



# So, what is “Sport Psychology”?

Some people think this is sport psychology:

War cry video start at 41 sec:

[https://youtu.be/yiKFYTFJ\\_kw](https://youtu.be/yiKFYTFJ_kw) end at 2 minutes

# So, what is “Sport Psychology”?

Others may think this is (*child*) sport psychology

<https://youtu.be/l7E3Sph45z8> end early

# I'll be discussing various components and approaches to Sport Psychology

Disclaimer: I am not a sport psychologist, I am a licensed clinical psychologist.

There is no licensing for sport psychologists.

*The American Psychological Association defines applied sport psychology as...*

“...the study and application of psychological principles of human performance in helping athletes consistently perform in the upper range of range of their capabilities and more thoroughly enjoy the sport performance process.”

This presentation will provide an understanding of the breadth and diversity of the field—applied examples from helping athletes use psychological principles to achieve optimal mental health and enhance enhance performance, to understanding how participation in sport, exercise exercise and physical activity affects an individual's psychological development, health and well-being throughout the lifespan.

We'll look at various components of Sport Psychology, including:

History/Origin

Assessment

Clinical

Performance

Case Examples

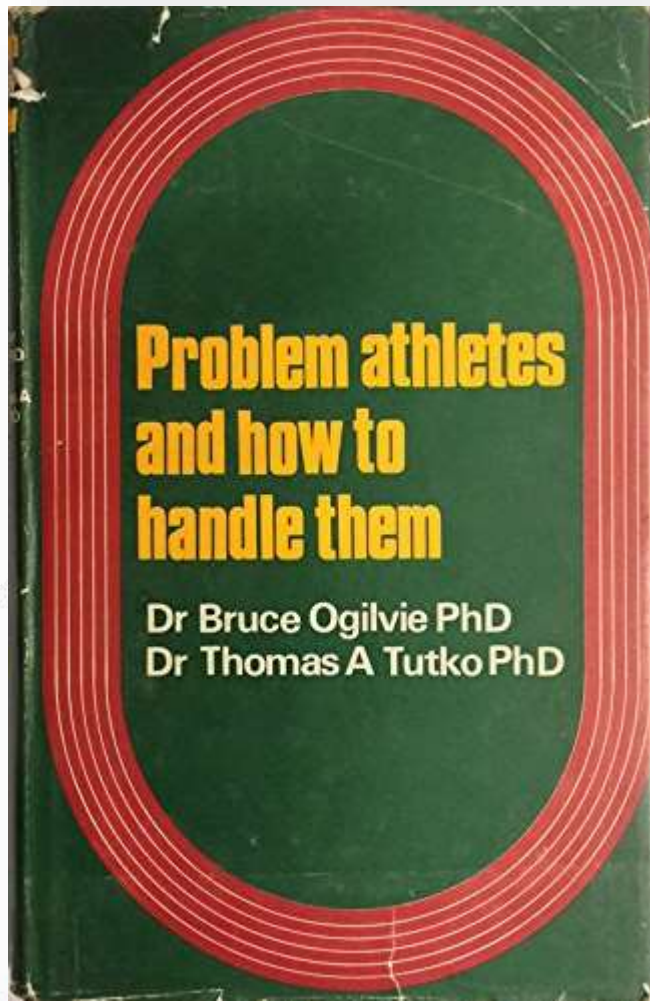
# The Origins of Sport and Performance Psychology

## 'America's first sport psychologist'

In 1938, Chicago Cubs owner Philip K. Wrigley hired experimental psychologist Coleman Griffith — and didn't listen to a thing he said.







“We have a neurotic in the backfield, doctor...”

Ogilvie & Tutko, 1966

They worked to show teams how to avoid mental blocks by tackling psychological hang-ups.

They did not bring their psychological knowledge to the developing theories of performance, but rather stuck to their theories of personality and focused on psychopathology and addressing general life issues of athletes.

# Assessment

- Historically controversial
- Not surprisingly, personality inventory scores often had limited predictive value in differentiating successful from unsuccessful athletes
- Psychological tests can play a crucial role in identifying the strengths and weaknesses of athletes and performing artists, and evaluating the effectiveness of psychological skills training programs
- Some require users to be a licensed psychologist to access, especially if clinical for depression, anxiety, ADHD, etc.
- Others are on-line
- Be aware of psychometric properties, are they valid, reliable?



# Assessment

- There are a number of other assessment approaches in sport psych that are not clinical or personality based
- In fact, the APA ethical guidelines note that “*using personality inventories alone to select athletes for a team or to cut them from a team is an abuse of testing that should not be tolerated*”
- A recent study note that there in the last 30 years, 314 self-report instruments used in sport, exercise and physical activity studies were published in 45 journals. In spite of peer reviewed studies, many cases the lacked of psychometric follow-up studies and thus pose a serious limitation for the test user.

# Assessment

- Performance measurements  
behavioral measures, eye movement recording and brain imaging provide powerful insights into the differences between novices and experts
- Measures of mental toughness
- Measures of dispositional state or “flow”
- Performance profiling
- Talent identification and development
- Assessment of perceptual and cognitive skills
- Here is a sampler of some instruments that have good rigor...

# Athletic Intelligence Quotient (AIQ)

A tool to measure cognitive abilities that determine athletic ability in:  
visual processing,  
memory,  
reaction time, and  
processing speed

Athletes demonstrate their skills, not report on them.



The AIQ is an IQ test for athletic performance.

[Learn More](#)

ORGANIZATIONS USING THE AIQ



The image displays a collection of logos for various sports organizations, including the NFL, Major League Baseball, NBA, NCAA, the Olympic rings, and Major League Soccer (MLS).



## DISC Profiles for Sport

*The sporting environment is one of the most demanding and competitive arenas. To be the best you need to be equipped with the best possible resources, the leading performance tools and looking after your most important asset, the people. DISC Profiling is the key to getting the 'people side' right in sport.*

### STYLE

**Dominance**

**Influence**

**Steadiness**

**Conscientious**

### TENDENCIES

Tends to be direct and guarded

Tends to be direct and open

Tends to be indirect and open

Tends to be indirect and guarded

### DISC for Coaches



Top Coaches constantly pursue the competitive edge.

### DISC for Athletes



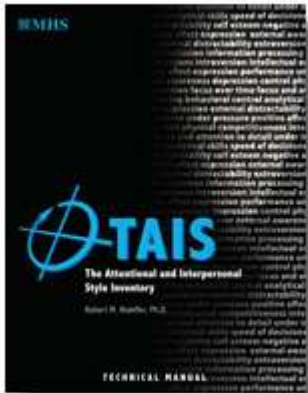
Consistently produce your best when it matters the most.

### DISC for Managers



Improve communication, working relationships and ultimately results.

- Developing self-awareness
- Effective communication
- More productive relationships
- Tailoring coaching, and
- Identifying how each person contributes their best.



# The Attentional and Interpersonal Style Inventory (TAIS)

Measures athlete/coach/performer's use and frequency of use of mental skills through:

- leadership,
- emotional control, and
- performance.

Helps athletes, coaches, or performers to identify environmental conditions and specific behaviors that are likely to facilitate or interfere with their ability to make effective decisions and perform at their optimal level.



# “Future”

Video-based simulations and virtual reality technology to measure and develop athletes' decision making and other cognitive skills.



# VR example

Start at 9 sec

<https://www.youtube.com/watch?v=Cb0p68ULQUM>

Stop at 1:20

# Clinical

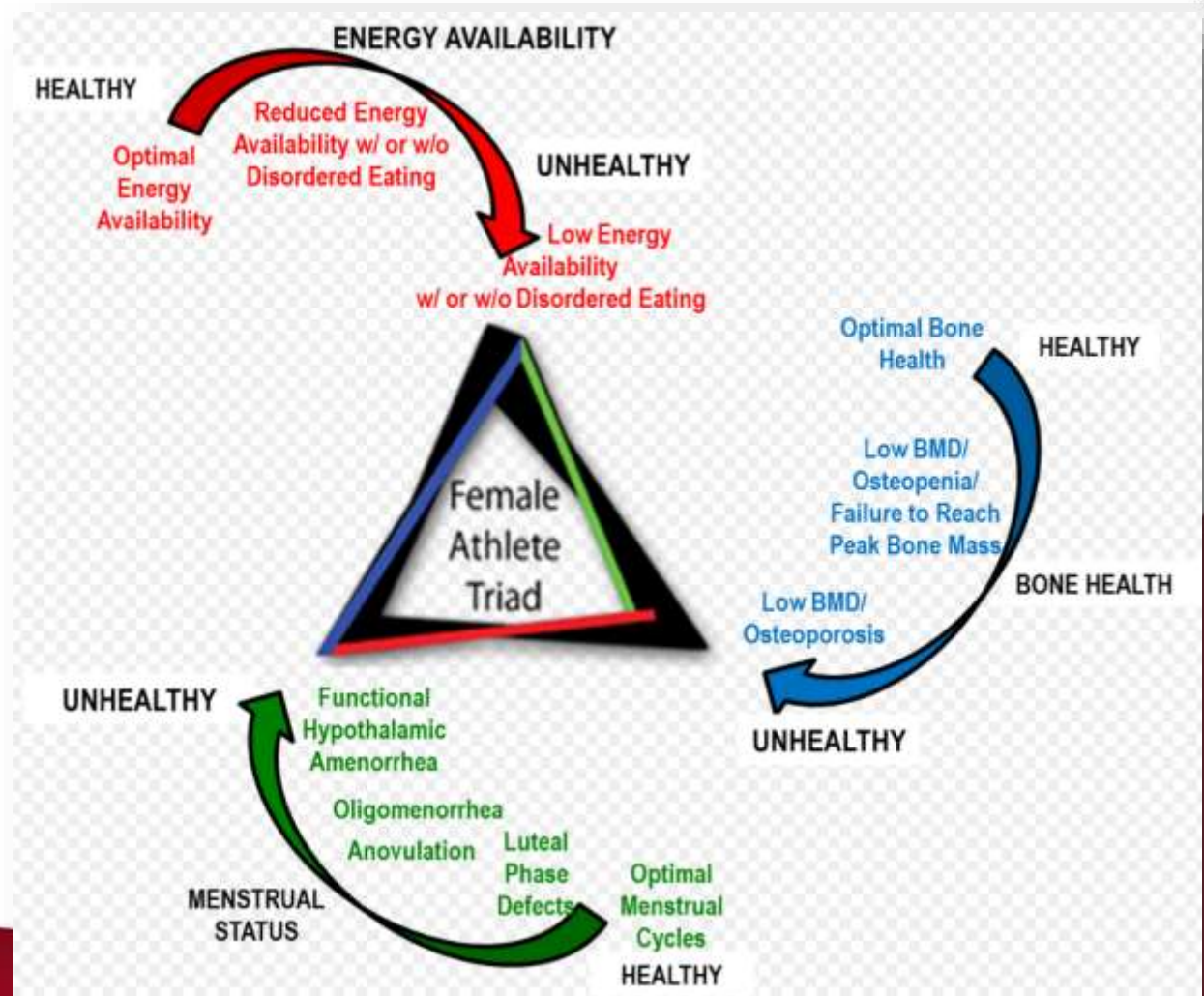
Being an athlete doesn't make one immune from psychological issues

In some instances, for some people, it can exacerbate problems.

# Clinical: Eating Disorders



# Clinical: Female Athlete Triad



# Clinical: ED Assessment

## Battery of Assessments

- Menstrual History Questionnaire,
- Injury Assessment Questionnaire, and
- Questionnaire for Eating Disorder Diagnoses



# Clinical: Male Athlete Triad...?

NCBI Resources How To

PubMed.gov  
US National Library of Medicine  
National Institutes of Health

PubMed Advanced

Format: Abstract Send to

Sports Med. 2016 Feb;46(2):171-82.

**Parallels with the Female Athlete Triad in Male Athletes.**

Tenforde AS, Barrack MT, Nattiv A, Fredericson M.

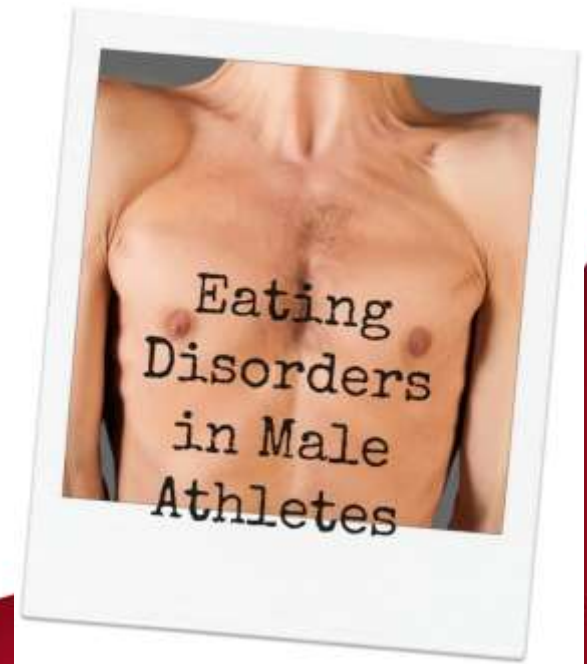
**Abstract**

Participation in sports offers many health benefits to athletes of both sexes. However, subsets of both female and male athletes are at increased risk of impaired bone health and bone stress injuries. The Female Athlete Triad (Triad) is defined as the interrelationship of low energy availability (with or without disordered eating), menstrual dysfunction, and low bone mineral density. The Triad may result in health consequences, including bone stress injuries. Our review presents evidence that an analogous process may occur in male athletes. Our review of the available literature indicates that a subset of male athletes may experience adverse health issues that parallel those associated with the Triad, including low energy availability (with or without disordered eating), hypogonadotropic hypogonadism, and low bone mineral density. Consequently, male athletes may be predisposed to developing bone stress injuries, and these injuries can be the first presenting feature of associated Triad conditions. We discuss the evidence for impaired nutrition, hormonal dysfunction, and low bone mineral density in a subset of male athletes, and how these health issues may parallel those of the Triad. With further research into the mechanisms and outcomes of these health concerns in active and athletic men, evidence-based guidelines can be developed that result in best practice.

# Clinical: Male Athlete Triad...?

Initial research is considering:

- Low energy (initially may present with “restless” energy)
- Low mood
- Poor sleep patterns
- Increased irritability
- Withdrawal from social circle
- Loss of libido
- Lack of concentration



**“**

**Confronting this issue may require recognizing that the whatever-it-takes mentality, and its attendant dangers, are an inextricable part of elite endurance sports.**

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There are other hurdles, too. While many schools tout free counseling, they often cap that benefit. Students at Brown University, for instance, get seven free sessions a year. At Indiana University, students get just two free sessions and then pay \$30 per visit.

**“Things start to back up like a traffic jam. A lot can happen in four or five weeks...It really wasn't OK to have that delay in place.”**

GARY DUNN, COUNSELING DIRECTOR, UNIVERSITY OF CALIFORNIA

**“You're not treating the depression or the panic attacks or the eating disorders.”**

BEN LOCKE, COUNSELING DIRECTOR, PENNSYLVANIA STATE UNIVERSITY

**“I was just looking at that date on the calendar and thinking, ‘If I can just make it one more day.’...I just couldn't hang on.”**

CONSTANCE RODENBARGER, STUDENT AT INDIANA UNIVERSITY

## Indiana University

1,535

TOTAL UNDERGRADUATES  
38,364

TOTAL PROVIDERS  
25

DATA REPORTED BY THE UNIVERSITY

## Washington State University

625:1 ratio of undergraduates to mental health providers

TOTAL UNDERGRADUATES  
7,504

TOTAL PROVIDERS  
12\*

DATA REPORTED BY THE UNIVERSITY

\*Actual number of providers reported was 12.6

## Elon University

## Cornell University



447:1 ratio of undergraduates to mental health providers

TOTAL UNDERGRADUATES  
14,315

TOTAL PROVIDERS  
32\*

DATA REPORTED BY THE UNIVERSITY

\*Actual number of providers reported was 31.6

COST PER SESSION  
\$10 / session

SESSION LIMIT  
No limit



Up to 2 weeks  
Up to 3 days for urgent need

[Sport, Exercise, and Performance Psychology Volume 6, Issue 3, \(Aug\)](#)

[Concussion in sport: Psychological perspectives.](#)

Page 215-219

Kontos, Anthony P.

[A review of psychological issues that may be associated with a sport-related concussion in youth and collegiate athletes.](#)

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Covassin, Tracey; Elbin, R. J.; Beidler, Erica; LaFevor, Meghan; Kontos, Anthony P.

[Parents' intentions to allow youth football participation: Perceived concussion risk and the theory of planned behavior.](#)

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Murphy, Ashley M.; Askew, Kevin L.; Sumner, Kenneth E.

[Exploring sandbagging behaviors, effort, and perceived utility of the IMPACT Baseline Assessment in college athletes.](#)

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Schatz, Philip; Elbin, R. J.; Anderson, Melissa N.; Savage, Jennifer; Covassin, Tracey

[The association between personality traits and sport-related concussion history in collegiate student-athletes.](#)

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Beidler

# Sport, Exercise, and Performance Psychology®

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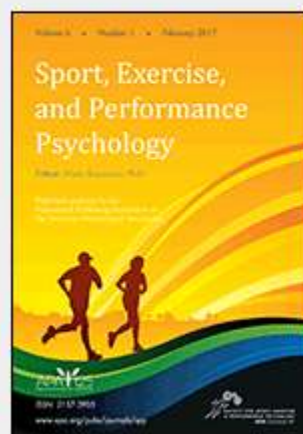
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 [View Table of Contents and Online First Publication](#)



# High school boys fear looking 'weak' if they report concussions

A study, with some limitations, sees link between youth football and emotional issues in adulthood

Shereen Lehman

By BOB TEDESCHI @bobtedeschi / SEPTEMBER 19, 2017

(Reuters Health) A study of high school football players found that those who reported concussions during their high school career were more likely to have emotional issues in adulthood. The study suggests that youth football may be linked to emotional problems later in life.

Meeting Coverage

Head Injuries

— Same-day

to “get ma

“Although we still see Wallace to



Parents please remember...  
It's not about you...  
It's about the kids...  
Let them play!!!



som<sup>ee</sup>cards  
user card



TI  
HERAPY



Published by the *Journal of Sports Sciences*, the first-of-its-kind research discovered that young athletes' attitudes to doping are more influenced by their parents than anyone else.

The research examined perfectionism and attitudes towards doping in 129 male British junior athletes (average age 17 years) in four different aspects of perfectionism.

The study found that it was only parental pressure that showed a positive relationship with positive doping attitudes. The other factors investigated were an athlete's striving for perfection, their concerns about making mistakes and pressure from their coach to be perfect.

The study will now be widened to examine if young female athletes are similar and if the findings are the same for those taking part in team versus individual sports.

*Perfectionism and attitudes towards doping in junior athletes* (Daniel Madigan; Professor Joachim Stoeber, School of Psychology, University of Kent; Professor Louis Passfield, School of Sport and Exercise Sciences, University of Kent) is published online in the *Journal of Sports Sciences*.

University of Kent > News C

## Parental doping



By Sandy Flemming

Pressure to be perfect about doping.

# Ex-NFL star Aaron Hernandez, serving a life term for murder, hangs himself in prison



Former New England Patriots tight end Aaron Hernandez looks back during his trial at Suffolk Superior Court on March 28, 2017, in Boston. (Nancy Lane / AP)

By Associated Press

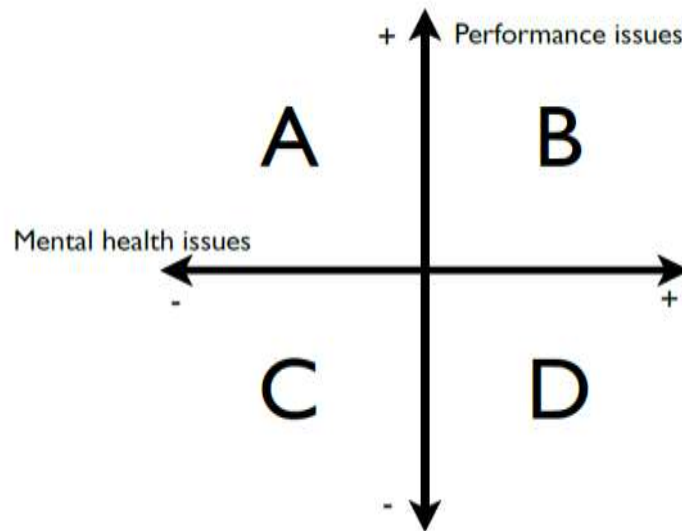
APRIL 18, 2017, 7:00 AM | MILFORD, MASS.

**F**ormer NFL star Aaron Hernandez, who was serving a life sentence for a murder conviction and just days ago was acquitted of a double murder, died after hanging himself in his prison cell early Wednesday, Massachusetts prisons officials said.

# Performance Issues vs. Mental Health Issues.

Performance issues are those psychological processes or characteristics that interfere with the development or execution of the knowledge, skills, or abilities needed to consistently perform at the performer's upper range of capability.

Mental health issues are those psychological or behavioral issues that interfere with a person's well-being.



- Quadrant A represents a person with performance, but not any mental health, issues.
- Quadrant B represents a performer working through both performance and mental health issues.
- Quadrant C represents a performer currently functioning without either type of issue.
- Quadrant D represents a performer with only mental health issues and would thus benefit solely from psychotherapy



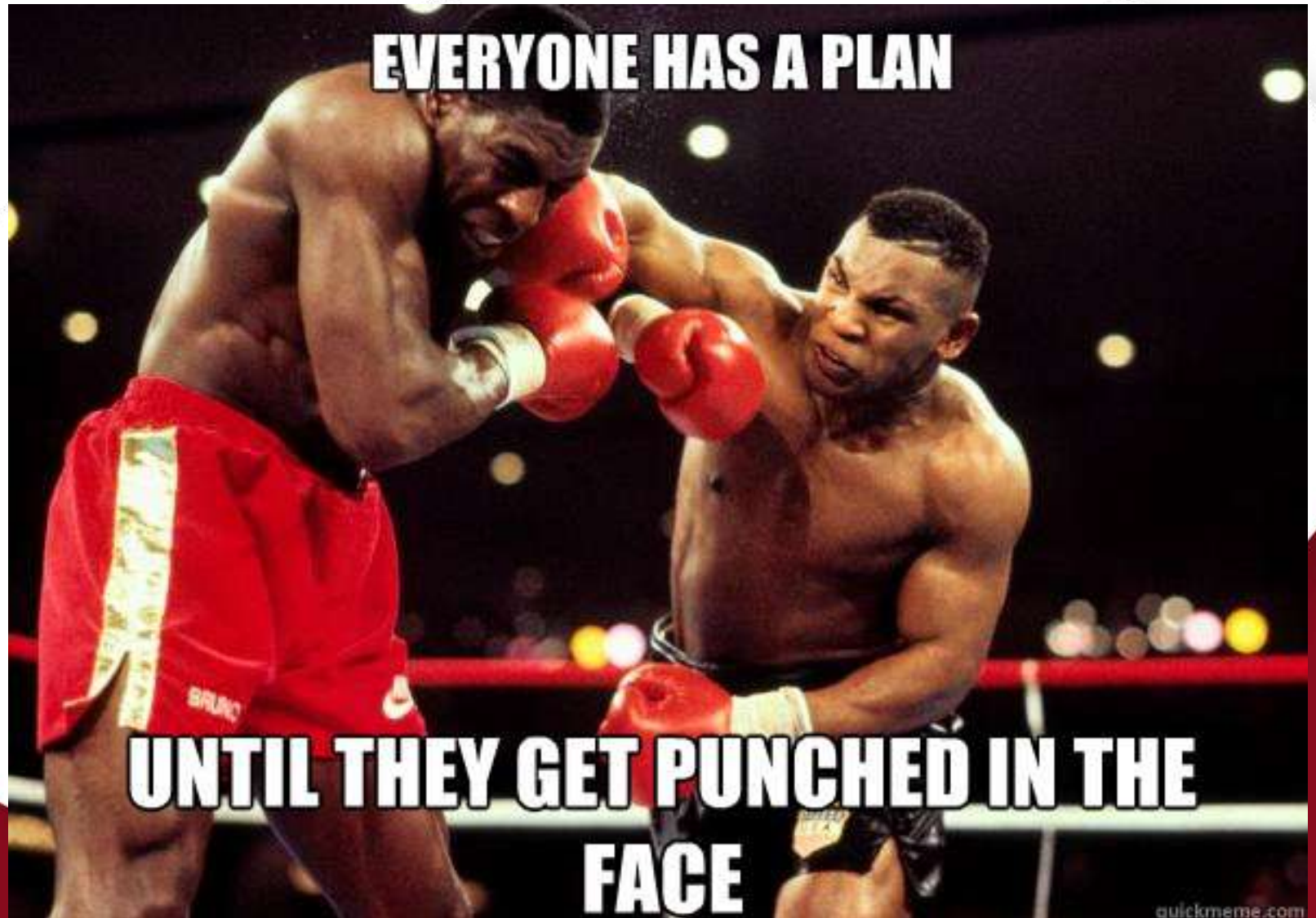
To reiterate, it is clear that although athletes and other performers may need therapy, therapy with an athlete is NOT sport psychology, it is clinical psychology.

However, being able to provide therapeutic services may be an important part of a sport psychologist's job responsibilities.

Many of the new full-time positions in college athletics or with the United States Olympic Committee require a license to provide psychotherapy.

This implies an expectation that there may be a need for traditional therapeutic services in addition to performance/sport psychology services.

# Performance



# Performance

Performance psychology is the study and application of psychological principles of human performance to help people consistently perform in the upper range of their capabilities and more thoroughly enjoy the performance process.

Performance psychology has been of use, beyond athletes, with performing artists, business executives, and those in high-risk professions.

# Performance

Performance psychologists are uniquely trained and specialized to engage in:

- The identification, development, and execution of the mental and emotional knowledge, skills, and abilities required for excellence in performance domains;
- The understanding, diagnosing, and preventing of the psychological, cognitive, emotional, behavioral, and psychophysiological inhibitors of consistent, excellent performance; and
- The improvement of performance environments to facilitate more efficient development, consistent execution, and positive experiences in performers.

# Performance

Much of the focus of sport psychology addresses current functioning in order to improve future performance.

This includes:

- goal setting,
- constructive imagery,
- increasing confidence,
- psychological skills training (PST), and
- mental skills training (MST).

# Performance

Techniques to get there include:

Stress management using Biofeedback via...

Heart-Rate Variability

EEG/Neurofeedback (Brain wave)

Electro-myography biofeedback (Muscle activity) *Not just helpful in sports, but also asthma, CV conditions, depression, anxiety, and insomnia.*



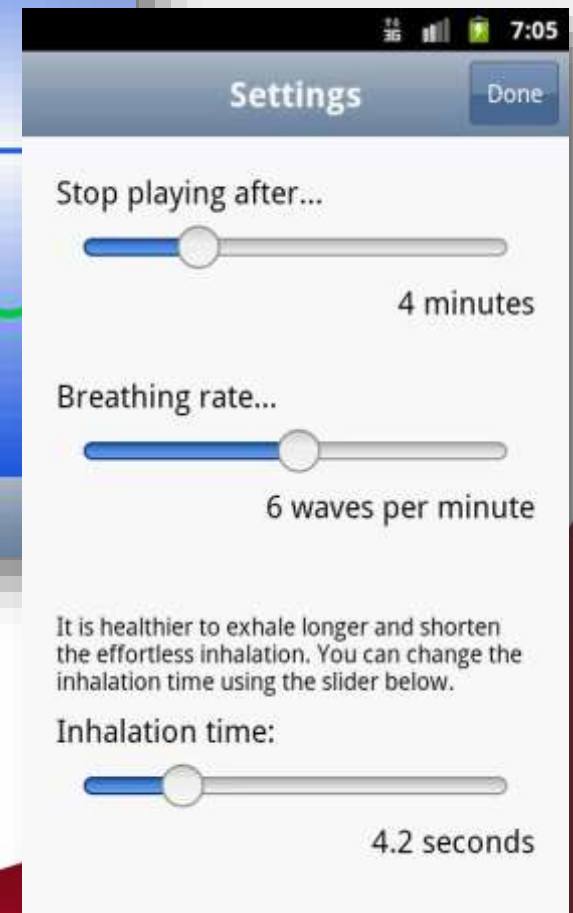
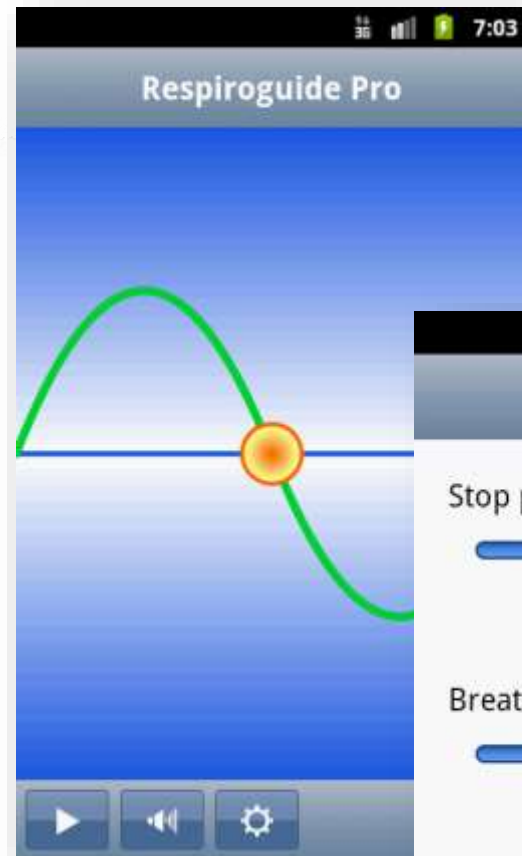


# RespiroGuide

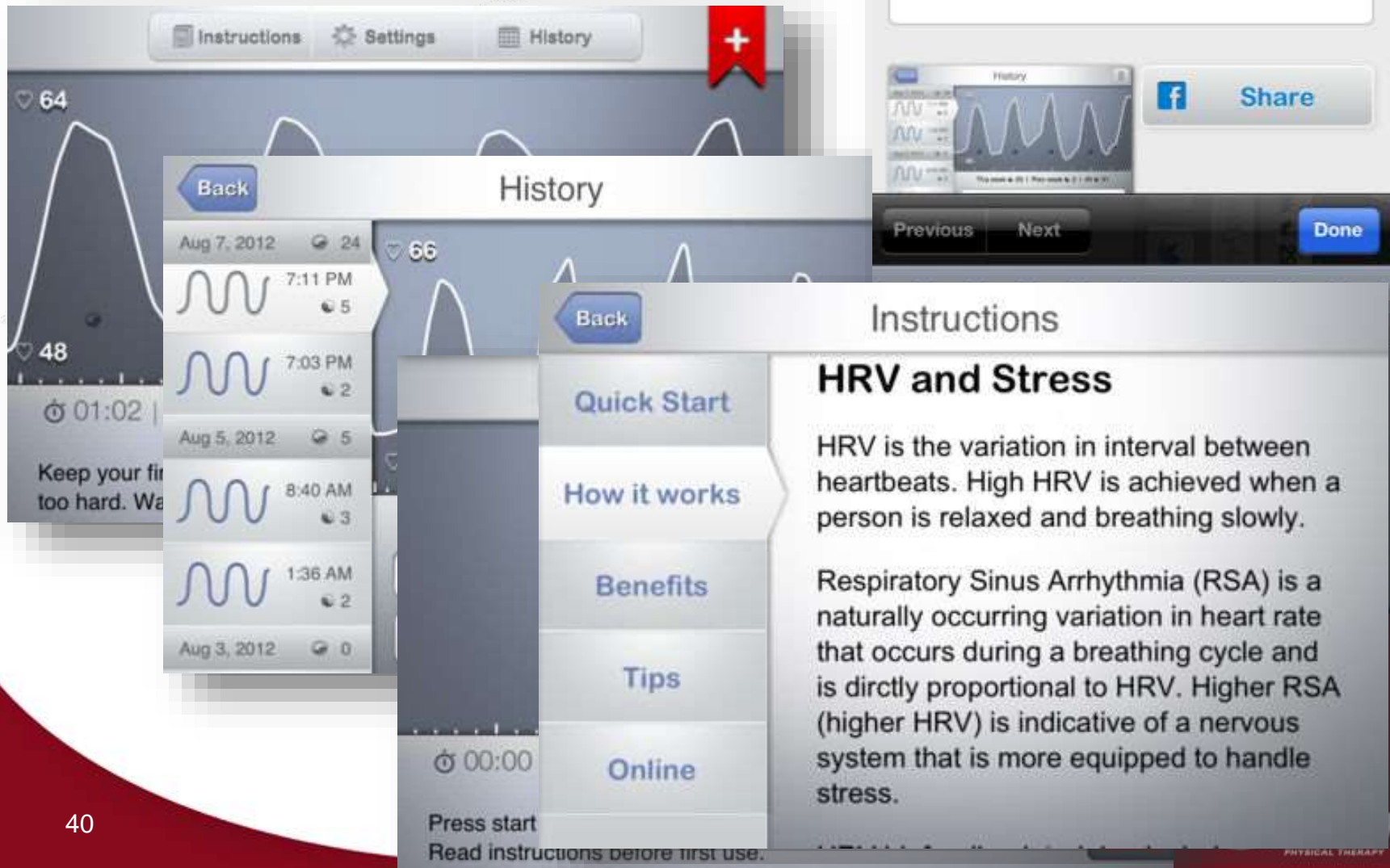
Screen displays a breathing visual aid consisting of a wave with a small yellow circle.

Hit PLAY and the small yellow circle moves along the wave to indicate when the user should inhale and exhale breaths.

It is set up so that the user achieves 4-7 breaths per minute for 3 minutes.



# Stress Doctor: Heart Rate Variability



# Performance

## Pressure Management Skills

In tandem with EEG, athletes can learn how to modify their brain waves and states of mind to improve performance

Develop strategies to recreate that state under pressure or in the face of distraction (similar to exposure and extinction in clinical psychology).

# Performance

## Pressure Management Skills

Curry overcomes:

<https://www.youtube.com/watch?v=kGaE5kBpDE0>

How: <https://youtu.be/jNst-DulXyM>

## Case Examples





# Burned out on water — The Case of Alice





# Sport Psychology Coaching As Gateway – The Case of Ben



# Goal-directed Consultation – The Case of Carl



# Transfer of Learning – The Case of Daphne



# Performance Psychology – The Case of Fiona







Pop Quiz



Wanna know what I think is even cooler...?

Just over a month later,  
John Landy Aus shaved almost *two seconds* off  
Bannister's time.

And you know what?

Over the course of the following few years, 19 others ran sub-4 minute miles.

*19..!*



How come?

What took so long?



Please be in touch

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or visit

DrChrisStout.com

# Chris E. Stout

## PhD



Dr. Stout is a licensed clinical psychologist and serves as ATI's Vice President of Research and Data Analytics, where he brings a diverse background tailored to moving the research agenda forward. He has both an impressive track record of publications and presentations, along with entrepreneurial experience in various healthcare enterprises, and FDA approved research studies. He founded ATI's Sport and Health Psychology Internship, as well.

Stout is also a Clinical Professor in the College of Medicine at the University of Illinois, Chicago, and a Fellow in their School of Public Health; he has held an academic appointment in Northwestern University Feinberg School of Medicine, and was a Visiting Professor at Rush University. He was appointed by the Secretary of the U.S. Department of Commerce to the Board of Examiners for the Baldrige National Quality Award. He holds the distinction of being one of only 100 world-wide leaders appointed to the World Economic Forum's Global Leaders of Tomorrow – joining the ranks of Tony Blair, Jody Foster, Bill Gates, and J.K. Rowling. He was an Invited Faculty at the Annual Meeting in Davos, and has also been invited to work with the Club de Madrid and Safe-Democracy.

Dr. Stout has published or presented over 300 papers and 35 books, including the popular Evidence-Based Practice (Wiley & Sons, 2005, with R. Hayes). His works have been translated into eight languages. He is co-editor of Current Perspectives in Clinical Treatment and Management in Workers' Compensation Cases with Matt Kruger and Jeff Rogers for Bentham Books, and Acquisitions Editor for the Journal of Disability Medicine. He has served as Director of Research and Senior VP of an integrated healthcare system during a 15-year tenure. He was then recruited into government and worked for five years in the Department of Human Services in a Cabinet-level directorship. He founded a 501(c)(3) to work on international humanitarian projects, and subsequently has won five international humanitarian awards. He works closely with ATI MissionWorks, and is an inaugural Inductee into the Hall of Fame both at his high school and at Purdue University.

Stout has lectured across the nation, and internationally in more than 20 countries; he has visited six continents and over 90 countries during his travels. He is frequently interviewed by the media as a subject matter expert (e.g., CNBC, CNN, NBC, PBS, NPR, Oprah, Eye On Harvard, Time, Chicago Tribune, The Wall Street Journal, New York Times, USA Today, Associated Press, Chicago Sun-Times). He is a fellow in the International Sports Professionals Association, Member of the Division of Sport Psychology of the APA, Advisor to the American Board of Independent Medical Examiners, member of the American College of Sports Medicine and is a periodic columnist for Competitor Magazine (formerly Windy City Sports).

Chris was educated at Purdue, The University of Chicago's Graduate School of Business, and Forest Institute. He obtained post-doctoral experience at Harvard Medical School as a Fellow in neuro-developmental behavioral pediatrics. He has received four additional doctorates (honoris causa) in clinical psychology, humane letters, humanities, and from the Purdue University School of Engineering, Doctor of Technology. He was awarded "Distinguished Alumni of the Year from Purdue University" in 1991.

Dr. Stout is a Fellow in three Divisions of the American Psychological Association, past-President of the Illinois Psychological Association, and is a Distinguished Practitioner in the National Academies of Practice. He was noted as being "one of the most frequently cited psychologists in the scientific literature" in a study by Hartwick College. He is listed in Fast Co.'s Global Fast 50 nominees and in TED Conferences Founder Richard Saul Wurman's "Who's Really Who, 1000: The Most Creative Individuals in America." A unique and distinct honor was his being named one of 10 Volunteer's of the Year by Pioneer Press, for his global efforts, and both the Illinois Senate and House similarly recognized his work by proclamation of "Dr. Chris E. Stout Week."

He's an avid (albeit amateur) alpinist, having thus far summited three of the world's seven summits, as well as Mt. Whitney (all-time in 49 states), Mt. Rainier, Yosemite's Half-Dome, Pikes Peak; he founded Summits For Others.