

Mental Skills Training Curriculum

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Chapter 1

Athletic Identity

Pursuing and achieving meaningful goals lead individuals on a unique path of experiences that shape and build their personalities and lives. Athletes adhere to the “The Sport Ethic” to which they make sacrifices for the game, strive for distinction as well as accept risks or refuse to accept the limits in the pursuit of possibilities (Hughes & Coakley, 1991). As Lodato (2022) expresses, the sport ethic is a set of norms that are used in power and performance sports as the criterion for defining what it means to be an athlete and to successfully claim an identity as an athlete. The athlete compared to the non-athlete, commits to practice schedules and tournament schedules, missing celebrating birthdays and holidays, and consequently, develops an athletic identity.

Eventually, athletes make choices that they perceive as beneficial for their process that shape their identity. Nonetheless, at times they may over-conform to the sports ethic neglecting relationships, putting focus on outcomes rather than the pursuit of excellence, and loss of sense of self-identity, and self-esteem if the outcomes are not achieved (Lodato, 2022). An athlete’s well-being can be at risks when performance outcomes are not meeting the results wanted, and when the motivational climate and orientation becomes counterproductive.

Athletic Identity and Basic Psychological Needs (Self-determination Theory)

Autonomy, competence, and relatedness are accounted as basic psychological needs. The satisfaction of these needs facilitates students' intrinsic motivation and well-internalized motivation and enhances well-being (Ryan & Deci, 2000). Being an athlete can be psychologically rewarding. The athlete can fulfill autonomy by setting their own goals, training, and working on self-regulation, fulfill competence by self-learning and improvement, and fulfill

relatedness as they merge into their sports environment and sports culture (Lodato 2022). The athlete's needs and choices are driven by their athletic pursuit. However, their perceived success conditions their well-being.

The motivational climate plays an important role in satisfying these basic needs. When there are positive reinforcements and the mastery motivational climate athletes, will feel successful and competent when they have learned something new, experienced skill improvements, mastered the task at hand, or given their best effort. On the other hand, if their success is measured by the recognition and acceptance of others, or based on competitive results, athletes may perceive competence and relatedness fragile. The difference is that an athlete can become ego-oriented, and become motivated by external goals rather than through own personal goals, or become mastery-oriented towards the development of their skills (Williams & Krane, 2020).

Motivational Orientation and Motivational Climate

The need to strive for success suggests striving for recognition and relatedness. An athlete's motivation can range from a-motivation, external, and internal. External and intrinsic motivation are the two orientations that are primarily compared in sports. The external is typically linked with external rewards, while the intrinsic is linked with perceived competence, self-efficacy, and perceived control (Wulf & Lewthwaite, 2016). The orientation an athlete grows can determine the way they pursue excellence and, later on, the way they may perceive their psychological needs as satisfied or not. Athletes who become ego-oriented and do not achieve more than others may undervalue their self-worth. On the other hand, if the athlete is

task-oriented, they may be able to see how much was learned and gained from the experiences (Weinberg & Gould, 2018).

Ego-oriented motivational downfalls express much of a-motivational and extrinsic motivational states. Such motivational conditions are regulated by non-interest or non-valuing, compliance, and external rewards with a lack of control (Williams and Krane, 2020). When control is taken away, autonomy and competence become vulnerable. Expectedly, it is more challenging to maintain high perceived competence for ego-oriented than task-oriented during the performance years, reducing efforts, ceasing trying, making excuses, and adopting the idea that their ability is fixed (Weinberg & Gould, 2018).

Practitioners must be aware of the dynamic between motivational needs, motivational climate, and the role of developing a healthy identity. The practitioner must observe and help coaches, teachers, and exercise leaders, as they facilitate motivation through the psychological climates they create (Weinberg & Gould, 2018). Literature expresses those positive outcomes can be expected from a task-oriented motivational environment enhances integrated motivation and that promotes and fulfills autonomy, competence, and relatedness (Wulf & Lewthwaite, 2016). Helping the athletes to make their own choices, providing support beyond outcome.

Athletic Identity, Motivational Orientation, and Mental Skills Training

Mental skills training is the systematic and consistent use of cognitive training tools -goal setting, imagery, relaxation and energization, and self-talk – to cognitive skills or psychological attributes that coaches want their athletes to have, such as motivation, energy management, attention, stress management, and confidence (Burton & Raedeke, 2008). Moreover, using mental tools can help in self-coaching, such as using instructional or motivational self-talk (Van

Raalte et al., 2016) and imagery in motor learning (Ruffino, 2017). Furthermore, about developing a healthy athletic identity, goal setting can increase motivation, and attention, lower stress, and the attainment of such goals raise confidence (Williams and Krane, 2020). The benefits of mental tools are substantial, making mental skills training a pillar for sports and performance psychology practitioners. The ability to an athlete to become intrinsically motivated relates to their level of well-being. As they stay focused on a goal of their choice and work through the minor goals and tasks, they become task oriented and intrinsically motivated to achieve their pursuits and distinction.

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Chapter 2

Creating Performance Routines

A vast collection of literature supports mental routines as beneficial for sports performance. Mental routines help athletes in finding flow and dealing with adversity (Burton & Raedeke, 2008); it increases the consistency of an athlete's thinking, feelings, and pre-sport behavior (McCann, 2018) and an overall improvement of performance (Hazel et al., 2014). routines are repeatable, consistent, purposeful and, yet flexible as needed. There are rituals and superstitions. A ritual may or may not be counter-productive, such as a pre-game ritual and cheer. Superstitions on the other hand are false beliefs and place the power and control in things that have no bearing in one outcomes (Lodato, 2022).

The example routines would be developed for a seventeen-year-old female elite tennis player transitioning from juniors to professionalism. Three different mental readiness plans were developed for pre-, in-, and post-competition, following the insight on flexible routines from Ravizza (2021).

The upcoming readiness plans would take into consideration the P.A.C.E performance program by Cohen (2013), the focus and commitment assessments suggested by Orlick (2015), and the use of mental skills training as proposed by Burton & Raedeke (2008) while following the six steps for developing pre-performance routines suggested by Hazel et al. (2014).

To begin with the plan, the athlete and practitioner would state the goal of the routines. What routines there are, and where will the work be put. The athlete may need to work in different routines that would allow the athlete to arrive at their performance rather than just showing up. Athletes have "A" routines, "B" routines and even "C" routines. Think of this as a funnel, from wide to focused, to arrive for the competition and all in on the next pitch, the next

play, the next serve, the next shift etc. (Lodato, 2022). The athlete and practitioner would go through pre-in-post competition behaviors, find meaning and a focus for them, and create a plan according to the goals desired (Hazel et al., (2014). The athlete and practitioner will have to evaluate potential distractions, desired attention, and desired activation (Cohen, 2013). Consequently, they will have to state the purpose of each routine and explore which mental tools could be used for each scenario. In order to develop proper routines, the athlete will have to look back on her best performances (Orlick, 2015) and practice proactivity for upcoming events.

Readiness Plan: Pre-competition

Preparation:

1. Goal: To be physically and mentally relaxed, centered, and without any preconceived thoughts.
2. Obstacle: Pressure from the expectative crowd. Not a good night of sleep.
3. Behavior: Use music and diaphragmatic breathing (Burton & Raedeke, 2008). Use your journal to review anything that helps you.

Resilience and coping with adversity:

1. Goal: To stay calm despite any unforeseen circumstance. To prepare for upcoming obstacles.
2. Obstacle: Menstruation, unexpected family matters
3. Behavior: Rapid relaxation, use a distracting cue word or behavior that can switch the attention. Imagery. Imagine yourself at your performance site (or in any other context) staying positive, feeling relaxed, overcoming obstacles, focusing fully on the task at hand, stretching your limits, and achieving your goals (Orlick, 2015).

Intensity:

1. Goal: To save energy for the in-competition. As centered and balanced and possible. The closer to the game, the more movement one does.
2. Obstacle: Not having the space or time.
3. Behavior: Begin to use imagery, and where possible do the athletic position.

Focus

1. Goal: To focus on the task at hand, pursuing flow.
2. Obstacle: Pressure, preconceived thoughts.
3. Behavior: Imagine oneself performing in flow (Orlick, 2015; Jackson, & Csikszentmihalyi, 1999). Find posture and imagine being centered (Leonard, 1992).

Readiness Plan: In-competition

Preparation:

1. Goal: To be physically and mentally ready to perform.
2. Obstacle: Pressure from the expectative crowd, umpires, line judges, and opponent.
3. Behavior: Use music and diaphragmatic breathing (Burton & Raedeke, 2008)

Resilience and coping with adversity:

1. Goal: To stay calm despite any unforeseen circumstance.
2. Obstacle: Bad calls, opponent stalling.
3. Behavior: Check arousal levels (boxer jumps, walk to the towel, and then boxer jumps).
Breath and focus on the task at hand. Self-talk: "I'm in control"

Intensity:

1. Goal: Optimal level of arousal.
2. Obstacle: Frustrations, delay, or insufficient time to regenerate.
3. Behavior: Find centeredness and breath or boxer jumps and a "c'mon."

Focus

1. Goal: To focus on the task at hand, pursuing flow.
2. Obstacle: Pressure, preconceived thoughts.
3. Behavior: Imagine oneself performing in flow (Orlick, 2015; Jackson, & Csikszentmihalyi, 1999.) Find posture, find centeredness (Leonard, 1992).

Readiness Plan: In-competition (Pre-Service in Tennis)

Preparation:

1. Goal: To be physically and mentally ready to perform.
2. Obstacle: Pressure from the expectative crowd, umpires, line judges, and opponent.
3. Behavior: Find centeredness (Leonard, 1992), squeeze the grip, and bounce the ball. Pick where to serve, imagine it, trust it, and go for it.

Resilience and coping with adversity:

1. Goal: To continue being present.
2. Obstacle: Bad calls, opponent stalling. Break point. Pressure point.
3. Behavior: Check arousal levels (boxer jumps, walk to the towel, and then boxer jumps).
Breath and focus on the task at hand. Self-talk: "I'm in control", right here.

Intensity:

1. Goal: Optimal level of arousal.
2. Obstacle: Frustrations, delay, or not enough time to regenerate.
3. Behavior: Find centeredness and breath or boxer jumps and a "c'mon."

Focus

1. Goal: To focus on the task at hand, pursuing flow.
2. Obstacle: Pressure, preconceived thoughts.

3. Behavior: Imagine oneself performing in flow (Orlick, 2015; Jackson, & Csikszentmihalyi, 1999.) Find posture and find centeredness (Leonard, 1992). Imagine your serve, embrace it and go for it.

Readiness Plan: Post-competition

Preparation:

1. Goal: To thank the crowd and then move on to debrief
2. Obstacle: No time or place for debrief. On court interview.
3. Behavior: Find centeredness.

Resilience and coping with adversity:

1. Goal: To stay calm despite any unforeseen circumstance.
2. Obstacle: The crowd may turn against you when you beat somebody recognized.
3. Behavior: Stay gracious, find centeredness and calmness. You are in control.

Intensity:

1. Goal: Optimal level of arousal.
2. Obstacle: Emotions
3. Behavior: Relaxation. Breath and smile.

Focus

1. Goal: To stay calm, and
2. Obstacle: Preconceived thoughts.
3. Behavior: Find posture, find centeredness (Leonard, 1992). Breath and focus (Mack 2002).

All the mental routines are prepared to face different unforeseen circumstances. The athlete accounts with a variety of mental skills and ideas and routines that can help her dealing with adversity and preparing her mentally ready for any future circumstance.

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Chapter 3

Self-Talk

Self-talk is the internal dialogue and conversations we have with ourselves (Lodato, 2022). It is also referred to as internal monologue, intrapersonal communication, covert, private, or silent speech, self-directed verbalizations, auditory imagery, and stream of consciousness, among other conceptualizations (Van Raalte et al., 2016). Research has shown that self-talk affects athletes' attention, control over emotions and thoughts, automatic skill execution, confidence, and effort regulation (Hardy et al., 2018; Van Raalte et al., 2016(b)). Self-talk and particular thinking habits are key factors that positively or negatively influence confidence, feelings, and, ultimately, behavior, including performance (Williams & Krane, 2020).

Types and uses of Self-Talk

Weinberg & Gould (2018) share different types of self-talk categorized as positive (motivational), instructional, and negative. Positive (motivational) self-talk typically focuses on increasing energy, effort, and positive attitude but does not carry a specific task-related cue (e.g., "I can do this" or "C'mon"). Instructional self-talk helps the individual focus on the technical or task-related aspects of the performance to improve execution (e.g., "Keep your eyes on the ball"). Negative self-talk can be critical, and self-demeaning. It can get in the way of a person reaching their goals. It can be counterproductive and anxiety-producing, by fosters self-doubt, and for most athletes, can be detrimental to performance. However, for other athletes it can work as productive and motivating (Lodato 2022). Perhaps it is negative, yet it continues to be proactive, purposeful, and outcome oriented.

Motivational or instructional self-talk, depending on the athlete's needs, can be used to enhance concentration, including increasing confidence, enhancing motivation, regulating

arousal levels, improving mental preparation, breaking bad habits, acquiring new skills, and sustaining effort (Weinberg & Gould, 2018).

In the task and learning stages, instructional self-talk appears to be most effective in helping athletes improve attention concentration, direct attention, and focus on the technical aspects of the movement. Motivational self-talk seems to be more effective in psyching up, increasing drive, and maximizing physical effort. Fine motor tasks generally require a sharper attentional focus, so instructional self-talk works best. However, for gross motor tasks, where drive and physical effort are usually more important, motivational self-talk works best (Hatzigeorgiadis, Zourbanos, Latinjak, & Theodorakis, 2014).

Understanding Self-Talk

Van Raalte, Vincent, & Brewer (2016a) explain there are two systems involving self-talk. A spontaneous System 1 is an automatic reaction, such as “I’m the best” after a victory or “I’m so bad” after errors or a loss, the primary producer of irrational thoughts. System 2 requires working memory, hypothetical thinking, and mental stimulation. It is worth noting that even though System 2 has the ability to process thoughts, it does not necessarily mean that the thought produced may have a positive outcome. Ironic errors often happen, such as “Don’t think about elephants,” which naturally leads to thinking about elephants. Positive self-talk can lead to positive self-fulfilling prophesies and negative ones like saying “Don’t miss,” shifting the attention to the outcome, which is one of the main reasons for choking (Weinberg & Gould, 2018).

What, when, how, who of self-talk

Albert Ellis shared that when individuals fail to reach their goals and perform below their ability primarily because they accept and endorse self-defeating, irrational beliefs, such as

demanding perfection, catastrophizing, and believing one's worth depends upon achievement (Williams & Krane, 2020). Therefore, it is essential to avoid judgmental thinking, especially negative self-appraisal like "I suck," and replace negative and self-defeating thoughts with positive, purposeful, and proactive self-talk (Lodato, 2022).

Striving control over one's thoughts and feelings is a process demanding honest self-awareness. Athletes must commit to becoming aware of what the circumstances are when the self-talk occurs, how self-talk varies in different competitive situations, and what consequences follow from the particular self-talk. "Am I thinking in a way that will give me the best chance of success?" (Williams & Krane, 2020).

Zourbanos, Hatzigeorgiadis, Chroni, Theodorakis, and Papaioannou (2009) developed a scale for assessing self-talk and found eight types (factors) of self-talk. They divide positive self-talk as psych-up (e.g., "power"), confidence (e.g., "I can make it"), instruction (e.g., "Focus on your technique"), and anxiety control (e.g., "Calm down"). The negative self-talk was divided into worry (e.g., "I'm wrong again"), disengagement (e.g., "I can't keep going"), and somatic fatigue (e.g., "I am tired"). Finally, neutral self-talk was categorized as irrelevant thoughts ("what will I do later tonight")

Positive, proactive, purposeful, and outcome-oriented self-talk can be especially beneficial in in-competition routines. Since routines are consistent, repeatable, comfortable, and yet flexible as needed, in competition is important for your athletes to know what to "go to" (instructional or motivational self-talk) as required (Lodato, 2022).

Techniques for improving Self-Talk

Self-talk is the key to cognitive control (Williams & Krane, 2020). Some of the techniques to improve self-talk are shared by Weinberg & Gould (2018).

- *Thought stopping* involves briefly concentrating on the undesired thought and then using a cue or trigger to stop the thought and clear your mind. Lodato (2022) shares that some athletes use a rubber band on the wrist to “snap” negative thoughts.
- *Changing negative self-talk to positive self-talk*. The goal is to recognize what situations produce negative thoughts and why and then try to substitute the negative statement with a positive one.
- *Rational emotive behavior therapy (REBT)*. Irrational beliefs lead to dysfunctional emotions and maladaptive behaviors, whereas rational beliefs lead to functional emotions such as optimism and adaptive behavior such as approach. This is also known as ABC cognitive restructuring.

Other useful techniques shared by Williams & Krane (2020): are countering/disputing, reframing/reappraising, mindfulness, and affirmation statement.

Useful guidance for cognitive restructuring is Vincent A. Lodato's steps in cognitive restructuring & positive self-talk.

Step 1: Identify the internal dialogue (thoughts) in a specific situation that leads to excessive or unwanted anxiety, anger, worry, or fear.

Identify:

- A) Thoughts about your self-confidence level
- B) Thoughts about others involved
- C) Thoughts about the situation

Step 2: Identify any irrational ideas or feelings that might be supporting negative thinking in Step 1.

Step 3: Challenge any irrational thinking or feelings in Steps 1 and 2 by identifying:

- A) What is true that you are thinking
- B) What is not true that you are thinking
- C) Identify any catastrophic (“what if...”), awfulized (“It would be awful if...”), or absolute (“I must, I should...”) thinking

Step 4: Substitute specific rational thoughts that don’t just reduce anxiety, anger, worry, or fear.

These thoughts must be directly counter to thoughts that were disruptive. They are positive, outcome-oriented, and proactive. For example, Not just “stop worrying” or “calm down” but rather “RELAX”, “I’m in control”, and focused on what you want to accomplish, not what you don’t want to accomplish.

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Chapter 4

Goal Setting

Effective goal setting is one of the most useful mental skills athletes have in their “toolbox” (Lodato, 2022). Goal setting is an effective behavior modification procedure that can improve athletes’ performance (Pop et al., 2021). Weinberg & Gould (2018) explain that in sports and exercise settings, people set either subjective goals that are not measurable or objective goals that require meeting a specific standard in a given time frame. There are three types of goals, and to be an effective goal setter, it is important that one knows and uses all three types (Lodato, 2022). Process goals set the actions leading to improved performance, performance goals, such as self-comparison for improvements, or outcome goals that involve beating or surpassing others (Weinberg & Gould, 2018). These goals should be set on long and short-term frames. Weinberg & Gould (2018) express the following principles for effective goal setting: specific goals; moderately difficult but realistic; long- and short-term; performance, process, and outcome goals; mastery approach goals; practice and in-competition goals; record goals; develop goal achievement strategies; consider participants’ personalities and motivations; foster an individual’s goal commitment; provide goal support and provide an evaluation of and feedback on goals.

The importance of Process Goals

Process goals are the most in the athlete’s control. These are the goals that lead you to focus on the actions or steps of a good performance (Lodato, 2022). Process goals can apply as guidelines that help the athlete prepare for the performance. When developing process goals, one focuses on “how” one can be proactive and positively reactive ahead of the competition. The athlete can set process goals on how to improve a certain area such as mental, tactical, technical,

or physical, to reach a desired level. Through process goals the athlete can work on mental routines and game plans that can lead to the increased probability of reaching performance goals, and then the probability of desired outcomes. Nonetheless, performance and outcome are the least controllable as setbacks such as fatigue or illnesses and the performance of competitors can affect the desired outcomes. Therefore, when facing setbacks process goals are the ones that help the athlete plan again how to act and react. A tennis player can focus on making the least unforced errors, attempt to play shorter points, etc.

Goal-Setting on motivation, self-efficacy, and confidence

Goal-setting techniques mobilize effort and persistence by providing incentives (Weinberg & Gould, 2018). Goal-setting applies task-orientation through the process and performance goals, as it emphasizes comparisons with own performance standards rather than with the performances of others. Goal setting does not just focus on the final outcome but on the journey of getting there. One motivation or the direction and intensity of effort (Weinberg & Gould, 2018) can be increased by setting benchmarks. One self-efficacy affects one's choice of activities, persistence, and level of effort. The sources of self-efficacy include performance accomplishments, vicarious experiences, and psychological and emotional states (Weinberg & Gould, 2018). Confidence has been defined as the belief that one can successfully perform the desired behavior and that one has the ability to execute physical skills, psychological skills, and perceptual skills (Weinberg & Gould, 2018).

By setting short-term goals, one can improve physically, technically, tactically, and mentally, and one can draw out positive lessons from those experiences and act on them (Orlick, 2015). By setting goals for the next sessions, such as running an extra minute, learning a new play, adding some extra reps of technical skill, or attempting to solve a puzzle while on a

countdown clock, one can become a better performer creating better chances to achieve their long-term goals.

SMARTS Goals

The smart acronym presents the principles of effective goal setting.

Specific. Goals should indicate precisely what is to be accomplished or achieved.

Measurable. Goals should be quantifiable.

Action-oriented. Goals should indicate something that needs to be done and specific actions to achieve the stated goal.

Realistic. Goals should be achievable given various constraints.

Timely. Goals should be achievable in a reasonable amount of time.

Self-determined. Goals should be set by, or with input from, the participant.

Barriers to goal setting and goal attainment

Some of the most common problems in goal setting are convincing students, athletes, and exercisers to set goals; failing to set specific goals; setting too many goals too soon; failing to adjust goals when they are not being achieved; failing to set performance and process goals; and not initiating goal-setting evaluation and follow-up procedures (Weinberg & Gould, 2018).

Goal-Setting

Tell me some goals you would like to accomplish. This can be personal, sport, and academic-related. Let us pick three of them and plan the route to that destination. What would it be needed? When would it be possible to be achieved? Can you break it down by stages or short-term goals? What do you need to accomplish at each stage? How long do you think it would take you to reach your first stage? Once you have thought about it, you and your mentor can evaluate your goals and plan accordingly.

Long-term outcome goal: *tell me your dream*

Process for long-term goal: *what/how do I need to do on a weekly/monthly basis to get there*

Short-term outcome goal: *tell me what would you like to accomplish this week/month/season*

Process goal: *what/how do I need to do on a daily/weekly/monthly basis to get there*

Short-term performance goal: *tell me how would you like to perform*

Performance goals: *what/how do I need to do on a daily/weekly/monthly basis to get there*

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Chapter 5

Mental Toughness

Personal working definition of Mental Toughness:

Mental toughness is the abilities and beliefs that help one perform and outperform despite doubts, concerns, fatigue, and setbacks, all in the quest of one's pursuits.

Literature definitions:

Different definitions have been credited to mental toughness. Razvan et al. (2021) describe it as the athlete's ability to perform at optimal levels under demanding conditions. Jones (2002) has defined it as having the natural or developed psychological edge that enables you to, generally, cope better than your opponents with the many demands (competition, training, lifestyle) that sport places on a performer and, specifically, be more consistent and better than your opponents in remaining determined, focused, confident, and in control under pressure. Mentally tough athletes tackle their problems head-on.

Jones (2002) places mental toughness attributes in the following general categories: self-belief, desire, and motivation, focus (performance-related), focus (lifestyles-related), dealing with competition-related pressure (external), and anxiety (internal), and dealing with physical and emotional pain. Clough, Earle, & Sewell (2002) offer the 4C model of mental toughness: control (cognitive and affective factors, motivation, process focus, protective factors), commitment (behavioral factors, consistency, routines, goal setting. Adaptive and coping factors), challenge (cognitive factors, perceptions, approach orientation. Adaptive and coping factors), confidence (cognitive and affective factors, athletic identity and self-efficacy. Protective factors) (Lodato, 2022).

Working and Applied Definition of Mental Toughness

Mental toughness is something one has (*traits*), and something one does (*states*). It is the *cognitive* (internal beliefs and thought of one's mental life), *behavioral* (consistent preparation, routines, goals, problem-solving), and *affective* strategies (emotional management, arousal regulation) that are both *adaptive* and *coping* with stress, pressure, and setbacks as well as *protective* to one's sense of self, self-esteem, and self-efficacy (Lodato, 2022)

Characteristics of a Mentally Tough Athlete

The 4Cs is the way a mentally tough athlete is typically described. A mentally tough athlete accounts for a rich profile. Is *competitive*, striving to find a way to win. Is *confident* and has a can-do attitude, which almost never fails victims of self-defeating thoughts. Is in *control* of their emotions and behavior, maintaining poise and concentration under the greatest pressure and most challenging situations. Is *committed* to goals. Keeps *composure* when dealing with adversity. Has *courage* and is willing to take risks. And most of all is *consistent* with inner strength to thrive (Mack, 2002).

MST in Mental Toughness

Lodato (2022) shares strategies for different areas of mental toughness. For cognitive strategies, motivational and instructional self-talk. For behavioral routines, consistent preparation, and goals. For effective: emotional management and arousal regulation.

The role of Resilience and Coping with Adversity on Mental Toughness

Resilience is the ability to return to baseline, to return to balance (Lodato, 2022). Resilience definitions are generally centered around two main constructs, a. exposure to

adversity and b. positive adaptation (Kegelaers & Wylleman, 2019). Fletcher and Sarkar (2012) explain resilience as “the role of mental processes and behavior in promoting personal assets and protecting an individual from the potential negative effect of stressors.” Certain psychological characteristics (motivation, confidence, positive personality, and focus) positively influence athletes’ challenge appraisals, metacognitive strategies, and adaptive responses in the face of adversity. The constructs of resilience are similar to the mentally tough athlete. Therefore, the mentally tough athlete is resilient.

Mental Toughness Development

Factors that contribute: sibling rivalries, supportive parents, coach expectations, a motivational training environment, teammate encouragement, tough practices, and coping with failure. Some techniques that help mental toughness can be: creating a positive motivational practice environment and intense competitive practices, creating simulations (pressure), setting specific goals, providing instructional and supportive feedback, building confidence through rigorous physical preparation and conditioning, enhancing attentional control through self-statements, and making appropriate attributions for success and failure (Weinberg & Gould, 2018).

A similar perspective is given for effective resilience training. Kegelaers & Wylleman (2019) suggest that resilience training should be set up holistically, focusing on three distinct aspects, a. developing psychological qualities, b. creating a facilitative environment, c. promoting a challenge mindset. Moreover, a positive coach-athlete relationship and constructive coach behaviors supported athletes through challenges and strengthened their ability to overcome setbacks (Fletcher & Sarkar, 2016). A sport and performance psychology consultant can consider Connor Davidson Resilience Scale (CD-RISC) as it is the only resilience-specific measure to be

utilized in sport (Lodato, 2022). In doing so the practitioner is able to target focus areas of mental toughness that are strengths and weaknesses of the athlete.

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Chapter 6

Focus, Concentration, and Managing Distraction

Elite athlete peak performance is associated with being “absorbed in the present” and having no thoughts about the past or future, being mentally relaxed and having a high degree of concentration and control, and in a state of extraordinary awareness of both the body and the external environment (Keegan, 2014).

Attentional processes play an important role in allowing an athlete to focus on relevant cues and facilitating optimal performance. Nonetheless, the ability to focus your attention on the task at hand and avoid distractions, both internal distractions and external distractions, is a skill that is critical for elite performance (Weinberg & Gould, 2018).

Attention, Focus, and Concentration

The meaning of these three concepts may be commonly mistaken, as coaches and educators generally demand them. However, each word has a different purpose. Attention is the broad scan of the environment, attending to many cues and signals, and focus is narrowing one or two relevant and important cues and signals (Lodato, 2022). Lastly, concentration is attending to the right things at the right time and in the right way (Williams & Krane, 2020). One can think of it as a funnel in which one attends to several cues, focusing on the relevant ones, while concentrating on the task at hand. The athlete needs to be capable of paying attention to the environment that can affect their performance as well as their own process. Such as a soccer player dribbling and paying attention to any opponent approaching from the back or the sides. As the soccer player arrives in the goal area, he may focus on the goal and what is the goalie’s action towards his approach. Finally, the soccer player determines his decision-making to shoot

to score or make a pass. Throughout this process, the soccer player may have been immersed in the situation as he focused on not drifting off or missing important moments (Keegan, 2014).

The whole process initiates in a visual perspective cognitive information processing which helps the athlete anticipate opponents' moves, apply decision making towards how to perform the task, and become aware of the right time to perform it.

How does attention vary?

The width and direction of attentional focus relate to understanding that sometimes a broad attentional focus is needed and other times a narrow attentional focus will produce successful results (Williams & Krane, 2020). Nideffer's model describes the four types of attentional focus.

- Broad external: awareness of and sensitivity to a rapidly changing environment. Used to rapidly assess a situation.
- Broad internal: Used to analyze and plan.
- Narrow external: Used to focus exclusively on one or two external cues
- Narrow internal: used to mentally rehearse an upcoming performance or control emotional state.

The different types of attention lead to a variety of concentration skills (Weinberg & Gould, 2018). These are:

1. Selective attention – focusing on the relevant cues in the environment.
2. Maintaining attentional focus over time.
3. Having awareness of the situation and performance errors.

4. Shifting attentional focus when necessary.

Usually, concentration problems are caused by inappropriate attentional focus. Worries and irrelevant thoughts can cause individuals to move their concentration “beam” from what they are doing to what they hope will not happen (Weinberg & Gould, 2018). Internal and external distracters affect athletes in controlling and maintaining focus.

Internal and External Distracters

Some distractions come from within, such as thoughts, worries, and concerns. Typical internal distracters attend to past and/or future events, choking under pressure, overanalyzing body mechanics, fatigue, and inadequate motivation (Weinberg & Gould, 2018). On the other hand, external distracters are the stimuli from the environment that divert people’s attention from the cues relevant to their performance. These distracters are generally visual (people, objects moving, sun reflection) and auditory distracters (people booing, airplanes) (Weinberg & Gould, 2018). The athlete can shift attention from broad external to narrow internal. Scouts watching a high school match may be externally distracting for the quarterback. The quarterback may realize their presence, shifting attention internally with irrelevant or thoughts instead of focusing on the task at hand.

Arousal, Anxiety, and Attention

Alterations in physiological arousal and perceptions of anxiety states affect concentration. Muscular tension levels, heart rate, respiration rates, and irrational thoughts are all possible internal distracters affecting concentration (Williams & Krane, 2020). Concentration is lost when focusing shifts from factors outside the athlete’s control, such as worrying about past experiences, projecting too far, uncontrollable distracters, or a booing audience (Williams &

Krane, 2020). The phenomenon of choking under pressure is an example. Having performance progressively decrease and uncontrollably arousal increases well beyond the desired level, and perceptions of anxiety states become debilitating causing attention to be involuntary narrow and become more internally focused. Over aroused (anxiety) can lead to attention to narrow and under-aroused (too relaxed) can lead to attention to broad (Lodato, 2022). As noted, visual perceptions provide information on which cues to focus and concentrate, as well as distract focus away from the task at hand. Irrelevant distracters can trigger worries and raise or lower physical and cognitive arousals, affecting anticipation, reaction time, and decision making.

Training Concentration

Keegan (2014) suggests different mental skills training to enhance concentration. Some of them are scanning and focusing exercises, simulation training, goal-setting, pre-performance routines, imagery, self-talk, biofeedback, triggers, and centering. For external training, dress rehearsal, and imagery. For internal training, cuing, developing refocusing skills, routines, and process goals.

To begin with,

Something becomes a distraction only if you let it distract you. Terry Orlick

Figure 7.1 Distraction Control			
Distractions	Usual Response	Preferred Response	Refocus Reminders

From T. Orlick, 2015, *In pursuit of excellence, 5th ed.* (Champaign, IL,: Human Kinetics)

Once the distraction control is processed, it can be applied to the pre-shot or pre-play routine for focusing and re-focusing purposes.

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Chapter 7

Imagery and Visualization

What imagery is, when it is used, and why it is important.

Imagery is a form of simulation that involves recalling from memory pieces of information stored from experience and shaping these pieces into meaningful images. It involves all the senses (kinesthetic, visual, auditory, tactile, olfactory), moods, and emotions as well as the modality, perspective, angle, agency and deliberation of the visualization (Lodato, 2020). When we consciously internally represent an action through imagery, the same brain areas involved in the unconscious planning and execution of movements are activated (Cumming & Williams, 2012). Athletes can use imagery before, during, and after practice, before, during, and after a competition, and injury rehabilitation (Weinberg & Gould, 2018). It is important as it enhances performance by helping prepare for competition, acquiring, practicing, correcting sports skills and strategies, and controlling arousals (Weinberg & Gould, 2018).

Primary theories related to imagery.

Weinberg & Gould (2018) share five theories related to imagery.

1. Psychoneuromuscular Theory proposes the ideomotor principle of imagery. Imagery facilitates motor skills because of the nature of the neuromuscular activity patterns activated during imaging.
2. Symbolic Learning Theory considers imagery may function as a coding system to help people understand and acquire movement patterns.

3. Bioinformational Theory explains that images are made of stimulus and response propositions. The stimulus is the scenario to be imagined, and the response proposition is the response to the scenario.
4. Triple Code Model posits imagery comprises the image, somatic response, and image meaning.
5. Psychological Skills Hypothesis suggests imagery develops and refines mental skills and reduces anxiety. It holds the Attention Arousal Set Theory which argues that imagery functions as a preparatory set that assists in achieving an optimal arousal level.

Imagery in the context of motivation

Weinberg & Gould (2018) present four main purposes of imagery. Motivation-general and motivation-specific; cognitive-general and cognitive-specific. Motivation general-mastery (MG-M) is goal, oriented. An athlete imagines performing well to maintain confidence. Motivational general-arousal (MG-A) is imagery used to help achieve control and relaxation, such as imagining a quiet place. Cognitive-specific (CS) is imagery focused on the performance of specific motor skills. Finally, cognitive-general (CG) is imagery posited in rehearsing strategies, game plans, and routines for competition.

Benefits and uses of imagery

Imagery has many benefits and uses. It can enhance motivation and build confidence by imagining positive outcomes and positively executing skills (Weinberg & Gould, 2018). Athletes can improve concentration by imagining remaining composed and focused. Furthermore, by visualizing previous strong performances, athletes can identify their optimal energy levels and strategies for getting into effective energy zones prior to performing (Burton & Raedeke, 2008).

Keys to Effective Imagery

Weinberg & Gould (2018) explain that the degree of vividness and controllability is key for a good imaging ability. When using imagery, athletes should involve as many senses as possible and re-create or create the emotions associated with the task or skill they are trying to execute. Once one can imagine performances, it is important to develop controllability by learning to manipulate images, so they do what the performer wants them to. Furthermore, Cumming & Williams (2012) identified five key characteristics of the imagery process:

- *Modality*. The senses used in imagery—auditory, visual, tactile, olfactory, and kinesthetic.
- *Perspective*. The visual perspective is taken—first person (internal) or third person (external).
- *Angle*. When imaging from an external perspective, the viewing angle is above, behind, front, or side.
- *Agency*. The author or agent of the behavior being imagined—oneself or another person.
- *Deliberation*. The degree to which imagery is deliberate or spontaneous (i.e., triggered, deliberate mental practice).

Developing an Imagery Training Program

Cumming & Williams (2012) explain that the imagery process is characterized by modality, perspective, angle, agency, and deliberation. In addition to considering characteristics, such as the amount, duration, speed, vividness, and color of the imagery.

The PETTELEP program serves as a guideline for developing an Imagery Training Program (Weinberg & Gould, 2018). The acronym refers to seven elements of imagery. The

physical nature of the movement; the *specifics* of the environment; the *type* of task; the *timing* of the movement; *learning* the content of the movement; the *emotion* meaning to the individual of the moment; the *perspective* of the person (internal or external). It is also important to consider stimulus proposition (e.g., nerves?) and response proposition. Furthermore, Cumming & Williams (2012) express that a key consideration when developing imagery interventions is not only the desired outcome but what type(s) of imagery will serve the function (e.g., motivation, concentration, confidence) for the intended person.

Lodato (2022) includes concise imagery guidelines when developing a program. These are proper setting, relaxed concentration, realistic expectations, sufficient motivation, vivid and controllable images, and positive focus. Also, important to consider videotapes and audiotapes, imaging execution and outcomes, and imaging in real-time.

Some exercises to develop imagery can be imagining home, positive performance of a skill, and a positive performance. Also, imagining controlling a performance, controlling performance against a tough opponent, and imagining controlling emotions (Weinberg & Gould, 2018).

Sport Imagery Ability Questionnaire

Instructions:

The purpose of this questionnaire is to obtain information about your ability to generate a number of images athletes use in relation to their sport. For each item, bring the image to your mind with your eyes CLOSED. Then rate how easy it is for you to form this image (1 = very hard, 4 = not easy or hard to 7 = very easy). Circle the appropriate rating based on the scale provided. For example, some athletes may find imaging themselves kicking a football neither easy nor hard and therefore select 4. Please be as accurate as possible and take as long as you feel necessary to arrive at the proper ratings for each image. There are no right or wrong answers because we are simply interested in your response.

In relation to my sport, how easy is it for me to image...	Very hard to image	Hard to image	Somewhat hard to image	Neutral (not easy or hard)	Somewhat easy to image	Easy to image	Very easy to image
1. Making up new plans/strategies in my head	1	2	3	4	5	6	7
2. Giving 100% effort even when things are not going well	1	2	3	4	5	6	7
3. Refining a particular skill	1	2	3	4	5	6	7
4. The positive emotions I feel while doing my sport	1	2	3	4	5	6	7
5. Myself winning a medal	1	2	3	4	5	6	7
6. Alternative plans/strategies	1	2	3	4	5	6	7
7. The anticipation and excitement associated with my sport	1	2	3	4	5	6	7
8. Improving a particular skill	1	2	3	4	5	6	7
9. Being interviewed as a champion	1	2	3	4	5	6	7
10. Staying positive after a setback.	1	2	3	4	5	6	7
11. The excitement associated with performing	1	2	3	4	5	6	7
12. Making corrections to physical skills	1	2	3	4	5	6	7
13. Creating a new event/game plan	1	2	3	4	5	6	7
14. Myself winning	1	2	3	4	5	6	7
15. Remaining confident in a difficult situation	1	2	3	4	5	6	7

From Williams & Cuning (2014).

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Chapter 8

Performance States

Performance states arousal, anxiety, and stress

Performance is affected by the levels of arousal needed to perform, the interpretation of external and internal stressors, and anxiety.

Arousal refers to the general physiological and psychological activation that varies on a continuum from deep sleep to intense excitement (Weinberg & Gould, 2018). A golfer may need a low heartbeat for a putt, while a goalie before a penalty may benefit from a higher activation to react. Therefore, the level of arousal needed determines a different performance state.

Anxiety refers to a negative emotional state in which feelings of nervousness, worry, and apprehension are associated with activation or arousal of the body (Weinberg & Gould, 2018). Anxiety can be triggered by “right now” feelings that change from moment to moment, called state anxiety. At the same time, some individuals account for trait anxiety and a stable personality disposition over time (Lodato, 2022). Furthermore, anxiety can be present cognitively (worries, uneasiness) and somatic (changes in physiological activation). Anxiety may act as a distractor to the performer, as attention shifts from focusing on the task to concentrating on worries and unconscious physiological arousal.

Stress is a physical, mental, or emotional factor that causes bodily or mental tension. An individual can be stressed by external factors from the environment, psychological or social situations, or internal factors such as illness (Dai et al., 2021). Anxiety can be facilitative or debilitating depending on how performers interpret stressors, such as challenges or threats. When the athlete perceives as capable of controlling them, the anxiety is viewed as facilitative. On the

other hand, when the performer considers them incapable of controlling them, the anxiety is deemed debilitating (Weinberg & Gould, 2018). The athlete can interpret arousals and anxiety and reframe it as facilitating, energizing, anticipatory, and mobilizing rather than debilitating, overwhelming, and de-mobilizing (Lodato, 2022).

Theories related to performance states

Sport and exercise psychologists have studied the relationship between anxiety and performance for decades (Weinberg & Gould, 2018). These are some of the theories with a brief description.

Drive theory states that an individual's arousal or state of anxiety increases, and too does performance. Within this theory, *Social Facilitation Theory* predicts that the presence of others helps performance on well-learned or simple skills and inhibits or lessens performance on unlearned or complex tasks.

The *inverted-U hypothesis* holds that at low arousal levels, performance will be below par; the exerciser is not psyched up. As arousal increases, so does performance-up to an optimal point where best performance results. high performance with the optimal level of arousal and lesser performance with either low or very high arousal.

Individualized Zones of Optimal Functioning (IZOF) states that a person's optimal performance may be at the lower, middle, or upper end of the state anxiety continuum (Weinberg & Gould, 2018).

Multidimensional Anxiety Theory considers somatic state anxiety (physiologically manifested) affects performance in an inverted U and that increases in anxiety facilitate performance up to an optimal level and relates cognitive state anxiety such as worry as

negatively related to performance. Much of the interpretation is determined by the individual's interpretation of cognitive and somatic anxiety (Lodato, 2022)

The catastrophe phenomenon predicts that physiological arousal is related to performance in an inverted-U fashion, but only when an athlete is not worried or has low cognitive state anxiety. Physiological arousal can have markedly different effects on performance depending on the cognitive anxiety experienced. High worry deteriorates once over-aroused.

Reversal Theory predicts that athletes must interpret their arousal as *pleasant excitement* rather than as unpleasant anxiety for best performance. How a performer interprets arousal influences performance

Every theory has something to share on how stress, anxiety, and arousals condition each other in creating performance states that can be facilitative or debilitating.

Anxiety direction and intensity

People can view anxiety symptoms as facilitative and debilitating. The perception of control relative to coping and goal attainment is critical in determining whether state anxiety will be facilitative or debilitating to the performance. (Weinberg & Gould, 2018) There is an optimal level of anxiety for each person that will facilitate good performance. Experienced athletes who are in tune with their bodies recognize when their energy levels are not optimal.

The relationship between arousal, anxiety, and stress

According to Jones' model, anxiety can be facilitative or debilitating depending on how performers interpret stressors, such as challenges or threats. When the athlete perceives as capable of controlling them, the anxiety is viewed as facilitative. On the other hand, when the

performer considers incapable of controlling them, the anxiety is viewed as debilitating (Weinberg & Gould, 2018). The performer assesses the performance cognitively; however, despite the ability or not to perform, the optimal level of arousal is needed to perform the task. If the individual narrow their attention internally, they may forget to raise arousal. In contrast, if the individual objectively assesses the demands, will take arousal levels to where they need to be to perform.

Increased arousal can influence athletic performance in two main aspects. First by, inducing muscle tension, fatigue, and coordination difficulties. Second, changes in attention, concentration, and visual search patterns (Weinberg & Gould, 2018).

MedlinePlus has a definition of anxiety that fits the topic. According to it, anxiety is a feeling of fear, dread, and uneasiness. It might cause you to sweat, feel restless and tense, and have a rapid heartbeat. It can be a normal reaction to stress. For example, you might feel anxious when faced with a difficult problem at work, before taking a test, or before making an important decision. It can help you to cope. The anxiety may give you a boost of energy or help you focus. If the athlete has self-awareness, it can help the athlete by reminding him or her to perform coping strategies in their routines and work on focusing and re-focusing.

To a great extent, the Multidimensional Anxiety Theory is assertive in considering that much of performance is determined by the individual's interpretation of cognitive and somatic anxiety. Nonetheless, some optimal level of arousal and emotion leads to peak performance, but the optimal levels of physiological activation and arousal-related thoughts (worry) are not necessarily the same (Weinberg & Gould, 2018)

Measuring Arousal and Anxiety and Working on it.

As learned, arousals and anxiety play a key role in performance. Consequently, self-awareness is the first step to gaining control of any pressure situation. Williams & Krane (2020) recommend checking in and determining the athletes' arousal level and emotional state through processes and checking if the focus is needed to adjust to give the best opportunity to succeed.

Measuring Arousal and Anxiety

Lodato (2022) shares three assessments to measure arousal and anxiety and several strategies to work on them.

1. Psychological and Psycho-physiology (heart rate, respiration, skin conductance, biochemistry)
2. Global and Multidimensional self-report scales (CSAI-2, SCAT, SAS)
3. emWave Pro-Plus HRV

Strategies to work with

- Routines,
- Imagery on arousal and optimal states
- Motivational and instructional self-talk
- Deep breathing: pre-competition, and in-competition to manage arousal
- Re-framing; cognitive appraisal
- Goals and goal setting

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Chapter 9

Handling Performance Errors & Setbacks

Performance Errors & Setbacks

Errors and setbacks are part of every sport. Sports are contested activities that test an individual's abilities to perform. Errors can be caused by technical weaknesses, tactical decisions, and physical, mental, and emotional distractors. However, not every error or setback is catastrophic. Every champion has had to perform under stressful circumstances before achieving their goals. Many of them suffered setbacks that could have demotivated them to continue their fight for their dreams. Nonetheless, they were able to move on to the next play rather than dwelling on the unfortunate and they are able to manage play to play. This is why elite athletes are considered mentally tough. They have the mindset to face adversity as an opportunity to grow and rise to the occasion.

Mental Toughness

A mentally tough athlete can perform at optimal levels under demanding conditions because they account for commitment, confidence, challenge, and control (Clough et al. 2002). These attributes are not bought in a supermarket. These attributes are built and embraced. A mentally tough athlete is committed to their goals, confident, can push through any challenge that may arise, and can control their reactions towards it while facing adversity. The mentally tough athlete is resilient, a characteristic centered around two primary constructs: exposure to adversity and positive adaptation.

Coping with Adversity

Adversity can come in a wide variety of forms. From an unfair call to an illness. A mentally tough athlete employs affective strategies such as emotional management and arousal

regulation that are both *adaptive* and *coping* with stress, pressure, and setbacks as well as *protective* to one's sense of self, self-esteem, and self-efficacy (Lodato, 2022)

Coping refers to the process of constantly changing cognitive and behavioral efforts to manage specific external and internal demands that cause stress (Weinberg & Gould, 2018).

There are two main coping categories:

- Problem-focus coping: identify the problem and manage the problem causing the stress. It includes gathering information, planning, goal-setting, time management, increasing effort, self-talk, and adhering to an injury rehabilitation program.
- Emotion-focus coping: entails regulating the emotions to the problem that causes stress. It includes behaviors such as meditation, relaxation, wishful thinking, reappraisal, mental and behavioral withdrawal, and cognitive efforts to change the meaning of the situation (but not the actual problem or environment).

A third category occurs with social support coping when one turns to others for assistance and emotional support in times of stress (Weinberg & Gould, 2018). However, in certain sports like tennis, where coaching is not allowed, this coping strategy may not be possible.

Handling Performance Errors and Setbacks.

The ability to handle performance errors and setbacks comes from proactive and reactive strategies. These involve mental preparations and evaluation of setbacks in a critical but constructive way and encourage self-evaluation, and self-reflection, referring to inspecting and evaluating one's own emotions, cognitions, and behaviors (Kegelaers & Wylleman, 2019).

As mentioned, errors and setbacks can be technical and tactical or caused by stress. The athlete may or may not realize the main cause, yet with problem focus coping, they can begin to work towards the error. In between plays, the athlete can attempt to gather information and

implement instructional self-talk and imagery, and mentally correct the error. The athlete can develop a “fix-it mindset and play forward to get to the next play (Lodato, 2022)

After performance errors athletes will:

1. Re-play the event and either re-enforce and dwell on it, or correct the error mentally.
2. Fix the error by pre-playing the next opportunity.
3. Return to the moment and ready for the next play.

If the situation becomes heavy and stressful and holds the individual to perform with the flow, then emotion-focused coping may help. Here the athlete can use breathing, progressive relaxation, and physical energization to build physical arousals.

Mental planning go-to routines will enhance automaticity, and mental toughness, as well as help athletes, perform optimally in a pressure-packed competitive situation (Burton & Raedeke, 2008)

Awareness Comes First

The first step toward controlling arousal levels is for athletes to become aware of the situations in competitive sports that cause them anxiety and how they respond to these events (Weinberg & Gould, 2018). External and internal factors can cause physical, mental, and emotional stress and anxieties that can present in changes of arousals both cognitively (worries, uneasiness) and somatically (changes in physiological activation).

Weinberg and Gould (2018) suggest a process to acknowledge how external or internal factors affect one performance. First, think of one’s best performance and try to visualize it for five minutes. Then complete the “Checklist of Performance States.” After completing the checklist, the process continues by thinking of one’s worst performance and repeating the same process. Once the process is complete, one can compare and see how one may act and think

differently. Most people find that their thoughts and feelings are distinctly different when playing well than playing poorly (Weinberg & Gould, 2018).

Strategies for Anxiety Reduction

Weinberg and Gould (2018) recommend acknowledging the type of anxiety and using a strategy accordingly. Somatic to somatic, cognitive to cognitive, and if unknown, multimodal.

- ***Somatic strategies: progressive relaxation:*** tensing and relaxing specific muscles. *Breath control:* breathing techniques that help focus on the lowering (inhalation) and raising (exhalation) of the diaphragm that helps increase the sense of stability, centeredness, and relaxation— and *biofeedback:* electronic instruments that provide visual or auditory feedback of physiological responses; helps on becoming aware of individuals' automatic nervous system and subsequently control reactions.
- ***Cognitive strategies relaxation response:*** meditation to mentally prepared. Keen awareness, effortlessness, relaxation, spontaneity, and focused attention. *Autogenic Training* and *Systematic Desensitization*.
- ***Multimodal strategies: Cognitive-Affective Stress Management Training, Stress Inoculation Training, Pressure Training, and Hypnosis.***

MST and Routines

The main issue with errors and setbacks is that sometimes it is hard to let go, and these keep distracting the athlete, taking their focus away from the task at hand. All the strategies and mental skills are there for the athlete to use and find easiness in letting go. That is why athletes will need and will want repeatable routines for handling errors that will occur (Lodato, 2022).

Pre-, in', and post-competition routines can be built to tackle each possible distracter and maintain the right focus and arousal levels needed.

Example of Routine after Error

1. Step away from the baseline in tennis after a double fault or unforced error.
2. Find a focal point and clear the mind.
3. Inhale and release the error.
4. Use a symbolic “wipe it away”. Some will take the tennis ball and tap it away and get a new ball.
5. “Fix-it”.
6. Pre-play it; self-talk, imagery, task focus.
7. Be present.

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Chapter 10

Using Assessments and Technology

One of the first steps when developing a psychological skills training program is to conduct a psychological needs assessment to determine the program's components. Through subjective and objective evaluations, consultants can gather insight into the individuals' mental strengths and weaknesses, raise awareness, evaluate and monitor athlete performance, and facilitate discussion, communication, and interaction. Athletes and performers can learn from these assessments and become more self-aware, help them decide on what to work on, and take more responsibility for their development (Weinberg & Gould, 2018).

The advancement of technology has facilitated and innovated certain aspects of consultancy services. With smartphones, one can record, analyze, and optimize performance. There are metrics and statistics for any activity or need. Some apps and devices help track and measure heart rate, stress, and oxygen levels, which one can find in a smartwatch. Furthermore, technology has facilitated practitioner-athlete communication through video conferencing, emailing, instant messaging, and social networking.

Through assessments and consultancy sessions, personal information is gathered. As it is essential to exercise the practice, much of this information could be misinterpreted and mismanaged due to incompetence, and lack of integrity, risking individuals' rights and welfare. Nevertheless, assessments and technologies are indispensable for consultant work. Hence, sport and performance consultants are scientist-practitioners who are required to have a certain level of experience, background, and competence in applied sports psychology to provide proper service. Several organizational bodies, such as the Association for Applied Sport Psychology (AASP),

and the American Counseling Association (ACA), have developed guidelines that help set in motion a healthy and professional practitioner-client relationship.

Ethics Codes

As professionals, general principles and standards of conduct are of great importance to maintain the dignity and welfare of those who provide services. In a known manner, sports psychologists should maintain high standards of competence, promote integrity, maintain professional and scientific responsibility, respect people's rights and dignity, seek to contribute to the welfare they work with, and be aware of their professional and scientific responsibilities to the society in which they work and live (Whelan, 2011). Consultants produce appropriate informed consent prior to their start of work and maintain confidentiality throughout their service (Etzel & Watson, 2013)

A competent counselor can recognize boundaries and limitations. Therefore, they use scientific, professional, technical, and administrative resources appropriately. When delivering assessments, they ensure these are backed with validity and reliability, and when using technologies, they adjust to the needs and competency of their clients. The AASP in section 26 offers guidelines for integrating technology into professional and scientific work within the sport, exercise, and health psychology (Whelan, 2011).

Objective and Subjective Assessments

When evaluating clients, subjective and objective assessments can be conducted. Subjective assessments occur when practitioners interview clients, interview people close to the client, or observe the client. On the other hand, psychological assessments provide a more objective outlook as they can assess skills such as performance strategies and anxiety coping.

There are two main factors to be aware of when assessing a client. First, consultants should ask who, what, when, how, and where questions in the initial interview, but not why. The client may not know the answer to why questions and thus be embarrassed and confused, or the answer to a why a question might cause emotional conflict and cause the client to withdraw. In addition to evaluating the athlete's mental skills, the practitioner should also consider the unique physical, technical, and logistical demands of the sport itself in order to maximize the effectiveness of the psychological intervention (Weinberg & Gould, 2018).

Validity and Reliability

Sports psychologists should consider the reliability and validity of any app or assessment used in this field. Some apps and tools can be used in this field. NeuroTracker is a technological tool that can raise awareness and focus. Scientist-practitioners have the duty to verify the scientific background and pursue peer-reviewed tools.

Validity and reliability describe the accuracy and consistency with which an assessment tool measures what it is supposed to measure and ensures that bias and distortion are not significantly impacting the results. Validity is the extent to which a test measures the construct of variables it purports to measure. Reliability is the extent to which the assessments are consistent (Sheperis et al., 2016). Furthermore, it is important to check the science behind them, the costs, and how it can transfer into the work.

Assessments and Tools

- **Assessments:** Athletic Skills Coping Inventory, Sport Anxiety Scale, Trait-State Confidence Inventory.
- **Tools:** Neurotracker, Eye Metrix, Breath Sync.

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