible, real-time imagery is preferred because we perform in real time. You may slow an image to focus on a particular detail if needed or when control of the image is difficult and slow motion is needed to correct it. But in general, real time is preferred to enhance the reality of the image.

 › **Learning** is the fifth component of the model. Like task, the learning component takes into account the current skill level of the performer, but adds that the content of the imagery should be adapted over time as the athlete becomes more skilled. Changing the imagery in response to learning keeps the athlete progressing in skills. This not only refers to physical skills, but also psychological states, such as confidence and motivation.

 › The next component is **emotion**. We live life emotionally, and this is particularly true of competitive sport and other performance domains. Therefore, for an image to be realistic, the emotions felt during performance must be recreated. Rehearsing and developing the emotional responses you want to feel during a performance is a great target for imagery use.

 › **Perspective** is the final component and refers to the viewpoint of the performer during imagery. There is not a strong consensus on which perspective is better, either first person or third person. First person may be best when rehearsing attitudes and emotions or when rehearsing strategy. A third-person perspective may be adopted to review form
when executing a technical skill. Athletes report using both and sometimes bouncing between the two.

How to Do Imagery

- The PETTLEP model includes the first two important points of how to do imagery: include physical movement and equipment and do it in the performance environment—or at least recreate the environment the best you can by imagining details, using audio sounds and scents.

- The combination of physical practice and imagery yields the best results, and like physical skills, imagery skills can be developed. At least three times per week is recommended, as one study found significantly better results with three practices over just once weekly.

- Physical practice can be limited by injury, fatigue, or overtraining the body. PETTLEP imagery can be done when the body needs to rest. So, by combining imagery with physical practice, wear and tear on the body can be decreased.

- Many of the studies proving imagery’s effectiveness consist of only 3 to 15 minutes of practice in the whole experiment. Although effective, such a short duration may not maximize the effect, and the authors of a meta-analysis examining this issue concluded that 20 minutes is the optimal duration of imagery practice.

- A big question, with some conflicting recommendations, is whether you should relax before doing imagery. With the PETTLEP model, you probably shouldn’t. Relaxation is often inconsistent with the excited arousal stage of performance and may conflict with the desired realistic emotional component.

- Imagery vividness does not seem to be enhanced when you relax beforehand either. Although if you aren’t able to control
the image or concentrate on what you are doing, some authors suggest that relaxation can help clear out distractions for imagery beginners and help them focus.

- Another thing to avoid when using imagery is negative language. “Don’t turn the ball over” or “don’t make a mistake here” are sport examples. Our brains don’t process the negative language without introducing the very thing we do not want to see or do. Focus on and use words that reflect only what you want to do.

- Controlled research has proven that negative imagery can result in performance deterioration, so you want to be sure you control your imagery to do what you intend it to do. If you accidentally have a negative image, you don’t want to end there. Take the time to correct it and end on a positive image.

- But you don’t want to imagine everything unrealistically perfect either. Imagine great performances under realistic adverse conditions, such as feeling nervous or imagining yourself bouncing back from a mistake to perform in the clutch. These are more helpful scenarios, particularly in practice between competitions.
Before performances, however, keeping your imagery and focus on excellent execution is best.

- Also avoid imagery without a goal. Each imagery practice session should have a specific purpose. There is a triple-code model of imagery that highlights three essential components: the image itself, the somatic or bodily response to the image, and the personal meaning of the image.

- Personal meaning has been shown to create greater EMG activity in the muscles and a greater perception of imagery ability compared to generic imagery scripts. That meaning, or purpose, of the image can be varied.

- In addition to using imagery for motor learning, you can also use imagery to improve your motivation for a particular task or goal by rehearsing the emotions you want to feel in those challenging situations.

- You can practice focused attention, physical arousal, and emotional control. You can review past performances and evaluate your decisions and actions. You can use imagery to enhance strength and flexibility by imagining the growth and lengthening of the muscles during exercise. Research has also found imagery to be effective in healing by imagining the process of physiological healing, or seeing yourself as healthy and fully functioning.

- This isn’t limited to just sport rehabilitation but is used in the effective treatment of cancer and other chronic diseases. Graded motor imagery, for example, is a specific protocol that has been used to lower pain and disability in chronic pain populations.

- The motivation to practice often gets in the way of successful imagery practice. An imagery program takes a lot of time and effort to be successful. It is up to the performer to decide if the gains are worth the investment. It helps to understand the measurable performance improvement that can be had through
the real physiological changes that occur with consistent imagery rehearsal.

- Sometimes, performers can get frustrated with their lack of imagery control or vividness. They may assume that they just are no good at it or get upset with how difficult it is. In this case, it is important to remember that imagery is a skill that can be developed with deliberate practice over time, just like any other skill. Looking at the results it can have, an athlete has to decide if he or she is willing to dedicate him- or herself to practice and be willing to work through the frustration to be successful.

- The most unfortunate scenario is when an athlete falsely concludes that imagery just isn’t helpful when performance doesn’t improve because of a lack of attention to detail in following the PETTLEP model, too-infrequent practice sessions, or shorter-than-optimal duration of practice. Don’t expect results if you don’t pay attention to detail and put in the work. Excellence takes work. Commit to the work.

**Suggested Reading**

Clarey, “Olympians Use Imagery as Mental Training.”
Wright and Smith, “The Effect of PETTLEP Imagery on Strength Performance.”
Wright, Wakefield, and Smith, “Using PETTLEP Imagery to Improve Music Performance.”

**Questions to Consider**

1. Using the PETTLEP model, create an imagery script for a golfer who struggles with anxiety on putts longer than six feet.

2. As a sport psychologist, you believe a gymnast you are working with would greatly benefit from imagery to learn a new skill, but he or she is noncompliant with practice. Why might that be, and how might you encourage him or her?
Confidence can be very powerful. When you believe that you can do something, you pursue it with more vigor, focus, and drive. On the other hand, when you lack confidence, you avoid difficult goals, give less effort, and give up more easily. In this lecture, you will learn how confidence empowers you to be your best and take action as well as how self-talk affects confidence.
Confidence

- We all know confidence when we see it, but it can be more difficult to define. In fact, the literature in sport psychology will often interchangeably use the terms self-confidence and self-efficacy.

- Self-efficacy as a theory was first coined in 1977 by Albert Bandura, who defined it as an individual’s belief in one’s capabilities to organize and execute the courses of action required to get the desired results.

- Sport confidence is the degree of certainty individuals possess about their capability to be successful in sport, so it is more general and focused on the result, as opposed to the abilities necessary to achieve the result, as in self-efficacy.

- Both involve a cognitive process where we make judgements about our ability to accomplish a particular goal. In both we are talking about a self-concept within a goal-striving framework about what we can do—not about attributes we may possess or good feelings about ourselves. Both self-efficacy and sport confidence are goal oriented.

- Self-efficacy beliefs can vary in level, strength, and generality. Self-efficacy level refers to the confidence someone has in his or her ability to perform in various challenging tasks. You generally need a higher level of self-efficacy to believe you can succeed more difficult tasks.

- Self-efficacy strength is the degree of confidence a person has in his or her abilities. We know or believe few things 100 percent.

- Self-efficacy generality refers to how much this set of beliefs can be applied to a range of activities or conditions. One athlete may feel that he or she can succeed in all athletic challenges, another may be confident in racquet sports but not endurance events or ball-handling games, and still another may be confident only in tennis.
Greater beliefs people have in their own capabilities consistently predict improved performance and accomplishment across numerous life situations, including in sports, education, and the workplace.

It’s not so much that beliefs have a direct impact on performance—although they do through their influence on behavior—it’s just that beliefs alone don’t make anything happen.

Efficacy beliefs have powerful indirect effects, too. Your self-efficacy beliefs influence what you choose to do. They influence the goals you choose to pursue, the level of difficulty they are, and the effort you put into achieving them. The higher your belief in your own self-efficacy, the more challenging your goal will be and the more you will persist in the face of adversity.

Commitment rises with self-efficacy. On the flip side, if you lack confidence, you are more likely to avoid the task even if objectively you can do it.
Your self-efficacy beliefs influence how you interpret the world around you and what happens to you. When you are confident, you tend to interpret tasks as challenging rather than threatening, are more optimistic and less likely to expect a negative outcome, and will have fewer negative emotions when performing tasks. That rapid heart rate and jittery feeling can either be excitement that will help you when you’re confident or nervousness that will interfere with performance when self-efficacy is low.

When things do go wrong, confidence serves as a cognitive buffer, limiting the damaging effects of negative self-talk and negative emotions that can follow. For example, when confident individuals fail, they are more likely to attribute it to a lack of effort—something they can control and fix the next time—rather than a shortcoming in their ability. Even if criticized, confident individuals have a better ability to brush off those comments and not take them to heart, whereas those lacking confidence can internalize these beliefs and damage their sense of self.

For these reasons, confidence is a significant factor in performance excellence. So, we better know how to build it. Albert Bandura identified four sources of self-efficacy: mastery experiences, or past accomplishments; vicarious experiences, or modeling; verbal persuasion; and physiological and affective states.

The most powerful of these are the mastery experiences, a person’s perception about what he or she has accomplished in the past. Nothing is more powerful than the actual experience of success to boost self-efficacy. There’s something about the
objective and experiential feeling of doing it right. So, we want to maximize these mastery experiences in all settings to increase confidence. We do that by creating task-involving climates where the focus is on personal improvement, comparison to where you were before, and how you are getting better from there.

› Vicarious experiences, or modeling, can be a good source of information to increase efficacy. Also called social modeling, when we see someone else succeed, especially when that person is similar to you in age, gender, or experience, then your confidence increases through their success. Cognitive self-modeling, or mental imagery, is another way to increase confidence.

› Verbal persuasion is when someone else has confidence in us and expresses that. This helps, especially if that person is knowledgeable or someone we trust. For such communications to be effective, they have to be within realistic bounds. Verbal persuasion after mistakes can build confidence, if the communication is teaching and encouraging improvement of the things that can go better.

› The way we interpret our physiological condition and emotional states influences our self-efficacy. When our bodies and minds feel good, our confidence is elevated. And when we feel pain, fatigue, or nervousness or lack motivation, our self-efficacy tends to diminish. Athletes should learn relaxation strategies and practice under anxious conditions to improve their confidence about how well they can perform when their arousal is increased.

◆ In a sport context and beyond Bandura’s four sources, four additional factors will help: If athletes feel good about their physical selves, believe in their coaches’ abilities, feel comfortable in their competitive environment, and think the competitive situation is in their favor, then they should have higher confidence in their ability to achieve success.

◆ Efficacy beliefs affect performance, and performance affects efficacy beliefs. We call these hot streaks, or momentum, when
there is an upward spiral of confidence leading to improved performance, fueling more confidence and even greater performance.

- Athletes sometimes get into a downward spiral, or slump, when after a mistake their confidence is shaken, leading to more mistakes and worsening of confidence and then even more performance declines. Either of these spirals can be broken intentionally or by accident.

  - Changing perspective can help boost confidence. Helping athletes attribute their difficulty to effort, which they can control, rather than lack of talent, which they can’t control, can empower them. Sometimes athletes get distracted by their low confidence in winning the game. Moving attention to skills they have mastered that will help them win is a good shift to make.

  - Efficacy beliefs go beyond the self, as tasks can vary and we perform in a context with others. So, we can have efficacy beliefs regarding just about every aspect of our performance, and they can influence our performance in that area.
To change your behavior, the degree to which you believe you can control your behaviors will influence how much you can resist urges and follow through on intentional behavior choices. This is called self-regulatory efficacy.

**Self-Talk**

Self-talk is verbalizations or statements made to the self, typically serving one of two functions: instructional or motivational. They can also be automatic, meaning by accident, or deliberate and intentional. They can be positive or negative in content, and they can have facilitative or debilitative effects.

Most frequently, athletes will use positive statements to psych themselves up and improve confidence. Sometimes, focusing on rational self-statements can keep negativity from setting in. Worry is the most common type of negative self-talk in athletes, causing the most interference with performance.

Our self-talk can be reactive to the process or quality of our play and the environment. One example is how negative coaching behaviors increase negative self-talk in athletes. But when an automatic negative thought pops up, you are responsible for how long you engage it.

Different self-talk cues are needed across performance settings and skill levels. But in general, more instructional content is suggested because of the action orientation and focus it generates. This is particularly true for fine motor tasks and newer skills.

Motivational self-talk is less effective but can add value, particularly on grosser motor tasks and well-learned skills. But be careful: Having an athlete talk through the steps of a well-learned skill, such as a golf swing, can slow processing and interfere with execution. “Down and through” may be a whole
swing thought that is more helpful—instructional but not too detailed.

- A meta-analysis of the existing self-talk literature found a moderate positive effect size on all performance. Self-talk is relatively more effective for novel tasks compared to well-learned tasks and for tasks that required precision, coordination, or fine execution compared to strength and endurance. Furthermore, self-talk was more effective when the performer had formal training in self-talk compared to those without.

- In a number of studies, the effectiveness of self-talk has not been supported. Self-talk has a role as part of performance, but only as a part of the process, and arguably not the most important part. Thinking doesn’t do anything unless you follow it up with action.

- And that’s really the mechanism by which self-talk may work, by activating one of these things: improve effort, increase attentional focus, or control cognitive or emotional reactions, or if it helps trigger automatic execution of your skills, then it can have a positive effect on performance. This is true even of negative self-talk.

- Athletes cite concentration and confidence as the most helpful result of self-talk. This is particularly true for novel tasks or in young and beginner athletes, where attention to detail is particularly needed to learn and execute.

- Some practical strategies for self-talk include the following:
  - Much of our negative thinking occurs when we are nervous. So, self-instructing how to breathe easy and relax can lower that arousal. Statements that normalize these excited sensations can also help, as the body is just preparing for action.
  - Surround yourself with positive people, particularly positive coaches who are reinforcing, give constructive feedback specific to performance, and provide social support, especially with regard to self-esteem. At the very least, avoid coaches...
who use negative or abusive statements and actions and irrational criticism.

› Knowing what you want to think about or say to yourself ahead of time can provide a buffer against unwanted thoughts, so be sure to plan for this.

› Self-talk has to match the needs of the athlete and task characteristics.

› Athletes should include self-talk into all their training routines, imagery, and pre-performance routines by first identifying what they want to achieve with the self-talk intervention. A list of possible cue words and short phrases could be developed and tested in practice for effectiveness.

› Don’t go crazy with too much self-talk. Especially for well-learned and automatic skills, the goal is to perform automatically with trust. Taking yourself through it and overanalyzing can disrupt execution and hurt performance with well-learned skills, during automated stages of performance, or if inappropriately applied with high-level athletes.

**Suggested Reading**

Woodman, Akehurst, Hardy, and Beattie, “Self-Confidence and Performance.”

**Questions to Consider**

1. It is good to get distance from thoughts and feelings because they are not essential to performance. Why, then, is it important to develop confidence and self-talk skills?

2. What is the role of belief in confidence and self-talk?
There might not be a more important psychological skill for performers than focused attention. In some sports, a loss of focus can be devastating to performance, risking injury or contributing to the loss of skills. Problems arise when performers’ attention shifts—usually from what they are doing to what they are thinking or feeling. If your attention isn’t on what you are doing, then none of the other skills matter. Focus can be developed, and it is to our greatest advantage to develop it.
When we talk about attention, we could mean one of six things: biological arousal or alertness, a state of readiness to respond to the environment; the orienting response, which is automatic, where attention is reflexively directed to an unexpected stimulus; the visual search, where we shift our attention toward a specific region of a visual space; selective attention, which is the ability to tune into a specific source of information while ignoring other information; mental resources, or the mental effort that fuels cognitive activity; and the overall supervisory process that regulates our intentional attention.

Researchers have boiled it down further to three aspects or dimensions of attention: concentration, which refers to a person’s intentional decision to invest mental effort on what is most important at the time; selective attention, or the ability to zoom in on task-relevant information while ignoring distractions; and divided attention, which concerns the fact that performers often have to do more than one thing at a time.

Performers direct their attention across two dimensions. The first is from broad to narrow, meaning that the performer is examining a large number of cues (broad) to a limited number, or ultimately one (narrow). The second dimension considers attention outside the body, or external, to internal, or inside the body.

- With a narrow-internal focus, the performer is concentrating on a specific internal sensation or mental process, such as imagery.
- A broad-external focus is needed when an athlete has to assess a situation quickly and see what options are available before deciding on the best course of action. A broad-external focus can seem distracted if attention is needed in one of the other three quadrants, tuning in to too many things or unnecessary details.
- The third quadrant, narrow-external, is important to minimize those distractions and to focus energy in a specific direction to execute skills and maximize effort often in relation to
something in the playing field. When athletes are performing their best, they tend to stay external and flow across the broad-to-narrow continuum as needed. Problems arise when they get distracted by internal experiences.

› A broad-internal focus is best when the performer needs to analyze and plan. Past information is recalled and compared to present conditions to pick the best course of action.

◆ To do their best, performers need two things in their concentration: the correct, specific target and focusing only on the actions that are under their control. This doesn’t mean, for example, that factors such as field conditions or wind should be ignored. But they should be considered only at the right time and place, when planning is appropriate. Once it comes time to perform and you decide on an action you want to commit to—already taking all of those factors into account—then the ideal focus when you are performing is on a specific, controllable target.

◆ But distractions happen. Athletes who casually say, “Oh, I just lost focus; I’ll do better next time” put themselves at a disadvantage. You didn’t forget to focus. You haven’t developed the skill. And you can improve it.
So, hold yourself accountable. You may never be perfect. Sometimes the best we can do is catch it as early as humanly possible and refocus back onto the appropriate target—one that is important to the task at hand, under our control, and in the present moment.

Do we control our attention? We greatly influence attention and we can become very good about where we direct it, but ultimately it is not 100 percent under our control.

Daniel Wegner’s ironic process theory helps explain why attentional lapses happen at the worst time. Attention wanders because we try to control it—hence the irony. There is a conscious, controlled search for the ideal focus thoughts. But at the same time, there is a simultaneous second process going on that is automatic and unconscious that searches for any sign of the unwanted thought to be sure the mind is being successful. Checking to be sure it isn’t there makes it be there.

The thoughts we try to suppress come to mind more easily than the thought we want to focus on—a phenomenon called hyperaccessibility—and it is especially likely to occur under conditions of mental load because conscious, intentional focusing takes a lot of mental energy. This is real energy, and when we are tired or the pressure is too great and we are anxious, we don’t have as much strength to control our thoughts. Our mind is taxed, and then it wanders to wherever.

**Five Principles of Effective Concentration**

There are five principles of effective concentration to teach so that skilled performance is maximized.

1. The first is simple but critical: You have to decide to concentrate. It will not just happen by chance or automatically be there when you need it. Because it takes energy, it can be helpful to turn it on and off with a performance routine.
2. The second principle is to focus on only one thought at a time. When we multitask, we either shift rapidly between doing things one at a time in succession, or one or more of the simultaneous actions have been practiced so much that they have become automatic and don’t require conscious control. We don’t want to be thinking and talking to ourselves as we perform. That can slow or disrupt a complicated task.

**Focusing Exercises**

Focusing exercises help performers limit their attention to what is most important.

**What’s My Job?**

Before going into a game, athletes should identify two or three behaviors that are under their control to emphasize. Of course, there are a ton of things to do, but with all the things to do—and coaches coaching and parents coaching from the sideline—in a pressure game, it can become overwhelming. When an athlete knows what his or her job is—two or three specific behaviors to focus on and come back to—it helps ground him or her in the chaos. He or she can then play with purpose and determination.

**What’s Important Now? (WIN)**

Do you want to WIN? That stands for “what’s important now?” With this technique, whenever you are confused or overwhelmed or stuck on a mistake or nervous about the future, just ask yourself, “What’s important now?” and it brings you back to the present moment and some action thought that will best help your performance. At any given moment of any performance, there will be some specific thing that is most important for you to be doing or focusing on.

3. The third principle for good concentration is to do exactly what you are thinking or think specifically about what you want to do. You are truly focused and will have your best performance when there is no difference between what you are thinking and what you are doing. Keep your head and body in the same place.
This comes from research on flow states and being in the zone. Keep thoughts positively phrased regarding what you will do, not what you don’t want to do.

4. The fourth principle is to focus only on factors that are under your control—because if you can’t control them, why invest your limited amount of attention into them? You can’t control uncontrollable distractions, and they matter, but the time to consider them is usually before the game or during breaks in the action to plan, choose equipment, and strategize. When you are actually performing, those factors should have already been addressed, allowing you to focus on what you can and do control.

5. The fifth principle goes back to the internal/external dimension of attention: When you get nervous, focus outward. We are naturally drawn in, out of our performance, and get consumed or distracted by what we feel. When we get stuck inside, we doubt, worry, criticize, become hypervigilant of what we fear—and mess up. So, get out, back into the game.

How to Develop Your Focus Skills

- For these techniques to work best, you need the mental strength to be able to do them. The top recommendation for this is mindfulness training. The purpose of training is to adopt a nonjudgmental relationship to distractions while immersing yourself in a chosen target of attention. This acceptance but detachment from distractions avoids suppression and the hyperaccessibility trap.

- And it is closely related to that flow state, with its grounding in the present moment. Study after study has shown that various mindfulness and mindfulness-based programs increase flow and performance as part of this attentional training.

- Another way to build focus is simulation training, or practicing under conditions that replicate key aspects of an upcoming
challenge. This means getting used to keeping the distraction in the background. Simulation training can help prevent choking.

- Similarly, pre-event and pre-performance routines can help focus attention. These are specific and structured actions a performer takes before a performance to prepare mentally, physically, and emotionally. Routines usually have a focus component to guide attention to task-relevant cues and get into the moment.

- Another technique is to use trigger words as cues to concentrate. Skilled performers often talk to themselves for motivational and instructional purposes.

- All performers have outcome goals. But these desired outcomes can become a distraction. So, setting performance goals—process goals that lie within your control, telling you what to do—improves performance by directing your attention to the how of performance.

Suggested Reading

Goleman, Focus.

Murphy, ed., The Oxford Handbook of Sport and Performance Psychology, p. 117–130.

Questions to Consider

1. Defend this statement: “Focus is the most important mental skill.”
2. If we know what to focus on, why is maintaining focus so difficult?
This lecture is about routines, rituals, and superstitions. Superstitions may reduce anxiety but can also be a distraction. Still, as a sport psychologist, it can be disruptive to force an athlete to give them up, especially when superstition is part of the team or sport culture. Rituals are a bit better, but they are not specific enough. Ultimately, performers want structured routines that directly improve performance. They will include physical and emotional components as well as skills such as confidence, focus, and imagery.
Routines

- Good routines are designed to prepare an athlete for his or her best performance, mentally, physically, and emotionally. Routines put specific performance-improving behaviors into a logical and sequential order for maximal results. Routines can occur before the performance, during the performance, and after the performance. Any time a consistent application of behaviors can prepare or guide a performer to be his or her best, a routine can be used.

- A pre-performance routine is designed to prepare the athlete for action. This could be before a specific motor skill, such as a basketball free throw, tennis serve, or golf putt. But it could also be before a game, the morning of a competition or the night before.

- Warm-up routines can be very helpful. The timing of warm-up behaviors enables the athlete to be well prepared in advance and avoid the stress of being late or feeling rushed. In a routine, each behavior is specific, directly contributes to peak performance, and will be repeated at every competition.

- During-performance routines are systematic ways to respond within the sport performance. One is Dan Kirschenbaum’s 4-F technique. After a mistake, the following series is recommended:
  - Fudge, a brief, internal negative reaction;
  - Fix—the most important part—correcting the problem by immediately executing the correct play, or at least with some physical movement and corrective imagery;
  - Forget about it; and
  - Focus on what’s important now.

- A good between-performance routine that works well in sports that have a series of short performances—like American football, diving, and wrestling—is Jim Taylor’s 4-R technique:
  - Rest: Take a few slow, deep breaths once the performance is over to relax, recover, and center.
Regroup: Check in with your emotions and work through any frustration or anxiety, or calm down if overly excited after a big play.

Refocus on the task at hand, in this moment. Get yourself out of the past mistake or thoughts about the future. Zero in on what you need to do next. This may be technical, tactical, or mental.

Recharge: Bring your intensity up or down, depending on your sport demands and current level of energy.

Post-performance routines are excellent for promoting recovery, such as warm-downs or nutritional supplements, or as a systematic way to review the performance, including film review or feedback sessions with coaches. Post-performance routines don’t leave these things to chance; they are planned and executed, all in service of improving performance.
There are a few things that all performance plans should have. One is a physical component. These are the things that are done to prepare the body, such as a deep breath for relaxation.

Routines should also address psychological preparation, such as self-talk strategies with cue words. Other components may be a combination of focus and tactical preparation, such as a football player before the snap checking off his assignment, adjusting his alignment, and emotionally adjusting his attitude, psyching up or down as necessary.

The best way to maximize your physical functioning is to be mentally prepared. In this way, routines are like mental scanners, a formal way to assess the competitive environment and make adjustments to give the athlete the best chance of success. It keeps the performer aware of the environmental conditions, the tendencies of their opponents, or their status regarding fatigue or aggressiveness.

Routines help you check in with any number of internal issues, such as negative thoughts, anxiety, focus, and intensity. The best routines will have you end with a task-oriented mindset.

Some routines are very specific while others are more general. Micro routines are typically done as a self-paced event, such as pitching a baseball. They can be very specific and precise, depending on the needs and preferences of the performer. But macro routines, which may cover an entire day or event, may be defined a bit more generally and with some flexibility to adapt to the changing environment.

You want to strike a balance between specific and general routines. Be sure not to skip a cool-down completely after a game, and include a minimum of a few stretches that have to be done beforehand to be prepared. But vary them to prevent boredom and to rotate throughout the body. You don’t want your routines to be overly specific in case you cannot complete them.
The most effective performance routines are usually mastered with a high degree of consistency. But pay attention to the time. While they can be self-paced, there are limits. For example, American football requires the ball to be snapped 25 seconds after declared ready to play. A routine that fits the demands and pacing of the game is essential and another reason why you will want every aspect of your routine to count.

In many routines, not all the movements have a direct effect on performance. Some may just help an athlete calm down or focus because what he or she is doing is familiar. There is a comfort in repetitive movements, and it can help a game-winning shot feel like any other free throw, just one of a thousand shots previously taken. But sometimes athletes include extra unnecessary movements, which serve as a potential distraction.

Superstitions Rituals

Sometimes, routines are actually superstitions rituals. Superstitions are big in sports, with both fans and athletes alike. For example, you might wear a particular jersey when your favorite football team plays. You might know that your jersey doesn’t make a difference in the outcome of the game, but you
might feel like it does. And that’s how superstitions work. They help decrease anxiety.

- You might not be affecting the outcome of the game, but you are treating your nervousness. It is an illusion of control that you are happy to believe in. You keep doing the superstitious behavior because it keeps helping your anxiety, even though the results aren’t there to support its effectiveness: Your team isn’t going to win every time you wear your jersey.

- Athletes use superstitions in a similar way. In one Belgium study, more than 75 percent of the participating athletes reported one or more superstitious rituals. The more tension the athlete felt, the more superstitious he or she was.

- Players are more committed to their rituals when they were more uncertain about winning or in bigger, more important situations, such as playoff games. Superstitions are more prevalent the higher the achievement level and number of years played. The stakes are higher, so athletes look for more control over the situation to win. They want to do everything they can to help the team.

- Superstitions help anxiety, but there are so many more direct ways to work with anxiety and enhance focus. Still, athletes try to achieve control by investing in irrelevant objects or actions, believing there is a causal link between these things and results.

- The biggest difference between a superstitious ritual and a pre-performance routine is that routines are always under our control and
directly improve your performance. But we can’t say that superstitious rituals don’t help—that there isn’t a psychological placebo effect. If superstitions decrease anxiety and increase confidence, some authors argue that they aren’t superstitions.

 But the fact remains that despite their positive outcome, they still aren’t the best or most direct way to prepare. Rituals that are designed to help increase anxiety when they can’t be performed and become a problem in and of themselves independent of the game.

 A part of some rituals that some may think is superstition but others may argue are not are pre-game prayers. Routines can be defined as a series of pre-performance behaviors organized into a detailed plan aimed at maximizing performance. Performance routines are a specific and beneficial kind of ritual. Superstitions are actions that are repetitive, formal, sequential, and distinct from technical performance.

 Religious ritual and superstition have many similarities. Both are continually repeated, and athletes believe that both will enhance performance. And both attempt to use the influence of an outside force to their advantage, whether that be God or luck or something undefined.

 But the differences between the two are significant. Superstitions come out of a need to control or influence the uncontrollable, particularly when uncertainty about the outcome is high. Superstitions reduce anxiety and serve as a scapegoat when things don’t go well. The athlete can blame the failed superstition rather than take responsibility for his or her own effort, focus, or performance.

 But prayer can include intentions far beyond that of sport superstitions, such as dedicating the sport activity to God, bringing God into the activity, or requesting assistance to live a moral life in and out of sport, to put sport into perspective, or to increase the bond between teammates and bless them and
keep them safe—a very other-focused intention in contrast to more self-oriented superstitions.

- In addition, athletes can feel controlled by their superstitions, a sense that they have to do them or else their anxiety increases about something bad happening. Religious rituals, on the other hand, reflect a more personal relationship with God and are often done with the intention of trusting God.

- Although a team prayer ritual could become superstitious if an athlete develops some magical thinking about the prayer activity and outcome, ideally prayer or other religious rituals promote greater holistic well-being for the athlete and the team in a way superstitions cannot. In this way, it can sometimes be a part of an athlete’s pre-performance routine, such as a gratitude prayer before competition, as the effects of such religious rituals can positively affect physiological arousal, calming the physical effects of anxiety.

- For these reasons, religious rituals are not considered superstitions. In fact, research in the field of the psychology of religion confirms that definitions of superstition that do not mention religion are actually more accurate than those that do.
Do Routines Improve Performance?

- Routines do improve performance. Studies have shown that athletes who use a pre-performance routine perform better than those who do not.

- Getting into the right intensity is important, so a routine to get physically prepared is important. But this may be the least significant benefit.

- Performance failures typically aren’t because the body isn’t ready. Most breakdowns occur in the mind—when focus is off, when there is poor planning, when you are rushing through, or when you make bad decisions. So, your best routines will include getting the body, mind, and heart ready.

- Routines increase a sense of control and guide your focus. They help performers establish the best plan of action throughout a performance. And routines reduce stress. They are familiar, and you know what to do and feel prepared.

**Suggested Reading**

Maranise, “Superstition and Religious Ritual.”

Taylor and Wilson, eds., *Applying Sport Psychology*, p. 137–150.

**Questions to Consider**

1. What is the difference between a performance routine and a habit?
2. Are there any situations where you would encourage superstitious behavior? Why or why not?
Have you been in the zone? It’s that place where you are just playing, doing your thing, one with the sport or experience. You are trusting, moving, and flowing moment to moment, completely immersed in what you are doing. Best or optimal performances involve four things: peak experiences and peak performances, which are moments in time; flow, which is a state of high performance that we want to be in more consistently; and mental toughness, which is a collection of mental and emotional attributes that can be developed.
Peak Experiences and Peak Performances

- Peak experiences are personal high points of life—one of the most exciting, rich, and fulfilling experiences a person has ever had. It is a psychological experience that exceeds the usual level of intensity and meaning. Note that this doesn’t necessarily mean an outstanding technical performance. It’s emotional and personal.

- It is an exemplary moment in time, with a lasting positive effect on the lives of those who experience such a moment, even for fans. Do you remember a specific catch, dramatic win, or outstanding play from your favorite player or team? For performers and athletes, this highlights a career. Not surprisingly, having these experiences, and wanting more of them, serves as a motivator for sport and other performance-based activities.

- Peak performances, on the other hand, are defined more physically. They are less emotionally centered than peak experiences and more dependent on what the performer actually does. These behaviors exceed an individual’s usual or even probable performance quality. It is truly the performance of a lifetime, one that stands out and defines the climax of a performer’s career.

- Peak performances are not always relative to others, such as setting a world record or winning Olympic gold. They can be personal. Your best golf round or fastest 5K race would count, no matter where you placed. It is a personal experience determined by the performer alone.

Flow

- Peak performances and peak experiences are most likely to occur when you are in a flow state and have mental toughness. Flow is characterized as an autotelic experience, meaning that it is enjoyable and intrinsically rewarding in its own right.
Flow—or being in the zone—is the ideal psychological state achieved during an activity when a balance occurs between the perceived challenge of the activity and the sense that one has the ability and skills to meet this challenge. There is a total immersion in the activity accompanied by feelings of enjoyment.

Flow has been described as intensely rewarding, internally motivated, and an above-average experience, although it is not uncommon. In fact, it can occur frequently at work and in well-trained athletes. Skill level is significantly related to flow, as it’s been suggested that those with higher ability will have higher levels of flow.

There are eight major components of flow—nine if you include the autotelic experience as a separate component, which the studies of sport typically do.

1. The **challenge-skills balance** is the foundation of all flow states. If a task is too easy, you lack intensity and may be bored. If a task is too difficult, then stress and anxiety can interfere with the positive mood states associated with flow. A challenging task that the performer has the necessary skills to complete is essential to produce the intense-focus characteristic of flow. And it’s only in this context that a flow state can be achieved. To get into a flow state, choose your activities wisely, setting challenging but realistic goals.

2. **Merging of action and awareness** is responsible for bringing about a sense of complete absorption, involvement, and focus on the task at hand. When action and awareness are combined, performance feels automatic, smooth, natural, uninterrupted, and peaceful. You can get lost in the task when you aren’t thinking about what you are doing. There isn’t an awareness of cognitive effort. Because of this, it’s fun and enjoyable.

3. This merging is the result of **total concentration and focus**, or complete concentration on what you’re doing. If you want to develop your ability to engage flow, this is where your practice needs to be. Mindfulness training is excellent for developing total concentration and focus, but so is daily
effort to pay attention to the details in life. Practice your performance skills, too.

4. When motor behaviors become so automatic that they are unconscious, intense concentration and focus on the enjoyable and holistic aspects of the task allow all other worries and apprehension to fade from consciousness. This is **loss of self-consciousness**.

5. Loss of self-consciousness is often associated with the **transformation of time**. You can be so immersed in what you are doing that you’re not even aware of the passage of time.

6. All of this leads to the **autotelic experience**, an experience that has a purpose in, and not apart from, itself—completely internally driven, not motivated by factors outside of the athlete or activity. The performance itself is rewarding and enjoyable.

7. **Clear goals** serve as intrinsic motivation, something you want for internal or personal reasons.

8. **Feedback** provides you with information regarding your progress toward those goals. Positive and negative feedback are expected to influence flow in either direction.
9. **Sense of control** is tricky. We’re never in full control of sport. We don’t control our opponent or winning, so this sense of control is more about influence—that if you do all the things you do have control over, then you will get the result you want. There is a sense of empowerment and a belief that you can and will work your way through any adversity that arises.

- There are differences in the way the nine qualities of flow are experienced. Not all nine dimensions are present in every flow state. In two studies with elite athletes, researchers found that all athletes experienced at least three dimensions and 93 percent experienced five or more. Five or six of the nine appeared to be the average.

- In studies of elite athletes, 12 factors were found to facilitate flow, 10 prevented flow from even starting, and 11 disrupted flow after it began. Ten of these factors did all three things, so there is considerable overlap.

- Both the absence of negative influences during the performance and previous personal experience with flow uniquely facilitated flow. Losing rhythm uniquely disrupted flow. But these 10 factors were found to facilitate, prevent, or disrupt flow, depending on the context and circumstances.
Focus helps when appropriate but prevents or disrupts when inappropriate.
Preparation when done well facilitates but prevents and disrupts when not done well or completely.
Motivation, arousal, thoughts and emotions, confidence, and environment and situational conditions all facilitate flow when ideal but prevent and disrupt when not ideal.
Positive feedback facilitates flow. Negative feedback prevents and disrupts it.
Performance defined as starting well facilitates flow. Poor performance prevents it. Mistakes disrupt flow.
Positive team play and interactions enhance flow, negative play and interactions prevent it, and problems with the team will disrupt it.

Mental Toughness

In addition to flow, mental toughness plays an important role in peak performances and peak experiences. There are many definitions of mental toughness, but this one has done well to illustrate a few critical points without getting overwhelmed by too much nuanced detail: Mental toughness is the natural, or developed, psychological edge that enables you to be better and more consistent than your opponent in remaining determined, focused, confident, and in control under pressure.

This definition acknowledges that some people are naturally gifted with mental toughness. And while some people are, the rest of us can also develop it. Even if you have it, you can always improve it. And it does, in fact, give you an edge.

The most talented player doesn’t always win. Neither does the most mentally tough one. But when the talent margin closes, what distinguishes athletes is their mental toughness. It is what enables you to be both better and more consistent.
Consistency is key. Nobody keeps focus through an entire game, performance, or meeting. But the athlete who can be more consistent in bringing his or her attention back to the moment of performance has the edge over his or her opponent. The same is true for confidence and determination.

Being in control under pressure means being in control over your reactions to your thoughts and feelings, playing with intention, and being a values-driven athlete rather than an emotionally driven one.

Current research supports a view of mental toughness as a multidimensional personality construct that includes a number of psychological attributes across sports. According to a meta-analysis of the research literature on the subject by Dr. Robert Harmison, that list includes being confident; summoning motivation and desire; effectively dealing with adversity and failure; overcoming physical and emotional pain and hardship; successfully managing anxiety, pressure, and other emotions; staying focused; and finding balance and keeping perspective.

Psychological Characteristics of the Optimal Performance State

The psychological characteristics of the optimal performance state include feelings of high self-confidence, expectations of success, being energized yet relaxed, feeling in control, being totally concentrated, having a keen focus on the present task, having positive attitudes and thoughts about performance, and being strongly determined and committed.

To help athletes identify their personal best performance state, have them describe what they thought, what they felt in their bodies, and how they felt emotionally during peak performances—to specifically identify those thoughts, focus points, cue words, and sensations.
In addition, ask them to describe the social context, such as a supportive coach or time alone to focus, that also contributes. And then ask them to compare this best performance state to their worst performances in the same way: what they thought, what they felt in their bodies, and how they felt emotionally. It helps to paint very different pictures—to identify their ideal target zones and be aware of when they are out of them.

The characteristics that seem to correlate with worse performances in sport include self-doubt, lacking concentration on the task and moment, and being distracted by something specifically. Being overly focused on the competition outcome or score is a big one, as well as feeling over- or under-aroused. You need your intensity to match the job.

Not everyone is the same. Some qualities are important to one athlete while different levels of that same quality are important
to another. The individual zones of optimal functioning (IZOF) model suggests that each performer experiences a unique range of pleasant and unpleasant psychobiological states that either facilitate or inhibit performance. Each emotion serves two primary purposes: mobilizing and organizing energy.

- Will this mobilization and organization help or hinder the performer in generating energy and efficiently using it to accomplish his or her performance actions? Being in and out of an individual zone of optimal functioning has been tested in sport, and results show that idiosyncratic positive and negative emotions—that is, positive and negative emotions unique to an individual athlete—do appear to be related to performance levels.

- There is some evidence to support IZOF-based principles to guide emotional regulation in sport. Psychological skills such as relaxation, focusing, or self-talk could help an athlete achieve his or her personally optimal emotional states and improve objective performance. Inappropriately used, it could knock him or her out of the zone and hurt performance.

**Suggested Reading**


**Questions to Consider**

1. Given the information learned in this lecture, how might you define mental toughness?

2. If flow is such a good state to be in, why does it happen so infrequently?
This lecture is about performance anxiety and choking, which are common problems that interfere with performance. As you will discover, you’re nervous because you care. Your body is simply preparing for action. You must redirect your attention to what is essential, and if you want to get better at performing under pressure, practice performing under pressure.
Performance Anxiety

- Performance anxiety is normal. It doesn’t matter how crazy or excessive the anxiety is. It comes from a normal place, and it’s more likely due to how much you care rather than something actually being wrong or threatening.

- If you want something and don’t get it, or care about something and it goes wrong, we have at least emotional pain—embarrassment, loss, sadness. Sometimes there are financial consequences or missed opportunities and experiences. Sometimes there are pain and injury. Bad things can happen.

- And while there is always a positive side of what we could accomplish or experience, there is always a dark and scary side of what will happen if we don’t. Our mind won’t let us be unrealistically positive and just forget about these possibilities. In fact, the more we try to ignore them, the more our mind may draw attention to them. We should think about anxiety as just a friendly warning of what could happen, not what will happen.

- As normal as anxiety is, it can be deadly to performance. The most critical skill in sport psychology may be the ability to focus on the right thing at the right time. Anxiety messes that up. You think about the wrong things—what could go wrong, who’s going to be upset, that last-mistake you made, the feelings of fear and pressure—and you think about them at the wrong time—when you are trying to putt or make a free-throw or when you should be looking for the pass. And your performance blows up.

- And that’s just the mental part. Anxiety includes heightened physiological arousal, too. Your body is preparing for action. The fight-or-flight response kicks in to protect you from danger to fight the threat or run away from it. This can help in sport, too, as you go into battle with an enemy both intensely competing for the same thing. Sometimes, you need that heightened arousal.
All the nasty and uncomfortable physical sensations of anxiety are at least neutral, meaning normal and safe, and are intended to give you more energy and activation. For example, that racing and pounding heart you don’t like is more quickly delivering oxygen and removing carbon dioxide from your bloodstream. Your blood and muscles need that oxygen to perform.

The physical sensations of anxiety are supposed to be helpful. And maybe when driving to the basket it is, but then you get fouled and have to calm down quickly to make a free throw.
If you are an archer or a surgeon, this physical arousal does not help. In fact, it will hurt your fine motor skills. Maybe your physical arousal is completely irrelevant to performance, such as your nerves before a test or giving a speech. You don’t need a lot of physical intensity to perform these mental tasks or challenges. And if your attention is drawn to these sensations, choking becomes a very real risk.

### Choking

- Choking is generally thought of as not performing under pressure. Missing the putt or field goal or basket to win the game may be choking, but it isn’t always. Choking more specifically means that you don’t execute a sport skill under pressure that you would very likely be able to execute in practice or under normal game conditions.

- There are two sets of theories about the choking mechanism. The first set is called self-focused theories, which propose that pressure raises anxiety and self-consciousness about performing well. The natural reactions are increased attention to doing the skill well and too much attention to the step-by-step control over execution, which actually interferes with the natural and fluid execution of a previously automatic skill.

- Intentional, purposeful thinking slows you down, particularly if you are trying to go against your natural inclination. This is good for deliberate, detailed activity but problematic in sport when it disrupts automatic execution of well-learned skills. Other self-focused theories claim that it is the monitoring of the step-by-step execution of the skill that disrupts execution.

- Distraction theories are another set of explanations for choking. Worry takes a lot of our energy and brain space. We only have so much mental energy, and if a good chunk of it is used for worry, performance suffers.
Both theory sets show us that choking is an attentional issue. Sometimes it is too much attention to the task trying to monitor and control it; other times it is too little attention to the task. Ideally, we want our attention to be just right, focused in the moment on the task at hand.

What you ideally want is clutch performance, the opposite of choking—those moments when under pressure the athlete actually performs better than usual. This can happen in a few ways. The first has to do with how you think about the pressure: positively or negatively.

If an athlete feels able to handle the anxiety and has a sense of control over his or her performance, then the sensations may be interpreted as facilitative. But if the performer feels that he or she is not in control, can’t cope and expects fears, and focuses on failure, then anxiety can be debilitative.

The practical application is to remember that thoughts are just warnings. Your physical symptoms in anxiety are the same as excitement. Your body is preparing to do something great. Don’t get distracted by the energy. Interpret it as helpful and get back to focusing on the task at hand.
Attentional Control Theories

Distraction theories suggest that worry takes up some of the attention used for performance. Processing efficiency theory extends this to how and why the same mechanism can help athletes perform when they redirect that energy into extra effort or other tasks that enhance performance. After appropriately assessing and worrying that what they are currently doing isn’t working, they redirect that energy into another thinking strategy.

Attention is critical. From an evolutionary perspective, anxiety evolved to quickly organize our cognitive functions for protective purposes when necessary. Anxiety has a positive functional role. Worrying about danger leads people to take fewer risks, seek safety, and focus on doing things well to avoid the consequences of poor performance. But in sport and other performance areas, sometimes—often times—you have to step into that risk and feel whatever comes along with it.

For this reason, while relaxation is very frequently advised as a treatment for anxiety, and it does work to reduce anxiety, use it
with caution. If you are in a panic or physically very over-aroused, you really do need to calm down. Taking a deep diaphragmatic breath or doing a progressive muscle relaxation exercise can help.

- But if you want relaxation to eliminate your anxiety and feel like you have to get rid of it all to perform well, you’re going to be challenged. You don’t want physical and attentional energy wasted on a struggle to control the anxiety at the cost of performing.

- If the brain is going to continually search out danger, then the environment you are in is going to seem more threatening. You may be emphasizing your awareness of threats to the detriment of your being able to focus on what can go well or what you should be doing to play well. Our survival instinct hurts our performance.

- But how much it hurts is in part related to how much voluntary control we exercise over our attention. And how much attentional control you have is a skill that can be built from exercises such as mindfulness. Those with a good amount of attentional control will be better able to disengage the mind’s warnings and refocus on performance compared to those with weak attentional control skills.

- In processing efficiency theory, anxiety taxes attentional resources. We have limited energy, and some of it gets snatched up, turning into potential threats. When anxious, the efficiency with which we can process and act on information decreases. Performance suffers because our attention is divided and slowed.

- A more recent attentional control theory builds on this with an explanation of how our concentration is disrupted when anxious. We have two systems. Attentional control theory suggests that anxiety causes a disruption in the goal-directed system, which is involved in preparing and applying goal-directed thinking, attention, and behaviors; and the stimulus-driven system, which is much faster and can be very adaptive, quickly orienting us to important or dangerous details that need immediate attention.
As anxiety increases, the strength of our evaluations of the potential threat warnings and the likelihood that the stimuli will capture our attention and pull it away from performance is greatly increased. How do you inhibit the stimulus-driven response and shift back to the goal-directed target?

Relaxation training can bring down some of that physiological arousal, particularly when it is very high, and mindfulness training can be important to develop the skill of letting go, shifting and reengaging the present moment.

The Quiet Eye

Sport and performance most critically involve an interaction between what we are seeing and what we are doing. Sight and action interact. To perform well in a complex, ever-moving, changing environment such as sport, an athlete must select the information that is most relevant at any point in time so that effective plans for action can be made.

This can be done by choosing the best visual target each moment. These task-specific eye movements are purposeful and goal directed, and the target of sight has been generally identified as being close to the spot of action. This fixation occurs approximately one second before the action for many tasks.

In sport science, this particular measure of attentional control has been called the quiet eye. It is the final fixation of sight on the most appropriate target prior to the execution of the most critical phase of movement.

Experts have longer quiet-eye durations than nonexperts, and successful attempts have longer quiet-eye durations than unsuccessful attempts. It is believed that the quiet eye helps maintain effective goal-driven attentional control while reducing the impact of the stimulus-driven attentional system.
Anxiety threatens to disrupt the quiet eye, so developing the quiet-eye gaze can minimize the impact of anxiety and prevent performance decline. Control your eyes and you control your focus on what is essential.

We need to train and develop this quiet eye, but not to reduce anxiety. Developing the quiet eye keeps all of your attention on the most important performance details at the most important time. As a performer, it is critical to identify exactly what these visual cues are as well as when and how long they should be focused on during the execution of a sport skill.

This quiet-eye training helps the motor system be more accurate in execution by providing timely visual information about targets. The quiet eye also draws attention away from the internal experience of anxiety, whether that be negative thoughts or physiological symptoms. It promotes motor learning and prevents choking by directing attention to critical physical actions of performance.

A classic sport psychology tip is to focus on what you can control. The quiet eye does just that. Under pressure, rather than worrying about the outcome you cannot control, you can control where you direct your attention.
By focusing the mind in this way, it quiets the athlete, not just his or her eyes. It is usually negative self-talk and worry that work us up and make us anxious under pressure. But we can’t do two things at once. If we are focused on the target, we are not worrying ourselves into a frenzy. The focus can result in a calm, quiet approach.

Another way to do this is to train with anxiety. Practice isn’t the same as games, and it’s difficult to replicate game conditions, but it can be done if you get creative. By practicing with anxiety, you learn to more efficiently and effectively invest anxious energy in a more beneficial, goal-directed direction.

**Suggested Reading**


**Questions to Consider**

1. In what ways can performance anxiety help performance?
2. How must a performer react to that anxiety to make it useful?
Perfectionism is characterized by attitudes and behaviors that strive for flawlessness. Exceedingly high standards for performance are set and overly criticized. Perfectionism has typically been seen as a bad thing, but more recent research suggests that this may not be the case. In this lecture, you will learn about current research on perfectionism and how to manage perfectionism that has gone wrong.
Perfectionistic Strivings and Concerns

- Perfectionism can be broken up into two dimensions: perfectionistic strivings and perfectionistic concerns.
  - Perfectionistic strivings are characterized by striving to be without error and setting extremely high performance standards. These strivings tend to be associated with more positive characteristics and outcomes, such as conscientiousness, adaptive coping and positive emotion, and overall ratings of subjective well-being and good psychological adjustment.
  - Perfectionistic concerns are characterized by worry over making mistakes, fear of negative evaluations by others, and a very keen awareness of the difference between one’s expectations and one’s actual performance. These perfectionistic concerns are consistently and strongly associated with neuroticism, maladaptive coping and negative affect, and indicators of poor psychological adjustment and mental disorders such as depression and anxiety.

- The idea that perfectionism is generally a bad thing is likely because the two dimensions are so highly correlated. If you’re high in perfectionistic strivings, you tend to also be high in perfectionistic concerns, because being perfect is important to you.

- But some researchers argue that they are independent factors that can be useful to consider when working with athletes. Perfectionistic strivings are often associated with improved performance while perfectionistic concerns can hurt performance. We want to encourage one and guard against the other.

- You can be low to high on perfectionistic strivings. If you are on the lower end of the continuum, you would likely be labeled a non-perfectionist. You may want to do well and appreciate quality, but you probably allow for mistakes and don’t get too upset when they happen.

- Those on the higher end of strivings can be measured along a second continuum to better define their experience. Healthy,
or adaptive, perfectionists are high on strivings but low in their perfectionistic concerns. So, while they strive for flawless performances, they are able to keep their attention on their goals and the process of performance.

- Unhealthy, or maladaptive, perfectionists, on the other hand, are distracted. They strive for perfection but to varying degrees also worry about failure and how others will perceive them. On the highest end, they can experience crippling doubt, fear of failure and rejection, and insecurity and will agonize over mistakes. Their attention gets divided, moving away from the process of performance and attention to detail to fear of negative future outcomes.

- In sport and the performing arts, the pursuit of impeccable execution is approved, encouraged, and even revered because achievement at the highest level requires extraordinary dedication and near-perfect performances to be successful, sometimes even to survive. So, it’s critical for performance consultants and
performers themselves to know how perfectionism both helps and hinders.

- The one area that does have a lot of academic research is academic performance. And the overwhelming majority shows that students with higher levels of perfectionistic strivings show higher exam performance, higher individual grades, and a higher GPA than students with lower levels of strivings.

- Surprisingly, the relationship with perfectionistic concerns is less clear. It’s not completely negative. In fact, most studies find that as concerns increase, grades do not necessarily decrease. Although some others did find a small negative correlation, it’s not to the degree that would be expected. From a performance-focus standpoint, we would expect such worry and concern to interfere with concentration and hurt grades. But this might just be an issue of measurement, and more scientific research needs to be done.

- A pretty strong argument can be made for perfectionistic strivings as a good thing to improve performance, at least in part due to the drive it produces to stimulate greater effort on the performer’s part. And while perfectionistic concerns don’t necessarily help, they don’t always hurt, but that is probably a matter of degree: The more severe or significant the concern, the more likely it will interfere.

- In the sport research, we generally see the same thing, but there are some differences. One study, for example, found that after four trials of a new basketball scoring training task, perfectionistic strivings were associated with higher performance. But athletes who were high in both strivings and concerns—unhealthy perfectionists—showed the largest performance improvement over the four trials. The reason for this may have been the measures used and how perfectionistic concerns were defined, muddying the conclusions that can be drawn.

- This issue was corrected the following year in two studies with triathletes that again confirmed that high perfectionistic strivings
predict better performance. These strivings are consistently associated with self-confidence, hope of success, wanting to performing better than others, wanting to perform as well as one possibly can, and—most importantly—actual performance in both training and competition. Perfectionistic strivings are good. But in these studies, perfectionistic concerns neither hurt nor helped.

- A 2015 study of junior athletes found that perfectionistic concerns were a risk factor for burnout. Strivings appeared to have the opposite effect, with high levels predicting decreases in burnout. So, even if concerns do help performance, it seems that they can come at a potentially great cost.

- If we look at skill level, we find that perfectionistic strivings tend to increase in more competitive and serious levels of sport, but it is unclear which causes which. It was also found that competitive level was only related to perfectionistic strivings, not concerns.

- This makes sense, as higher-level athletes are going to be more invested in their performance than lower-level performers. It also makes sense that the more invested you are in performance at higher levels, concerns about mistakes should also increase, but not necessarily maladaptively, because if maladaptive
concerns consistently come up and interfere, it would limit your opportunity to get to that next level.

◆ Worry and fear are generally not a good thing. But by reacting adaptively to these traditionally unhelpful concerns, you can limit their negative influence, ultimately by letting go and refocusing on the pursuit of excellence.

◆ But if we start cutting out perfectionistic concerns, are we still measuring perfectionism? You can’t add or take away constructs of perfectionism and still call it perfectionism. So, while it can be a useful tool to think about good and bad perfectionism, or strivings versus concerns, some authors argue that we should keep the concept clearly defined so as to not invite confusion.

◆ Perfectionism, in its entirety, is unhealthy. Striving for excellence is good. Worry and fear, chronic criticism, and lack of tolerance of mistakes are generally bad. So, perfectionism, which includes both, has some short-term advantages but at a great cost. And athletes who have high levels of primarily adaptive perfectionistic strivings also tend to have higher levels of primarily maladaptive perfectionistic concerns.

**Perfectionism**

◆ In its most complete and truest form, perfectionism is a paradox. It is a thinking and feeling pattern that energizes achievement and contributes to success while simultaneously causing distress that can undermine the level and enjoyment of that success.

◆ Perfectionism may be best thought of as a personality characteristic, not just a thinking style or behavioral intensity of goal striving. Perfectionists do not pursue these ridiculously high standards of performance for an intrinsic reward or enjoyment of achieving them.
For perfectionists, such achievements have become a (somewhat) effective way to gain social acceptance, get recognition, and establish a sense of personal value. But it gets to an irrational level, where success and failure are absolutes—dichotomies with no gray in between. And with the definition of success set so high, the many failures that inevitably result are followed by harsh criticism. There’s no room for error, and this intensifies the concern about making an error.

So begins a hypervigilant search for threats, a desperation to avoid and correct weaknesses and limitations, and a profound sensitivity to criticism from others because such failures undermine their very worth.

Perfectionists start to doubt that they have the ability to adequately meet these important goals, with a preoccupation on where they are lacking and the possible impact of their failures. They find it difficult to determine what’s good enough, leaving them in a state of constant tension, for if perfection is the standard—yet it cannot be achieved—how else can they feel? So, they are moved to action, obsessively striving for this standard as a hopeless attempt to feel good enough.

The foundational belief of perfectionism, then, is that self-acceptance is intimately tied to accomplishment and the two cannot be separated. This fosters an overdependence on achieving and drives people to strive compulsively, regardless of the consequences of that striving.

With that definition, true perfectionism is so much more than just intensely pursuing a goal, or limited to just wanting to get it exactly right. These beliefs are firmly integrated into an individual’s identity, not only reflecting how he or she behaves but also who he or she is.

Part of the problem is that not only are the standards set both rigid and excessive, but perfection is to some degree also believed to always be possible. When failure inevitably occurs,
the person can’t handle it, acting like it shouldn’t happen to him or her. Not only is failure frequently experienced, but so is self-criticism and distress. While this can positively result in intense goal striving, it comes at the cost of undermining self-worth.

Theories of Motivation

- Self-determination theory suggests that we’re motivated to fulfill three basic human needs: competence, autonomy, and relatedness. We can most readily see that the frequent failure of falling short of perfectionistic standards undermines the competence need. And because the perfectionist is looking for the approval of others and is feeling that he or she has to succeed, rather than wants to, this sense of obligation and external control undermines autonomy.

- With these needs not being met, and with perfection as the solution to achieving competence, the drive to be perfect is enhanced, but it perpetuates the cycle of needs not getting met, which sets the perfectionist up for lower self-worth and burnout, continually striving for something that he or she can’t get.

- Achievement goal theory looks at how an individual defines success and failure as the critical factor determining how he or she goes about achieving. So, the perfectionist overworks for goals with both extreme approach and extreme avoidance motives in an attempt to establish self-worth, wanting to approach success and avoid failure.

- The hybrid goal of craving success, with simultaneous thoughts of failure, energize perfectionistic striving. Perfectionistic athletes set both mastery and performance goals—goals to master a skill and goals to beat others.

- Sport psychologists tend to emphasize mastery goals because you can’t control the performance of others and comparisons can
lead to distress, but performance goals can be motivating and part of what drives the elite is to be better than everyone else.

But perfectionists also set performance avoidance goals—goals that tell you what not to do. From a performance standpoint, mistakes are even more likely to happen with this focus. Goals that tell you what not to do make it more likely that you will do it because your attention is drawn to the wrong thing. So, the perfectionist’s performance suffers in this way, too, and motivation takes a hit when mistakes happen.

People are attached to their perfectionism, so the goal for a sport psychologist might be to help them become perfect perfectionists. Threatening to get rid of the very thing they need—their perfectionism—frightens some athletes. Instead,
the goal is to lessen their concerns while increasing their strivings, ultimately stopping true perfectionism and embracing a pursuit of excellence.

- But perfectionism is difficult to treat. A clinical sport psychologist with a background in cognitive behavioral therapy or acceptance and commitment therapy may be in the best position to treat the perfectionistic athlete.

- Still, coaches and the sport culture can help. Teaching the difference between perfectionistic striving and striving for excellence is one way to do it. The latter makes room for mistakes. Another strategy is appropriate goal setting, where the goals are challenging but realistic and flexible. Setting up a mastery-orientated practice climate is the best thing that can be done, where mistakes are related to as opportunities to learn and success is defined by improvement, not perfection.

**Suggested Reading**


Papaioannou and Hackfort, eds., *Routledge Companion to Sport & Exercise Psychology*, p. 152–165.

**Questions to Consider**

1. Which model of perfectionism do you find most accurate: the multidimensional construct of strivings and concerns or the personality construct where both dimensions must exist? Why?

2. Can a perfectionist ever truly be okay with making mistakes? Explain your answer.
We can’t just push problems aside as if they don’t exist or treat them as an inconvenience. We shouldn’t dwell on them either, but we have to take some time to acknowledge them before we can start problem solving. There are times we need to pull it together immediately and cope, but in the times between, we need to take the time to acknowledge what we really feel. We need to feel our feelings and process them and then decide what to do with them and how to perform our best. We need to practice self-compassion.
Self-Compassion

In 2003, Dr. Kristin Neff introduced the concept of self-compassion, defining it in three parts: self-kindness, which is being kind and understanding toward yourself in instances of pain or failure rather than being harshly self-critical; common humanity, which is perceiving your experiences as part of the larger human experience rather than seeing them as separating and isolating; and mindfulness, which is holding painful thoughts and feelings in balanced awareness rather than over-identifying with them.

There are two opposite ways we can treat ourselves across three dimensions: We can either treat ourselves with kindness or judgment; we can either see our experience as shared with others and normal or in isolation; and we can either relate to our suffering by mindfully observing it or getting overly invested in it.

Self-compassion differs from self-esteem. Self-compassion is based on self-acceptance, as you are. Self-esteem is based on self-evaluation and social comparison.

We know judgement, but what we need is kindness: the ability to be caring and supportive to ourselves when life’s difficult circumstances or personal failures arise and we need to get through them. When we accept painful experiences with self-kindness, we are better able to experience our pain rationally and calmly rather than with self-criticism and frustration.

We can suffer alone and think our pain is unique, and we’re the only ones going through it, and no one understands us because they aren’t in our situation. These attitudes hurt us because they increase our sense of isolation and make it difficult to listen to the friend, teammate, coach, or family member who may have some very helpful information to share.

A belief in a common humanity, on the other hand, represents a worldview characterized by the recognition that all humans are imperfect and vulnerable and that suffering is part of the
universal human experience rather than a personal affliction. When we see our pain this way, we become less judgmental and more understanding when dealing with adversity. It enables us to cope better.

- You might think that if you take it easy on yourself, you’ll squash your motivation to work hard and improve. But that’s not true. In fact, it’s the opposite; self-compassion actually increases your motivation.

- Self-handicaps are barriers to performance that people create to protect their sense of competence and self-esteem, usually through unclear performance feedback. If they fail, they tell themselves that it isn’t because of their poor ability; it is for some circumstance outside of themselves. When the performer does well in spite of this handicap, then his or her sense of competence is enhanced.

- Handicapping comes in two types: behavioral handicaps, which are actual behaviors that would hurt performance, such as decreased effort or less practice time; and self-reported handicaps, which are claims of handicaps before a performance, such as high anxiety.

- Only moderate or occasional use of self-handicapping strategies protects or enhances self-esteem. More frequent use, however, will lead to more long-term disadvantages than benefits. Decreasing effort or practice, and using that as an excuse, increases the risk of failure.

- Sandbagging is defined as a self-presentation strategy where a false prediction or fake demonstration of inability lowers others’ expectations of your performance and theoretically decreases pressure to perform. Personal expectations of success increase performance, but other people’s expectations of success can hurt performance, so sandbagging decreases this pressure—but at a cost.
Sandbaggers limit exploration of their abilities by avoiding feedback on their performance when it would be made public. In a sport-specific example, sandbaggers who predicted lower performance scores ended up performing worse in the actual competition, suggesting that predicting worse performance could also work as a self-fulfilling prophecy.

Both self-handicapping and sandbagging are powerful ways to protect ourselves from psychological harm, at the cost of being our best. But it turns out that people high in self-compassion have less of a need to use such self-protective strategies and both self-handicap and sandbag less. This is also true in academic settings.

**Self-Compassion and Performance**

To date, there are no studies that measure a direct effect of self-compassion on physical sport outcomes such as strength, speed, or wins and losses. But the research does address psychological variables associated with self-compassion that do enhance performance directly.

You can be both kind and challenging. You do not have to be mean to yourself to motivate yourself. You can have extremely high standards and at the same time be honest with yourself about who you are and the mistakes you made.

Only then, with this accurate and balanced picture of yourself, can you change what needs to be fixed. Self-criticism is actually associated with lower goal progress in athletes. So, if you want to be better, be kind to yourself.

Self-compassion may be particularly beneficial for female athletes who face the unique challenge of negotiating the difficult relationship between the body required for performance and the body desired for appearance. These athletes inevitably experience guilt and shame because by meeting one standard,
they fall short in the other. Self-compassion is described as an emotional regulation strategy that can neutralize negative emotions and promote a positive state of mind.

- The lack of self-compassion is only a slightly bigger issue for women compared to men. In a 2015 meta-analysis consisting of 71 publications and more than 13,000 participants, women were found to be a bit less self-compassionate. This is consistent with past findings that females tend to be more critical of themselves, use more negative self-talk, and ruminate more than males.

- Unfortunately, this can lead to a higher incidence of depression among females. So, it may be particularly important to help women learn how to be self-compassionate, but because the effect size is small, gender differences in self-compassion should not be overemphasized. Men need to practice this, too. In fact, we could all use more of this, regardless of gender, race, age, or culture.
The benefits of self-compassion are not limited to sport and performance. Another 2015 meta-analysis with more than 3,200 participants found self-compassion to be positively associated with the practice of health-promoting behaviors such as eating habits, exercise, sleep behaviors, and stress management. The authors concluded that some of these results are due to the impact of self-compassion on the increased positive and decreased negative emotions.

In a large meta-analytic study with a sample of almost 16,500 participants, the authors found not only a very clear association of self-compassion with various forms of well-being, but also a causal relationship, with medium to large effect sizes.

Self-compassion also apparently helps procrastinators. Procrastination creates stress, but we do it anyway because it delays the immediate discomfort of whatever we don’t want to do. Delaying it, however, often just creates more stress and pressure later on, increasing our urge to procrastinate even more. Procrastinators then tend to make it worse by beating themselves up for the behavior with self-deprecating and automatic negative thoughts, further increasing stress and distress.

Individuals with high self-compassion report dramatically less motivation anxiety and tendency to procrastinate than those with low or moderate self-compassion. Those with lower levels were associated with higher levels of procrastination. And treating yourself harshly after failure to do what you want just adds to the stress associated with procrastinating, further compromising health.

Practicing Self-Compassion

Dr. Kristin Neff’s website, www.self-compassion.org, is an incredible resource of articles, meditations, and exercises.
Maybe the best way to develop compassion for yourself is to consider how you might treat a friend. In a writing exercise, respond to these four prompts:

1. Think about times when a close friend feels bad about him- or herself or is struggling in some way. How would you, at your best, respond to your friend in this situation? Write down what you typically do and what you say, and note the tone in which you typically talk to your friends.

2. Think about times when you feel bad about yourself or are struggling. How do you typically respond to yourself in these situations? Write down what you typically do and what you say, and note the tone in which you talk to yourself.

3. Do you notice a difference? If so, ask yourself why. What factors or fears come into play that lead you to treat yourself and others so differently?

4. Write down how you think things might change if you treat yourself like a close friend when you’re suffering.

Taking a self-compassion break can take less than five minutes and consists of the three elements of self-compassion: mindfulness, common humanity, and kindness.
1. When a moment of suffering or pain arises, pause and recognize that it is there. Typically, we will do any number of things to avoid or get rid of it, including trying to dismiss it or criticize ourselves for being so silly or weak. But your feelings matter and they’re there, so take a moment to acknowledge them. Don’t evaluate, embellish, or justify them. Just notice them, label them, and feel them for what they are.

2. Then, recognize that you are not alone. Remembering that you’re having a very normal feeling, that millions of others also feel, can help. This isn’t meant to trivialize your experience—quite the opposite. Respect that you feel what you feel, and while no one knows exactly what you’re going through, there is an element of it that everyone can relate to because we all suffer in some capacity.

3. Once you can feel that, put your hand over your heart, or on that place where you feel that emotional pain, or where you need a soothing touch, such as holding yourself or stroking your skin. Feel the warmth of your hands, considering how you can be kind to yourself or what you need to hear at that moment. This is an opportunity to give yourself validation, encouragement, or acceptance. Physical touch has a powerful effect, even your own. End with kind words to yourself. Watch how much better you feel.

**Suggested Reading**

Neff, “Self-Compassion.”


**Questions to Consider**

1. Why do you think high achievers may be hesitant to apply compassion to themselves?

This lecture is about burnout, which is defined as a psychological syndrome where an individual is low on three dimensions: energy, involvement, and efficacy—maybe better described as exhausted, cynical, and ineffective. When you’re exhausted, you feel overextended and depleted physically and emotionally. Cynicism describes a negative, callous, or excessively detached response toward different aspects of work. Inefficacy, or reduced accomplishments, captures the feelings of incompetence, lack of achievement, and decreased productivity associated with burnout. All three dimensions are needed to be considered burnout.
These definitions associated with burnout come from analyses of burnout within the helping professions. As far as sport goes, this model extends well to coaches because they are helpers providing for their athletes. But athletes are different. They are receiving the help, so the model has to be modified.

Exhaustion remains but is adjusted to physical and emotional exhaustion associated with intense training and competition. Cynicism is replaced with sport devaluation: a loss of interest, indifference, or resentment toward performance and the sport. Inefficacy is replaced by reduced accomplishment, relating to an athlete’s skills and abilities and observed when athletes fail to achieve personal goals or are performing below expectations.

Of course, athletes are going to get exhausted when training. But burnout exhaustion lasts long after training fatigue is relieved following rest. And the pattern or onset of burnout differs in sport than in the work setting. Exhaustion comes first but is then closely followed by reduced accomplishment. Devaluation doesn’t happen until later.

Sometimes there is a confusion of terms. Burnout is not being just really, really tired. In this case, such fatigue can lead to withdrawal from an activity that is actually helpful. You get your break and then return refreshed.

In burnout, the withdrawal is part of the problem, not the cure, because it becomes a habit of low motivation. True physical exhaustion involves the depletion of physical energy resources, and withdrawal in cases of burnout are a more significant psychological and motivational unwillingness to engage than when just fatigued.

Burnout can look like depression, but there are distinct differences. Burnout tends to be associated with a specific performance context, whereas depression is more generalized.
across all aspects of a person’s life. The sadness, guilt, hopelessness, and worthlessness that are seen in depression are not necessarily a part of the burnout experience. They are separate, but you could experience both simultaneously.

- Probably the most confused construct with burnout is overtraining. Overlapping symptoms such as exhaustion, lethargy, and negative mood make distinguishing between them difficult. A common way to screen for overtraining is by using the Profile of Mood States scale, which assesses five negative mood states and one positive mood state.

- Successful performance in sport is usually associated with an iceberg profile, one that is high on vigor and low on tension, depression, anger, fatigue, and confusion. Overtrained athletes show the opposite pattern.
Some argue that burnout is a more severe form of overtraining but also maintain that they are distinct conditions. Overtraining is more associated with physical training and issues of under-recovery, whereas burnout can happen in the absence of excessive physical loads, such as due to psychological stress.

Regarding overtraining, rest is critical for recovery. But rest alone does not do it for the burned-out athlete.

The overtrained athlete is attempting to balance a continued drive to train with a physically reduced ability to do so. The burned-out athlete, on the other hand, is done physically and emotionally. He or she has lost the motivation to train and ultimately even participate in the sport. And while burnout isn’t a common problem, for those that are burned out, the consequences are devastating.

Burnout is a syndrome, or a collection of symptoms that occur together. Because these symptoms are associated with other constructs, such as depression, it can be challenging to identify. In addition, it can be difficult to tell which symptoms are true symptoms of the condition and which ones are the resulting consequences of the syndrome.
Burnout can affect five main areas: affective, cognitive, physical, behavioral, and motivational.

- The affective symptoms are typically a restrained or subdued mood state, such as gloomy, tearful, or depressed. But it can also be moody, with shifts to anxiety or aggression because of frustration and oversensitivity.
- The cognitive symptoms include problems with information processing, memory, attention, and concentration as well as sometimes a rigidity in thinking.
- There is inconsistency in the physical symptoms with objective measures of health, such as cholesterol and cortisol levels being only weakly associated with burnout compared to stronger self-reports of headaches, nausea, restlessness, sleep disturbance, ulcers, high blood pressure, disrupted menstrual cycles, and frequent and prolonged colds.
- The same inconsistency shows up for the behavioral manifestations, such as substance use, over- and undereating, high risk taking, avoidance, impulsivity, and procrastination.
- But the motivational symptoms are clear. There is a crisis in which the emotional drive has disappeared, replaced by feelings of disappointment that sport is not experienced as great as it once was, accompanied by a loss of hope. This leads to the behavioral responses mentioned previously and, ultimately, withdrawal.

While these descriptors are from the literature on professional burnout, they hold up pretty well in the sport context. Additional symptoms specific to sport include feeling trapped or unable to escape sport, constant fatigue, and needing longer recovery periods for the physical and emotional exhaustion dimension.

Reduced accomplishment in the sport model adds inconsistent performances, training hard but not seeing any improvement, and internalizing or taking feedback too personally.

Finally, devaluation is characterized by a loss of motivation and enthusiasm, seeing few benefits to participating, looking forward to being done with the sport and time away, resentment, and just being sick of playing and competing.
Models of Burnout

There aren’t enough longitudinal studies to identify the exact causes of burnout in sport, but a few models have been proposed to explain it. One of the most well-supported models in the literature is the cognitive-affective model, in which stress is perceived as the key causal factor.

Burnout is the product of chronic exposure to stress. Based on the idea that humans want to maximize positive and minimize negative experiences, athletes will engage in activities as long as they are favorable, balancing the costs and rewards of engaging in the activity compared to other opportunities. When sport becomes an aversive source of stress, burnout and withdrawal are likely when the costs become too great and outweigh the benefits.

Burnout happens in four stages. The first stage is the demands of the sport—time, training, relationships, and pressure. In the second stage, the athlete meets these demands. If he or she can handle them, then everything is good. But if he or she feels that he or she can’t handle them because of a lack of skills, time, energy, good coaching, money, or emotional support, then the third stage of physiological responses is initiated: the stress response, or the fight-or-flight response. This triggers the coping behaviors in the final stage. These behaviors can be positive, such as rest, working harder, or seeking support, or they can be maladaptive, such as working harder when rest is needed or avoidance. Then, the athlete cycles back into the first situational demands stage, and the process continues.

In burnout, a sense of chronic overload continues, and physiological responses of lethargy, tension, fatigue, or illness result. If the stress isn’t managed so that the benefits outweigh the costs, withdrawal from sport can be the final coping behavior.

Building on this, the stress-recovery perspective suggests that burnout is the result of a growing imbalance between stress and adequate recovery. It can start with overtraining as athletes are
unable to recover adequately, and as the gap between stress and healing continues, burnout can follow. This emphasis on recovery is an important one. It is critical to performance-improvement cycles.

- A second stress-recovery model, total quality recovery, places a greater emphasis on the role of proper recovery in preventing overtraining, staleness, and burnout. It’s comprehensive, emphasizing physical, emotional, psychological, and social recovery.

- That takes care of stress perspectives, but there are other models, including the sport commitment model of burnout. Like the constrained, obligatory kind of commitment identified in recent models, in the sport burnout literature, it is called sport entrapment: high cost and low rewards for participating, few choices for alternative activities, and a high investment in participation. Entrapped athletes doubt the value of their sport and feel restricted and unable to leave, leading to burnout.

- In a social model called the unidimensional identity development and external control model, burnout is the result of encouraging athletes to develop their identity exclusively in
and around sport, where success becomes critical to a positive sense of self. In addition, decision making is in the hands of coaches, administrators, and others, so both the limited identity and lack of autonomy and control contribute to burnout, leading to sport withdrawal.

- The final model of athletic burnout has been the application of self-determination theory, which proposes that we all have three basic needs for well-being and personal growth: autonomy, competence, and relatedness. Autonomy is your perception of control and choice. Competence is how you feel you are measuring up to internal and external goals and standards. Relatedness is how connected and secure you feel in your environment.

- The more satisfied you are in each of these areas, the more self-determined, or internally motivated, you can be. The more self-determined you are, the more control over your own behaviors you have, and the greater likelihood of success and achievement. But if you are more externally regulated and you’re depending on things outside yourself, then getting your needs for autonomy, competence, and relatedness met can be hindered. And burnout may be one of several negative consequences.

### Preventing and Treating Burnout

- Pulling from the professional intervention literature, there is evidence that stress management techniques—such as cognitive restructuring, taking a more helpful perspective and what these experiences mean to people, and relaxation training—can be helpful.

- The more interventions you can do—and it’s great if you can address both the individual and the performance context—the better, especially because research shows that the organizational factors play a bigger role in burnout than individual ones. But it may be easier for the individual to change.
- Targeting the exhaustion element of burnout seems to yield the best results. The inefficacy and cynicism seem to be more resistant to improvement.

- A more positive mood should be protected and developed in sport to prevent burnout. Mindfulness practice is one way that you can achieve this, and it is a particularly good way because such a practice is entirely under your control.

- Enhancing engagement may be the best way to prevent burnout overall. Do what you can to stay positively absorbed and engaged in what you are doing. Athlete engagement is characterized by confidence, dedication, vigor, and enthusiasm.

- Physical and emotional exhaustion is the first dimension of burnout, so rest is important. But it is difficult to prescribe, because it is different for everyone. Personal awareness decision making is the key, monitoring your body and recovery and quality of workouts, and making adjustments as needed to meet your goals and maintain energy. Be aware of sleep, hydration, and nutrition so that your body maximally heals after
exercise. Prevention is ideal, so finding a daily or weekly way to recharge yourself is best.

- The second dimension is sport devaluation. Motivation is needed here, so remember self-determination theory: autonomy, competence, and relatedness.
  > Recognize your independence. Realize that you could do something else with your life. Perhaps a daily gratitude exercise will help. Each day, journal three unique things that you’re thankful for to keep you engaged.
  > Goal setting and achievement are great ways to keep you focused on your competence, even if your coach or boss doesn’t acknowledge it. While it’s true that the environment is the greater cause for burnout, we have to be responsible for ourselves. Keeping a goal journal with daily, or at least weekly and monthly, goals keeps you focused on your progress. This also helps buffer against the third dimension of burnout, reduced accomplishments.
  > The relatedness component, how connected and secure we are in our environment, ties in well with the stress models of burnout, as relationships are often the biggest stressors. We cannot control other people; we cannot make them nice or be supportive. Find healthy relationship boundaries. And say no. You only have a limited amount of energy.

**Suggested Reading**


**Questions to Consider**

1. Why might high achievers minimize the value of rest and recovery?
2. What drives achievers to continue to push themselves when they are suffering the consequences of burnout?
This lecture focuses on pain and injury, which are as much a part of sport as winning and losing are. In some ways, pain is a part of what we love most about sports. It makes them difficult and challenging. Not everyone is willing to risk pain, and athletes take pride in that. Injury certainly involves pain, but it’s so much more. Injuries happen and can’t be avoided in sport.
Pain

- Pain is a biopsychosocial experience. Every pain experience involves your biology, your thoughts about the pain, and your emotional reactions to it, and it is influenced by the social context in which it occurs. It will often start with a physical trigger or cause, although it doesn’t have to.

- Thoughts and emotions influence pain perception and can affect behavior. Positive, affirming, confident reactions can be beneficial. But when pain elicits a strong negative emotional reaction, then a vicious cycle can develop where pain increases distress, which increases pain, which increases distress, and so on. Anxiety and depression can kill motivation for rehab and further prevent recovery.

- Pain also occurs in a context. In American football, drawing attention to an injury could be dangerous for a player who doesn’t want to let the opposing team know that he has been hurt by their efforts. In soccer, however, reacting to pain can be helpful, hopefully drawing a penalty and a potential penalty kick.

- The social aspects of pain are also critical to the pain experience. Does pain elicit more support and attention from family or teammates? Does pain serve as an excuse for poor performance? Might pain let an athlete escape a particularly tough workout?

- It might not be that someone is faking pain or malingering an injury, but there might be real perceived differences in pain sensations due to the psychological and social factors that contribute to the pain experience. Such social reinforcers for the pain actually increase the physical experience of pain.

- Psychology is an integral and significant part of the pain experience. This is why doctors can’t just look at a person’s injury and know how much pain he or she should be feeling. It is also so
often why—particularly in chronic pain, which threatens a person’s
day-to-day life experiences—medications alone, even powerful
ones, do not work. It’s because the pain isn’t just physical.

◆ There isn’t just one kind of pain. Athletes will experience a
continuum of pain: Fatigue and discomfort are the normal
sensations associated with training, competition, and
rehabilitation. As an athlete, you have to get comfortable with
being uncomfortable, as this is a routine part of sport.

◆ More intense is positive training pain. This, too, is necessary,
and athletes need to push into this on a regular basis to be their
best, although it can be difficult. It is a nonthreatening pain and
typically happens with endurance activities. It is believed to be
under the athlete’s control, as it stops when the activity stops or
lessens when intensity is dropped.

◆ This normal performance pain is usually characterized as being
a dull, more generalized pain. It doesn’t last long after exertion
and is produced voluntarily. In many ways, it can be satisfying
when interpreted as a sign of a good workout or achieving goals.
◆ If an athlete isn’t sure what these kinds of pains are, or interprets them as dangerous, it can lead to unnecessary distress and decreased compliance with rehabilitation.

◆ Next is negative training pain, which is threatening. It means that continued training is no longer beneficial. It hurts, and pushing through it isn’t helping you athletically.

◆ Negative warning pain is even more threatening, signaling potential injury and prompting the athlete to evaluate the cause and take appropriate action to prevent injury.

◆ Negative acute pain indicates that an injury has occurred. Unlike performance pain, this pain is intense and specific. It persists after exertion has stopped. It is perceived as outside the athlete’s control and can be distressing. And if athletes misinterpret this pain as safe, they are at risk for worsening the injury, treatment setbacks, and re-injury.

◆ Finally, at the most extreme end of the spectrum is numbness, the absence of sensation. This is typically a cause for concern. It signals a serious injury and should be interpreted as highly negative.

◆ When pain shows up, you can either pay attention to it or not. Association is a strategy that means tuning in to the pain as a performance cue. Dissociation strategies, on the other hand, intentionally use distraction as a way of coping with the mental and physical demands of the sport. There isn’t one strategy that’s best; rather, you can determine which strategy is best when you consider your goals, effort, conditioning, willingness to hurt, and pain management skills.

◆ John Heil wrote the top book on sport injury, and in it, he suggests seven elements to remarkable feats of pain tolerance.
  1. There has to be the expectation that pain can and will be tolerated.
  2. Acceptance involves giving up the struggle to be comfortable or focus on getting relief. Pain is respected as valuable and
essential. In this way, pain is positive. It can be equated with effort. You might not even call it pain but use other labels, such as fatigue or discomfort, to help change the cognitive interpretation and normalize it.

3. With a **strong goal focus**, achievement of the goal is of primary concern, an incredibly strong desire to achieve an outcome that leads to willingness to experience anything to achieve it.

4. This leads to **absorption in the work**, or a focus so strong on the moment-to-moment process of performance that all else, including pain, just fades away.

5. In remarkable feats, there may be **cognitive and perceptual changes**, such as tunnel vision and enhanced visual clarity, not hearing some sounds but intensified others, slow- and fast-motion time effects, intrusive thinking, dissociation, memory loss, distortion, and even temporary paralysis and automated behavior. When these strange changes occur, they are considered normal and helpful in service of performance.

6. The awareness that pain will be **tolerated for a limited amount of time** makes remarkable feats of pain tolerance more likely. Performance pain will eventually end, but the emotional pain of failure can last forever, motivating the performer to endure more in the moment for a more enduring sense of satisfaction and achievement later.

7. Pain can be most greatly tolerated in a **true survival context**, under life-threatening conditions. While sport seldom involves true life-or-death situations, there is a metaphorical survival context when an athlete must “win or go home” or fight to make the team. The athlete’s survival at sport can depend on a successful outcome, increasing the willingness to experience pain to achieve the goal.
Heil also describes the pain-sport attentional matrix, a useful way to look at how focusing on and distracting from pain interacts with performance.

- **Associating to both pain and sport.** This is useful when pain signals the proper technique.
- **Dissociating from both pain and sport** will help decrease pain, but performance suffers. Comfort is never the goal in sport, so this has limited usefulness as far as achievement goes but can be helpful during natural breaks from activity as a way of getting psychological rest from pain or the cognitive demands of the sport.
- **Dissociating from pain while tuning into sport performance** is best when the pain is understood as routine or benign. It is best to just let it be there and stay focused on the task, otherwise pain becomes a distraction and interferes with performance. But sometimes this has limited value. Ignoring it in the beginning may work, but as it increases, pain has a way of wanting to be heard. So, develop a mindful approach to pain tolerance, letting it be there as it is, accepting it, and staying away from catastrophizing.
- **Tuning into pain and dissociating from sport** in many cases would cause the ultimate breakdown in performance. But it can be valuable during rehabilitation, in the management of overuse and chronic injury. Sport can totally absorb our attention. We can lose ourselves in it and push our bodies beyond where they should go, with pain signals suppressed to the detriment of athletes’ physical well-being. This strategy is best used during breaks in the action to assess pain or look for muscular guarding in an attempt to protect the hurting body part.

**Injury**

- Injury can be devastating to an athlete, or it can be an opportunity to improve and come back even better. In either case, it is an athletic challenge, and an athlete is best served to treat it as such, using all the skills, tenacity, commitment, and hard work he or she has used in sport.
Emotionally, an athlete will go through an affective cycle. It is not uncommon to experience distress, such as anxiety and depression. It is also common to experience some denial or unacknowledged distress, particularly in the early stages.

These are normal, and we don’t have to panic and rush to get athletes to the third component of the model, determined coping, which is characterized by vigorous, proactive, goal-driven behavior—although that is the ultimate goal. We want to spend more time in this phase, but it is normal and healthy to cycle through all three.

When a performer is injured, we expect some sadness and disappointment. Playing time may be lost, perhaps a season. This can be particularly distressing if the performer has been training for a long period of time. Expect some anxiety about the injury and questions about returning to play, losing a starting spot, and achieving goals.

When working with injured athletes, start by assessing what they know about their injury and how much they trust their medical
team. Sometimes patients don’t understand the medical jargon. Sometimes the athlete feels rushed with the doctor, but they have to get their questions answered, particularly about what the pain means.

◆ Is it benign, or can they play through it? Does it signal more damage being done, or is it normal rehabilitation pain? These answers are essential to rehabilitate properly, but they also minimize anxiety and relieve depression. Safety can be established, and progress can be better made.

◆ There is a return-to-sport model that suggests five stages an athlete will go through after injury when attempting to return to play.
  › First is the initial return, which tests the injury to be sure it is healed. This is medical confirmation. Athletes get stuck here. When a doctor tells the athlete that he or she is fine, it doesn’t always sink in. It is critical that the athlete knows in no uncertain terms that he or she is healed and safe to return. Athletes need to be careful about jumping back into sport. They are healed, but that doesn’t mean they are in competition shape. The risk is physically progressing too quickly.
  › This leads to the second stage of recovery confirmation. Similar to the first, but more psychological in nature, athletes need feedback that the now-healed injury is also able to withstand the demands of sport.
  › The third stage is the actual return of physical and technical abilities. Athletes are frustrated. They often want to pick up where they left off, but they can’t. They have to rebuild. This is a dangerous stage because the athlete sometimes wants to just jump back in with their teammates, setting them up for re-injury. Athletes must commit to realistic healing and skill goals, based on where they are today.
  › The next stage of high-intensity training marks the psychological transformation from injured to healed. Athletes in this stage can experience doubt and anxiety and have to be on the lookout for setbacks.
The final stage is the return to competition with a mix of emotions. An athlete might be back and healed and ready to go, but there is also nervousness and apprehension. The key for athletes is to trust the rehab they’ve done and, when they get back to the game, to adopt the same focus they had before they left. If you are protecting the body part or fearing re-injury, your attention is not on the game; this increases your chances of getting hurt again.

**Suggested Reading**

Addison, Kremer, and Bell, “Understanding the Psychology of Pain.”


**Questions to Consider**

1. Why do athletes and nonathletes alike prefer to see pain as purely a medical or physical issue?

2. For endurance athletes, such as cross-country runners and swimmers, pain tolerance is essential for success. Describe three ways in which pain can be interpreted as necessary and beneficial. What must an athlete do to keep this perspective at the top of his or her mind?
We all feel pressure to look better. With every advertisement, music video, magazine cover, and Hollywood movie showing someone strong and beautiful, how can we not compare ourselves to these ideals and feel like we have to keep up? It starts early. Girls as young as eight and nine years old are worrying that they aren’t thin enough, and boys wonder if they’re muscular enough at nine. What can we do about this dangerous pursuit of the ideal body?
Body Image Disturbance

Western cultures’ feminine beauty ideal and sexual objectification of women is well documented, and now men are getting caught up in it, too, defining masculinity through body shape and size. Masculine and feminine ideals get internalized, and it becomes the lens through which we compare ourselves to the rest of the world, evaluating our bodies as personal worth.

When we fall short, as we often do, dissatisfaction and distress can result in leading men and women alike to engage in behaviors that aren’t the healthiest. Dieting, particularly with extreme restraint, is the primary way to achieve the feminine beauty ideal. Physical activity, particularly high-level strength training and conditioning, is the avenue to achieve the male ideal.

Performance settings and cultures add additional pressure for athletes. For example, weight requirements or coach-encouraged weight limits, public weigh-ins, judging criteria that reinforce and reward certain body types, and even just commenting on weight add to the pressure.

Revealing uniforms are especially problematic. High school female athletes and both male and female college athletes rated uniforms as one of the most significant weight and body image pressures. Body consciousness becomes an unneeded source of pressure and distraction that hurts performance.

What happens when you try to meet two competing ideals at once? A female swimmer’s muscular shoulders are advantageous for sport but could make her feel self-conscious and dissatisfied with her body in social situations where she may want to appear more “feminine.” You can’t be both at once. Some pick a side and choose to interpret their body in the most positive way. Others experience conflict for years.
When the athletic body conflicts with the social ideal, the performer is at risk for unhealthy behaviors. And these unhealthy behaviors are often rewarded. Dieting, playing through pain, perfectionism, and excessive exercise might be complimented by coaches and teammates in service of achieving sport goals.

And at the right time, in the right way, in the appropriate situations, these behaviors may be okay or even commendable. But in the wrong context or in excess, these behaviors can come at the expense of personal health, leading to disordered eating or substance use.

Athletes in sports that are judged—aesthetic sports—are at particular risk for eating disorders. Winning in cheerleading, figure skating, synchronized swimming, and gymnastics is determined by the subjective evaluation of others, not an objective outcome, such as time, weight lifted, or baskets made. These athletes experience considerable weight-related pressures.
Many coaches in lean or endurance sports, such as wrestling, powerlifting, distance running, swimming, and tae kwon do, believe that leaner bodies and lower weight will improve performance, even though empirical research doesn’t support this idea.

Coaches and parents, therefore, may pressure an athlete to lose weight to his or her detriment. In these cases, there are higher rates of purposeful dehydration, self-induced vomiting, and diuretic and laxative use. The goal in some of these sports is to get one or two weight classes below their natural weight to gain a competitive advantage. But this isn’t always true.

The pressure can be internal, too, especially when their identity is closely tied to their performance results. In addition, as athletes and performing artists advance, they devote more time, effort, and training to the pursuit of excellence. So, there’s internal and external pressure to win and do what they have to do to be their best.

But the strongest influence on body dissatisfaction and dietary restraint is the direct negative opinions and comments by coaches and teammates about what athletes look like and weigh and how bad the athletes feel about it.

Athletes value a coach’s opinion, so coaches can really influence how an athlete thinks about his or her body. But coaches also directly control the athlete’s physical training, playing time, and sometimes even food intake. And because of that power, when pleasing the coach can result in more playing time and attention, it can further incentivize the athlete to drop weight.

Comments regarding weight are common. In one sample of gymnastics coaches, half admitted that they made judgments for weight loss based only on appearance, not the athlete’s performance or nutritional training protocols. In another sample of young adult female athletes across a variety of sports, more than half had heard negative comments about their appearance,
body shape or size, and weight—not only from coaches, but also from family and peers.

- Even well-conditioned athletes can find themselves lacking, whether because of comparison to photoshopped pictures, to the size and shape believed to have a competitive advantage, or to what the general public currently finds attractive.

- And if they believe the ideal is what they should look like and overemphasize the importance of their appearance in their self-evaluation, they are most at risk to be dissatisfied or even disgusted with how they look and want to change it. And the more that athletes are exposed to these messages, the more likely they are to internalize these ideals and ultimately are more at risk for disordered eating to achieve them.

- Negative emotions such as low self-esteem, guilt, and stress are associated with high levels of eating pathology as well as intent to restrict food intake. Dieting does not automatically make you a high eating disorder risk, but it does objectively put you one step in that direction.
While we think of these as problematic behaviors, the athletes see them as solutions—ways to fix the performance problem, get the edge, secure a starting position, keep up with the competition, or get to the next level. Sometimes it’s emotional, to feel good enough. Either way, disordered eating and the use of appearance- and performance-enhancing drugs are solutions that create other problems.

How Can We Help?

Researchers suggest that creating a body-healthy environment may serve as a preventative measure, where the physical and psychological well-being of the athlete is central to all decisions, recommendations, and requirements regarding training.

Of course, coaches and administrators are concerned with the health of the athlete, but with the data we have, it looks like performance and winning are really at the center. This needs to change, but not necessarily at the cost of winning. In fact, a physically and mentally healthy athlete will be a better performer.

Researchers Trent Petrie and Christy Greenleaf offer some suggestions about where the right balance between health risks and sport performance is.

There is no ideal body weight or body fat percentage that translates into peak performances. The best performers in sport vary in height, weight, size, and shape. So, the first step is disconnecting weight and performance. Don’t get athletes and dancers distracted by something that has little to do with their actual performance. Focus instead on skill development, mental training, proper nutrition, and rest.

The authors argue that weight requirements and weigh-ins are unnecessary and should be eliminated in almost all instances. If weight requirements and weigh-ins are beneficial for health or
safety, then let the sports medicine team handle all the details, not the coaches or administrators. Do it privately and don’t post the results. Coaches and other staff should not talk about it. And coaches should be educated about disordered eating and the impact it can have on an athlete’s body image. When they criticize weight, it undermines confidence and negatively impacts performance. Keep these weight discussions out of the coaching arena and leave them to the nutritionist.

- Better than treating something is preventing it in the first place. Meta-analyses show that prevention programs have a significant small to moderate effect in reducing risk factors such as internalization, body dissatisfaction, and negative affect, particularly when high-risk groups are targeted and the programs focus on body acceptance or reducing the thin ideal.

- But because problems do exist, screen for them and treat them. Information about eating habits, body and weight attitudes, and overall mood and stress can be gathered in preseason physicals. Then, throughout the year, the performers can be monitored by coaches and medical staff for signs and symptoms of disordered eating. Once identified, make confidential treatment a priority. Yes, this takes time, effort, and money—but our priorities do. We invest in what’s most important. Sport cannot say that health is important and then not act on it.

- While education is important, it hasn’t consistently shown to significantly impact behaviors. Nothing is more powerful than changing the culture itself. As long as performance and appearance continue to be what’s most important, health, ethics, and fair play will come in second, with disordered eating and appearance- and performance-enhancing drug use a solution to achieving those more highly valued outcomes.

- Using performance-enhancing drugs is cheating and puts the athlete’s health at risk. If the athlete gets caught, as so many have, he or she has already made the money, broken the records, and achieved the success. The majority of punishments
for using performance-enhancing drugs, even while playing, are relatively minor—a few game checks and suspensions—not a lifetime ban. There isn’t a no-tolerance policy, which means we tolerate it at best. At worst, we encourage it, to the detriment of athletes’ health and well-being. This needs to change.

Suggested Reading

Mirabella, “Struggling with Body Image.”
Thompson and Sherman, Eating Disorders in Sport.

Questions to Consider

1. What would have to change in the sport culture to eradicate disordered eating? Choose a specific sport. At the youth and high school levels, how would you change the rules of the sport, the dress, the coaching, the communication, etc., to make this happen?

2. What would have to change in the sport culture to eradicate the use of performance-enhancing drugs? Choose a specific sport league. How would you modify the rules of the league to make this happen?
This lecture is about the psychology of the sports fan. Sport fandom can be summarized in one word: identification. It seems to be at the root of our passion. Being a fan tends to distort our thinking and creates bias. Men tend to identify more, but women are not immune. Identification and the consequent distortion in thinking influences our behaviors, both good and violent.
Fan Psychology

- Why be a fan? What makes us so passionate? Is it helpful or hurtful? Why do we get so passionate about a group of men or women who don’t even know who we are, yet how they perform and the decisions they make affect us so deeply?

- It comes down to belonging. It has been proven that identifying with a social group that shares your values or beliefs, a group that you value, leads to more social networks, which in turn provides more psychological support, boosting mental health. Positive social relationships are one of the core and best predictors of happiness and satisfaction with life.

- Social identity theory says that an individual’s self-concept comes, in part, from knowing that he or she is a member of a specific social group, along with the value and significance attached to that membership. Team identification is an application of this. It’s defined as a fan’s psychological attachment to a team and the degree to which a fan views that team as an extension of him- or herself.

- Fans feel part of a larger community sharing the same interest, and this fandom creates a sense of belonging. This psychological sense of community is associated with feeling greater social support and higher life satisfaction, quality of life, and social and subjective well-being.

- Being a fan boosts your well-being in two ways. First, you can bask in reflected glory, which is when you associate yourself with a winning team and feel their success as your own experience. The second is team identification, which involves the extent to which fans see the team as an extension of themselves.

- Highly identified persons are those with a strong psychological attachment to the team, and they get tangible psychological benefits simply through their association with the group.
Team identification is correlated with higher levels of social self-esteem and social well-being, higher levels of energy and more frequent positive emotions, and lower levels of loneliness, depression, alienation, and experiences of negative emotion. It’s also correlated with higher levels of openness, conscientiousness, and extroversion.

Even identifying with a losing team can be beneficial because of the belonging. In addition, these fans can take pride in their loyalty and ability to stick with the team through bad times as another way to enhance their self-esteem.

In 2006, Daniel Wann published the Team Identification–Social Psychological Health Model to explain the positive relationships between sport team identification and well-being. Team identification leads to increased social connections with others, both enduring and temporary.

Enduring social connections are found when fans live in a community where other fans of the team are frequently seen. Temporary social connections occur when an individual who does not live in a community with lasting connections sometimes finds him- or herself in the company of other fans of the team.

It isn’t through these social connections that social psychological well-being is enhanced. Team identification seems to enhance well-being directly through the reflected glory—when you can get it—and that sense of association.

In addition, threats to that social identity, such as poor team performance, and strategic coping mechanisms, such as assigning good characteristics to the team you are a fan of or bad characteristics to players you don’t like, determine how these social connections influence health.

It is the team identification, not sport fandom in general, that yields these positive results. The casual fan may not get the benefit if identification is low. On the other hand, highly
identified fans are threatened by their team’s poor performance and will use all kinds of coping strategies to help them deal with the distress.

- Both athletes and fans tend to attribute wins to internal, stable, and controllable factors and losses to external, unstable, and uncontrollable factors. This phenomenon is known as the team-serving bias. Wins are attributed to the team’s preparation and effort, while losses are the result of poor officiating.

- Lowly identified fans don’t tend to do this and seem to be less bothered with explaining or justifying a defeat. Highly identified fans have a strong positive connection to their team, and being a fan is a central part of their social identity. As a result, the performance of their team is closely linked to their feelings of self-worth. They take wins and losses personally and experience anxiety, and their mood after the contest will be greatly affected.
However, consistently great performances are not required to maintain fandom. Highly identified fans stay fans through the ups and downs and are less likely to disengage when the team is unsuccessful. On the other hand, fair-weather fans avoid the emotional burden of losing by disengaging after a loss and cutting off reflected failure.

Identification affects how you view the players. Highly identified fans will see players on their team more positively than lowly identified fans. They may focus on the positive attributes and minimize the negative. Highly identified fans will have a more negative bias on players from rival teams, judging them more harshly for a similar infraction.

Fans try to maintain this favorable perception of their teams and players by focusing on the positive. They make comparisons that favor them, a situation called an intergroup bias. Intergroup bias explains why highly identified fans root against rival teams and against teams that just beat their team, particularly in playoffs or tournaments. It helps with coping.

Lowly identified fans don’t feel the same effects of a win or a loss on self-worth and self-esteem—positively or negatively—so there is no need to use these team-serving, or intergroup, biases to cope. It doesn’t mean you are less of a fan; it just means that you are less identified. It spares you some mood swings.

Highly identified fans gain and maintain friendships through their association with the team. In fact, highly identified fans, when compared to low-identified ones, have greater levels of social self-esteem, social integration, and trust in others. They also have lower levels of loneliness and alienation. Beyond these social benefits, highly identified fans demonstrate healthier mood profiles.

Across the ages, identification with a winning team predicts higher levels of social life satisfaction and lower levels of loneliness. Sport fandom in general does not contribute to social well-being, illustrating the unique and powerful role of identification.
Higher identification means more time, energy, and financial resources invested through more frequent attendance at games and events, more money spent on the team, more frequent purchases of team merchandise and memorabilia, and higher rates of television and radio consumption.

**Fan Violence**

There is a dark side to fandom: fan violence. The National Association of Sports Officials reports two to three acts of parental violence at youth sporting events each week. What’s going on in a fan’s mind to engage in violent behaviors?

To answer this, researchers looked at soccer parents and their sideline rage and found that the angrier the parents became, the more aggressive their behaviors. What got them so angry, in psychological terms, was their ego defensiveness, or how anxious or sensitive they were to challenges and criticisms of their self-worth, as experienced through identification with their child as if they as parents were playing. And it is a strong reaction—three times greater than the irritability you feel from daily hassles.
A second contributor to anger is control orientation. When parents have an unconscious attitude of rules regarding how people should behave and the rules don’t go that way, ego defensiveness increases because of this perceived attack on their beliefs.

On the other hand, when parents endorse an autonomy orientation—when people regulate their behavior according to their personally chosen values—then it reduces ego defensiveness because everyone gets to choose their own. These orientations don’t directly affect anger, but through ego defensiveness, orientation can affect anger positively or negatively.

The practical application is, as a fan or parent, to choose your orientation. If you have a mindset where there are rules of behavior that need to be followed—the game should be fair, refs shouldn’t make mistakes, everybody should get equal playing time—then you are at greater risk of becoming irate when these things don’t happen.

But if you can adopt a perspective that is more focused on how you want to behave—where you actually have more control and
see both the sport you are watching and the actions of others as independent of you—then you are less likely be ego defensive.

- We see similar angry behaviors from non-parental fans, and the level of identification with the team seems to play a decisive role.

- Identification is only one factor for violence. Another may be the demographics of who attends the games. Police intervention is often implicated as a reason for increases in fan violence.

- Fan violence typically begins with random acts of violence directed at sports officials, coaches, and players and typically involves verbal assaults and throwing stuff. This can elevate to clashes between groups of fans, or between fans and security inside the stadium, and more verbal assaults and throwing things.

- But this can now escalate to fights in the stands and pitch invasion, where anywhere from two to 300 people rush to the area occupied by opposing fans. Besides the risk of direct bodily harm from fighting, many can become trampled in the wave—some of whom are innocent and just trying to flee or seeking help from the police.

- The third stage of fan violence takes it outside the stadium to the bars, trains, busses, and streets around town. Speaking of bars, alcohol is often a significant factor in fan violence.

- Spectators’ identification with a team, an athlete, or the nation they represent will mediate fans’ response to violence in sport. Although not a necessary condition for violence, heightened arousal generally increases the intensity and likelihood of aggression.

### Maximizing Fandom

- There is a body of research on maximizing, or seeking the optimal outcome. Maximizers seek more options in hopes of
getting the best outcome. This requires a greater investment of time and energy, and maximizers tend to use poor decision-making strategies, such as relying too much on input from others to avoid this stress.

- Maximizers often experience regret and dissatisfaction, maybe because with more options they are more aware of what they are giving up, even when they obtain the outcomes that by some objective measures are in fact the best.

- In these ways, maximizers resemble highly identified sports fans, who also invest significant time, energy, and resources on the teams with which they identify. Like maximizers, the commitment of a highly identified fan carries significant emotional consequences: They suffer stress from the highs and lows of their teams’ successes and failures.

- Maximizers try to get the optimal outcome in sport fandom, defined as identification with a historically successful team, in a different way than searching for the best job. Maximizers may drive far for more ice cream selections to get the best one, but they won’t take the same approach and follow more teams in hopes that one of them will win the championship this year. They won’t follow the best teams to maximize their chances, either.

- Rather, maximizing seems to enhance the strength of identification with a team. This was seen in fans of unsuccessful teams. If the fan was a maximizer, he or she was more likely to be highly identified with the team than if he or she wasn’t a maximizer. Maximizers are not usually fair-weather fans. They may seek optimal outcomes; however, they do not always end up with them.

- In fact, when maximizers follow teams that may not provide them with optimal outcomes in terms of performance, they identify even more strongly with those teams. Believing a team may not perform well actually causes maximizers to identify more strongly.
Maximizing may contribute to sport fan well-being by maintaining high levels of identification in the face of team adversity. People are happier when they win gambles with better-than-expected outcomes. The best fans may stick by the worst teams in anticipation of the glory of improbable victory.

**Suggested Reading**

Wann, Waddill, Polk, and Weaver, “The Team Identification–Social Psychological Health Model.”

**Questions to Consider**

1. When does healthy identification with a sport team end and unhealthy identification begin?

2. How are fans of professional sport teams and parental fans of youth sports the same? How are they different?
The father of group dynamics, Kurt Lewin, identified the two processes in which all groups are certain to be involved: locomotion, which is the activities of a group that are directed toward the achievement of its goals, and maintenance, which consists of the activities directed toward keeping the group intact. To enhance teamwork, by improving both locomotion and maintenance in sport teams, four correlates of teamwork have been identified: cohesion, cooperation, role relationships, and leadership.
Cohesion

- Cohesion is the measure of how much groups remain united through adversity, pushing forward together either to achieve team goals and/or sometimes for emotional benefit—a team that takes care of each other.

- There are four things to recognize about cohesion.
  - Cohesion is multidimensional. There are several factors that can cause a group to stick together. Not all factors are found in each group, so teams can have different reasons to stay united.
  - Cohesion is dynamic. It can change over time. The team that’s together just to win a championship may grow closer over the season.
  - Regardless, all groups come together for an instrumental purpose. It’s often to accomplish something, but even social groups have a social or emotional purpose and goal to be met.
  - Note the affective, or emotional, dimension of cohesion. Bonding on any level is satisfying. We like to belong. Bonding is related to positive emotions, such as enjoyment, and exclusion can lead to negative emotions, such as depression and loneliness.

- Looking at almost 10,000 athletes and more than 1,000 sport teams, researchers found a medium to large effect size in the cohesion-performance relationship. Maybe surprisingly, the relationship is even stronger in coactive sports, such as archery and sprinting, compared to interactive teams.

- Cohesion has its risks and drawbacks. Athletes have cited time wasting and putting social goals before task goals as risks of high social cohesion. Another is social isolation, which is when a specific teammate isn’t as social by nature and feels left out. Similarly, high task cohesion has the potential disadvantages of some athletes feeling that the environment has become too serious or feeling increased pressure to conform, losing individuality, and not letting down teammates.
The relationship between cohesion and performance is very strong in female teams and greater than in male teams. A more cohesive team will facilitate winning in women, but the opposite tends to be true among men: Winning increases cohesion.

The effect size is large in high school teams, moderate at the intercollegiate level, and smaller at the club and professional levels. The skill levels to succeed become progressively more difficult and necessary as you move from high school to professional levels, meaning that cohesion has a relatively smaller effect on performance.

Team building exercises are probably the most common way to build cohesion, typically with specific goals to help the group increase effectiveness, satisfy the needs of its members, or improve working conditions. Team building works best when it centers around at least one of these four elements: goal setting, problem solving, interpersonal relationships, and role development.

Team building can improve the group environment, structure, or process.
If you want to address the distinctiveness of the group and help members feel like they’re part of a real team, creating a group logo or getting similar haircuts can do that. Traveling on a team bus to games or training in the off-season as a group improves togetherness. These address the group environment.

To affect group structure, target role clarity and acceptance with coach-athlete meetings. Encourage members to buy into team norms, such as making a point to encourage each other after a mistake. Address team leadership.

To enhance group process, exercises should address the importance of individual sacrifices for the sake of the team. And let members have input into group goal setting.

Cooperation

- Team-building exercises can also target cooperation, where success can only be had through working together. Cooperative teamwork is best and essential for complex and interdependent tasks or games, such as basketball and volleyball. This is in contrast to competitive tasks, which have their role even within a team.

- In general, competition is best for simple reaction-time and independent tasks, such as archery and sprinting. Competition tends to be associated with self-centeredness and can, at times, lower players’ self-concept when compared to practice in more cooperative environments.

- Cooperation will often require a player to emphasize the team above him- or herself. This is essential for effective teamwork because of how dependent you are on others to do their jobs.

- To enhance cooperation, each individual has to buy in to the goals and values of the team. A great way to do this is by creating a preseason contract, in which you discuss what characteristics are most important to the team, what it takes to win, and what
type of team culture players want to have. You generate ideas and then summarize them into themes. Try to narrow it all down to about five critical values and then specifically define the behaviors that would demonstrate each.

- You write down these behaviors, everybody agrees and signs the contract, and it gets posted in the locker room or practice facility as a reminder for what players have committed themselves to doing all season, because team building is most effective when it’s ongoing. Coaches can refer back to it, and they don’t feel nagged because it was players’ ideas, and they signed the agreement. Teammates have permission to challenge each other because they’re working together cooperatively to create this kind of environment.

**Role Relationships**

- Every player on every team has a role to play, and clearly defining that role is essential for a coach. Understanding and accepting that role as defined is critical for a player to contribute to team success.

- More specifically, an athlete needs to understand the scope of his or her responsibilities, what behaviors are required to execute these responsibilities, how he or she will be evaluated regarding his or her role performance, and what the consequences are if he or she fails to fulfill these responsibilities both personally and in regards to the team goal.

- When a player’s role is ambiguous, it can be stressful to the athlete, who will end up wasting time putting effort and energy in a direction that’s not needed or even counterproductive. The athlete’s satisfaction decreases while anxiety increases. There is reduced cohesion with others on a task because of the confusion and increased role conflict as athletes step on each other’s toes. Ultimately, you get inferior performance. You have to know what
your job is specifically, accept it, and execute it for a team to be successful in sport.

- Role efficacy refers to team members’ beliefs about their capabilities to successfully carry out their role duties. Mastery experiences are the biggest contributors to self-efficacy, or a person’s belief that he or she can execute a specific action to achieve a specific result. When performers try something new and get positive feedback that they have been successful, it develops confidence that they can play the role needed by the team.

- Team success may come at the direct cost of personal development. This is a great example of the real-life challenge many athletes face. At least knowing what your role is, however limited, and accepting it helps the team. It also helps the individual perform in that role.

- When role clarity is high, we find a moderately strong positive relationship between role efficacy and role performance, meaning that when one increases, so does the other. But under conditions of role ambiguity, there was no relationship. If you don’t know what you are supposed to be doing, your confidence and performance are going to be unrelated.
This highlights the importance of clearly defining roles so that you can understand what needs to be done. Then, you can determine if you are playing the right role, have confidence in your ability to execute your job as defined, and ultimately improve your likelihood of success.

**Leadership**

- An initial look at the research of leadership in sport finds that some of the models have conflicting or inconsistent theories behind them. Hard leadership styles, where coaches are more autocratic in their decision making, are a more demanding and directing approach. Athletes have on many occasions preferred this style. It’s oriented more toward individual and team performance excellence.

- The autonomy-supportive leadership style emphasizes creating and fostering a task-focused climate. This soft style of leadership seeks to cultivate a sense of independence and competence in the individual, which in turn fosters a sense of well-being and intrinsic motivation to train, compete, and stay involved.

- The best way to look at this isn’t as an either-or situation. Both styles have their merits, and being exclusively one or the other probably wouldn’t work well in any setting, so a coaching style that integrates the two is preferred.

- Teams that are more social and recreational, and even developmental at younger ages, may be thought of as having an emphasis on the pursuit of pleasure rather than focusing on winning. With an emphasis on deliberate play—where the activity is done for its own sake, is enjoyable, is flexible, and occurs without adult supervision—more autonomy-supportive behaviors by the leader are encouraged.

- Deliberate play is a precondition for individuals to be continually involved in an activity and gain experience that could lead to
mastery over time. But as the pursuit of excellence becomes the greater focus, and more deliberate practice is engaged, a greater percentage of commanding-demanding behaviors from the leader may be more beneficial.

- Eleven leader behaviors have been identified as essential in the pursuit of excellence: Leaders create vision, stimulate intellectually, pay individualized and supportive attention to each member, give personalized recognition, are demanding, build both self-efficacy and self-esteem, guide training, emphasize winning, cultivate self-interest, encourage rivalry within the team, and instill both a task and an ego orientation.

- Transformational leadership theory guides what behaviors we want to see in our leaders across four dimensions:
  1. Idealized influence: This is where the leader is a role model, leading through a demonstration of personally held values and beliefs.
  2. Inspirational motivation: These leaders are optimistic about what others can achieve. They set high but achievable goals and instill a sense of confidence in their followers.
3. Intellectual stimulation: This involves getting others to think about old problems in new ways and encouraging them to think for themselves.

4. Individualized consideration: This involves recognizing individual needs and abilities, taking a genuine interest in the team, and displaying a sense of care, concern, and compassion.

- This leadership style affects how individuals think about themselves. It influences their confidence, intrinsic motivation, and emotional responses. And ultimately, all of these things influence the performer’s ability to excel.

- Jeff Janssen created the Team Captain’s Leadership Model, which contains many elements from transformational leadership theory. It starts with leading by example, which is idealized influence. The basic premise is that if you can’t lead yourself, then you can’t lead anybody else. And you lead by example in four ways: through commitment, confidence, composure, and character.

- It is only after you lead by example that an athlete can become a vocal leader. Then, 75 percent of the time, your role as vocal leader is to be an encourager.

- Do this by being a servant leader. Make the team the priority and team success over personal success. Do the grunt work. Check in on others and see how they are and what they need. Listen well. Help where you can.

- Be sure that your words build confidence. Catch team members doing something right and reinforce it. Celebrate success. Tell players that you believe in them.

- Help them refocus. Do it gently but directly. Don’t scold; be on their side about it. You want the same things. Remind them to focus on what’s important now. It is under adversity when leadership is most needed to help athletes refocus on what is essential for success.
Be a team builder. Keep the team goals in front and visible. Remind the team who they are and why they’re doing this. Help teammates accept their role by valuing it yourself and telling them. Encourage teammates to bond outside of sport and develop positive personal relationships.

If a leader is doing all of that, he or she will be more effective and there will be less of a need to be an enforcer. Still, about 25 percent of your duty will be as an enforcer, as no team goes without conflict or needing accountability.

**Suggested Reading**


**Questions to Consider**

1. How would you encourage an athlete who is not happy with his or her playing time from the perspective of each correlate of teamwork: cohesion, cooperation, leadership, and role relationships?

2. Why is leading by example not enough? Why do people tend to embrace the enforcer role of leadership too much?
Talent is a developmental process, not a genetic gift. It can’t be developed unless it is recognized and nurtured by parents, teachers, and coaches. Discipline over a long period of time is necessary. The motivation to do this is greatly enhanced by the support and encouragement of those in the field and family members. The vast majority of athletes do not make it to the top. In this lecture, you will learn how to help athletes develop to be their best, regardless of how far it takes them.
Talent Development Models

- When we look to develop kids athletically, a talent identification model is typically used. This is where a skills-based approach is used to evaluate talent in a youth sport league. The less skilled children are gradually weeded out through competition and by investing in the better players. The idea is to give more coaching and playing time to those kids who show promise.

- But there are many problems with this model. First, some of these young kids get into an early training model that is inconsistent with a child’s motivation to play sports. Remember, these are kids. Kids like to play and have fun. Modeling an adult athletic training program often doesn’t fit developmentally, and the kids—even the really talented ones—may not have the maturity or interest to commit themselves in such a serious and intensive manner. These kids risk greater injury, burnout, and dropout.

- But there’s even a question about whether you’ve identified the most talented athletes this way. Many of these talented kids haven’t even hit puberty yet. Their bodies are going to change significantly. The size or speed that is used to distinguish adult athletes may not become apparent until adolescence.

- And there’s no guarantee that a particular attribute that separates a child-athlete from his or her peers will still distinguish that child when he or she becomes an adult athlete, particularly if it’s size or strength. By weeding these supposedly less talented kids out early, late-maturing athletes could be lost, and both the athlete and the sport system would suffer a shameful loss of opportunity.

- Identifying sport talent is unreliable, especially before puberty.

- There are limited spots at the top, and lesser athletes get dropped the higher you go, whether in Olympic or professional sports. This pyramid approach to sport development assumes that earlier and increased training in childhood will provide a
performance advantage to children who are chosen for select teams and will eventually increase their chances to climb to the top in adult sports. The focus is on the short-term performance outcome for a limited number of kids. But where does that leave the other 99 percent?

- Soccer in England, baseball and basketball in the United States, and ice hockey in Canada have a large base of youth participation. They can more easily get away with eliminating potentially talented kids early because there is always another talented kid to take his or her place.

- But this excludes a very large number of children from the opportunity to develop into elite-level athletes, and it reduces the pool from which elite athletes develop in at an early age. This hurts the sport in the long run, and it hurts potentially talented athletes. It favors the kid who develops early, not necessarily the eventually most talented young adult.

- Many of these elite youth sport programs downplay the costs of this early talent selection because there are so many other
kids ready to try and take the place of kids who burn out or get injured and quit. Emphasis remains on the top performers, and the rest are all but forgotten.

- It takes time to develop, and an early start isn’t the only way, especially when you consider the risks. And the pyramid approach is, at best, unreliable. In fact, childhood sport performance is actually a poor predictor of adult performance. There are too many other variables to consider.

- A better talent development model focuses on retaining athletes by providing equipment, space, and playing and training opportunities for a large number of children. This offers the chance to select the best athletes from among a much larger pool of motivated adolescents. The most important purpose of childhood sports, then, is to attract and motivate children to stay involved so that they can choose either a recreational or elite pathway at the appropriate developmental age of about 13.

- This approach is consistent with a true developmental perspective that defines talent not as something that just is or isn’t there, but as the truly multidimensional, difficult-to-assess-at-childhood construct that it is. For talent to come to fruition, input from a host of personal and social variables over a long period of time is required.

### Developmental Activities in Youth Sport

Developmental activities in youth sport can be examined across two axes: how much the activity is led by adults versus children and how intrinsically rewarding the activity is versus instrumental in developing skills. This results in four kinds of activities:

1. **Deliberate play** is where athletes experience sport through fun and playful games. Its reward is intrinsic; it provides immediate gratification, maximizing enjoyment. An example is street hockey. It is led by children, often modified from the standardized rules, and is low pressure. It encourages kids to...
be creative and experiment with new skills they might be afraid to attempt under the critical eye of a coach or parent. Social skills develop as kids are left on their own to negotiate rules of fairness and resolve conflict. There is often a mix of ages and skill levels, creating a host of opportunities to test skills and learn from more mature players or deal with the adversity of competing and getting beat by someone bigger and stronger.

2. **Spontaneous practice** has the extrinsic or practical value of improving sport skills but is still led by kids. An example is when two athletes use their free time to practice their jump shots on their own. They don’t follow an adult-specified curriculum, and they may not be targeting the skills they most need to improve. The value is the ownership a kid takes over his or her skill development, and the practice pays off in performance improvement.

3. **Deliberate practice** is led by adults and dominates most organized sport leagues. Kids are often divided by skill level or age to structure and control the instruction, keeping the learning focused on the specific demands of the sport. This requires effort, generates no immediate rewards, and is motivated by the goal of improving performance in the future rather than enjoyment in the present. Drills are run at practice by a coach, and feedback is given to a young athlete. It is essential for development of expertise, but there is debate about how early
this is needed. Are the benefits of this structured environment more valuable at this stage than the benefits of deliberate play?

4. **Play practice** is where adults lead the fun and games in a structured practice environment. Coaches often use this incentive to play at the end of practice if the kids pay attention and get through the necessary drills, but that’s the wrong attitude. Adults want to emphasize training, but this play practice has great value. It keeps kids motivated while developing sport skills.

**The Developmental Model of Sport Participation**

- The most prominent conceptualization of athletic development is the Developmental Model of Sport Participation, and it consists of seven basic assumptions that have stood up to scientific scrutiny. These postulates not only promote the development of expertise, but also the physical health and psychosocial development for all children involved in youth sport.

- Unlike the pyramid approach, this model does not support elite programs or the early selection of talent during childhood. It features the interaction of variables at all levels.
  1. Early diversification does not hurt elite sport participation in sports where peak performance is reached after maturation.
  2. Sampling, or trying out a bunch of sports and activities, is linked to a longer sports career and has positive implications for long-term sport involvement.
  3. Early diversification allows participation in a range of settings that most favorably affect positive youth development.
  4. A lot of deliberate play during the sampling years builds a solid foundation of intrinsic motivation. It does this through involvement in activities that are enjoyable and promote self-management.
  5. A lot of deliberate play during the sampling years establishes a wide range of motor and cognitive experiences that children can ultimately bring to their main sport of interest. Deliberate play builds a solid foundation of generalizable skills.
6. Around the end of primary school, about age 13, children should have the opportunity to either choose to specialize in their favorite sport or continue in sport at a recreational level. The primary goals of recreation are an extension of the sampling years, with an emphasis on enjoyment and health. They can involve deliberate play and deliberate practice. But if specialization is desired, then more time is dedicated to the chosen activities.

7. By late adolescence, around age 16, kids have developed the physical, social, cognitive, emotional, and motor skills needed to invest their efforts into highly specialized training in one sport.

- The sampling pathway is less direct than early specialization but offers a potentially wider range of positive outcomes. There is a trade-off. Early specialization and the extra hours of practice yield results, and great results for a limited number of kids. Before choosing which path to go down, coaches, parents, and athletes are encouraged to weigh the potential health, psychological, social, and motor benefits and risks of early sampling or early specialization.

**Recommendations for Athletic Development**

- Be careful about cutting kids from competitive sport programs. They may mature late and lose the opportunity to be a high-level performer, which hurts them, and the sport program, in the long run. Provide the opportunity for all kids ages 12 and below to participate and develop, making adjustments when needed.

- Discourage specialization in one sport until mid-adolescence, unless early specialization is required by the nature of the sport.

- All kids should be taught the skills for all positions. Growth spurts and puberty can dramatically change kids’ bodies, attitudes, and aggression. You won’t know what position the athlete will be best suited for until growing and development are complete.
Activities for ages 2 to 10 should focus on the development of fundamental movement and manipulative skills. The risk of early specialization is that only the skills specific to that sport get developed, limiting their development and opportunities in other sports or activities later on.

From a psychological perspective, provide younger children, ages 4 to 7, with frequent positive feedback. Self-worth is based on perceptions of competence in multiple areas, and this feedback is critical. Complement simple task accomplishments and personal effort.

At ages 7 to 12, emphasize mastery efforts and how the young athlete learned and developed over time through hard work and persistence.

Avoid peer comparisons. Everyone has different advantages or disadvantages that have nothing to do with anyone other than the athlete him- or herself. So, from ages 7 through adolescence, increase the use of self-comparison techniques to evaluate personal competence. This will help buffer against a whole host of problems, such as performance anxiety and fear of failure, later on.

Value the role of every player on the team. Be sure to let each player know how he or she contributes by defining his or her role and reinforcing its importance.
Kids develop best in a positive and encouraging environment that supports autonomy and growth. Remember this when the desire to win or an overemphasis on outcomes dominates.

Competition doesn’t become enjoyable until the end of this sampling stage, so be careful about emphasizing it too early. You can have competitive challenges during deliberate play activities, but emphasize mastery of skills over outcome and peer comparisons.

Once an athlete reaches the specialization years, don’t focus exclusively on intense levels of training. Balance deliberate play and deliberate practice.

Teach athletes to view mistakes as being a necessary and essential part of the learning and developmental process. The fear of making mistakes is crippling, and coaches or parents who get angry or criticize and show frustration when mistakes are made create an unsafe environment for learning. If you want your athlete to develop, he or she has to have a healthy attitude toward mistakes. Start developing this early.

**Suggested Reading**

Papaioannou and Hackfort, eds., *Routledge Companion to Sport & Exercise Psychology*, 3–21 and 22–33.

**Questions to Consider**

1. In lecture 2, an early start was identified as an important factor in the development of expertise. How does that conflict with the goal of the sampling years in the Developmental Model of Sport Participation? Can they coexist? At what cost?

2. Think about the growing specialization of youth sport today. What are the benefits and costs? Do you support keeping things the way they are? Why? If not, what would you change, and why?
LECTURE 23

How to Be a Great Sport Parent

In this lecture, you will learn how to help your child grow and develop into a successful achiever, whether that is in sport, art, music, or life. You will learn that everything you say and do matters—and that everything you don’t say or do matters. At the foundation of good sport parenting is the unconditional love and support throughout the process of raising an independent young adult. Let all your decisions come from this attitude to guide your words and behaviors.
Mistakes Sport Parents Make

- The biggest mistake sport parents make is what they say on the car ride home. This may be what kids hate most about youth sport. After a tough loss, they’re not interested in your opinion of how they could have hustled more or technical instruction on their batting swing.

- Give your kids time. Let them sulk if they want to. They don’t need emotional correction at this time, either. In general, being upset is appropriate. You don’t have to fix them. In fact, trying to fix them can invalidate their feelings and make it worse. Sit with them in their pain. You can talk about the game when they want to talk about it. If you have to talk, at least ask them when. Let them own it.

- To show unconditional love, treat your kids the same after wins and losses. Otherwise, you are going to teach them that your love and mood are dependent on the outcome—an outcome they can’t control. That creates too much unnecessary pressure.

- Something that drives student-athletes crazy is when their parents yell at the referees. Referees are doing the best they can. They have professional integrity and make human mistakes, or they’re 16-year-olds getting paid 10 dollars a game. Taking your abuse is not part of the job description. But the child-athletes recognize this better than the parents. They feel bad for the referees. They understand that they are doing their best, the same way the athletes are trying. Your yelling embarrasses them and sets a bad example.

- Another thing that bothers student-athletes is when their parents engage in sideline coaching. You are probably only trying to help, but you’re not the coach. When you coach from the sideline, you might undermine the coach or confuse the child about what to do. Don’t put your child in the position to have to choose between listening to the coach or you.
Give the kids space to think. Sport performance goes far beyond just the physical skills. When kids are playing, they are also learning how to think and focus, seeing the field, and working on the technical and tactical aspects of the game. It doesn’t help to yell at them to do the obvious, such as “run” or “catch the ball.”

Concentration is a mental skill athletes are trying to develop, and if you are going to be shouting instructions, it’s going to make it difficult for them to focus. Their attention is going to be divided, and that’s going to lead to more mistakes.
Here is a script based on the psychological research of the best things a parent can say to encourage a young performer:

› Before a competition: Have fun. Play hard. I love you.
› After a competition: Did you have fun? I’m proud of you. I love you.

These statements can be broken down into one: I love to watch you play. Notice the unconditional love, complete acceptance of the child, and lack of pressure or attention to performance. Kids already know that they play sports to win. They know to avoid mistakes. What they need to know is that you love them no matter what.

Parents and the Development of Elite Talent

Many children who become experts have already had hundreds of hours of deliberate play and practice before the age of eight. So, parents have tremendous influence on the child’s social and sport development experiences. The roles, beliefs, values, skills, and behavior of the family create a psychosocial context in which the child develops, greatly influencing the outcome.

In the early or sampling years, parents introduce the child to a variety of activities, with the emphasis on play and fun. At this stage, parents value the activity and communicate this to the child. Looking at interviews with world-class performers in sport, music, art, math, and science, researchers found that these parents tried to ensure higher-quality coaching and supported the coach in creating a learning climate with process-oriented training and an absence of competitive pressure on the child. Parents believe their child may have a gift and begin to invest in it.

Competence is an essential ingredient in motivation, so the acknowledgement of improvement and achievement after hard work is critical in a young athlete’s development. Parents can negatively affect motivation by getting angry or using rewards to try to control behavior. Parents can also hurt development
by only providing rewards based on results; instead, reward behaviors they can execute to give them the best shot at winning.

- The transition period that takes place in the middle years, from ages 12 or 13 to about 15, is characterized by a shift to greater sport specialization and higher levels of training and competition—up to about 12 to 19 hours per week over 75 percent of the year.

- Parents increase their support, accepting and adjusting to the greater demands of the increasingly challenging sport environment. The teen’s investment and pressure increases, and so does the parents’. The parents make sacrifices, giving up other social opportunities, providing transportation, and providing financial support—all while continuing to be a good role model under more challenging situations.

- With greater investment and disappointment, the emotional regulations of dealing with playing time, injury, perceived fairness, and coach-athlete relationships increase. Parents of talented athletes become more proactively involved with their child’s sport.

- This is when kids start to become more autonomous in their training and sport progression. Remember, you aren’t the coach. You’re not responsible for your child’s performance. The developing athlete relies more and more on feedback from perceived experts, such as coaches and peers. Parents are not seen as the best source for competence-based information or feedback anymore.

- Parents model the role of close, proactive guardians within the support team. As part of this, parents may shift family activities to center on the talented athlete’s training and competition schedule, which can affect siblings. This family focus can be central to an athlete’s success.
School is still valued at this point, encouraging balance within sport achievement. Older siblings will often serve as role models for work ethic at this stage, in either direction.

The intensity of demands increases significantly at this stage. Know what you’re getting into. Interviews with tennis and soccer parents at this stage identified a few specific challenges: conflicts between their role in tennis support and their real jobs, lack of family and partner time, organizational and administrative roles, and the financial impact.

Then there’s the stress of watching competitions, dealing with the emotions of the results, and interacting with the other sport parents. There are also challenges you have to face and overcome trying to ensure your child’s best interest while everyone else is doing the same for their kids, often creating competition and conflict between parents. Athletes during this stage do best when supported by parents who show more directive behavior with situational advice and emotional support.
Unfortunately, it seems that negative behaviors are also more prominent during this stage. Too much pressure, too much involvement, poor emotional reactions to outcomes, and embarrassing behaviors show up here. And athletes complain of too much sport talk, a restricted social life, and parental approval tied to results.

You can ask kids at a young age about what they want, what works, what makes them feel supported, and what makes them feel bad, and they’ll tell you. Parents and kids should ask each other what they want and listen to the responses. Your child-athlete is the expert on what he or she needs. Partner with your child to find the best way to support him or her.

The athlete continues to grow, and in the later years of mastery and investment, ages 15 through 18, the athlete is probably training 19 to 22 hours per week. He or she is moving from elite junior to elite senior performance and working toward professional status. As the athlete grows and continues to become more independent, the parent role is mostly emotional support.

Home becomes a refuge from the ups and downs of athletic life. Parents become unconditional providers of social support, a valuable but often underappreciated role. But parents are the only ones who can do this because everyone else has some investment in the child’s performance. The disappointments and setbacks can be more emotionally intense, requiring even more parental emotional support.

In some cases, tangible support can be increased, too. Sacrifices to ensure optimal training conditions may be greater, such as travel for elite coaching or relocating the family. And then parents have to navigate the strained relationships with siblings who may be jealous of the achievements and differential behavior toward the elite athlete.
The Best Sport Parenting Practices

For children at any age and any level, the best sport parenting practices consist of three specifically defined behaviors. These roles are unique to parents, and while they may not be as fun or exciting as sideline coaching and feeling like you’re truly part of the team, they are roles that only you as a sport parent can play. And they are important.

1. **Parents are providers of a young athlete’s sport experience.**
   In the early years, this translates to introducing kids to various sports, supporting them financially and logistically, and giving them informational support in training and competition. Often, this translates to the more challenging role as the provider of emotional support, admiration, and reinforcement of positive behaviors.

2. **Parents serve as interpreters of their child’s sport experience.**
   What you believe in as a parent—the priorities you set and what you value—gets transmitted to your kids. If you think their talent is a natural gift or product of hard work, this will influence their motivation, how they respond to adversity, and what they think about themselves. Parental values regarding the benefits of competitive sport and the necessary psychological characteristics for improving can fast-track a young athlete’s development and positive coping responses. Negative beliefs, doubts, and criticisms do the opposite.

3. **Parents are role models.**
   Kids are always watching and listening. They see how you talk about coaches and how you respond to your mistakes as well as theirs. Be what you want them to be, in and out of sport. Demonstrate work ethic by training for your own road race, setting and committing to training goals. Be calm when watching sports and respect the referees and coaches. Be honest in all things. Model sportsmanship and don’t cheer when opponents made an error; compliment good plays on both sides. Let kids solve adversity themselves; ask their opinion of challenging situations to develop their sense of competence and independence.
Suggested Reading
Taylor, Positive Pushing.

Questions to Consider
1. In what ways do the natural instincts of parents hurt their child-athletes?
2. What performance skills discussed in this course would help sport parents embrace their unique role and leave coaches to coach without interference?
You don’t have to stop excelling as a performer when you get older. If you are willing to engage in deliberate practice, you can work to maintain your skills and keep achieving. Start planning early for eventual retirement. Realize that as a performer, you are more than your win-loss record, your title or position, or the money you make. The skills you’ve learned in this course will transfer to many of life’s challenges. Keep using them and excel throughout your lifetime.
Age-Related Decline

- We don’t need science to tell us that we slow down as we get older. Our speed, strength, dexterity, and memory inevitably decline. While we can’t deny that aging effects are real, a study of masters athletes gives us clues on how to keep performing at a high level as life goes on.

- The older we get, the faster we decline in sport performance. The decline is generally greater for females; for longer, endurance events within any sport compared to shorter-distance events; and for events that require greater peak power.

- Performance in tasks that demand motor accuracy over maximal power tend to peak at later ages and are more likely to be retained longer. Tasks that rely on experience, knowledge, and strategy are more likely to be retained than physiological and power tasks.

- Interestingly, research shows that age-related decline is consistently greater with cross-sectional data than with longitudinal data, meaning that when we compare age groups at a point in time, the differences between ages is greater than if we follow a specific group of athletes over a long period. This is because continued training slows decline. So, it may be that over time, increased access to coaching and increased availability of older-age competitive programs could be the reason for this difference as more opportunities to train and participate arise.

- For the nonathletic population, there’s about a two percent decline in performance per year. But by comparison, sport performance declines at only half of a percent per year from age 35 to 70. This was based on cross-sectional data from archived masters’ records. Longitudinal studies suggest much less than half of a percent for continuously involved aging athletes.

- It seems that continued involvement is the key. Masters athletes continue to train specifically for, and compete in, their chosen
sports well beyond the typical age of peak performance. Many remain quite competitive even when compared to their younger peers. The age of masters sports typically begins around 35, although this varies by sport. Seniors are athletes older than 55.

There are a few ways in which these athletes retain their skills.

› The compensatory explanation suggests that it’s possible to maintain performance through increased reliance on other aspects of functioning that have been improved. When you lose it in one area, you make up for it in another. An aging tennis player may choose to focus exclusively on tennis and give up other sports and activities to stay sharp and may use an oversized racquet to optimize her chances for success.

› Selective maintenance is similar to compensation in that insufficient practice is believed to be a significant contributor to age-related decline. To maintain high levels of performance, individuals must maintain the right amount of deliberate practice, which is the intentional and very specific practice of skill development, consistently identifying what could be better and working toward that goal with consistent feedback. Unlike compensation, which introduces new skills to offset declines in other areas, selective maintenance claims that older
experts will continue to use intense deliberate practice in the same way as younger experts. This works best when they keep up the specificity, intensity, and volume of practice as they age, while their peers tend to decline in these ways.

- Average training amounts typically decline during each stage of life, even among the elite. But older competitors remain highly involved. One study of senior Olympians reported 54 minutes of aerobic training four times per week and 14 minutes of anaerobic training twice per week.

- You can’t just throw yourself into this intense training at a later age and expect to catch up to these athletes. It’s ideal to get thousands of hours of practice early on to reach a high level and then maintain continuous involvement and deliberate practice to slow decline.

- But while such practice is very specific, there is something to be said for less specific activity, such as cross-training, to prevent wear and tear, to stay active when seasonal barriers interrupt training, and to keep motivation high by avoiding boredom or burnout. Then, there is the transfer of fitness and skills from one activity to the other.

- Athletes stay committed across the lifespan through achievement goals. Masters athletes tend to structure their training around one or two major annual competitions that they consider to be very important. They also tend to be more task oriented than ego oriented, meaning that they tend to focus more on beating their own times than beating others, and feel more control over doing so. But this doesn’t mean that they don’t care about winning.

- To succeed, you have to commit, even when you don’t feel like it. And athletes at all levels will commit in either a functional or obligatory way. Functional commitment is a “want to” commitment based on choice. Obligatory commitment is a “have to” commitment.
While one certainly seems more positive than the other, they both play a role in keeping older athletes engaged. Research shows that masters athletes have high levels of functional commitment and moderate to low levels of obligatory commitment. This is good because functional commitment tends to be healthier, more adaptive, and more likely to be positively related to determined training and participation.

Why would anyone “have to” play at this stage of their life? There are just some aspects of sport that can’t be replicated elsewhere—for example, head-to-head competition. So, if you want to continue to have such experiences, you have to continue in sport.

Sport enjoyment and satisfaction are consistently the strongest predictors of functional commitment across masters sports. In a study of senior Olympians, enjoyment was the only predictor of functional commitment in participants older than 65. A sense of personal investment, the expectation of enjoying and having the opportunity to participate in sport, and the lack of alternative activities contributed to a lesser extent.

Social support doesn’t necessarily increase functional commitment. But a lack of social support is associated with a higher level of obligatory commitment. Even more, the high expectations and pressure from significant others, called social constraints, most strongly predict this “have to” commitment.

When an athlete has greater functional commitment, he or she will put greater amounts of time, energy, and effort into sport, particularly, as one study found, as masters swimmers get older. But there was another age difference: Expectations and pressure from significant others was related to decreased resolve among younger masters but increased resolve to continue sport among older masters.

Social factors are the final area that influence masters sport involvement. About half of masters athletes have been
continuously involved with their sport since they were young. Sport becomes a part of their identity, recognized by others for what they do and achieve in sport. So, as they get older, staying involved in masters sports maintains this identity through the lifespan.

The Retirement Process

- We would expect that the retirement process would be most difficult for student-athletes or professional athletes who have most strongly and exclusively based their identity on athletic performance. Other challenging scenarios would be if there is a large gap between what they aspired to be and their actual ability forcing an exit from sport, or if they have little experience with these kinds of role transitions, poor emotional coping skills, or limited social or material resource support.

- Athletes who are forced out of their sport before they want to be usually face the most challenges. Some can no longer make the cut because of age or injury. Others, even if still young and healthy, get to a point where their skills are not at the level they need to be to make the team. This deselection is the most frequent cause
of involuntary withdrawal from sport. Ironically, these are often the athletes who are least prepared for the transition.

- If they are borderline athletes, they will likely have increased their training in a desperate hope to make the team, pushing back education or career planning even further into the background. It leaves them without a developed plan B when they’re cut.

- As a result, the athletes most vulnerable to deselection can be the most unprepared to cope with the end of their sport career. If their dreams haven’t been fulfilled before they exit, some athletes will question if all the time, effort, sacrifice, and struggle was worth it. For some, it can get so bad that they become bitter and disown their entire sport experience.

- A career-ending injury is unpredictable, comes as a sudden surprise and derails all plans, and is completely out of a person’s control. And of all these factors are associated with increased levels of anxiety and stress. In fact, career-ending injuries have been shown to be the most difficult reason for exit from sport to manage and can lead to the most severe reactions, leading to the most dissatisfaction with life after a sports career.
As athletes realize they can’t duplicate the elite athlete experience, they can understandably feel sad and a sense of loss. Some relocate. For the ones who do, once separated from the frequent and structured time with coaches and teammates, loneliness and boredom often set in.

Athletes who freely choose to retire usually have the easiest transition. When they do so in their own time, they typically are of the appropriate age, have achieved most of their sport goals, and have prepared for and planned what they will do next.

This planning is critical to success, yet most athletes don’t plan for their retirement or life after sport. Then, when they are inevitably faced with it, they are left feeling a sense of emptiness and have difficulty taking the first steps into exploring their next career.

These athletes are years behind their peers in establishing themselves in the workplace. They often have a limited sense of their values, needs, non-sport interests, and skills outside of sport. The sporting world is different from real life, so it makes sense that those athletes who do take the initiative and plan for retirement have been shown to adapt to the transition more quickly and report greater life satisfaction.

In sports, particularly elite sport, athletes specialize. They narrow their interests and focus most of their attention and energy on sport. It takes a tremendous amount of dedication, commitment, and time to perfect techniques and win.

This often comes at the price of personal and career development. And if the strength and exclusivity of sport specialization at a young age becomes too great, athletes can fail at developing other aspects of their identity during their teen years.

The primary developmental task of late adolescence and early adulthood is to explore different occupational alternatives, ideological beliefs, and potential life roles to gain the experiences
necessary to develop a personal identity—and hopefully one that is well rounded.

- But to be elite, this is often sacrificed. The time commitment and both physical and psychological demands prevent this healthy exploration. As a result, the strength and exclusivity of an athletic identity has some negative consequences when athletes disengage from sport because of retirement, injury, or deselection.

- While athletes are playing, they surround themselves with people who share their investment in sport, such as coaches, teammates, the sports medicine team, and administrators, who can be more interested in keeping the athlete in sport rather than facilitating their retirement. When retirement comes, athletes can find themselves without emotional support. This is where organizational support at the elite level is important, and there are programs to help.

- The Life Development Intervention model contains strategies for each stage of transition: enhancement strategies when planning for the future, support strategies while the athlete is transitioning, and counseling strategies to help athletes cope with the aftermath.

Suggested Reading

Questions to Consider

1. If you created a hierarchal list of the important and valuable concepts addressed in this course to achieve excellence, where would you rank deliberate practice? How would you justify that ranking?

2. How can sport and performance psychology benefit performers after their career is over?


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