



## **The American Board of Sport Psychology: Position Paper on the State of Applied Sport Psychology**

The American Board of Sport Psychology (ABSP) initially presented its *Position Paper on the State of Applied Sport Psychology* at the American Psychological Association's (APA) annual convention in 2008 in a poster session. It was expanded and redelivered in a paper at the 2011 APA convention as part of a broader symposium on the state of applied sport psychology (Carlstedt, 2008; 2011).

### **Background**

The ABSP position paper advances the perspective that compared to practice and evidentiary standards in numerous allied human services fields the field of applied sport psychology and its practitioners are for the most part engaging in antiquated and substandard practices at the lowest level in the evidence hierarchy. The initial basis of this critique emanated from:

1. Anecdotal experiences and encounters with practitioners in the context of the ABSP certification training programs:

The American Board of Sport Psychology holds an annual summer visiting fellowship and internship training program in evidence-based applied sport psychology going back to 2006. Dozens of participating practitioners and students were extensively questioned about their experiences as a sport psychology practitioner in the context of previous education and training. Undergraduate and graduate students and/or student-athletes in the program were asked about their experiences as recipients of sport psychological services. This line of on-going research provided experiential feedback supporting most of the relevant points of critique in the ABSP Position Paper. Respondents frequently mentioned that they did not experience systematic approaches to mental training or where not taught how to administer higher evidentiary procedures with both practitioners and student/student athletes having little if any awareness of accountability methodologies.

2. Accounts of sport psychology practices in the media and practitioner websites:

A review of scores of sport psychology related websites of practitioners revealed that they contained unsubstantiated claims and testimonials and no cautionary language regarding intervention efficacy. Instead of just listing services in a neutral manner the vast majority of websites used misleading language. Guaranteed successful outcome was usually implied. Interventions were often touted on the basis of misinterpretation or embellishment of self-generated research with inflated claims of success without verifiable documentation pervading. No practitioners, regardless of credentials or academic degree could be found that advertised, let alone engaged in gold standard assessment and intervention efficiency and efficacy procedures. This is alarming, a discovery that led to the inception of the ABSP in 2000 and its quest to



advance of high evidentiary approaches to athlete assessment and intervention and attempts to educate the public regarding deficiencies in applied sport psychology.

3. Importantly, the largest database of practitioner acquired brain-heart-mind-body responses in the context of real and simulated competition calls into question claims of universal intervention efficacy. While intervention efficiency, showing mind-body changes as a function of mental training, was frequently documented, intervention efficacy varied highly as a function of three key isolated individual differences measures (Athlete's Profile constellations, see Chapter 4 of program textbook) with more negative or no change findings emerging than performance gains that could be attributed to an intervention. This suggests that something is amiss in light of with field-wide claims of across the board high intervention efficacy and almost non-existent reports of negative outcome. As a result one could conclude that:

1. either group findings reporting high efficacy do not generalize to the individual athlete as is often assumed by practitioners...
2. or, there are design and methodological flaws in many positive group studies (e.g. lack of ecological validity)...
3. or, negative findings are not being reported.

As a result, due to a lack of extension or validation studies or practitioner generated high evidentiary data (usually none), claims of high intervention efficacy can be called into question, claims that in the end can mislead athletes, coaches, the public and the field into believing that sport psychology consistently offers intervention solutions that are potent, reliable and universally replicable.

*ABSP generated data suggests that nothing could be further from the truth when gold standard methodologies are applied longitudinally, with consistent high intervention efficacy being very difficult to demonstrate at the intraindividual level.*

*More non- and negative than positive results emerge when high evidentiary approaches to efficacy tested are used.*

## I. Identified Issues and Shortcomings in Applied Sport Psychology: Overview

\*Prevalent approaches to athlete assessment and intervention are based on weak or incomplete data and even myth (e.g., lack of ecological data on Mind-Body performance responses during actual competition; notion that body language predicts performance).

\*Assessment and Intervention strategies are antiquated and often administered in an ad hoc manner devoid of underlying construct validity or a coherent and integrative theoretical context.



\*Little is known about psychophysiological responding during actual training and real competition and whether attempts to induce supposed performance facilitative intervention responses occur and importantly; are they really associated with positive outcome? Moreover, the vast majority of practitioners have not been trained to engage in applied psychophysiology.

\*Interventions are assumed to work; however, where's the accountability? Do they really work and how do we know?

\*These shortcomings have resulted in part from a failure to validate many of the theories, hypotheses, assumptions and myths that drive prevalent approaches to practice; with untenable and unsupported approaches continuing to persist as though they were valid.

## II. How sport psychology is not being practiced

Prevalent practice approaches are marked more by what they don't than do include and involve:

### 1. Evaluation sessions are often cursory

Practitioners rely to a large extent on an athlete's input or answers to questions about performance issues or context inappropriate test instruments to arrive at a "diagnosis" or insight regarding performance issues. Important subliminal mind-body response tendencies that often transcend conscious awareness are usually not assessed. They are frequently overlooked despite their relevance to predicting performance, explaining etiology of performance issues and determining intervention amenability and compliance. Coaches are rarely involved in the interview/evaluation process. Sessions usually last for an hour and resemble clinical or counseling sessions in their content and progression with plans rarely being laid for later ecological evaluations and longitudinal follow-up and analysis.

### 2. Practitioners rarely leave the office

On-the-playing field observations and evaluation are not engaged in by the vast majority of practitioners, with many never leaving their office to actually observe a client perform. Major discrepancies between athlete in-office self-report and actual responses during training and competition thereby go unnoticed. Such incongruence between athlete-feedback and practitioner impressions and actual underlying psychophysiology, psychological performance tendencies and their effect on objective outcome measures (obtained in-the-field) frequently render in-office "diagnostic" conclusions incomplete, inaccurate and/or flawed.

### 3. Practitioners rarely make referrals

Practitioners regardless of limitations in education, training and expertise in a specific sport tend to take on every case. Most seem very confident that they can handle



any performance issue. What is troubling, though, is that very few practitioners are aware of what they don't know including performance specificities and technical and tactical dynamics of many sports.

#### **4. Practice approaches are eclectic, lack documentation and accountability**

Select ten practitioners at random and one is likely to find ten different approaches to the evaluation and mental training of athletes. The lack of a systematic evidence-based approach to applied sport psychology can significantly hinder athletes from achieving peak psychological performance and obtaining valid and reliable information on their psychological response tendencies and mental performance during training and competition. Unfortunately, many practitioners are not aware that something may be missing from their practice repertoire, training/education and knowledge base or are reluctant to admit to such (even more so among highly credentialed or “experienced,” “star” or supposed stalwart practitioners). Yet, the field and many of its practitioners continue to tout and promote their methods with utmost confidence to the extent of guaranteeing the validity and efficacy of their methods or approach. Such a state of affairs would be untenable in the medical arena where procedural competence and data-driven accountability is demanded and scope of practice is limited to specialty domains, a concept that is foreign to applied sport psychology where a “wild west” state of affairs pervades.

#### **5. Practitioners fail to utilize advanced technologies and methodologies**

Most practitioners lack training in applied psychophysiology, applied neuroscience, ambulatory monitoring and use of psychophysiological instrumentation/software, procedures and methodologies for real-time ecological *in vivo* monitoring and analysis of athletes. Most also lack training in biofeedback and knowledge pertaining to its utility as an on-the-playing field intervention that can be used in an attempt to manipulate or shape desired psychological or mind-body responses (attention, physiological reactivity and cognitive processing) and then determine the extent to which such attempts are achieved as reflected in fluctuations in the frequency and amplitude of wave forms that are visible on a computer monitor (e.g., EEG or ECG). These advanced technologically-based procedures allow for the documentation of athlete responding, bringing accountability to the assessment and intervention process in the context of ecologically valid settings and situations; namely real-official competition. Most practitioners also fail to employ single-case longitudinal statistical analysis strategies and generate performance-specific databases in follow-up to or in conjunction with every training session and competitive event that an athlete engages in. These are crucial high-level evidentiary procedures/methods that should be used by all serious, conscientious and ethical practitioners or outsourced to specialists who are trained to use these methods and instruments. The failure to utilize the above methods, technologies and information can be considered malpractice and is no longer tenable. Athletes, coaches, teams and organizations who are not being exposed to these evidence-based approaches (the vast majority) that are critical to informed and best practices are being short-changed. Clients often unknowingly select (hire) or encounter practitioners under the



assumption that there is indeed a systematic or universal and validated approach to athlete assessment and intervention that all practitioners are trained in and that they apply these and other important procedures. However, these assumptions are faulty with the vast majority of practitioners lacking training in these advanced evidence-based methods and procedures.

#### **6. Interventions are applied in a haphazard, ad hoc manner**

Athletes are taught visualization techniques, cognitive strategies, breathing and other methods in the context of the intake or first session and then sent on their way under the assumption that a client has 1) *learned a mental training (MT) technique and is capable of practicing it* 2) *that the temporal properties of a MT technique are such that they can be applied at any time and then work later or on command* and 3) *that MT will generalize to the real world of competition*. Most MT techniques are designed to “relax” an athlete; yet NO practitioner could be located who actually monitored athletes during training and competition to determine 1) *whether an athlete is/was engaging in the prescribed MT technique* 2) *whether and what sort of psychophysiological responses* are/were associated with engaging in MT prior to and during actual competition and importantly 3) *whether engaging in a MT training technique really improves/improved performance, and if so, to what extent this assumption of MT-efficacy can/could be validated* (on the basis of objective statistical outcome measures that are accrued longitudinally at the intra-individual level)?

#### **7. Sport Psychology Services Delivery Approaches are Practitioner and Not Athlete-Centered**

The prevalent approach to applied sport psychology is practitioner-centered. It is driven by financial and practice realities that supersede what is known about developmental processes and the remediation of performance problems or the enhancement of performance. Yet, promises are made, guarantees are given and claims pervade. It is disingenuous to ever make the claim that a psychological performance issue that probably took a lifetime to develop can be eradicated or performance can be improved on the basis of cursory, time-constrained sessions with a sport psychology practitioner that usually take place once a week for an hour. At worst, such a contention is a seductive claim and could be considered malpractice. Just as physical and technical training have ideal temporal parameters that facilitate technical maintenance and improvement so too can it be expected that achieving enhanced psychological performance will also be contingent on intensive training over the course of time. Coaches and athletes know, technical proficiency and physical fitness requires hours of training, each day. Consequently, for example, a 1:10 ratio of mental to physical training is highly likely to be sufficient to improve an athlete's mental game. Just as a developing athlete or technically/physically deficient athlete requires supervised coaching for extended time periods, so does the psychologically vulnerable, burdened athlete who is trying to develop mental skills. An athlete's improvement or remediation program should not be constrained or dictated by a practitioner's temporal, financial and other practice realities. This is a



critical ethical issue as well since developmental realities pertaining to behavioral change cannot be ignored in light of what is known about psychological remediation and improvement processes. It takes time to ameliorate sport-specific psychological problems or improve an athlete's mental game. Psychological interventions and mental training frequently must be carried out for hours to achieve consolidation. Ultimately, time-to-achieve enduring biomarker-verifiable change parameters must be established for each individual athlete. Doing so requires a structured athlete-centered delivery of services paradigm even if it means that a practitioner must leave the office and work with an athlete for four hours a day for three weeks straight.

### **III. Toward a Gold Standard Approach to Applied Sport Psychology**

If the field of applied sport psychology is to provide athletes, coaches and organizations with best practices fundamental changes in the way athletes are assessed and trained need to be instituted. New standardized and validated approaches to the evaluation of athletes must produce meaningful and useful information regarding psychological tendencies and performance that has a high degree of ecological and predictive validity and reliability. Sport psychology practitioners, athletes and coaches need to be provided with evidence-based assessment and intervention methods that generate measures and parameters of performance relevant psychological and neuropsychophysiological functioning for the purpose of predicting performance, guiding interventions and determining their efficacy. The time has come for sport psychologists to engage in a new practice paradigm, one that is based on:

*An integrative conceptual and systematic, evidence-based methodological framework for athlete assessment, intervention and efficacy testing that leads to:*

1. Group and individualized norms for attention, physiological reactivity and cognitive responding that have a high degree of predictive and ecological validity.
2. Validation of standardized, ecological protocols that are designed to assess and manipulate attention, psychophysiological responding and cognitive processing as well as determine the efficacy of interventions on the basis of objective statistical performance and “mind-body” (e.g., HRV) outcome measures.
3. Operationalizations and measurement of psychological performance (e.g., Zone, or Flow states; IZOF) beyond self-report, anecdotal and mythical descriptions.
4. Longitudinal databases of athlete psychological performance and psychophysiological responding that are derived from micro-analyses of training and actual competition (before, during and after) and include intervention efficacy testing information (outcome data).

Points 1-4 will not be elaborated here. They were extensively explicated throughout the ABSP Certification training manual Readers are referred especially to



Chapters 2 and 3 in Evidence-Based Applied Sport Psychology: A Practitioner's Manual  
(Carlstedt, R.A.; 2012, Springer Publishing)

## **ADDITIONAL PERSPECTIVES and INFORMATION**

### **What Client-Athletes Should Demand of a Sport Psychologist/Sport Psychology Practitioner**

1. Comprehensive assessment or evaluation of psychological and mind-body tendencies in the context of a longitudinal repeated measures design with training and official competition analytic components consisting of at least 60 repeated predictor measures that are related to global one-shot personality or behavioral measures and 60 repeated macro and micro-outcome measures.

*Insufficient and cause for concern: receiving a test score or personality profile or other type of analysis or verbal feedback from a practitioner without extensive follow-up on-the-playing field cross validation or criterion-referencing of office-based evaluation.*

2. Comprehensive written report that is orally presented to an athlete client face-to-face or via telephone/Skype in which initial office-based assessments and responses are compared with ecologically-based/obtained responses during training and competition using advanced validation methodologies that are advanced by the ABSP-CP.

*Insufficient and cause for concern: practitioner does not design ecologically-based testing, does not leave the office to carry out training-competition-based validation and related psychological performance testing using validated approaches, procedures and methodologies.*

3. Transition to mental training or intervention only occur after sufficient psychological performance testing has been carried out (60-60 repeated measures rule) to help determine an athlete's mental to technical/physical game ratio and/or the impact of state psychological measures on performance.

*Insufficient and cause for concern: if a practitioner within the first or second session immediately starts with mental training, even more concerning if intervention amenability assessment is not done (which most practitioners are unaware of) and teaches a specific mental training technique(s); worse yet, he or she then sends the athlete off to try them and have an athlete report back in a week.*

4. Immediate mental training can be requested in some cases. For example, leading up to an important competition in the near future.



*Insufficient and cause for concern: however, if a practitioner recommends and administers a specific mental training method without intervention amenability testing an athlete may attempt to engage in an intervention technique that they are incapable of learning and exploiting, for example, trying to use hypnosis if an athlete is low in hypnotic susceptibility; moreover, if a practitioner fails to do intervention efficiency and efficacy testing during training and does not test intervention efficacy during competition or instruct his or her athlete to arrange for psychological statistical analyses to be performed during competition (if the athlete is traveling and the practitioner cannot attend a competition) gold standard practice standards are not being adhered to.*

5. Ideally, the intervention phase should commence after meticulous pre-intervention and intervention training phases that are carried out with ABSP recommended accountability methodological paradigms.

*Insufficient and cause for concern: being taught a mental training method and then being told to practice it without initial constant supervision in the context of an experimental efficiency and efficacy testing paradigm.*

#### **Questions Athlete Clients, Coaches and Other Stakeholders Should Ask Their Practitioner<sup>1</sup>**

1. What is my/are my athlete/player(s) Athlete's Profile(s)? If a practitioner does not know what an Athlete's Profile is suggest that they look into the ABSP-CP.
2. Alternatively, if your practitioner labels or analyzes you or types you according to any test results ask what the predictive validity of any score, measure or profile is(based on group studies) and importantly, ask if there are analogous state measures that can be obtained that can be tested in the context of training and competition to see if any obtained psychological measures (based on group studies) are meaningful and predict psychological tendencies and your expected performance outcome.
4. If not, then ask the practitioner to verify or validate any test measure obtained by initial assessments by evaluating you during training and competition over time (at least ten competitions).
5. If the practitioner then merely watches you play or compete and then tells you what he or she thinks about your psychological performance or mental toughness ask them to quantify your mental game using validated paradigms. If they don't know of any tell them to contact ABSP.

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<sup>1</sup> Alternatively, these questions and the issues they address should be preemptively discussed by practitioners to better inform their client athletes assuming a practitioner possesses ABSP requisite competencies.



6. If a practitioner asks you to learn a specific or multiple mental training techniques ask them why those were chosen, what they are expected to do, how long should they be trained and how effective are they? If your practitioner gives you clear and definitive answers to these questions that is a major red flag, more so if he or she claims that a mental training method almost always or even usually works.
7. Ask your practitioner to demonstrate the selected intervention's efficiency and efficacy. Tell him or her that you want to know how much of the variance in micro-level outcome measures can be attributed to your mental training efforts. If this question cannot be answered or is avoided or brushed off an athlete should have major concerns about a practitioner's competence.
8. Ask your practitioner about his or her background as an athlete and whether they have expertise or advanced knowledge of the sport you participate in. If he or she does not have verifiable expertise or advanced knowledge of your sport request that a coach attend your initial intake session and ask for an on-the-playing field analysis of your mental and technical games to determine the extent to which purported psychological issues are "real" and not more technically/physically based which is often the case with lower level athletes.
9. Ask for a referral if your initial practitioner does not have advanced knowledge of your sport or can arrange for a coach to participate in the assessment and mental training process.
10. Thoroughly read Evidence-Based Applied Sport Psychology (Carlstedt, 2012) to<sup>2</sup> become familiar on a basic level with all of the recommended procedures and ask your practitioner to apply them and importantly require that they adhere to all of the recommended accountability methodologies. An educated athlete is an empowered athlete one who can benefit or learn from evidence-based approaches to athlete assessment. Obtaining valid and reliable information is at least as important as engaging in mental training, more so, if mental training is not tested for efficiency and efficacy. Tell your sport psychology practitioner that you want to know as much as possible about your mental game; a request that can only be honored if he or she is capable of carrying out the procedures and methods that are advanced in this book.
11. Importantly, as a client, remember there are no quick fixes. High evidentiary applied sport psychological approaches to the mental game must be carried out over time in a systematic manner; they can be time consuming and involve extensive testing and intensive mental training sessions that must be documented and analyzed. The notion that merely talking to a practitioner occasionally will result in dramatic improvement is naive and inconsistent with what is known about developmental processes, learning, procedural consolidation, neuronal change, the remediation of performance psychological problems and the enhancement of improvement of an athlete's mental game. If you practice or train many hours a day to reach and maintain peak performance you can not expect to make



major and enduring and biomarker verifiable psychological gains if the mental game is not approached in a manner similar to your technical game. Anything less is folly and to portend otherwise is not credible. Consequently, an athlete has to invest in the mental game, there are no short-cuts. Do not fall into the practitioner-based paradigm trap, one in which an athlete must structure his or her schedule to that of the practitioner; the once or twice a week office-based approach is not a tenable one; unless a practitioner can unequivocally demonstrate high level evidence-based intervention efficacy that can be attributed to abbreviated approaches to the mental game. The onus is on each practitioner to back up claims of intervention efficacy using high level accountability methods.

Of course, gold standard approaches can be expensive and need to be funded. However, once an athlete becomes fully trained in the ABSP-CP they should be capable of self-administering and documenting the protocol with a little bit of effort. Proficiency in the distance-based multi-model protocol allows for ongoing documentation, intervention efficiency and efficacy testing, an approach practitioners and their athlete clients should carry out collaboratively in the context of a mutually acceptable fee structure.

### **The Professional, Olympic and Elite Athlete and Teams**

Sport psychology offers practitioners of highly disparate education, training, experience and credentials an unparalleled opportunity to break into the elite strata of sports. Just about anyone who talks a good game, has inside contacts and a flashy website can sell themselves and even work with elite athletes at the professional level. This is not necessarily a good thing. In fact one could contend that the arena of professional sports has been contaminated by an influx of practitioners who possess woefully inadequate training and are incapable of delivering gold standard services to athletes. Yet, teams and individual athletes continue to hire practitioners on the basis of personal contacts, previous experience and anecdotal beliefs that a particular individual will provide a team or individual athlete with that nebulous edge. The ABSP surveys professional sports annually and has found that about 60% of all teams contacted trust their "mental game" departments to individuals who broke into "sport psychology" in a manner that could be considered highly irregular. Many practitioners talked their way into positions because a team wanted to start a sport psychology department and a particular person was at the right place at the right time; an individual may have had a few psychology courses, others were former athletes who sold the argument that if anybody understands what athletes are going through it's an ex-athlete and some physicians and psychiatrists inherited the role of chief performance enhancer despite having no specific training to do so.

The ABSP has had applicants (who then did not follow through with pursuing its certification and training program) who were suddenly hired to direct sport psychology and related programs in the NBA and MLB. Such occurrences suggest that aspiring practitioners, while recognizing that something is missing in terms of what they can do, what they know or in regard to their education, training and credentials, nevertheless, will not let these issues stop them, despite bypassing high level education and training that is mandated by all serious professions in the human services fields, and take any job that



they can get in professional sports. They are not going to miss out on a possible once in a lifetime opportunity to work with elite athletes just because they lack knowledge and are incapable of delivering high standard athlete assessment and intervention methods and procedures, since it is highly unlikely that a General Manager would have a clue as to what constitutes high standard athlete assessment and intervention in the first place. These sorts of accounts are plentiful. They range from the flight attendant who was earmarked by a Major League Baseball team to develop and direct a sport psychology program for its entire minor league operation; apparently because this individual was a former minor league player, was pursuing a Master's degree in sport psychology and was recommended by the team's current mental training practitioner. To this person's credit, he recognized that he was not prepared to take on this assignment without extensive additional training and collaboration. But he is the exception and not the rule, with scores of practitioners and "wannabe" practitioners trying to seduce professional sport teams and individual athletes into hiring or working with them despite not offering much of credible substance. The very fact that obtaining a position in professional sports or working independently with elite athletes, devoid of oversight, scrutiny and objective accountability approaches in place, diminishes the field of applied sport psychology. It is inconceivable that a professional sport organization or individual elite athlete would hire or seek out a mere EKG technician or well-informed medicine aficionado to perform cardiologic clinical evaluations or hire as their team psychiatrist a practical nurse. Yet in sport psychology, an individual, a few months out of college with a degree in marketing or a guru of note could find themselves at the helm of a performance enhancement department and entrusted with "working" with elite athletes. This dismal and even dangerous state of affairs can be attributed to the field's inability to police itself and regulate the practice of applied sport psychology. Instead the field has effusively promoted unrealistic positive outcome expectations to the masses of potential consumers of sport psychological services, whether the high school athlete or professional sports team general manager; both and others have essentially been seduced by myths that pervade the field and as such have no idea about the many pitfalls of applied sport psychology (athlete assessment and intervention).

In all serious and mature sub-fields in psychology and related disciplines progression through the ranks is predicated on extensive and supervised education, initial training, formal internships, residencies and post-doctoral fellowships that are followed by years of acquiring experience under oversight before a practitioner/clinician can rise through the ranks. Yet when it comes to applied sport psychology within days it is possible for an individual without any formal training or background to go right to the top of the field and earn millions of dollars<sup>3</sup>. While this may make some ambitioned readers salivate, serious, concerned and ethically driven practitioners and future practitioners should be alarmed by what can be considered a crisis in applied sport psychology and try to reverse what this continuing trend is doing to the field and athlete consumers.

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<sup>3</sup> See Brain Typing and the story of Jon Niednagel a multi-level-marketing executive who was uncritically lifted to prominence by the media and eventually hired by numerous professional sport teams on the basis of a system of athlete evaluation that was sold as "brain science" whereby athletes were given neuropsychological profiles on the basis of merely looking at an athlete and then predicting performance outcome (see Sandbek, 2012, Pseudoscience of Brain Typing).



Unfortunately, the problem of quality control in hiring decisions extends throughout the credential, training and experience hierarchy with even supposed stalwart doctorate holder and certified practitioners with years of experience in applied sport psychology continuing to engage in substandard practices; and, it's not so much about specific methods or systems of applied sport psychology that continue to be propagated as the gold standard by influential and highly visible "star" practitioners, it's about the utter lack of accountability metrics that allows just about any assessment and intervention system to pass as credible or highly efficacious despite this not being the case when assessments and interventions/mental training are subjected to rigorous validation methodologies.

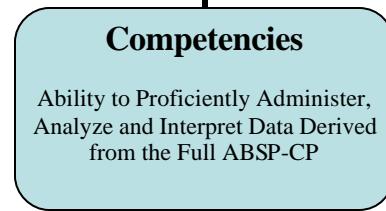
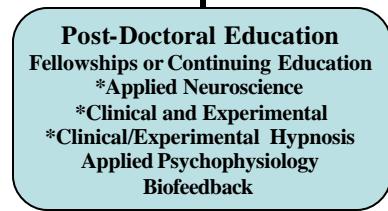
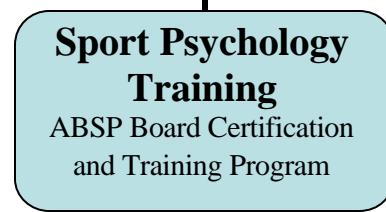
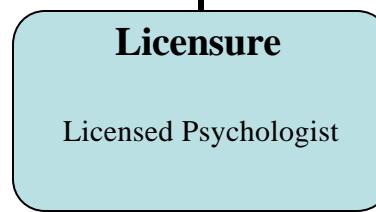
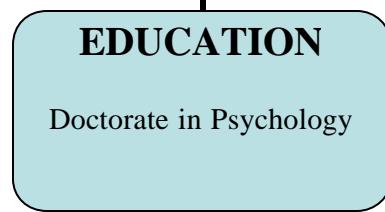
In light of highly eclectic, diverse and personality (Guru) driven approaches to applied sport psychology can it be expected that decision makers in professional sports as well as elite athletes can make informed decisions about hiring and evaluating the work of their sport psychology departments. Who should be hired and on the basis of what criteria? What should a pro team GM expect to get or learn from a sport psychology practitioner? What should high level decision makers in professional and elite sports know about applied sport psychology, what should they expect and demand?

### **Who Is Competent to Practice Applied Sport Psychology in Professional Sports?**

The American Board of Sport Psychology practice qualifications and competencies template is presented below (Figure 1. below). Aspiring and active practitioners need to take these recommendations into account when pursuing or advancing a career in applied sport psychology. Competencies supersede credentials alone irrespective of a certified practitioner's experience and educational background if a highly degreed and credentialed practitioner fails to become trained in and applies athlete assessment and intervention procedures and analytic methodologies that are crucial to best practices and high evidentiary applied sport psychology. Ideally, however, in light of scope of practice laws that can restrict what a non-licensed practitioner can actually do with an athlete, professional sport teams and elite individual athletes should hire licensed psychologists who are trained in, certified by and possess the ABSP recommended competencies or are available to supervise and collaboratively work with board certified practitioners who have all of the ABSP recommended competencies (unless an unlicensed practitioner obtains a waiver or dispensation from a state board of psychology regarding what constitutes the practice of psychology). Nevertheless, in cases where a Master's level or lower degreed practitioner possesses more ABSP recommended competencies (than a higher degreed practitioner) such an individual should or can head a professional team's applied or related sport psychology department in an administrative, analyst and researcher capacity (leaving licensed psychologists to carry out prescribed assessment and intervention procedures within ABSP accountability guidelines).



## Professional Sports: Qualifications and Competencies



Masters Level ABSP Certified and Other ABSP Trained and Certified Practitioners Qualify to Head a Professional Applied Sport Psychology Department Commensurate with State Licensing Scope of Practice Laws

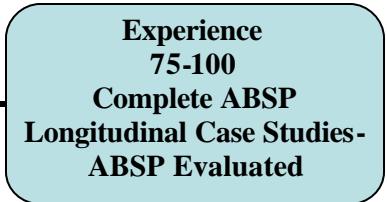


Figure 1. Qualification and Competencies for Heads of Pro Sport Applied Sport Psychology Departments

### **What Professional Sport Team Executives Should Know and Demand of Practitioners**

1. Documented assurances from the state board of psychology of said professional sport team's state that a practitioner is permitted to practice applied sport psychology as an independent licensed psychologist, other related licensed profession or is determined to be exempt from psychology scope of practice laws or can practice applied sport psychology under the supervision of a licensed psychologist.
2. Documentation that team's practitioner is a ABSP Board Certified Sport Psychologist the highest level credential in applied sport psychology since it denotes that a practitioner is a licensed psychologist and thus can practice psychology independently with assurances that such an individual is capable of administering the entire ABSP validated



athlete assessment and intervention protocol including its advanced high evidentiary accountability methodologies.

3. Master's degree level practitioners or lower and/or non-degreed practitioners who are not ABSP board certified consultants are not trained in the extensive and validated ABSP mandated athlete assessment, intervention and accountability procedures and methodologies and as such cannot be expected to provide highest standard best applied sport psychological services.

4. Team executives should have their applied sport psychology departments evaluated by the ABSP. If the following gold standard components are lacking a team and its athletes cannot be assured that they will be receiving high standard applied sport psychological service:

- a. Is your team's sport psychology practitioner a licensed psychologist? (yes = pass)
- b. Is your sport psychology practitioner ABSP certified? (yes = pass)
- c. Is your sport psychology practitioner certified by another agency or body (yes-provisional pass)?
- d. If non-ABSP certified, but certified is your practitioner trained in: **Applied Neuroscience; Clinical and Experimental; Clinical/Experimental Hypnosis; Applied Psychophysiology; Biofeedback, Experimental Assessment and Intervention Validation Methods and Intervention Efficiency and Efficacy Testing Methodologies per ABSP recommendations?** (yes = pass)
- e. Does your sport psychology practitioner maintain a comprehensive database of brain-heart-mind-body-motor responses on athlete clients in the context of actual official sport-specific micro-level performance outcome measures derived from official competition and would such data hold up to independent scrutiny or auditing? (yes = pass)
- d. Does your practitioner have competency in and carries out most of the following procedures on all athletes within an accountability framework?:

*1. Assessment of Primary Higher Order Psychological Factors using the Carlstedt Subliminal Attention, Reactivity, Coping Scale and related tests to measure an athlete's level of hypnotic susceptibility, neuroticism and repressive coping*

*2. Neurocognitive Testing using the Brain Resource Internet-based or related neuropsychological test batteries for assessing subliminal brain responses ([www.americanboardofsportpsychology.org](http://www.americanboardofsportpsychology.org) link to Test Center)*



3. *In-the-laboratory psychophysiological stress testing with video stimulus/stress paradigm: checking for stress responding*
4. *Quantitative EEG (qEEG, brain mapping) using the Brain Resource Paradigm or related EEG paradigms for assessing subliminal brain responding*
5. *On-the-playing field assessment of brain responding using wireless EEG*
6. *On-the-playing field assessment of heart rate variability: Time-out paradigm*
7. *Wireless monitoring of heart activity and heart rate variability and heart rate deceleration analysis during real competition*
8. *Critical Moments analyses during training and competition*
9. *In-the-field Technical and Focus Threshold analyses to analyze mind-body-motor control and ability to concentrate during practice and competition*
10. *Mental Training as a function of Athlete's Profile of Primary Higher Order Factors, including:*
  - a. *Heart Rate Variability/Heart Rate Deceleration Biofeedback*
  - b. *Neurofeedback using Carlstedt Frontal Lobe Protocols: a means of directly shaping brain wave activity associated with peak performance components such as attention/focus, motor control and intensity. Used to manipulate key brain responses associated with zone states, responses that are vital to performance*
  - c. *On-the-field Glasses-Laterality manipulation training: teaches an athlete to induce immediate shifts in brain activation that have been found to underlie transition from strategic planning to perceptual pre-action preparation; left to right brain shift facilitation and relative shut-down or idling of the frontal lobes which can interfere with focus; keeping intrusive thoughts at bay.*
  - d. *Active-alert hypnosis: used with athletes who are high in hypnotic susceptibility to intensely focus and prime motor or technical responses while shutting out intrusive thoughts and external distractions.*
  - e. *Mental Imagery efficiency and efficacy testing*
  - f. *Tactile Motor and Technical Learning: using motor learning principles to consolidate training and technique into long-term motor memory; used in athletes with most negative psychological Athlete's profile in an attempt to override negative mental influences and enhance self-confidence on the basis of stellar physical and technical ability.*
  - h. *On-the-field Focus Threshold Training*



*i. Multi-modal intervention; Distance-Based Multi-modal intervention*

*11. Intervention Efficacy Testing: designed to ascertain to what an extent an intervention impacts performance*

*12. Comprehensive Athlete Database creation and management: documenting assessment and training measures over time; databases are used for comparative purposes, for example, pre-slump versus post slump, could be used to test doper pre-and post doping and effects on numerous performance measures.*

*13. Psychological performance statistics: statistics on the mental game that can be used to document psychological performance in real-time, game to game, like with regular statistics such as batting average.*

*14. Comprehensive Reporting: the culmination of a complete analysis of a player's mind-body-motor performance.*

(yes to all = pass)

If your practitioner (i.e. applied sport psychology department) does not fulfill the each "pass" criterion then in the context of professional sports it can be considered substandard.

### **ABSP Recommended Educational and Training Curricula: Applied Sport Psychology**

Each year the American Board of Sport Psychology hold a summer visiting fellowship and training/internship program. Participants from across the nation including university professors as well as undergraduate students and even non-ABSP certified sport psychology practitioners are questioned regarding their experiences with sport psychology either as an athlete recipient of services, student in a degree or certification program or as an instructor/professor or coach of athletes. The vast majority of these participants noted that they were not sure of what it was they were supposed to do, whether a procedure worked and none systematically used mental training methods one their own once team-based seasonal relationships with a sport psychology practitioner ended. On the other hand all active athletes religiously adhered to physical and technically-oriented training programs. Relative to instructors in sport psychology as well as practitioners seeking additional training in the ABSP summer program all said that they were dissatisfied with educational approaches in applied sport psychology, especially experiential components that are lacking in many degree programs. A common theme was that graduates, certificate holders and athletes themselves really did not know what to do when it came to competently administering or engaging in applied psychological procedures. A sort of learn as you go attitude seemed to pervade with on-the-job training guiding and eventually shaping practitioners' approach to athlete assessment and mental training. In the end, if ten practitioners from the same graduate or



certification program were surveyed a few years later regarding their practices one likely would find ten different approaches to applied sport psychology.

ABSP contends that the vast majority of applied sport psychology education programs are substandard and do not prepare graduates to become competent practitioners and practitioner-researchers. This may be in part attributable that sport psychology is a field, that since its inception has been dominated by and almost exclusively housed in Physical Education and Kinesiology departments. Beyond a few distance-based sport psychology degree programs in psychology departments, sport psychology per se tends to be offered as a specialization or emphasis area within a Physical Education or Kinesiology degree program. Master's degrees in sport psychology are also offered, but these are associated with potential practice constraints associated with state scope or practice and title laws.

By being housed in Physical Education and Kinesiology departments sport psychology degree programs for the most part are being taught by non-psychologists. That in-of-itself is not necessarily a negative thing. However, it is unlikely that ABSP recommended competencies that are crucial to eventual high evidentiary practice will be considered and taught by faculty whose background lacks crucial psychologically-based educational and training components. Unless the previously mentioned competencies, educational and training program are part of a degree program or sport psychology emphasis area a graduate will be incapable of delivering gold standard applied sport psychological services. Moreover, if legal realities governing scope of practice and title usage laws are not considered graduates with degrees that are not associated with licensure will be seen as rogue practitioners if they chose to work with athletes but are not sanctioned by the state in which they reside. Current Master and lower level practitioners who engage in procedures that are fall within scope of practice purviews of licensed professions including AASP consultants who are not licensed are at risk. Hence, until (if and when) state laws regarding the practice of psychology or other laws exempt sport psychology practitioners from scope of practice laws the entire education and certification infrastructure is in serious jeopardy since a strong case could be made that people are being charged tuition, given degrees and certification that in the end do not allow graduates and certificate holders to legally practice many if not most sport psychological procedures.<sup>4</sup>

Consequently, the time has come for university and college psychology departments to adopt sport psychology and play an important role in reshaping and defining sport psychology in the context of highest standard education, research and especially applied training programs that lead to degrees and credentials that permit eventual licensure and unrestricted, independent practice.

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<sup>4</sup> Non-licensed ABSP sub-doctoral degreed practitioners must practice under the supervision of a licensed professional. ABSP advances a competency model. As such if competency can be demonstrated as defined by the ABSP applied practice template a practitioner should be able to practice applied sport psychology. However, until scope of practice laws are amended to accommodate non-licensed practitioners in the context of independent practice they must make formal arrangements to work under the supervision of a licensed psychologist.



## **Recommended Curriculum**

In addition to standard coursework and requirements for a major in psychology, Master's or Doctorate in Psychology along with all experience and licensure components the ABSP practicum roadmap should be integrated into the aforementioned degree and training programs (review ABSP practicum content above). It is also recommended that all psychology courses are augmented with a sport psychology component. For example, a course in neuropsychology consisting of three written papers, 3 quizzes and/or a final examination or paper would require (for a sport psychology major, minor, or degree) one paper and/or quiz to be sport psychology topic-specific along with an option to write one's final paper on, in this case, sport neuropsychology. Curriculum iterations leading to advanced knowledge and eventual applied competencies in sport and applied sport psychology are numerous. However, ultimately, the discipline of psychology, that is, its knowledge base, subject domains and especially its evidence-based procedures, methodologies and analytic approaches should guide the study of sport and applied sport psychology. The goal of psychology department-based sport psychology education, training and degree programs is to produce a cadre of future practitioners who possess competencies that are crucial to the advancement of scientific applied sport psychology, best applied sport psychological practices and the credibility of the field.

## **Collaborating with ABSP**

The American Board of Sport Psychology seeks to collaborate with colleges and universities who are interested in advancing its mission of higher standards in sport and applied sport psychology. In conjunction with its annual summer visiting fellowship/internship and training/research program in evidence-based applied sport psychology ABSP offers students experience for institutional degree programs that count toward board certification in sport psychology and college credit. Faculty members and athletic department coaches are also invited to attend the ABSP program as Visiting Fellows. Eventually, ABSP would like to hold short-courses at affiliated colleges/universities and certify psychology department-based sport psychology degree programs.

It must be again emphasized that to legally practice sport psychology and call oneself a sport psychologist state licensure must be achieved. This can only be done through licensure track professional psychology specific education, degree, training and experience acquisition programs that the ABSP maintains should start at the undergraduate level and continue through graduate and professional degree programs in the context of a systematic competencies-based training roadmap and that legal practice realities must be made known to all students who are interested in becoming sport psychologists. As such, applied sport psychology should go through psychology departments and eventually transition into professional psychology degree and training programs and culminate with board certification as a Board Certified Sport Psychologist or competence to practice sport psychology under supervision as a Board Certified Consultant.



## **Critical Issues in Applied Sport Psychology (concluding remarks)**

### **Introduction**

In contrast to the physical and technical game about which there is an abundance of scientific information and data along with large volumes of objective performance statistics, when it comes to the mental side there is a paucity of valid and reliable information about its dynamics. The field of applied sport psychology remains mired in a paradigm that is based in part on weak data, questionable assessment methods and interventions that are not validated at the intraindividual level. It continues to overemphasize findings that were derived from group studies as justification for the continued indiscriminant use of many of its procedures and interventions despite the fact that such findings do not necessarily generalize to the individual athlete. This is ironic, especially since the most prominent theory of peak performance (Individual Zone of Optimum Functioning [IZOF]) stresses the need to establish individual profiles of athlete peak performance; Hanin, 2006). If the field is to make serious and lasting inroads and provide athletes, coaches and organizations with best practices and methods a paradigm shift needs to occur. It must be based on rigorous scientific applications and methods, similar to those seen in certain clinical realms where important advances have been made pertaining to patient diagnosis and treatment. New approaches to the evaluation of athletes must produce meaningful and useful information regarding an athlete's psychological performance that has a high degree of ecological validity and reliability. Just as a professional scout or coach knows an athlete's vertical jumping ability, foot speed, performance averages, technical propensities, body-fat index and oxygen uptake, the time has come to develop individualized normative databases of psychological and neuropsychophysiological functioning in athletes for assessment/diagnostic, comparative and intervention purposes. Practitioners should know an athlete's "attention threshold," "brain processing speed and reaction time," "frontal-lobe error rate," "emotional reactivity and valence," "critical moment psychological proficiency," heart rate variability and deceleration response parameters," and "movement related brain-macro potentials" to name a few important psychophysiological performance responses if they are to effectively advise athletes, coaches and teams. The era of just telling athletes "to relax" or "just imagine" or "shut out negative thoughts" needs to evolve into a new one in which just relax means "generate more high frequency heart rate variability" prior to critical moments, or engage in focus threshold training to improve concentration or manipulate cerebral laterality to suppress intrusive thoughts. The current cliché laden "just do it" approach needs to be replaced with methods that define numerous nebulous constructs that pervade applied sport psychology today (e.g., "zone," "mental toughness," "focus"). It is time to delineate the IZOF theory and postulates using instruments and methodologies that allow for the operationalization of states of intensity or physiological reactivity it refers to.

It is no longer tenable for practitioners to speak in vague subjective terms such as "he doesn't concentrate" or "she's a choker," or "he's not mentally tough" or recommend



interventions just because they are the thing to do. "You've got to visualize" or "get your intensity up," or "watch your body language" as slogans to somehow involve a person in mental training are insufficient. Athletes and coaches need to be provided with standardized assessment and intervention methods along with measures and parameters of performance relevant psychological and neuropsychophysiological functioning. The time has come for sport psychologists to use new language, methods and procedures that are based on empirically derived data and operationalizations of psychological processes and their effects on performance.

### Claims and Promises

All it takes is a cursory search of the internet using key words like *mental training*, *mental game* or *sport psychology* and one will come up with scores of websites of systems of mental training and practitioners that promise athletes the key to success. Usually these sites and the businesses, services or individuals that they represent have catchy names like *Peak Performance Consulting*, *Brain Game* or *Ultimate Mental Training* with their very titles implying that the answer to an athlete's mental woes or goals can be found there. Looking a little further one will find descriptions of a system or method that was developed by a key personality who runs the *practice* who claims to have found the approach to the mental game, a system that is so unique and powerful that it will help struggling athletes or make them better. The more insidious systems make grand proclamations. For example Brain Typing claims to be an infallible method for determining within minutes not only an athlete's psychological tendencies, strengths and weaknesses, but also the neuro-anatomical and neuro-functional underpinnings of a diagnosed athlete's mental game, and all this merely by just looking at an athlete.

A web search will also result in the discovery of former athletes, who based on their experience and psychological struggles and self-methods for overcoming them claim to have a major advantage over practitioners who were not top athletes. Less extreme, but just as troubling are credentialed practitioners, many holding doctoral degrees or certification who claim unequivocally that their procedures work and will lift an athlete to new performance heights. Frequently, such practitioners advertise expertise in a particular method like hypnosis, mental imagery, motivation or goal setting. Others may utilize biofeedback, with neurofeedback practitioners (a form of biofeedback) being notorious for claiming that achieving a certain brain wave functional profile in an office setting will take hold and transfer to the playing field to greatly enhance performance. In all cases you'll find a list of endorseees or testimonials from athletes, all professing to having discovered the *Holy Grail* for achieving peak psychological performance.

The guru driven nature of sport psychology has contaminated the field and how it is perceived, evaluated and valued by coaches, athletes and decision makers in organizations who may want to utilize the services of sport psychology practitioners. Yet, on the basis of what criteria are decisions being made as to who will be hired or retained and on the basis of what and how much should they be paid? In a claim ridden market, unlike one that is data, fact or evidence driven, decision making is made difficult. Claims are not associated with transparency or accountability; hence, they can not be valued.



What is their worth? Does the claim that one's special visualization or neurofeedback protocol have inherent value, such that an athlete or team should pay a certain fee or offer a major consulting contract on the basis of what is promised? Does the fact that a practitioner has used a "special" procedure with hundreds of athletes carry any empirical weight? After-all, how does the practitioner behind a mental training system demonstrate its efficacy; on the basis of having applied it to scores of athletes? Shouldn't the benchmark for efficacy be data and not testimonial or endorsement driven or experience in delivering services that upon close scrutiny are substandard and devoid of accountability? Can we expect administrators such as general managers of professional sport teams and athletic directors at schools and colleges as well as coaches and athletes to make informed decisions as to who will be their sport psychology practitioner on the basis of personal pitches that to a great extent rest on claims, experience in practicing the procedures that led to a candidate's unjustified claims and attestations of efficacy by current and former clients? Are such claims to be trusted and should they be at the heart or center of a professional field of disciplined inquiry and practice?

The previous critique and recommendations provide a foundational and fundamental rationale for advancing evidence based and validated athlete assessment and intervention protocols. Although highly critical of the field the points of contention that are raised were not intended to insult or be condescending toward serious and ethical practitioners, most who are apt to have recognized themselves weaknesses and limitations of the field and many of its current practices.

### **The ABSP-Carlstedt Protocol: Copyright Considerations**

The ABSP-Carlstedt protocol is a validated proprietary system of athlete assessment and intervention. It should only be administered after extensive training that can be obtained in the ABSP certification, intern and visiting fellowship programs.