

# The Role of Psychological Skills in Sports & Physical Activities



Nikos Comoutos PhD  
University of Thessaly

# Outline

- Definitions of Psychological Skills Training-PST
- Historical development of PST
- Why PST is important
- Research on PST and mental toughness
- Task 1
- A framework for understanding PST in sport
- An introduction to psychological techniques
- Task 2
- Why athletes or coaches neglect psychological skills

# What is sport psychology

- The American Psychological Association (APA, 2008, 7 <https://www.apa.org/ed/graduate/specialize/sports>) defines sport psychology as follows:
- “**Sport psychology** is a proficiency that uses psychological knowledge and skills to address optimal performance and well-being of athletes, developmental and social aspects of sports participation, and systemic issues associated with sports settings and organizations.”

# Parents – Coaches...

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- Videos..

# Describe or Define Psychological Skills



**Similar OR  
different?**

- **Skills**
- **Abilities**

- In small groups, think of examples

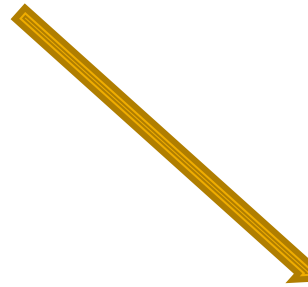
Video  
BBC

# HISTORICAL DEVELOPMENT OF MENTAL SKILLS TRAINING IN SPORT

- The story of sport psychology began in earnest with the writings of the ancient Greeks, a civilization which vigorously extolled the virtues of physical prowess.



We argue more about the navigation of ships than about the training of athletes, because it has been less well organized as a science.  
(*Aristotle, Nicomachean Ethics*)



The 'tetrad' or four-day system, a system guided by psychological as well as physiological principles (day one, preparation; day two, concentration; day three, moderation; day four, relaxation)  
(*Philostratus, Gymnastic*)

# The specific term “sport psychology” was first used...

- As far as is known, the specific **term** “sport psychology” was first used by **Pierre de Coubertin** (lived from 1863 to 1937) at the turn of the last century (de Coubertin, [1900](#)).
- Coubertin, inspired by the Olympic Games of antiquity, was instrumental in initiating the Olympic Games of modern times as the founder the International Olympic Committee in 1894. He probably recognized that psychological factors play a decisive role in physical performance in the sense of “Citius, altius, fortius” (motto of the Olympic Games; Latin for *faster, higher, stronger*).

# *European sport psychological research*

- The beginning of *European sport psychological research* stemmed from a strong interest in sport psychological topics by students of **Wilhelm Wundt** (lived from 1832 to 1920), who founded the first Experimental Institute of Psychology at the University of Leipzig in 1879.
- His student **Edward Wheeler Scripture** (lived from 1864 to 1945), for example, published laboratory experimental studies (e.g., Scripture, 1894) on the question of whether fencers differed from other groups of people in their reaction times (“mental quickness”) and movement times (speed of execution of movements).



# American Sport Psychology

- The founding of the first American research institute for competitive sport (Athletic Research Laboratory, University of Illinois, Chicago Urbana) in 1925 is considered to be one of the first major milestones in *American sport psychological research*.

# HISTORICAL DEVELOPMENT OF MENTAL SKILLS TRAINING IN SPORT

- Coleman Griffith was hired by the Chicago Cubs professional baseball team in 1938 to improve the performance of the team.



- ✕ The mental training techniques included: practice management strategies for enhanced learning and automation of skills, communication, skills for coaches, team dynamics and leadership development, goal setting, confidence building, competitive simulation, a test battery for measuring players' basic physical and "visual" skills, and a recommendation that psychological testing and observation be included in scouting

# Sport Psychology Scientific Bodies

- The first World Congress of Sport Psychology took place in Rome, Italy, in 1965. At that time, proximity enabled networking among sport psychologists from different European countries. At the congress, the International Society of Sport Psychology (ISSP) was founded.
- Three years later, in 1968, the European Federation of Sport Psychology (FEPSAC) was established.
- In 1970, the first sport psychology journal was published under the name "International Journal of Sport Psychology." "The Journal of Sport Psychology" of the North American Society for Psychology of Sport and Physical Activity (NASPSPA) which later became the influential "Journal of Sport and Exercise Psychology" was the second sport psychology journal first issued in 1979.

- ISSP – International Society of Sport Psychology - <https://issponline.org>
- FEPSAC- European Federation of Sport Psychology - <https://fepsac.com/history/>
- AASP - Association for Applied Sport Psychology - <https://appliedsportpsych.org>
- NASPSPA- North American Society for Psychology of Sport and Physical Activity - <https://www.naspspa.com>
- BASES - British Association for Sport and Exercise Science - <https://www.cases.org.uk>

# Sport Psychology Journals

Sport and Exercise Psychology Journals

Journal of Sport and Exercise Psychology

<http://journals.humankinetics.com/jsep-current-issue>

Psychology of Sport and Exercise

<http://journals.humankinetics.com/jsep-current-issue>

Journal of Applied Sport Psychology

[http://www.tandfonline.com/toc/uasp20/current#.UIY\\_G2R5zsk](http://www.tandfonline.com/toc/uasp20/current#.UIY_G2R5zsk)

The Sport Psychologist

<http://journals.humankinetics.com/tsp>

International Journal of Sport and Exercise Psychology

(Editor Prof Papaioannou)

<http://www.tandfonline.com/action/journalInformation...>

Research Quarterly for Exercise and Sport

<http://www.tandfonline.com/toc/urqe20/current#.UIZAgrmR5zsk>

Journal of Sports Sciences (Multidisciplinary)

<http://www.tandfonline.com/loi/rjsp20#.UIZAsWR5zsk>

International Review of Sport and Exercise Psychology

<http://www.tandfonline.com/toc/rirs20/current#.UIZBZGR5zsk>

Journal of Sport Exercise and Performance Psychology

<http://www.apa.org/pubs/journals/spy/>

Journal of Sport Psychology in Action

<http://www.tandfonline.com/toc/uspa20/current#.UIZBOmR5zsk>

The Journal of Sport Behavior

<http://www.southalabama.edu/psychology/journal.html>

Journal of Athletic Enhancement

<http://www.scitechnol.com/athletic-enhancement.php>

Journal of Teaching in Physical Education

<http://journals.humankinetics.com/jtpe-contents>

Measurement in Physical Education and Exercise Science

<http://www.navy.mil/...>

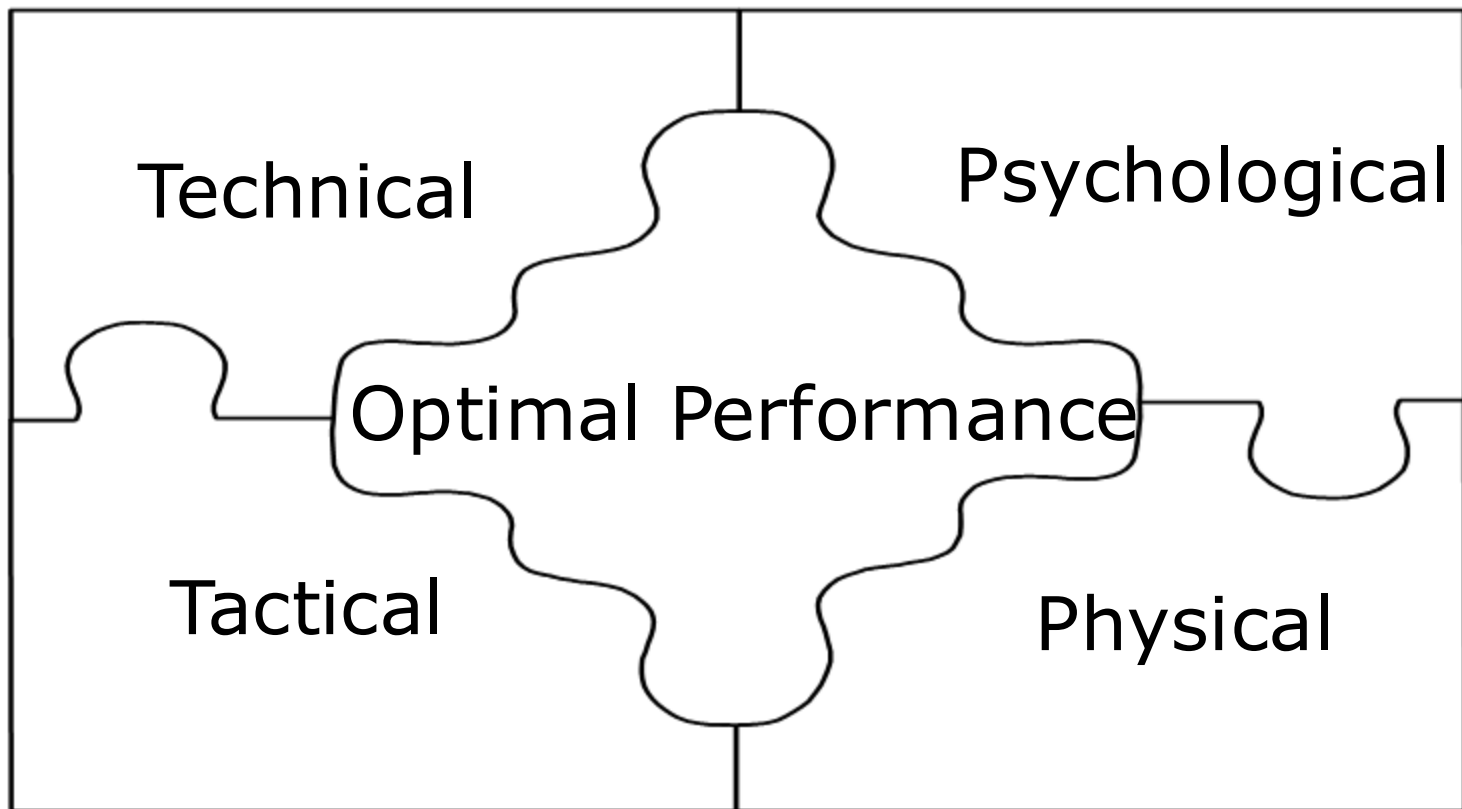
# What is psychological skills training?

- Psychological **skills training** or **mental training** is based on the implementation of mental strategies that aim to enhance the athlete's or team's **performance**. The aim is to reduce “mental weaknesses” as well as to enhance their **skills** and talent.

# Why PST is important?

- Which of the following sport and exercise experiences have you had?
  1. You choked at a critical point in competition
  2. You lacked the motivation to exercise
  3. Your mind wandered during competition
  4. ....

# Why PST is important?





# But..In any sport a player's success...

- Results from a combination of physical (e.g., strength, speed..)

Usain Bolt - video

AND

Mental abilities

Concentration

Confidence

Anxiety management

....

Jordan -- failure/success

# Orlick & Partington, 1988

## **Elements distinguishing successful and unsuccessful athletes**

- High level of commitment
- Set clear short- and long-term goals
- Engaged in imagery and simulation training
- Focused and refocused in face of distractions
- Had an established mental training plan
- Had a clearly established mental plans for competition

# Van den Auweele, De Cuyper, Van Mele & Rzewinicki, (1993)

- Characteristics in successful athletes
  - - High self-confidence
  - - Pre and post-competition low anxiety levels
  - - Techniques to regulate anxiety
  - - Attentional focus in specific tasks and movements.
  - - Ability to cope with unexpected/poor executions
  - - Positive self-talk

# Gould, Guinnan, Greenleaf, Medbery, & Peterson, 1999

## Successful teams

- Engaged in extensive mental preparation
- Were highly focused and committed
- Received support from family and friends
- Participated in residency programs

## Less successful teams

- Not as effective in planning for competitions
  - Lacked cohesion
- Experienced problems with coaching, traveling, focus, and commitment

# Durand-Bush & Salmela, 2002

## **Personal characteristics of Canadian Gold medal holders**

- Self-confidence
- Motivation
- Creativity
- Perseverance

## **Training characteristics**

- Technical, tactical, physical and mental components
  - Influenced by quality, quantity, intensity, and recovery

## **Competition Factors**

- Meticulous planning
- Evaluation
- Dealing with pressure, expectations, adversity
- Focusing on the process rather than the outcome of events

# Gould, Dieffenbach, & Moffett, 2002

## **US Olympic Champions were characterized by...**

- Ability to cope with and control anxiety
- Confidence
- Mental toughness/resiliency
- Sport intelligence
- Ability to focus and block out distractions
- Competitiveness
- Hard work-ethic
- Ability to set and achieve goals
- Coachability
- High levels of dispositional hope
- Optimism
- Adaptive perfectionism

# Jones, Hanton, & Connaughton, 2002

## Mental toughness

- Is having the natural or developed psychological edge that enables an athlete to:
  - Generally, **cope better** than the opponents with the many demands (competition, training, lifestyle) that sport places on a performer
  - Specifically, **be more consistent and better** than the opponents in remaining **determined, focused, confident, and in control under pressure**

Tiger Woods – Never ad

# Video with tennis player...

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# Anshel (2003)

- - Risk taking
- - Sensation seekers
- - Competitiveness
- - Self-confidence
- - Attentional style
- - Expectations of success
- - Mental toughness
- - Ability to regulate stress levels

# Orlick (2008)

- - Focus.
- - Commitment.
- - Confidence.
- - Positive images.
- - Mental readiness.
- - Distraction control.
- - Ongoing Learning.

## The Development and Maintenance of Mental Toughness in the World's Best Performers


Declan Connaughton and Sheldon Hanton  
University of Wales Institute

Graham Jones  
Lane 4 Management Group Ltd.

**Table 1 Mental Toughness Framework Dimensions and Subcomponents (Jones et al., 2007)**

Dimension	Subcomponent
Attitude/Mindset	<ul style="list-style-type: none"><li>• Belief</li><li>• Focus</li></ul>
Training	<ul style="list-style-type: none"><li>• Using long-term goals as the source of motivation</li><li>• Pushing yourself to the limit</li><li>• Controlling the environment</li></ul>
Competition	<ul style="list-style-type: none"><li>• Controlling the environment</li><li>• Belief</li><li>• Regulating performance</li><li>• Staying focused</li><li>• Awareness and control of thoughts and feelings</li><li>• Handling pressure</li></ul>
Postcompetition	<ul style="list-style-type: none"><li>• Handling failure</li><li>• Handling success</li></ul>

Foundations  
of mental  
toughness



# Task 1) Watch the video

- Which skills are portrayed in these athletes?

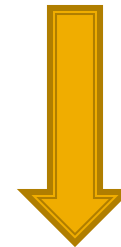
USWNT - Abby  
Wambach - video

Vancouver 2010  
Anniversary Joannie  
Rochette - video

# What is the objective of PST? (Vealey, 2007)

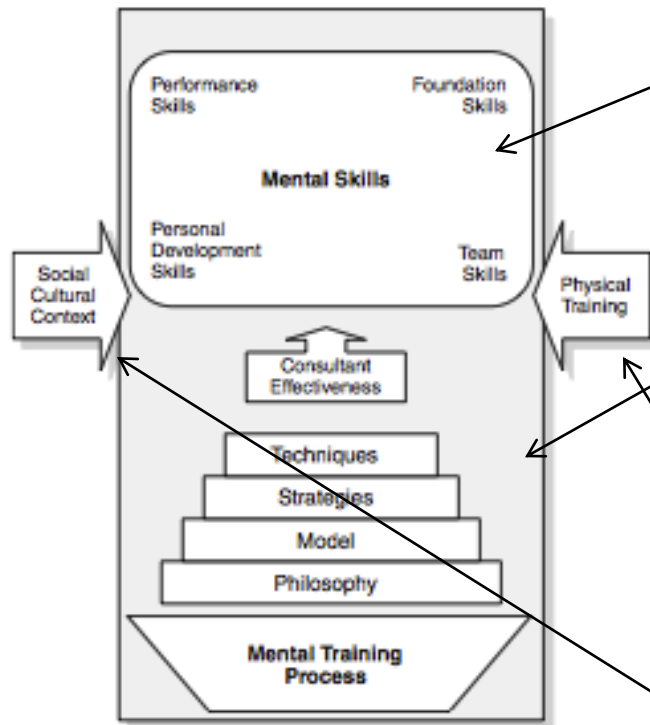


The objective of PST is to assist sport participants in the development of mental skills to achieve performance success and personal well-being.



Identify key mental skills that are related to performance success and personal well-being to guide the development of mental training interventions.

# A framework for understanding mental skills training in sport (Vealey, 2007)



The targets for mental training are foundation, performance, personal development, and team skills.

The process of mental training includes the philosophy, model, strategies, and techniques that define the consultant's approach to enhancing mental skills.

This process is mediated by the interpersonal and technical effectiveness of the consultant.

The two arrows on each side of the framework represent the influence of physical training and the social-cultural influences

# Mental training process(Vealey, 2007)

- Mental skill training has matured from early interventions that focused on the **random application** of mental training techniques, such as imagery and goal setting, **to programmatic** intervention models that utilize specific mental training strategies and techniques within a coherent guiding intervention model.

# Philosophy - Video with Robert Rotella

- The mental training process begins with the consultant's *philosophy*, or his or her set of ideas and beliefs about the nature of mental skills and mental training, usually including program objectives and the respective roles of the consultant, athlete, and coach in the process.
- **Educational Vs clinical approaches (Videos...)**
- **Program-centered Vs athlete-centered**
- **Performance enhancement Vs personal development**

# *Model of intervention*

- Models for team, organizational, and family intervention
- self-regulatory or cognitive-behavioral models
- behavioral management models
- educational mental skills models
- developmental models
- sport-specific mental skills models
- clinical intervention models
- perceptual training models



# Strategies and Assessment (Vealey, 2007)

- Five-Step Strategy (Singer, 1988)
  - The four-phase psychological skill program for close-skill performance enhancement (Boutcher & Rotella, 1987)
  - P<sub>3</sub> Thinking and goal mapping (Vealey, 2005)
  - Centering (Nideffer & Sagal, 2006)
  - Competition focus plans (Orlick, 1986)
  - The five-step approach to mental training using biofeedback (Blumenstein, Bar-Eli, & Tenenbaum, 2002)
  - Visuo-motor behavioral rehearsal (Suinn, 1993)
- 
- Observation
  - Interviews
  - Questionnaires
  - Psychophysiological measures

# *Techniques*

- The traditional four mental training techniques of:
  - Imagery
  - goal setting
  - thought management/ self-talk
  - physical relaxation/arousal regulation

have been most widely used by consultants (Gould, Murphy, Tammien, & May, 1991; Sullivan & Nashman, 1998; Vealey, 1988),

# What is imagery?

- Visualization, mental rehearsal, mental practice
- Imagery involves creating or recreating an experience in your mind
- Can involve all senses - visual, kinesthetic, auditory, tactile
- Can involve moods and emotions

# What is goal-setting

- Goals are clear targets set down by an athlete that outlines priorities and expectations regarding overall performance.
- They can be short term running 3 times per week initially to running a marathon as a long term goals...

# What is self-talk

- internal dialogue with oneself

**Moran, 1996**

- ... occurs anytime a person thinks

**Zinsser, Bunker, and Williams 2006**

- ... statements, phrases or cue words that are addressed to the self which might be said automatically or very strategically, either out loud or silently, phrased positively or negatively, having an instructional or motivational purpose, an element of interpretation, and incorporating some of the same grammatical features associated with every day speech

**Hardy & Zourbanos 2016**

See Video on how ....Dr. Dan Gould discusses how to use thought stopping, centering and refocusing in basket ball.

# What is arousal regulation?

- Individuals can control their autonomic functioning (arousal)
  - Heart rate
  - Breathing
  - Muscle tension
  - Body temperature
- I felt physically very relaxed, but also...pumped up.
- I experienced no anxiety or fear...”

<b>Psychological skill</b>	<b>Purpose</b>	<b>Psychological method used</b>
Arousal	Control levels of anxiety before completing a task	<ul style="list-style-type: none"><li>•Imagery</li><li>•Self-talk</li><li>•Arousal regulation</li></ul>
Concentration	Focuses attention on what is important in completing a task	<ul style="list-style-type: none"><li>•Imagery</li><li>•Self-talk</li></ul>
Confidence	Allows a person to believe in their ability to complete a task	<ul style="list-style-type: none"><li>•Imagery</li><li>•Self-talk</li><li>•Goal-setting</li></ul>
Motivation	Gives a person the desire to complete a task	<ul style="list-style-type: none"><li>•Self-talk</li><li>•Goal-setting</li></ul>

## Task 2)

- A) Find 3 articles from 2020-2024 on Elements distinguishing successful and unsuccessful athletes or mental toughness
- B) Find Applications in i-Phone or Android related to psychological skills training or sport psychology
- [nzourba@pe.uth.gr](mailto:nzourba@pe.uth.gr)



# In general

- Learning is most effective when mental skills are taught/coached as an integral part of training, not as an “add on” activity.
- Like all learning, mental skills learning is a developmental process; it begins with simple familiar examples and gradually develops with practice and good instruction to apply to complex and unfamiliar situations

# Why athletes or coaches neglect psychological skills?

- Misunderstandings about psychological skills (e.g., they can't be learned)
- Lack of time
- Lack of knowledge

# What Michael Phelps Can Teach Us About Mental Health

- <https://www.youtube.com/watch?v=YqpcIRqCmTY>

**THANK you for your attention**

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