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ESPORTE OLÍMPICO E PARALÍMPICO
A contribuição da psicologia do esporte
para o rendimento esportivo

# Apresentações dos Palestrantes Internacionais

Nota Editorial: As imagens e figuras eventualmente publicadas pelos autores no evento e na respectiva publicação neste suplemento, são de inteira responsabilidade dos autores.

# Dinámicas psicológicas de los equipos de competición (API001)

Alexandre Garcia-Mas<sup>1</sup>

<sup>1</sup>Universidad de las Islas Baleares, Mallorca, España.

# Introducción

En la actualidad los marcos conceptuales de la psicología del deporte aplicada a los equipos deportivos se han multiplicado, generándose una cierta confusión entre los más básicos y los más complejos y sofisticados. Asimismo, desde un punto de vista práctico, se ha generado una gran distancia entre los marcos conceptuales y teóricos, y las aplicaciones prácticas de estos conceptos en el día a día del entrenamiento de los equipos.

Además, esta distancia se ha creado en dos niveles distintos que afectan al desarrollo práctico de las intervenciones: 1) no se ha proporcionado base teórica suficiente psicológica a unas intervenciones psicológicas que sencillamente se han limitado a trasponer las de las áreas organizacional, educativa y/o clínica a la deportiva, sin llevar a cabo asimilación o adaptación más allá de la transituacional (1) no ha existido, desde la psicología del deporte, un trabajo continuo y efectivo para trasladar esos conocimientos a otras ciencias del deporte, sobre todo, las del entrenamiento deportivo, para que se pudieran

integrar efectivamente en la actividad cotidiana de los equipos y permitir a los entrenadores aumentar la calidad psicológica de su trabajo en el equipo.

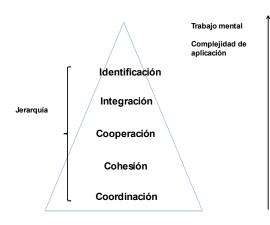
#### **Desenvolvimiento**

En este *Workshop* se pretende paliar en una pequeña parte estos problemas, proporcionando un modelo integrado de dinámicas psicológicas (actualizando asimismo la literatura y la investigación en el campo) de los equipos deportivos; discutiendo y analizando diversos casos prácticos, en la medida de lo posible desde la experiencia de los asistentes; y llevando a cabo una autoevaluación con un nuevo instrumento de recogida de información, generado de acuerdo con el modelo expuesto, y los diversos marcos conceptuales que lo componen.

# El Modelo global de dinámicas deportivas (2)

Como se puede ver en la Figura 1, el modelo considera primero la existencia de una determinada jerarquía en el equipo, de distinto orden, lo que habitualmente no se integra en los marcos conceptuales psicológicos.

En segundo lugar, a medida que se asciende en la "pirámide" psicológica, aumentan dos factores muy relevantes en el trabajo de entrenamiento: la carga mental del entrenador, y la complejidad de las intervenciones y de las variables psicológicas a utilizar.



**Figura 1** – Modelo global de Dinámicas Psicológicas de los Equipos deportivos (3)

Siguiendo con la Figura 1, en el nivel básico se encuentra la coordinación, que puede ser psicomotora o comunicacional, tanto verbal como no verbal (4,5), y es fundamental conocer las relaciones de interacción entre los miembros de los equipos (6).

En el segundo nivel se halla la cohesión, que ha sido durante mucho tiempo el único marco explicativo propio de la psicología del deporte en este campo. Existen dos formulaciones, la segunda, que se basa en la atracción e integración por la tarea y lo social en el equipo (1); y la primera, que ha rescatado la concepción de equipo también como grupo, con las características específicas de los grupos sociales (7). En el tercer nivel se halla la cooperación deportiva, que considera el nivel pro social de los jugadores, respecto de su adscripción al objetivo común o a los suyos personales, como una toma de decisiones para proporcionar esfuerzo v juego, v que puede ser tanto observada como reforzada por los entrenadores y psicólogos deportivos (8,9).

Los niveles cuarto y quinto, los de la integración e identificación, presentan muchas dificultades de manejo, tanto psicológico como de entrenamiento, y se explican fundamentalmente con los marcos teóricos de individualismo-colectivismo (10), y del compromiso deportivo y su factores, tanto "negativos" como "positivos" (11). Finalmente, se tratará el modelo de forma global y las maneras de integrarlo en el entrenamiento táctico y técnico de los jugadores de equipo.

## Casos prácticos

Se discutirán y comentarán los casos prácticos que se presenten por los asistentes en cuanto a:

- Su ubicación dentro del modelo de dinámicas psicológicas;
- Su relación con el rendimiento de los equipos;

- La posible intervención relativa a la variable psicológica del modelo seleccionada, tanto por parte de psicólogos como de entrenadores, y
- Sistema de *feedback* para evaluar la posible eficacia.

#### Autoevaluación

Para ello, se administrará a cada uno de los participantes el Cuestionario de Dinámicas de Equipo (2) que consta de 12 ítems que cubren los marcos teóricos que integran el Modelo global, desde dos perspectivas distintas: 1) como jugador o miembro del equipo deportivo de rendimiento, y 2) como entrenador o manager de un equipo deportivo.

#### Conclusión

Una vez autoevaluados, se llevará a cabo la discusión y comentario de los resultados, y su integración en los aspectos formativos de los psicólogos y/o entrenadores en cuanto a su capacidad y habilidades de intervención mediante variables psicológicas de los equipos deportivos.

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Author e-mail: alex.garcia@uib.es

# Mental skill strategies for excellent sports performance (API002)

Amasiatu Athan N<sup>1</sup>

<sup>1</sup>Department of Human Kinetics and Health Education, University of Port Harcourt, Rivers State Nigeria.

#### Introduction

Sports psychologists and researchers are involved in helping athletes explore better ways to enhancing their performance. One of such techniques that have yielded outstanding result is the mental skill strategy. This paper is poised to explore some of the mental skill strategies that athletes use to attain and sustain excellent performance in sports.

Physical skills, physical fitness and mental skills are the building blocks of the complete athlete that produce outstanding sports performances. At the top level of sport, where many athletes have equal physical ability, the difference between a great performance and a good performance or between winning and losing is often related to mental rather than physical abilities. Indeed, at any level of competition psychological component can become the critical factor of success. There are many examples where a team of less (physically) skilled players have often succeeded over more skilled opponents due to being more mentally prepared or 'psyched up' for the game.

Mental skills' training involves a number of strategies and techniques athletes may use to improve their focus and concentration thereby enhancing their sports performance. These include such psychological skills as goal setting, mental imagery and confidence. Attempt will be made to discuss how this psychological techniques are used to sustain peak performance.

# **Development**

# Goal Setting as a Strategy

One technique to enhance positive affect is goal setting. Goal setting is a popular motivational technique for enhancing productivity and performance in achievement domains like business and sport, and is thought to improve performance by helping individuals focus attention on a task, mobilize effort, persist longer at the task, and develop new learning strategies. The purpose of goals is to focus our attention. The body, together with the mind, will not reach toward achievement until they have clear objectives. The magic begins when you set goals. It is then that the switch is turned on, the current begins to flow, and the power to accomplish becomes a reality.

All athletes involved in sport will have their own goals in their lives and these will include goals for sporting achievement.

Having goals in sport can assist athletes in developing their mental skills such as motivation, self-confidence and arousal control, thus enhancing the athletes' sports performance. However, in order to achieve, they must set the right goals. Many people set New Year's resolutions, which are types of goals, but often these resolutions are broken within a week or even a day!

Goals help athletes to recognize their success and achievements more regularly and consequently increase their motivation to strive for and achieve their next goal.

Setting 'smart' goals

#### Specific

Goals need to be specific. A common error in goal setting is that the goal is too vague. An example of a specific goal is "I want to run the 1500m in 3.56s by 24 July" compared with simply saying "I want to run the 1500m faster".

# Measurable

If a goal is specific it should also be measurable and/or observable. Numerical goals are easier to measure (e.g. distance or time) than subjective goals (e.g. an improvement in attitude).

### Achievable

Goals should be difficult enough to challenge yet realistic enough to achieve, if you are committed. Goals that are too high will lead to failure and

decrease motivation, even if an athlete has performed well.

#### Relevant

Goals should be relevant to the athlete's current ability and future potential. Consider the athlete's opportunity for practice and level of commitment towards achieving their goals.

### **TimeLine**

Goals should have a timeframe or target date. Athletes should have long-term objectives to give them focus, but should set short-term goals to keep them motivated.

Goals should be regularly reviewed and evaluated. For example, target dates may need to be changed due to injury or illness, the selected goals may be too hard or too easy, or the strategies for achieving the goals may not be effective.

# Mental imagery rehearsal as a strategy

Mental imagery rehearsal is simply a mental technique that programmes the mind and body to respond optimally. By using mental imagery rehearsal as a mental training tool, athletes have the capacity to see and believe, which gives them the confidence and focus to perform successfully. In fact many athletes use imagery, but they do not use it systematically and often are unable to control their images.

Mental imagery involves the athletes' imagery themselves in a specific environment or performing a specific activity. Hence, elite and numerous athletes are turning towards mental imagery rehearsal to take their game to the next level. Different uses of imagery in sport include: mental practice of specific performance skills, improving confidence, and positive thinking, problem solving, controlling arousal and anxiety, performance review and analysis, preparation for performance and during imagery.

Sport psychologists have attempted to understand the exact mechanism that causes mental imagery to work. Evidence supports the effectiveness of imagery in improving sport performance, but only through a controlled systematic practice. Numerous theories exist to support that mental imagery rehearsal is a veritable tool in enhancing sport performance.

These five principles include:

- Imagery skills can be developed.
- The athlete must have a positive attitude relative to the effectiveness of imagery.
- Imagery is most effective when used by skilled athletes.
- Knowing how to relax is a necessary precursor to the effective use of imagery
- There are two kinds of imagery, internal and external.

Emphasizing the importance of internal and external imagery in sport performance Mahoney and Avener (2007) explained that internal perspective means that athletes see the image from behind their own eyes as if they were inside their bodies, as opposed to the external perspective in which they see the image from outside their bodies as with a video camera.

# Uses of mental imagery rehearsal in athletic performance

Mental imagery can be used in the following ways to enhancing athletic performance.

- To see success: Many athletes "see" themselves, achieving their goals on a regular basis, both performing skills at a high level and seeing the desired performance outcomes.
- To motivate: Before or during training sessions, calling up images of goals for that session, or of a past or future competition or competitor can serve a motivational purpose. It can vividly remind you of your objective, which can result in increased intensity in training.
- To perfect skills: Mental imagery is often used to facilitate the learning and requirement of skills or skill sequences. The best athletes "see" and "feel" themselves performing perfect skills, programme, routines, or plays on a very regular basis.
- To familiarize:- mental imagery can be effectively used to familiarize yourself with all kinds of things such as a competition site, a race course, a complex play pattern or routine, a pre-competition plan, an event focus plan, a media interview plan, a refocusing plan, or the strategy you plan to follow.
- To set the stage for performance: mental imagery is often an integral part of the pre-competition plan, which helps to set the mental stage for a good performance. Athletes do complete mental run-through, of the key element of their performance. This helps to draw out their desired percompetition feelings and focus. It also helps keep negative thoughts from interfering with a positive pre-game focus.
- To refocus: mental imagery can be useful in helping athlete to refocus when the need arises. For example, if a warm-up is feeling sluggish, imagery or a previous best performance or pervious best event focus can help get things back on track. You can also use imagery as a means of refocusing within the event, by imaging what you should focus on and feeling that

focus. In mental imagery it should be emphasized that the athletes should not focus on the outcome but on good performance.

For decades, athletes of all ages at competitive levels have sought for feelings that will instill the hope and drive in them to persevere even when faced with overwhelming adversity. The modern trends in sports psychology have demonstrated that athletes with a high degree of confidence perform better in a variety of sports than those that lack confidence. Also one of the most consistent findings in the peak performance literature is the significant correlation between self-confidence and successful sporting performance.

# The use of confidence as a strategy for peak performance in sports

The study of confidence within the domain of athletics and athletic situation seem to have been traditionally drawn from the concept of selfefficacy. Self-efficacy is an individual's judgment of his or her capabilities to organize and execute a specific course of action required to attain a desired performance. Sport confidence is defined by Vealey, as "the belief or degree of certainty individuals possess about their ability to be successful in sport". Based on recent advances in the study of sport confidence by sports psychologist, Manzo and Silva (1993) developed a theoretical model for sports confidence. This model is based on three underlying constructs: dispositional optimism (having positive attitude), perceived control (the belief that an expectancy is under one's control) and perceived competence (the degree to which one believes that he or she can successfully fulfill the demands of a sport situation).

### Prerequisites for gaining confidence

Psychologist and researchers have shown that confidence can be grasped. The following four prerequisites could be useful in providing a solid foundation for building confidence.

# <u>Understand the interaction of thought and performance</u>

Philosophers, scientists and poets have known for thousands of years that the thoughts we have of our ability, of the demands we face and the environment we happen to be in determine to a large extent the way we feel inside at any given moment. Think, I have done this many times before, and you feel confident. Think' I am being taken advantage of, and you feel angry. Think "this practice is worthless" and you feel impatient. These immediate feelings, in turn, directly affect performance, because they produce objectively verifiable changes in muscle tensions, blood flow hormone production and attention focus. For example, anticipated failure thoughts lead to feelings of anxiety and among other things overall

muscle tension when the wrong muscles are tense or the right muscles are tense at the wrong times coordination and timing are disrupted. The confident athlete deliberately directs his or her thoughts onto those aspects of self that produce powerful confident feelings so as to produce better and better performance.

# <u>Cultivate honest self-awareness</u>

Striving for control over ones thoughts and feelings is a process of demanding honest self-awareness. One must be willing to honestly pursue the question. "Am I really thinking in a way that will give me the best chances of success" For most people who play sport the real opponent is within themselves in the form of self-criticism self-doubt and hesitation, all in which are caused by in effective cognitive habits. This means athletes with great confidence have simply learned to win the battle with themselves. This is the most difficult battle that anyone will never try to win and it is also the challenge that makes sport such a great experience with so much potential for self-development and satisfaction.

# **Conclusion**

Mental skill training to sustaining peak performance has become one of the vital tools that can make the difference as the cutting edge to enhancing sports excellence if properly utilized. No matter how good or how limited the athletes mental skills are now, they can improve them through daily practice both at home and in their training setting. The strategies discussed in this paper may not be exhaustive but the truth remains that mental skill training is a major psychological technique that will give athletes the needed advantage for peak performance in sports and games.

Author e-mail: athan\_amasiatu@yahoo.com

# Social Cognitive Mechanisms regulating doping intention and use: research and intervention (API003)

Fabio Lucidi1

<sup>1</sup>Sapienza, University of Rome.

### Introduction

The use of doping substances in sports is an old and ongoing issue. Starting in the 60s, the use of substances in professional sport has greatly increased and, more recently, has appeared in amateur sports as well as in adolescence at increasingly younger ages, posing a significant threat to adolescent health. Overall, doping studies conducted on large samples in countries, suggest that between 0.6 and 5% of adolescents report using doping substances (1). Doping use is more

frequent among male than female adolescents and, to a lesser extent, among older than younger adolescents. The characteristics of adolescents' sport or physical activity choices seem to influence adolescents' doping use, although knowledge on this issue is less consolidated. For instance, while it is well known that a substantial percentage of adolescent doping users do not engage in competitive sports on a regular basis, some studies suggest that doping use is less likely among competitive than non-competitive athletes, although other studies report an association between being active in strength training and use of doping agents.

# **Development**

Past psychological doping research has primarily focused on the personal characteristics of doping users. While athletes use doping substances primarily to improve their performance, nonathletes exercisers may do so mainly to enhance their physical appearance. Compared to non-users, doping users experience greater depressed mood and dissatisfaction with their physical appearance and lower self-esteem, fewer concerns about health, and higher global-positive expectancies about doping use (2)

Doping use also co-varies with socioenvironmental influences, such as the value assigned to significant others' views, the relevance of weight-related social norms, and the knowledge of policy restrictions and drug testing protocols (3-5). Undoubtedly, the understanding of doping use in young athletes is hindered by the rarity or low frequency of the phenomenon, which adds complexity to the analysis of the characteristics associated with it. It is also in this respect that doping research has recently and increasingly called attention to the value of examining attitudes towards doping use as a social-cognitive factor that greatly increases the risk for doping use (1,4,5).

During the presentation, a doping research program carried by Sapienza- University of Rome will be described. Since its outset, the program was envisioned as an opportunity to cast doping research within well-defined theoretical frameworks articulating a series of psychological processes that intervene in deliberate or volitional forms of behaviors, such as doping use. Broadly speaking, this integrated effort has focused on examining belief systems and appraisal processes possibly regulating doping intentions and actual use (1,3-9). Overall, the research program contributed to establishing that young athletes' doping intentions and use partly depend on key socialcognitive factors and processes, such as positive attitudes toward doping use, the belief that significant others would approve it (i.e., social norms), one's personal confidence that he or she can resist to external or social pressure to use doping substances (i.e., self-regulatory efficacy), and the personal ways one may adopt or call upon to justify an otherwise illicit or socially reprehensible behavior, such as doping use (i.e., moral disengagement) (4-6). Furthermore, the research program also has contributed to establishing that the relations linking doping to the above set of beliefs hold especially in those adolescents or athletes who tend to misinterpret social situations or the intentions of others who may encourage or solicit doping use (i.e., interpersonal appraisals) (3).

Over the years, the existing research has clearly established the complex ways these beliefs and appraisals may jointly or uniquely contribute to young adolescents' and athletes' doping intentions and use. However, despite the acquisition of this scientific knowledge, there still exist research questions and issues that have yet to be addressed, and our recent research activity departed from these pending issues. In particular our program tried to develop integrated social cognition models to examine the predictors of doping intentions in athletes focused on different motivational, achievement goals, and sportsmanship profiles in elite athletes as well as on beliefs about the causes of success. Another issue is concerned with a clearer understanding of doping use in team sports, and the objective was to develop and rely on specific assessment instruments that were sensitive and tailored to young athletes practicing team sports. Furthermore, we addressed new ways to conceptualize and to measure doping attitudes (10).

# **Conclusion**

Finally, our effort has been to generalize the overall model of psychological effects evidenced in nationally based research to an international European context (i.e., Italy, Germany and Greece), suggesting the possibility to adopt common strategies in these three countries in the development and execution of anti-doping campaigns.

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# Athletes' mindfulness training with culture consideration (API004)

Gangyan Si<sup>1</sup>

<sup>1</sup>Hong Kong Institute of Education.

# Introduction

Along with the development and application of the mindfulness programs for athletes, the effectiveness of mindfulness-based training on the well-being and performance of athletes has been preliminarily established over the last decade. Since the pioneer study on the application of mindfulness meditation to collegiate and Olympic rowers was conducted by Kabat-Zinn, Beall, and Rippe in 1985, real interest in this particular applied research area has only grown since the formal introduction of the Mindfulness-Acceptance-Commitment (MAC). Recent correlational and intervention studies have indicated that mindfulness has a positive

association with the flow construct. In line with findings from healthy and clinical populations, performance improvements, positive psychological states, and a decrease in negative psychological states have been reported by several empirical sport studies.

# **Development**

The benefit of applying mindfulness-based training to Chinese athletes has also been acknowledged, given its effectiveness for our Western counterparts. However, the direct application of the Western mindfulness-based programs, such as the MAC, into a Chinese context might be somewhat limited. It seems imperative that socio-culturally relevant education and training should be integrated into mindfulness training programs for Chinese athletes. Specifically, the application of mindfulness-based therapy for Chinese athletes should be integrated with Chinese culture and the Chinese sport system (the Whole-Nation system).

Based on the widely recognized mindfulness training program, the MAC for performance enhancement, we have developed the Mindfulness -Acceptance-Insight-Commitment (MAIC) Program, for Chinese athletes, by integrating our own understanding of mindfulness, decentering and acceptance, from Zen Buddhism. We have extracted the concept of "insight", from Zen philosophy, and integrated it with the concept of "value", which is emphasized by the MAC. We believe that the concept of "insight" can be incorporated into mindfulness training programs as it is a distinct component, frequently used by elite Chinese athletes and coaches in Chinese sport culture. The concept "insight" is closely related to the nonattachment (release from mental fixation) of thinking. This nonattachment demonstrates flexibility with which to understand the world and human value. Insight refers to a new awareness or discovery of life, and its manifestation can be observed when an individual establishes a new understanding of his meaning of life and personal value, which strengthens his ability to face a variety of life issues.

Given that the Chinese athletes train and compete under the Whole-Nation system, which is a political and administrative mechanism founded by the government, they have to adapt themselves to two main characters of this system including: (a) collective interests as the priority, and (b) an executive-led system that takes charge of professional or technical issues. The process of adaptation to this system could be quite tough, and the insight for understanding one's sport career and its relationship to the system is bound to play an important role in this adaptation. Therefore, it seems important and imperative that the culturally-

relevant insight should be integrated into the mindfulness training program for Chinese athletes.

#### Conclusion

# Key Components of MAIC

The MAIC was developed based on several substantial components (e.g., mindfulness. acceptance, cognitive decentering, and value clarification) from the MAC and some new adaptations (e.g., insight, non-attachment, and willingness to encounter adversity) that were specially designed for Chinese athletes. Given the importance of values in athletes' mindfulness-based training, the concept of insight is presented in the introduction to values session as a process of new awareness and discovery in life, or career, and implies flexibility of thinking, and non-attachment of cognition. As athletes will inevitably face various difficulties and adversities, they may experience confusion, bewilderment, and doubts, in the pursuit and commitment of their values. Insight can help athletes cope more effectively with these issues, and enable them to work towards their values more effectively, which, as a result, subsequently is expected to improve performance as well as general well-being. Consistent with the key principles of the adversity coping framework which is an indigenous mental training model, the MAIC aims at raising athletes' willingness to encounter adversities and advocates that individuals accept the existence of adversity as it is, including any negative emotions, thoughts, and body sensations. The MAIC suggests that adversities are inevitable in life, and athletes are encouraged to divert their attention away from resisting or fighting against adversities, and instead direct their attention towards the behavioral tasks that are required at the present moment, and learn to coexist with the mental events. As a result, essential mental resources are available for allocation to the required task, and as such, behavioral efficiency can be improved.

# The influence of pressure on sport performance (API005)

Hiroshi Sekiya<sup>1</sup>

<sup>1</sup>Hiroshima University, Japan.

## Introduction

Choking under pressure refers to a phenomenon where psychological stress produced by a desire to perform well leads to performance decrement.

### **Development**

Although psychological factors, such as anxiety and attention, and physiological factors, such as arousal, have been involved in the theories proposed to explain performance decrements under pressure, little is known about behavioral factors,

such as movement kinematics and kinetics. We conducted a series of experiments to examine the movement characteristics under pressure. Common findings of these experiments were decreases in movement amplitude and velocity. Qualitative research was also conducted in order to bridge a possible gap between the experimental studies and fields. Based on the quantitative (experimental) and qualitative studies, we have successfully accumulated knowledge regarding movement characteristics under pressure.

## **Conclusion**

Reasons why we have negative emotions and reduced movements under pressure were discussed from an evolutionary perspective.

# Comunicación entre entrenadores y jugadores en deportes de equipo (API006)

Jaume Cruz<sup>1</sup>

<sup>1</sup>Universitat Autónoma de Barcelona.

#### Introducción

En esta presentación se describe la importancia del estilo de comunicación del entrenador en la iniciación deportiva de los jóvenes y se resume una línea de investigación sobre intervenciones con entrenadores de jugadores jóvenes de dos deportes de equipo: fútbol y baloncesto. En primer lugar, se describen las ventajas de realizar programas que el asesoramiento en estilo de comunicación v clima motivacional, tratando de individualizar al máximo las intervenciones con entrenadores. En segundo lugar, se enumeran los efectos de Programas de Asesoramiento Personalizado a Entrenadores (PAPE) en los cambios de su conducta, evaluada mediante el Coaching Behavior Assessment System (CBAS). Los resultados muestran que los entrenadores en diferentes estudios aumentan las conductas de apoyo a sus jugadores (i.e., refuerzo, ánimo ante el error y ánimo general) y disminuyen sus conductas punitivas (i.e., castigo e instrucción técnica punitiva) en función de los objetivos que se han propuesto en su programa personalizado de asesoramiento Asimismo, se produce también una mejora en algunos comportamientos que los entrenadores no han establecido como objetivo. Estos programas de asesoramiento personalizado logrado cambios más importantes en la conducta de los entrenadores que los obtenidos en intervenciones en grupo, en las que los entrenadores no pueden establecer sus objetivos prioritarios.

### **Desenvolvimiento**

En la iniciación deportiva el entrenador asume un rol muy importante ejerciendo gran influencia en la experiencia deportiva de los jóvenes, mediante los comportamientos, actitudes y valores que transmite (1). Al ser el deporte un medio para el aprendizaje de habilidades no sólo físicas sino también sociales y personales, la interacción entrenador-deportista puede contribuir desarrollo del joven más allá del ámbito deportivo. el entorno deportivo -entrenadores, monitores, familias y compañeros- se convierte en un medio de influencias socializadoras que juegan un papel importante en la formación de los jóvenes que practican un deporte (2,3). Entre las características psicológicas podemos destacar, por ejemplo: la percepción de habilidad (4, 5); las consecuencias emocionales y afectivas de la práctica deportiva de jóvenes deportistas (6); la participación, motivación, compromiso y grado de implicación en el deporte o en la retirada del mismo (7,8) y también en la transmisión de valores y en el desarrollo moral de los jóvenes (9-11). Sin embargo, a pesar del importante papel que juegan los otros significativos en la experiencia deportiva, la mayoría de investigaciones que estudian los procesos psicológicos en el deporte infantil y juvenil han ignorado hasta fechas muy recientes las influencias sociales, tal como remarcaba (12).

Esta comunicación se centra en el asesoramiento personalizado a entrenadores de deportistas jóvenes a fin de mejorar su estilo de comunicación y el clima motivacional que crean en sus equipos, pues se puede constatar que la mayoría de los entrenadores realiza su trabajo de forma voluntaria y sin una formación adecuada, a pesar de importancia que tiene la figura del entrenador en el ámbito de la iniciación deportiva. Este es un hecho que se produce de forma transversal en diferentes países y culturas. Diferentes estudios constatan que la mayoría de los entrenadores poseen los conocimientos técnico-tácticos básicos de la modalidad deportiva que entrenan, pero no suelen tener conocimientos o formación en aspectos psicológicos del desarrollo del niño ni de la dinámica del equipo, con los consiguientes efectos en los jóvenes que practican deporte (8,13,14). Si el joven vive la experiencia deportiva como agradable, podemos prever que aumente la probabilidad de adquisición de hábitos de práctica de actividad física y que, en el futuro, sea un adulto activo. En cambio, si el joven vivencia la experiencia deportiva de manera negativa puede padecer ansiedad y estrés y desarrollar actitudes disruptivas hacia la competición, contribuyendo a aumentar la probabilidad de abandonar el deporte (7).

Teniendo en cuenta la relevancia de los aspectos en los cuales el entrenador puede influir en el deportista, es deseable que su influencia sea lo más positiva posible (15). Así pues, podemos afirmar que si la actuación psicopedagógica del entrenador es una de las variables críticas para lograr que los deportistas jóvenes continúen interesados en la práctica deportiva, un objetivo prioritario de los psicólogos del deporte debería ser la observación de partidos y entrenamientos, a fin de obtener datos de las interacciones que se establecen entre los jóvenes jugadores y sus entrenadores. Los resultados de estas observaciones permitirían conocer el estilo de liderazgo de los técnicos que dirigen las competiciones deportivas para niños y niñas y asesorarles, posteriormente, de una manera más individualizada (16).

Los dos modelos de liderazgo más estudiados en Psicología del Deporte: a) el modelo mediacional de liderazgo, propuesto por Smoll y Smith, 1989 (17) y b) el modelo multidimensional de liderazgo de Chelladurai, 1993 (18) tienen implicaciones para la motivación de los deportistas, y se han trazado algunas interrelaciones entre ellos y la motivación en el marco de la teoría de las metas de logro (19). Al comienzo de la década de los noventa, esta teoría aportó las bases para el diseño de programas de intervención en el ámbito educativo (20) y en el deportivo (21,22), proporcionando directrices para mejorar el clima motivacional a partir de las 6 áreas TARGET: Tarea, Autoridad, Recompensas, Grupo, Evaluación y Tiempo (20). Así pues, a partir de las aportaciones de los modelos mediacional, multidimensional y de la teoría de las metas de logro se puede establecer un marco teórico para diseñar programas, como el Mastery Approach to Coaching (MAC) (23), en los cuales los entrenadores desarrollen un estilo de comunicación positivo y, además, recompensen el progreso individual, las tareas realistas pero desafiantes y la colaboración entre los miembros del equipo para establecer climas de implicación en la tarea.

#### Conclusión

Los resultados de los programas citados han sido positivos en muchos aspectos pero han mostrado la necesidad de individualizar al máximo el asesoramiento psicológico a los entrenadores, pues la efectividad de la intervención queda siempre modulada por los conocimientos, experiencia, ideas, creencias y expectativas profesionales del entrenador. En este sentido, en los últimos trabajos de investigación del Grup d'Estudis de Psicologia de l'Esport (GEPE) de la Universitat Autónoma de Barcelona, se han realizado Programas de Asesoramiento Personalizado a Entrenadores (PAPE) (24), a partir de sesiones individualizadas en las que los entrenadores toman conciencia de sus comportamientos, a partir del feedback que se les proporciona de sus conductas, v analizan, conjuntamente con el psicólogo del deporte, las conductas que deben mantener y aquellas que deben disminuir en su perfil conductual . En términos generales, los resultados los entrenadores en diferentes muestran que

estudios aumentan las conductas de apoyo a sus jugadores (i.e., refuerzo, ánimo ante el error y ánimo general) y disminuyen sus conductas punitivas (i.e., castigo e instrucción técnica punitiva) en función de los objetivos que se han propuesto en su programa personalizado de asesoramiento Asimismo, se produce también una mejora en algunos comportamientos que los entrenadores no han establecido como objetivo, tal como se puede comprobar con más detalle en los resultados de los estudios de Cruz et al. (25), Mora et al. (26) y Sousa et al, 2008 (14).

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# The role of agents of change for healthy youth sports (API007)

Jaume Cruz<sup>1</sup>

<sup>1</sup>Universitat Autònoma de Barcelona.

### Introduction

Both positive and negative effects of sport participation children's psychosocial on development are controversial issues for sport psychologists and physical educators. Some authors have outlined the importance of participation in youth competition in order to achieve goals like self-confidence physical fitness, sportspersonship. However, there is also some evidence of negative effects of athletic participation such as parents' overemphasis on the outcome of the game or the punitive communication style of some youth coaches. In short, the adult leaders coaches, parents, officials, sport organizers - who interact with young players determine the quality of child's athletic experience, as have pointed out Barnett et al. (1) and Liukkonen et al. (2), among others. So, it is interesting to analyse how specific coaches' and parents' behaviours, as well as the behaviors of others agents of change such as referees, physical educators or managers affect children's reactions to their athletic experience, and to use this information to develop interventions designed to assist the different agents of change in relating more effectively to young athletes.

# **Development**

In this communication, first, we will summarize a line of research to improve coaches communication style; second, a campaign to promote sportpersonship in parents and spectators of young leagues; and third we will do a reflection about the goal of the European Project Psytool, that have just started, in order to improve the role of the different agents of change with young players

Although coaches are considered a key figure in youth sport –because coaches' behaviors, attitudes,

and values are imitated by their players, not only in sport settings but also in other contexts of players' lives—most children receive coaching from untrained amateur coaches (3,4).

Coach training programs represent one model for structuring youth sport setting. Smith et al. (5) developed a pioneer program the Effectiveness Training (CET) that tries to increase those coaching behaviors that are empirically related to positive athlete outcomes, such as positive reinforcement, mistake-contingent encouragement, mistake-contingent technical instruction, and general encouragement, and to reduce those coaching behaviors related to negative evaluative reactions by athletes, particularly punishment and punitive technical instructions. Several interventions with the CET (5,6), the Spanish adaptations of CET (7,8), the Penn State Coach Training Program (9), and a new adaptation of CET-known as the Mastery Approach to Coaching (MAC) (10)- have been shown to produce salutary effects on a range of outcome variables in controlled quasi-experimental studies, including reductions in performance anxiety and stronger perceptions of coach-initiated mastery motivational climates (10,11).

As Sousa et al. (12) have outlined the CET and Mastery Approach interventions occur in the form of a group-administered workshop that involves didactic instructions, modelling, and role-playing. Taking into account that those programs usually had not provided individualized behavioral feedback, these authors took a step forward and encouraged sport psychologists to adapt the coach behavioral guidelines to the individual evaluations assessed in the baseline stage. In three more recent studies (12-14) the Programa de Asesoramiento Personalizado a Entrenadores (Individualized Program for Counseling Coaches, PAPE) was developed and implemented in soccer coaches in order to improve their communication style and the motivational climate created in their teams.

The intervention with parents of our research group started in 1998, when the Barcelona Sport Council organized a Congress: "Physical education and sport in school age in the city of Barcelona", with the slogan we want not only a more sporting city, but also a more educational sport. One of the consequences of this Congress was that the Barcelona Sports Council requested the Grup d' Estudis de Psicologia de l'Esport (i.e., Research Group in Sport Psychology; GEPE) of the Universitat Autònoma of Barcelona to design a campaign on the psychological aspects of parents' participation in sport (15).

In the above mentioned Congress, the Barcelona City Hall organized a public hearing about the youth sport situation, in which two hundred teenagers concluded that three out of the five main concerns related to sport competitions were the parents'

behaviors as spectators. Specifically, they reported: (a) their wish of less hostility and maximum respect for athletes; (b) the need of families generating a good environment of friendship and respect; and (c) the need to create behavioral rules for spectators. The Barcelona Sports Council accepted the challenge to have "not only a more sporting city, but also a more educational sport". According to this challenge, the Barcelona Sports Council ordered different professionals to work together to create an attractive campaign theoretically based about sportspersonship in sport. Thus, a group of psychologists worked together with sport scientists, publicists, and politicians in the design of the promote campaign to fair play, positive participation, and sportspersonship of parents in youth sport.

We decided to produce various materials in different formats with a shared message (the slogan) always included in all the materials. This multiplicity of materials and messages was intended to impact the different populations (i.e., children, parents, coaches, and sport coordinators). The visual aid of the campaign was the image of three fingers (see Figure 1) and the slogan "Quan els teus fills estan en joc, compta fins a tres" (i.e., Catalan equivalent to "when your kids are playing, count to three" which means think in what you will do before you do it) was at the same time the title of the whole campaign.

Following the slogan, three points were emphasized in the campaign: (1) Cheer for effort as much as for success, (2) Respect decisions from coaches and officials, and (3) Show sportspersonship.



Figure1 - Image of the Barcelona's Campaign

As the campaign was conceived to be as widespread as possible, not being focused on specific sports or social groups, multiple resources were produced in order to reach diverse sport participants. Six different products were designed in order to divulge the principles of Barcelona's Campaign: a booklet, leaflets, posters, a video, a web page, and workshops. The booklet was the main element of the campaign explaining: a) the philosophy and objectives of youth sports, b) the family functions related to sport, c) A Decalogue of recommendations for families, and d) a short explanation of socialization process through sport(16,17).

### **Conclusion**

# Reflection

The results of Barcelona's Campaign to promote parents' sportspersonship in youth sport were promising in terms of the level of awareness by spectators of youth sport and the level of positive communication messages given to the players. Similar results were found in the study of Walley, et al. (18) using self-instructional leaflets that were distributed to adult observers in an attempt to increase their positive verbalizations in a youth baseball league. However, in our study referees of football and basketball games received only 4% of encouragement and 68% of criticism, reflecting that some parents place too much emphasis on winning. In this sense, we have to assume that the elements of the campaign were insufficient by themselves to change the spectators' behaviors towards referees.

In general, the campaign attempted to influence spectators' behaviors, but the ones that behave in an appropriate way did not receive any positive reinforcement. If we want to parents/spectators behaviors in youth sport, we need to praise them for the positive and supportive behaviors they exhibited towards players, coaches, and referees and not for the verbalizations that reflect a win at all cost attitude. In this sense, it is interesting to follow new developments on parents' positive participation in sport, such as the "Juga verd" ("Play green campaign") (19), that proposed giving extra scores based on parents and spectators behavior which are taken into account in the outcome of the matches.

Now, that we have only done the kick-off of the European Project Psytool, I think that in sport, everybody has to do their best to win, but if we want to educate children through sport we have to take into account that not only they need to score more than the opposite team, but the fair play behaviors and verbalizations of players, coaches, spectators and other agents of change also matter.

Our final reflection, from a cognitive-behavioral perspective, is that if we want to change the values in youth sport and avoid gamesmanship, discrimination and violence, we have to change the contingencies of the sport context as well, especially the ones related to the different agents of change: parents, coaches, spectators, referees, managers ... in order to reward their supportive behavior towards referees and applauding the players fair play behaviors towards the opponents.

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# Olympic Games as career transitions (API008)

Natalia B. Stambulova<sup>1</sup>

<sup>1</sup>Halmstad University, Sweden.

# Introduction

Traditionally in sport psychology research and practice athletes' performance in competitions is considered in a situational context that is with a focus on managing factors that influence the athlete before and during performance. In this presentation I am going to make a shift to considering performance in a broader developmental or career context. Narratives circulating in sporting culture and media stories provide anecdotal evidences that participation in Olympic Games or other subjectively important competitions might have a significant impact on athletes' careers in sport, and often also in life. Career researchers have recently begun to explore important competitions, including Olympic Games, as career change-events or career transitions (1-8). This new trend in career transition research (9) considers how athlete career development and context influence, but also are influenced, by athletic performance.

### **Development**

A pioneering study in this area (6) dealt with junior Russian athletes' retrospective views of their first (well-remembered) competition using a survey based on the athletic career transition model (7). The participants' answers allowed to provide a description of the transition process with perceived demands (e.g., to reach their goals, to meet own and others' expectations), resources (positive feelings, practice experiences, social support), barriers (a lack of competition knowledge, negative thoughts and feelings), coping strategies ("doing like in practice", "observing how others do", "searching for help if lost"), and consequences of the first competition (inspiration for continuation in sport vs. a fear of competitions that needed to be treated in the further career). The study confirmed that important competitions during the earlier athletic career stages might have an impact on motivating athletes to continue and invest in sport or to dropout. It is even possible to anticipate that the further athletes' progress through the career stages and sport performance levels, the more impact important competitions might have on their athletic and non-athletic planning and development. Illustrative to this extrapolation is a study of Hollings et al. (1) on experiences of New Zealand elite track-and field athletes in regard of the World Junior Championship in Athletics (WJC). The participants were interviewed before and after the WJC to understand its career impact. The authors concluded that the WJC was seen by the athletes as an opportunity to gain experience of world-class competition and test their performance but also as a key reference point in their decision making about further investment in sport and preparation for the junior-to-senior transition.

Another line in exploring the transitional nature of important competitions refers exclusively to Olympic Games. Extensive literature on athletes' Olympic preparation and performance (11-13) is now complemented by identifying phases in the Olympic Games transition process and investigating athletes' experiences (e.g., perceived changes/ demands, resources, coping strategies) within each phase retrospectively or proactively. Several attempts were undertaken to structure the Olympic Games transition process as having three-five phases. For example, Wylleman et al. (8) used interviews and athletes' self-reports to describe changes in athletic, psychological, psychosocial and academic/vocational development experienced by four Belgian Olympians prior to the Olympic Games-2008 phase (between the qualification and the Games), during the Games phase, and (two months) after the Games phase. In regard of each phase the participants reported changes covering all four developmental dimensions that allowed the authors to further promote the holistic developmental perspective as important in studying Olympic athletes.

Sigurgeirsdóttir (5) conducted narrative interviews to explore transition experiences of eight Icelandic Olympic athletes who participated at

Olympic Games-2012. Their stories were then shaped using the five-phase Olympic preparation and Games structure (7) emphasizing major themes permeating to each phase. At the preliminary preparation phase the athletes struggled to gain international competition experiences and to get financial support. In the qualification phase they emphasized the importance of clear criteria for team selection and the benefits of early qualification. At the Olympic season phase, the highest priority was given to good relationships with coaches, energy management, overtraining prevention, and exploring the Olympic venue. The Games phase was marked by "hunger" for achievement, distraction awareness and coping, and expert support. The post-Games phase was related to analysis and evaluation of the Games, career change, and increased public attention and responsibility.

Another study related to the 2012 Olympic Games focused on Israeli athletes' and coaches' perceptions of the Games as a career changeevent(3) using the scheme of change for sport psychology practice (SCSPP) (2) as a theoretical framework and a survey as data collection method. The Olympic Games were perceived as a significant and positive change-event in the athletes' and coaches' careers regardless of formal results achieved during the Olympic tournament. The authors emphasized two important decisions made by athletes around Olympic qualification phase - a strategic decision to ignore or to address the change (e.g., independently or after consulting with others) and a subsequent decision to change (i.e., to make all necessary adjustments to effectively cope with the change). The study revealed that Israeli athletes mainly addressed the change independently, had high motivation for change, felt that they coped effectively and were satisfied with their coping efforts. The change-event outcomes (i.e., overall perception of Olympic Games experience) were measured through athletes' motivation for sport after the Olympics and their perception of Olympic performance. Motivation was found to be decreased (as many athletes retired after the Games) and also predicted by athletes' satisfaction with their coping effort. Athletes' satisfaction with their performance was a more significant predictor of overall perception of the Olympic Games experience than actual results in the Olympic tournament.

#### Conclusion

The aforementioned retrospective studies shed light on the temporal structure and content of the Olympic Games transition process and might be used as a basis for working with Olympic athletes. But as shown in the recent study of Schinke et al.(4),

it is possible to plan psychological support system for Olympic athletes based on the proactive vision of their Olympic experiences as a sequences of phases and meta-transitions (i.e., transitions to, within, and out of the Olympic cycle).

Precisely, "Psychological support for Olympic preparation of the Canadian Men's Boxing Team" was planned for the boxers' progression through the Own The Podium (OTP) program providing financial and expert support to medal hopefuls for the 2016 Olympic cycle. Six meta-transitions contributing to the Olympic Games transition are: (a) entering the OTP, (b) entering major games tournaments, (c) Olympic qualification, (d) focused preparation for the Olympics, (e) to the Olympic podium, and (f) to the post-Games. In relation to each of these meta-transitions, the athletes' major anticipated demands (e.g., adaption to the national team staff and orientation in the resources available during the first meta-transition or analysis of the Games experience and plan or the future during the sixth one), and relevant psychological support services were outlined. The next expected step in this project is to follow the real Olympic preparation and participation process and then to summarize the athletes/staff's reflections in order to make necessary changes for the next Olympic cycle. This project can also serve as an example on how such work can be done in various sports and countries.

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(Continua)

# Research to practice with immigrant elite athletes in amateur and professional sport (API009)

Robert J. Schinke<sup>1</sup>

<sup>1</sup>Laurentian University, Canada.

#### Introduction

Effective sport psychology practice is highly contextualized; the applications in our field require a substantive understanding of the clients we work with, the demands of their training and competitive environments, and in relation, how it is that we as consultants enter into and undertake practice. Within boxing, contextualized practice necessitates the understanding of newcomer athletes and the challenges processes and associated with acculturation (i.e. settling practices) (1). This presentation is developed to centralize contextualized nuances associated with newcomers and acculturation in relation to the presenter's applied practice working with the Canadian National Boxing Teams (female and male).

# **Development**

# Contextualization

Each training context brings with it some uniqueness. Though I have seen sport psychology consultants transferring practices from one sport to another and within a sport discipline from one context to another, the most potent approaches to applied practice are uniquely local. Recently, Schinke and Stambulova developed a special issue call in the Journal of Sport Psychology in Action in order to centralize these practices: http://www.tandfonline.com/doi/full/10.1080/21 520704.2016.1143759. Contextualization by its very definition implies a focus onto the richness of the local environment, including the use of language, dress code, training practices, financial and equipment resources, location of the training facility, and the constituent members found in the environment (2). Understanding each of these nuances permits practitioners to consider their personal skills and practices and how these might intersect / merge and be received by the prospective client (3). If practitioners are astute, they will engage in reflexive practices whereby they consider their own values and practices and how these could marginalize or centralize the identities of their clients (4). For these critical selfevaluations, the next step is to develop contextualized practices that meet the desires and expectations of the intended clients in the performance environments where they work.

# Immigrant Athletes and Acculturation

A large part of understanding boxing's context and its richness must be focused onto athletes and

their origins. It is well known that boxing attracts people from working class backgrounds (5). This is not to say that all boxers are from a working class background. One former national team athlete was a law student and a second pursued graduate education as a teacher, both from educated families. However, many of the boxers are indeed from modest origins, such as inner cities. Boxing is viewed as an opportunity - a means to a better living standard. The day this abstract was written, part way through the writing, there was a knock on my hotel door. I sat and listened to a world-class athlete who sees amateur career boxing as an opportunity to launch a lucrative professional athletic career. Several of this predecessors, also my clients, have achieved multimillion dollar professional careers(6). The thing that the most successful of these athletes share is that they were born outside of Canada.

When examining the success of the Canadian National Boxing Team, all of its most successful performers are relocated athletes, also known as settlers, from countries, including Jamaica, Haiti, Afghanistan, Russia, and Chechnya (5). In fact, at the 2015 Pan-American Games, two of Canada's three gold medals in boxing were earned by settler athletes. Two further medals, tallying to four of the six medals earned by the Canadian Boxing Teams were from settler athletes. This trend is continuing in the current year as Boxing Canada is preparing for the 2016 Rio Olympics. These athletes are treasured within the national team context. However, the integration of acculturating athletes within the boxing context is somewhat challenging. In Canada, there is an extensive coaching education program, and yet none of it is focused onto cultural inclusiveness (7). Within the broader confines of cultural sport psychology, athletes from minority cultures tend to be marginalized in one or more regards, often unintentionally (8). These athletes bring unique identities to the boxing context. For example, one of the Muslim athletes at the 2015 Pan American games prayed before each time he boxed. Before this recent event, people would walk in front and behind him while he prayed, often distracting him, with no regard for what he was doing. During the tournament, he asked me whether I would stop these interruptions for him so that he could spiritually prepare, before he followed up with his psychological preparation and then, his technical preparation. When I eagerly agreed to support the athlete, he seemed quite relieved. This consensual process brought us closer together. A second immigrant athlete from Qatar always goes for Arabic food with me, each time we meet. As well, in major games villages, we attend the multi-faith center, each of us going off to our respective area to practice our faiths. This sharing of religion permits the athletes to disclose some of their deeper beliefs of where religion belongs in relation to their

performance. This shared process also permits me as a practitioner to share my faith with them - a mutual disclosure. Each settler athlete has unique parts of her or his identity that can enrich the national team environment (3); the centralization of parts of an identity, by the national team, place value on the athlete as a whole person (9). The athlete is much more than a medal-producing performer, with no other depth or richness. The role of the sport psychologist is to support the centralization of this richness so that as much as possible of the athlete's identity can be revealed through the realm of performance.

#### Conclusion

# Reflections on Acculturation

### Shared processes

Acculturation is often experienced by the athlete (and also the acculturating coach) solely on her / his own shoulders. There is extensive literature that suggests that the outcome of shouldered processes is either alienation or marginalization (10). The objective of the sport psychology consultant is to encourage a shared format of acculturation (11). Shared acculturation permits athletes to disclose parts of their identities in an open forum while learning about the identities of their teammates.

# <u>Fluidity</u>

The process of acculturation was first envisioned as a linear process. This conception of acculturation is actually incorrect and misleading (11-13). Settler athletes move fluidly between satisfaction and dissatisfaction regarding the receiving culture and the national team where they are situated. The settler athletes might at one moment move toward assimilation or integration, and in another moment move away from seeking acceptance (14). The role of the sport psychology consultant in this process is to heavily monitor the athlete.

## <u>Healthiness</u>

Traditional understandings of acculturation reveal that this process is highly stressful to the settler / newcomer (11,15). Within this process, there are many discussions regarding whether the newcomer's acculturation process might be evaluated as healthy or unhealthy. This polarizing view of acculturation impedes a more truthful understanding that it can be both healthy and unhealthy depending on momentary circumstances and how these are interpreted. As well, traditionally held views of integration as healthy are now being questioned. Each context and circumstance is unique, and only in specific circumstances might the settler's engagement be regarded as healthy.

# **Exploration**

Explorations into athlete acculturation are highly important (16). In Brazil, many of the elite football players are migrating as transnational athletes in order to pursue lucrative professional sport careers. Similarly, combative sport athletes in the UFC and also professional boxers are valued resources outside of Brazil (and also many further countries). These transnational athletes are commonly traveling from one country to the next to opportunities career Understandings of these athletes' experiences are highly important, especially from the vantage of sport psychology (21-23). These understandings are best understood through qualitative fluidities where the methodologies and uncertainties in the acculturation process are centralized and explored (14). Furthermore, I propose that a relatively uncharted method, creative arts based methods might serve to open up narrative understandings (24).

# <u>Critical Acculturation</u>

Critical acculturation is an emerging thematic area found within cultural psychology (11,13,15). Though these writings are for the most part at the conceptual level, they have been informed my own vantage / perspective in regards to work with newcomer athletes, in a broader sport system. Further examples of this work all encourage the aforementioned four rules of thumb while opening up opportunities to explore the richness of this process.

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# From Mental Representation of Motor Action to New Approaches in Mental Training and Technology (API010)

Thomas Shack<sup>1</sup>

<sup>1</sup>Bielefeld University, Germany.

#### Introduction

Mental representation and memory structures play a central role in the control and organization of actions in sport.

# **Development**

For improving performance in practice it was our interest to measure such structures in memory and brain and use the results for developing new tools in mental training. For measuring the mental structure of movement representations in long term and working memory we used experimental methods like priming reaction time experiments or experimental classification methods. By using an expert-beginner paradigm, differences in the mental representation structure in various kinds of sport, like for instance golf, soccer, volleyball, tennis, climbing are evaluated. In high-level experts these representations were organized in a distinct hierarchical tree-like structure and were well matched with the functional and biomechanical demands of the task. In comparison, action representations in novices were organized less hierarchically and were less well matched with functional and biomechanical demands. understand the relationship between memory structures and learning in more detail we designed different learning and mental training studies in golf. Results show functional changes in the experimental group's mental representation of the putt. The mental representation structure for the control groups did not reveal any changes between the pre-, post- and retention -test. In a second step it was our interest to measure such structures in memory and brain and use the results for developing new tools in mental training. The technology developed here is to measure the mental representation of the movement before mental training and then integrate these results into the training. This Mental Training Based on Mental Representations (MTMR) has now been applied successfully for several years in professional sports.

To simulate action control and human performance, in a second step, I will discuss challenges and issues that arise when we try to replicate complex movement abilities in the context of technical systems. Interestingly human motor performance, rooted in the profoundness of biological evolution, has matured to a point where it can profit from technical systems. The research results on mental motor representation can not only help to understand the cognitive background of

motor performance, they also provide a basis for building artificial cognitive systems that can interact with humans in an intuitive way and acquire new skills by learning from the user.

#### Conclusion

In this context, it is clearly advantageous for a real or virtual coach to know how mental representation structures are formed, stabilized and adapted in daily actions. This knowledge enables a coach or technical system (such as intelligent glasses, or intelligent virtual coaches) to address individual users or trainees concerning their current level of learning and performance, and to shape instructions to optimize learning processes and maximize performance.

# The Work of Cultural Transition: Implications for Achievement Motivation and Performance (API011)

Tatiana V. Ryba<sup>1</sup>

<sup>1</sup>Department of Psychology, University of Jyväskylä, Finland.

#### Introduction

In today's uncertain, fluid job market, has intensified. transnational mobility geographical movement of highly skilled amateur elite and professional athletes characterizes athletic development today, which transnational mobility into a highly valuable commodity (1,2). The production of mobility and adaptation to a changing context in cultural transition are crucial for initiating and maintaining the transnational career. That is, in addition to being able to establish mobility, it is important for athletic migrants to sustain their performance, which is often predicated on athletes' adapt-abilities to create and maintain social relations and situated knowledge in the different localities they settle in, as well as those they leave behind. Previous sport research provides the basis for suggesting that a cultural transition has important implications for migrant athletes' adjustment to Sport processes, such as playing style, team interaction and coachathlete relationship, and may create difficulties in their lives outside of sport (3-8). Brandão and Vieira(9), for example, indicated that Brazilian footballers' poor adaptability hampers their professional careers inasmuch as 66% of 1029 players sent to foreign teams in 2010 returned to Brazil before completing their first season. Many players report inability to cope with loneliness and unfriendly climate, and to adapt to a new lifestyle.

## Development

Though the concept of cultural transition is increasingly used in sport and career research, insight into the processes of how individuals

produce their own development through work and relationships in shifting cultural patterns of meaning remains limited. The transnational industry of sports, in which athletes' psychological adjustment to cultural transitions has implications for both performance and meaningful life, serves as a backdrop for this collaborative study (10).

The aims of the study were to identify shifting discourses of sport, culture, and gender, and the ways in which transnational athletes negotiated their life fit into different cultural contexts. Taking into consideration the sport migrants' need for adapting to a meaningful working life in transition, the question becomes how psychological tendencies for career adaptability are mobilized through daily practices in transient cultural contexts. The purpose of this study therefore was to understand what dynamics are particularly critical in cultural transition and what impact the time has on these processes. Our specific research aims were to identify the developmental tasks of cultural transition and basic psychological mechanisms underpinning the transition that assisted athletic career adaptability.

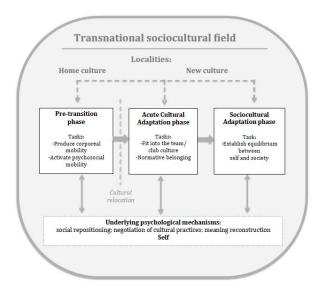
This study applied the life story method to interviews with 15 professional and amateur elite (semiprofessional) athletes, focusing particularly on the cultural transition aspect of their transnational athletic careers. The participants were from different sports, seven were male and eight were female, their educational background varied from high school dropouts to university graduates, and their ages ranged from 18 to 37 (median age was 26). The participants' countries of origins included Bulgaria, Canada, Denmark, England, Estonia, Finland, Nigeria, Slovakia, and Sweden; however, during the interviews they resided in the Nordic countries. The life story approach typically involves a series of interviews with each participant, allowing for flexibility to gain a rich and holistic understanding of participants' experiences (11,12). In our preparation for the interviews, we followed proposed interview guidelines Atkinson(11), including preparing background information on the athletes' lives and generating questions for the person to be interviewed. The main purpose of contextual preparation for the life story interview is to be able to guide participants to a deeper understanding of their own experiences.

As shown by Schultheiss et al. (13), within the relational cultural framework life stories, coconstructed in the process of telling and being heard, provide a means for making meaning out of work-life experiences of migrants and how these experiences shape their lives.

The thematic narrative, structural and performative analyses were used to analyze data. The first step in our engagement with the transcripts was a thematic narrative analysis (14,15) to map a shifting content of the cultural

transition from a temporal perspective. The periods before and immediately following relocation emerged as common themes across participants' stories. The third theme was linked to prolonged engagement with a sociocultural context and was common for athletes in a long-term migration. Drawing on relevant literature, these themes were labeled pre-transition, acute cultural adaptation, and sociocultural adaptation. In the second step, we worked with both structural and performative analyses (14,16). We identified three common performative processes that penetrated through multiple layers of unique storylinesrepositioning in social networks, negotiation of daily practices and meaning reconstruction. Serving the adaptive functions, these processes were mobilized around the key developmental tasks at each phase of the transition and appear to be the underlying mechanisms through which cultural transition was enacted. Based on the data analyses, a temporal model of cultural transition is proposed (see Figure 1).

The model in Fig. 1 shows the cultural transition process which consists of three phases: two on post relocation. While the temporal phases were extracted from the data by means of analytical abstraction and are presented in a sequential progression, they should not be interpreted as unfolding in a simplistic linear manner. We suggest that the transition process is relational, meaning that it does not merely unfold, but is rather constructed within a transnational sociocultural field dynamically and subjectively adjusted by individuals to the multiplicity of cultural contacts in various localities. The psychological domain is embedded in the fluid trans-local cultural field of social practices that constitute and sustain daily functioning and relational experiences of athletic migrants. Although individual experiences are unique and "cultures play infinite variations during the course of development and daily activity" (17), our data analyses suggest that the athletes interviewed possessed common developmental mobilized tasks that the adaptive strategies/mechanisms in cultural transition. As Fig. 1 demonstrates, we propose three underlying psychological mechanisms through which cultural transitions are enacted. These basic processes are adaptive responses that might be hidden beneath an array of culturally patterned behaviors and discourses that, in turn, may or may not lead to a successful task resolution in a particular cultural context. It seems important to reiterate that we identify the underlying psychological mechanisms as adaptive because they are mobilized to regulate one's mode of being in cultural transition.



**Figure1 –** Cultural Transition Model. *From*: Ryba et al. (10)

#### Conclusion

The results of this research clearly suggest that cultural transition has important implications for the direction of athletes' careers and also their opportunities to have a meaningful life. Their transnational career accounts revealed a lack of psychosocial support available for transitioning athletes in sport organizations and, therefore, call for the need to make career and life design counseling available for them. The findings of this research offer some important insights for sport psychologists and career counselors regarding the ways in which they can assist their clients with the psychological work of mending cultural rupture. Cultural Transition Model provides The professionals working in the fields of career counseling and migrant support with a content framework for enhancing athletes' adaptabilities and psychological wellbeing. We believe that these recommendations can, moreover, be applicable in counseling with other groups of high-skilled workers who pursue work-related migration.

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# Psychological and socio-cultural/ environmental factors associated with sport activity (API012)

YoungHo Kim<sup>1</sup>, SooJin Kang<sup>1</sup>

<sup>1</sup>Seoul National University of Science and Technology.

#### Introduction

It is well documented that active lifestyles including sport activity and physical activity are an important contributor in the reduction of various negative symptoms and the prevention of many chronic diseases. Particularly, regular participation in physical and sport activity has been recognizing to be the most effective health-related behavior in maintaining and promoting individual's health status. In spite of the benefits of such activities toward health, many people around the world have failed to engage in physical activity on a regular basis.

# **Development**

Physical and sport activity and the factor influencing it are very complex. It means that physical and sport activity is difficult to change, especially without an interaction among the factors that does not support change. Traditionally, efforts aimed at promoting people' physical and sport activity have focused on applying the educational and counseling programs without fully considering various significant factors associated with their physical and sport activity (1). In Korea, particularly, many activity studies have primarily aimed at the socioeconomic characteristics (i.e., gender, age, and income etc.) or psychological variables (i.e., self-efficacy, belief, attitude etc.)(2,3). However, these studies have rendered little activity research on identifying significance of social and physical environment. In this regard, it is well documented that factors affecting physical and sport activity can derive from psychosocial and environmental domain. Given its complex nature, the multiple influences of physical activity, such as psychological, social, and environmental variables, must be considered in a comprehensive framework(4).

The social ecological model (SEM) has been increasingly applied in identifying correlates of participation in physical and sport activity in a comprehensive viewpoint (5,6). The SEM emphasizes that physical and sport activity is influenced by a complex interaction of multiple factors (i.e., psychological, social, and environmental), and therefore addressing variables at multiple levels is necessary to understand

physical and sport activity (7). According to this model, the influences on physical and sport activity are made up by a series of layers (i.e., individuals, social environment, and physical environment). The innermost level represents the individual factors, which is then surrounded by the environmental factors (8). Specifically, individual factors that increase or decrease the likelihood of an individual being physically active include demographic variables (i.e., sex, age, and level of education etc.) and psychological variables (i.e., self-efficacy, perceived benefits, and perceived barriers etc.)(9). The next level surrounding the individual is the social environment that comprises the social relationships, the culture, and the society within which the individual lives and functions. The social environment includes social support from family, spouse and friends, social norm, and cultural background and has a significant influence on physical activity (10). Along with the social environment, the physical environment plays an important role to continue physical and sport activity participation because physical and sport activities take place in physical environments. There are a number of considerations when attempting to understand how the physical environment might influence physical and sport activity participation. Natural factors (i.e., weather and geography etc.), availability and access to exercise facilities (i.e., parks, playgrounds, swimming pool etc.), and perceived qualities and safety of facilities are an example of physical environments (11).

#### **Conclusion**

The current presentation will introduce some research outcomes based on social ecological model of SEM which is taking into consideration the multiple levels of influence on physical and sport activity participation and suggest concrete possibility of SEM to increase physical and sport activity participation. From the research outcomes which are shared in this presentation it can be summarized that psychological, environmental, and physical environmental variables have the effects on physical and sport activity. Specifically, among the social ecological variables, self-efficacy is the most important predictor of physical and sport activity. However, as it is widely understood that the psychological attributes of individuals are formed within a social physical environment, these findings emphasize to pay much attention to the significance of social and physical environment variables and the interaction of these variables with psychological variables in explaining physical and sport activity. Moreover, the findings revealed that self-efficacy and perceived benefits significantly mediate the relationships between family supports and physical activity and moreover perceived benefits has a significant mediating effect on the relationship between availability of exercise facilities and physical activity. Therefore, the current studies imply that application of the social ecological model is warranted to provide a more concrete association of the contextual factors to explain physical activity and to design a more effective intervention for promoting physical and sport activity.

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# Interdisciplinary Connections in Sport Psychology Service Delivery: From Theory and Research to Practice (API013)

Artur Poczwardowski<sup>1</sup>

<sup>1</sup>University of Denver, USA.

## Introduction

Grounding one's consulting work in theory-to-practice insights (theory), evidence-based principles (data), and practice-based recommendations (art) enhances the delivery of sport and performance psychology services to clients. In particular, the challenge to work with the whole person in increasingly more complex and competitive sport context demands from a consultant an interdisciplinary approach.

# **Development**

The purpose of this presentation is to present "5Rs for Tennis," a step-by-step educational program on how to develop a 'point-to-point' mental strategy in tennis. This strategy was developed as a step one (or an "entry product") in the presenter's private practice to attract youth tennis academies and individual clients to a systematic and long term sport psychology consultation. Individualizing the services was the second step (and was the actual product) and guided the overall consulting relationship and service delivery process. "5Rs for Tennis" are: 'Respond,' 'Release,' 'Replay,' 'Recharge,' 'Refocus,' which collectively aimed at facilitating a mental state that could be characterized by "4Cs": 'Calm,' 'Concentrated,' 'Confident,' and 'Control.'

The work of Ravizza and Hanson along with Vernacchia was the sport psychology theoretical foundation that was further situated in other scientific and practice-focused disciplines. Briefly, 'Respond' engages a player's pre-serve (or pre-return) routine and is meant to allow him or her best chance to execute the tactical plan for the next point. 'Release' is a first phase in the between-point sequence and aims at regulating the physiological aspect of emotions. Once the excessive positive or

negative energy is neutralized (from either winning or losing a point), 'replay' is the phase during which the players either reinforces the right shot or fixes the problem through replaying the shot in their head. 'Recharge' is a micro-break and promotes brief restoration (or relaxation) phase in the between-point sequence. Here the player has another opportunity to adjust their intensity (activation) levels to one's that they learned to be an optimal one for a particular moment in the match, for a specific opponent, or both. Finally, 'refocus' shifts the player's attention from the mental. Emotional, and energy adjustments to tactical planning and is finished with a decision, to which they commit. The point is then played and this is also the moment where the cycle completes and responds (pre-serve or pre-return routine) is initiated. Exemplary goals for achieved in this manner (i.e., 5Rs) mental state are: 'calm,' 'concentrated,' 'confident,' and (being in) 'control' and is captured by "4Cs." Meanings of these words are developed with a particular client and can be (naturally) replaced with words that make most sense to the player. Depending on the individual needs, preferences, and capacity to process information, the 5Rs can become "2Rs" or "3Rs." Importantly, mental practice on the tennis court follows to acquire, master, and automatize this 'point-to-point' routine. Clearly, the goals with the young elite players are to maximize the brief time allocated between the points (about 20 seconds).

Keeping the interdisciplinary approach in mind, theoretical and practical recommendations for introducing, implementing, and individualizing the "5Rs" with "4Cs" are grounded in sport psychology, cognitive psychology, neuroscience, psychophysiology, motor learning, and motor control. From a sport psychology standpoint, the following are frameworks have been used in the presenter's consulting practice: (a) general aspects of sport psychology service delivery; (b) recommendations for the objectives and methods of mental training; and (c) empirical support for the usefulness of psychological skills in performance enhancement.

#### **Conclusion**

The last part of the presentation will offer a brief insight into interdisciplinary connections between sport psychology solutions illustrated through "5Rs" and sport and exercise science principles derived from a number of sister and foundational scientific disciplines as mentioned above. Examples of the phenomena utilized in conceptualizing "5Rs" are: (a) shifting motor control processes from controlled (upper brain centers [e.g., motor cortex]) to automatic (lower brain centers [e.g., basal ganglia]); (b) reducing demands on information processing (or simplifying); (c) reinforcing and enhancing general motor program and specific control parameters; and (d) activating appropriate motor programs (response selection) and prepare the neuromuscular system for action (response programming).

# Apresentações dos Palestrantes Nacionais

# Lesões em competições paralímpicas: atuação da fisioterapia (APN001)

Andressa da Silva<sup>1</sup>

<sup>1</sup>Universidade Federal de Minas Gerais.

#### Introdução

O esporte paralímpico tem se desenvolvido rapidamente nos últimos anos, e este fato tem sido relacionado ao aumento do número e dos tipos de lesões músculo-esqueléticas. A partir disso, surge a necessidade de monitoramento, diagnóstico precoce, reabilitação e prevenção.

#### **Desenvolvimento**

O esporte paraolímpico competitivo abrange uma ampla variedade de características biomecânicas, o que propicia o surgimento de lesões comuns e algumas vezes específicas a cada modalidade. O aumento da complexidade no esporte competitivo provocou 0 aumento simultâneo no contingente de lesões, causando preocupações para atletas e treinadores em todas as esferas de rendimento, pois interrompem o processo evolutivo das adaptações sistemáticas impostas pelo treinamento. E com isso, surge à necessidade de implementação de programas fisioterapêuticos para que essas lesões sejam minimizadas e solucionadas de maneira eficaz e definitiva, para que o atleta restitua rápida e precocemente sua plena capacidade em nível competitivo.

# Conclusão

Diante disso, a reabilitação envolve quatro grandes áreas que podem ser implementadas no esporte paraolímpico, sendo elas: Monitoramento, Avaliação, Intervenção e Prevenção, tendo, cada uma dessas áreas um importante papel para que haja controle e minimização de lesões e recidivas, devolvendo e / ou garantindo ao atleta seu melhor

nível de desempenho em treinamentos e competições.

# **Overtraining (APN002)**

Birgit Keller Marsili

### Introdução

O overtraining pode ser caracterizado como uma desordem fisiológica que acomete principalmente atletas, causando redução do desempenho competitivo, incapacidade de manutenção das cargas de treinamento, fadiga crônica, desequilíbrios na homeostasia, enfermidades frequentes e transtornos psicológicos.

# **Desenvolvimento**

O desequilíbrio nas cargas de treinamento, excesso de competições e períodos inadequados de recuperação são alguns dos principais agentes causadores do *overtraining*, que pode durar semanas ou até meses.



O overreaching é o acúmulo de estresse de treinamento e não treinamento, resultando num decréscimo do desempenho em curto prazo com ou sem sinais e sintomas psicológicos e fisiológicos, sendo que, a restauração das capacidades normais se dá de alguns dias a algumas semanas. O overreaching é um momento chave no processo de treinamento, pois marca o início de uma falha do organismo em se adaptar a sobrecarga (demanda) imposta.

Identificar o *overreaching* é essencial, para que o treinador manipule as variáveis do treinamento, a fim de proteger seu atleta contra as adaptações negativas, já que, o *overreaching* pode se tornar uma fase positiva, se for planejado previamente.

Vários são os fatores que podem causar o *overtraining*, que não o de treino como: frequência de competições, monotonia do treinamento, estressores psicossociais, excesso de viagens, problemas familiares e sociais.

A incidência de overtraining observada nas Olimpíadas de Atlanta em 1996, entre 296 atletas de 30 diferentes esportes mostraram que 84 deles (28%) estiveram em um estado de overtraining e que este explicava a queda de seus desempenhos. Nas Olimpíadas de Inverno em Nagano, 1998, oito dos 83 atletas olímpicos americanos (quase 10%), de 13 diferentes esportes, reportaram que estiveram com *overtraining* e que isto os levou a um baixo desempenho. Pesquisas realizadas com atletas endurance (esportes predominantemente aeróbicos), especialmente nadadores, de 7% a 21% apresentam sinais e sintomas, sendo que 10% apresentavam sintomas graves.

#### Conclusão

Considerações finas: métodos ΩS mais apropriados para um programa de monitoramento do overtraining ainda são discutidos; testes fisiológicos compreensivos não têm mostrado ser mais eficientes do que testes psicológicos; a associação de parâmetros psicológicos em conjunto com avaliações fisiológicas, bioquímicas e/ou imunológicas; baseado na complexidade e na dificuldade de detecção do overtraining no esporte, desenvolver multidisciplinar; 0 programa implantação de um programa sistematizado de prevenção aos efeitos nocivos no desempenho, na saúde e consequentemente no bem-estar do atleta.

# Psicometria para quê? Investigando a validade de teorias (APN003)

Cristiano Mauro Assis Gomes<sup>1</sup>

<sup>1</sup>Laboratório de Investigação da Arquitetura Cognitiva – (LAICO) da Universidade Federal de Minas Gerais, Brasil.

# Introdução

Este texto sintetiza uma apresentação oriunda da mesa-redonda "Validação e avaliação: utilizando Instrumentos Psicométricos para o Esporte". Especificamente. "Psicometria para auê? Investigando a Validade de Teorias" busca refletir sobre a relevância da Psicometria para a ciência psicológica e campos adjacentes do conhecimento. poderia forma tentadora, responder rapidamente a esta questão afirmando que a maior contribuição da Psicometria é a de propiciar a investigação da validade de instrumentos em psicologia e ciências afins.

#### **Desenvolvimento**

Um instrumento precisa mostrar-se capaz de aferir o construto, ou os construtos, para o qual foi construído e a Psicometria possui métodos bem elaborados para investigar esta exigência. Não fortuitamente, concluir que a Psicometria tem muito a contribuir aos estudos de validade de instrumentos para o esporte é uma inferência

bastante correta. Mas, ao refletir de forma menos imediata, vislumbro uma utilidade maior para a Psicometria: a investigação a respeito da validade das teorias, seus pressupostos, seus construtos, entre outros elementos pertencentes às mesmas. Mas por que considerar esta segunda utilidade mais importante do que a primeira? Por um motivo lógico e um motivo epistemológico. O primeiro (lógico) é bastante simples. A investigação da validade de instrumentos é um subconjunto das investigações a respeito da validade de uma teoria, na medida em que qualquer instrumento é uma peça ou componente de uma teoria ou arcabouço teórico. O segundo motivo é menos simples, e por isso mesmo passível de maior controvérsia, pois envolve um julgamento de valor epistemológico. Parto do princípio de que as teorias científicas, com todos os seus diversos elementos (definições, pressupostos. argumentos. instrumentos. evidências, etc.), são construções feitas por pessoas, criações provenientes de comunidades de cientistas. Neste princípio, as teorias não são entendidas como verdades ou conhecimentos inquestionáveis que traduzem fielmente o que são os objetos da realidade, seu funcionamento e seus processos. Ainda nesta visão, qualquer cientista, por mais otimista, não deve ou pode ignorar que as teorias que ele/ela adota ou admira são meras construções, por mais sedutora que seja a expectativa de que a teoria adotada ou construída por ele/ela expresse a verdade sobre algo.

# Conclusão

Enfim, seja pelo critério lógico ou epistemológico, penso que para isso serve a Psicometria: questionar e duvidar, e, consequência, investigar a validade das teorias. Por via da Psicometria, os cientistas têm a oportunidade de questionar as suas próprias teorias, os seus próprios argumentos, os resultados até então encontrados, e as evidências construídas, assim como os instrumentos aplicados. Nesse sentido, usar a Psicometria para estudar a validade de um instrumento psicológico é uma boa ideia, bastante sensata. Mas usar a Psicometria para investigar a validade de uma teoria é algo que supera uma boa ideia, pois exprime o que a Psicometria tem de melhor a oferecer.

E-mail do autor: cristianomaurogomes@gmail.com

# Intervenções psicológicas para a melhoria do desempenho de equipes esportivas (APN004)

Franco Noce1

<sup>1</sup>Universidade Federal de Minas Gerais.

## Introdução

Nos últimos anos, a psicologia do esporte tem contribuído efetivamente para um entendimento de como os fatores psicológicos influenciam a performance atlética, especialmente desempenho de elite apresentado nos Jogos Olímpicos e Paralímpicos. O treinamento psicológico tem como meta desenvolver, estabilizar e aplicar as capacidades e habilidades psíquicas em diferentes situações, de forma variada e flexível. Aborda, segundo Nitsch (1986), os aspectos comportamentais (treinamento de autocontrole) e cognitivos (treinamento das capacidades psíquicas).

### **Desenvolvimento**

O trabalho de preparação psicológica de um atleta ou uma equipe passa, de forma geral, pelas etapas da demanda, do diagnóstico e da intervenção. A demanda pode surgir a partir da iniciativa de um atleta ou de um treinador, bem como em situações críticas com a finalidade de conter um determinado e eventual prejuízo, mas o ideal é que o trabalho de preparação psicológica ocorra ao longo do período de preparação como parte da vida diária do atleta. O diagnóstico é um fator determinante para o sucesso do trabalho na psicologia do esporte como um todo. Tem a função de indicar as áreas que necessitam trabalho. O uso de entrevistas e ferramentas psicométricas básicas é recomendado para estabelecer o perfil de cada atleta, bem como obter informação inicial sobre as demandas individuais e coletivas. Atualmente a Psicologia do Esporte, enquanto Ciência. desenvolveu e faz uso de uma série de outras ferramentas, tais como: testes informatizados como o sistema de testes de Viena (para avaliar uma série de variáveis psicológicas e psicomotoras de forma objetiva), o biofeedback (para avaliação dos níveis de ativação psicofísica), o eye tracking (para avaliar as estratégias de busca visual e atencionais), o simiscout (ferramentas para análise do comportamento tático) e uma infinidade de outras ferramentas que vem sendo desenvolvidas para a especificidade do esporte. A partir de um bom processo de diagnóstico a intervenção é planejada e inserida no dia-a-dia da vida do atleta/equipe. Técnicas como o treinamento da psicoregulação são fundamentais para ajustar o comportamento do atleta no treino e competição auxiliando, por exemplo, a minimizar o erro favorecendo os processos decisórios. Outra possibilidade é a criação e aplicação de rotinas para treino e competição.

#### Conclusão

rotina psicológica representa combinação de diferentes técnicas fisiológicas e psicológicas com o fim de estabilizar comportamento emocional de atletas na competição e de ajudá-lo a dirigir sua atenção aos estímulos relevantes da tarefa a ser realizada. Elementos de psicológica podem rotina estabelecimento de metas; regulação do nível de estresse e ativação; técnicas de imaginação e visualização; técnicas de atenção e concentração mental; autoafirmações positivas para motivar-se em situações decisivas. As rotinas psicológicas podem ser desenvolvidas e aplicadas em esportes individuais e coletivos.

# Estresse: parâmetros biológicos e psicológicos de avaliação em atletas (APN005)

Joice Mara Facco Stefanello1

# Introdução

No contexto esportivo, os atletas estão constantemente expostos aos mais diversos tipos de pressão competitiva, tendo de superar limites de forma vigorosa e manter a efetividade e regularidade do seu desempenho diante dos mais elevados níveis de exigências físicas, técnicas, táticas e psicológicas.

Logo, o fator decisivo para um bom desempenho, não é apenas a competência técnica do atleta, mas sua capacidade de render sob pressão e não sucumbir à diversidade de eventos estressores presentes neste contexto. Cabe ressaltar que uma situação de estresse ocorre sempre que se apresenta um desequilíbrio entre a condição da ação individual e a situacional ou motivacional. Ou seja, quando ocorre uma discrepância entre as capacidades das pessoas e as exigências da situação ou entre suas necessidades e capacidades em satisfazê-las.

Assim, os processos de avaliação psicológica visam avaliar condutas, atitudes e aptidões psicológicas (pontos fortes e vulneráveis) que possibilitam aos esportistas melhorar as condições e os recursos de sua prática esportiva, identificar psicológicas aue interferem variáveis rendimento de atletas, o seu grau de habilidade e as variáveis que o controlam, bem como estabelecer objetivos para cada variável envolvida e promover informações relevantes para seleção de técnicas psicológicas mais efetivas em função características dos atletas.

# Desenvolvimento

Medidas eletrofisiológicas. respiratórias. bioquímicas têm cardiovasculares e consideradas como importantes métodos mensuração do estresse no contexto esportivo. Dentre tais medidas, as concentrações de cortisol se têm destacado (1-3). Quando o indivíduo é submetido a um grande número de agentes estressores, reações psicofisiológicas ocorrem e resultam numa resposta específica do sistema nervoso central e do sistema endócrino. particularmente, da glândula suprarrenal (2), resultando na maior liberação de hormônios glucocorticoides, sendo o cortisol (hidrocortisona, composto F) o mais importante dentre os glucocorticoides produzidos pelo humano, e que exerce a maior parte da atividade metabólica (4). Dentre os diferentes métodos para mensuração do estresse agudo (cortisol salivar, sanguíneo e urinário), o cortisol salivar tem demonstrado ser a medida de análise mais utilizada no contexto esportivo, possivelmente por se constituir numa medida eficaz, acessível, rápida e não invasiva, possibilitando que a coleta seja feita qualquer situação, sem problemas reatividade, constrangimentos práticos ou éticos comuns aos métodos de coleta de sangue e urina(2). Para avaliação do estresse crônico, as medidas de cortisol a partir da fibra do cabelo, embora ainda pouco utilizadas no contexto esportivo, têm sido um importante método de análise, pois possibilitam avaliar a concentração média do cortisol ao longo de meses (5). Para tal, aproximadamente, 150 fios ou 20mg fios de cabelo são cortados o mais próximo possível do vértice posterior da cabeça (3cm de comprimento) e armazenados em envelope à temperatura ambiente até as análises laboratoriais(5,6).

Por outro lado. questionários de autopreenchimento têm sido ferramentas psicológicas utilizadas para a avaliação estresse no contexto esportivo. instrumentos objetivam avaliar diferentes aspectos relacionados ao estresse esportivo, como por exemplo: o estado de estresse e as atividades associadas à recuperação (RESTQ-76 Sport); os sintomas de estresse pré-competitivo (Lista de Sintomas de Estresse Pré-competitivo); os fatores geradores de estresse, o modo como os atletas reagem ao estresse percebido e as estratégias de controle utilizadas para enfrentar as situações estressoras (feedback de execução; ficha de avaliação psicológica). Tais instrumentos, por requisitarem a autoavaliação dos respondentes, podem favorecer a compreensão do modo como o atleta vivencia as pressões competitivas e ajudá-lo a obter o necessário autocontrole para atuar num alto nível de rendimento. A tomada de consciência, além de permitir que o atleta reconheça seus pontos fortes e frágeis para potencializar suas capacidades e corrigir seus déficits, permite que ele se prepare mentalmente para a competição e desenvolva estratégias apropriadas para fazer frente àquelas situações que podem afetar negativamente a sua atuação esportiva (7,8).

#### Conclusão

Em síntese, para que o atleta possa regular os graus de tensão e enfrentar as exigências esportivas com efetividade, deve aprender a associar respostas emocionais/corporais a determinados comportamentos e funções, pois cada mudança fisiológica do corpo corresponde a uma mudança paralela no estado emocional da pessoa.

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# Seleção Brasileira de ginástica rítmica: Um trabalho de intervenção psicológica para o ciclo olímpico - Rio 2016 (APN006)

Lenamar Fiorese Vieira<sup>1</sup>

<sup>1</sup>Universidade Estadual de Maringá, Paraná.

### Introdução

A seleção brasileira de ginástica rítmica (GR) teve sua melhor participação em olimpíadas nos Jogos Olímpicos de Sydney 2000, quando foi para final e obteve a oitava colocação. Para a Olimpíada do Rio de Janeiro - 2016 temos como meta ir para final e melhorar essa classificação.

#### **Desenvolvimento**

Nesse sentido, o Brasil desde 2011 montou um Centro de Treinamento de GR na cidade de Aracaju-SE, onde mantém uma seleção permanente, as atletas residem na cidade e treinam diariamente. Foi composta uma comissão técnica (técnica, professora de balé, médico, nutricionista, fisioterapeuta e psicóloga), que trabalham durante toda a temporada de treinamentos e acompanham nas competições oficiais.

#### Conclusão

O trabalho da psicologia é focado nas metas anuais da equipe e é estruturado em três pontos: Acompanhamento das atletas (individual e coletivo); Aconselhamento e preparação mental. É realizada avaliação em todo inicio de temporada através de testes psicométricos e entrevista com atletas e comissão técnica, visando levantar as necessidades, além de avaliações periódicas buscando resolver problemas emergentes. O trabalho é realizado por meio de atendimentos individuais e de dinâmicas de grupo (necessidades) no local de treinamento das atletas e em competições.

# Aspectos psicofisiológicos da prescrição do treinamento esportivo no basquetebol (APN007)

Marcelo Callegari Zanetti<sup>1,2</sup>

<sup>1</sup>Universidade Paulista (UNIP), São José do Rio Pardo. <sup>2</sup>Universidade São Judas Tadeu, São Paulo.

# Introdução

O Treinamento Esportivo configura-se como um complexo sistema que pode envolver uma série de subáreas, também conhecidas como ciências do esporte (fisiologia do exercício, biomecânica, psicologia do esporte, comportamento motor, esportiva, nutrição entre outras). aue conjuntamente deverão proporcionar maior rendimento atlético e menores índices afastamento por parte dos atletas.

### **Desenvolvimento**

Além dessa integração, o treinamento esportivo atuará na avaliação, prescrição e monitoramento das respostas proporcionadas pelas cargas

psicofísicas aplicadas, seja nas sessões de treinamento físico, técnico, tático, psicológico, conduzidas por diferentes profissionais: preparadores físicos, fisiologistas, psicólogos do esporte, etc. Por outro lado, para Bompa (1), o basquetebol é um esporte que combina velocidade, força e resistência física, o que o torna uma modalidade de alta exigência física e psicológica. Esse autor também cita algumas capacidades físicas importantes para atletas dessa modalidade tais como: alta potência anaeróbia, alta capacidade aeróbia, boa coordenação motora, perfil biométrico específico, resistir à fadiga e a alto grau de estresse, ser dotado de uma boa inteligência tática e espírito cooperativo. Somadas à complexidade treinamento esportivo e das peculiaridades do basquetebol estão as respostas agudas (queda nas funções orgânicas, fadiga, etc.) e crônicas (aprimoramento das valências psicofísicas, queda no rendimento, overtraining, etc.) provenientes das sessões de treinamento. Porém, muitas vezes, tais respostas são ignoradas por envolver métodos diretos e de alto custo (concentração de creatinofosfoquinase, lactato sanguíneo, comportamento da frequência cardíaca, respostas inflamatórias, entre outros) e desconhecimento de métodos indiretos e eficazes de monitoramento dessas respostas, como o defendido por Borg (2), que aponta que a percepção geral de esforco físico vem da integração de diferentes sintomas decorrentes de músculos ativos. dos sistemas cardiovascular e respiratório, articulações, transpiração, dor, tonturas, etc. Para esse mesmo autor, estudos têm demonstrado que o esforço percebido parece resultar da integração de uma série de sinais aferentes de receptores sensoriais encontrados nos músculos esqueléticos ativos e no sistema cardiopulmonar, ou o de Balaguer (3) que considera que as pessoas recebem informações de seus estados fisiológicos, e estados de desconforto como uma noite mal dormida, podem indicar ineficácia física e diminuir a percepção de autoeficácia, que também tem sido apontada como determinante no sucesso esportivo.

### Conclusão

Nesse sentido, parece prudente a utilização de sistemas de percepção subjetiva de esforço antes, durante e após as sessões de treinamento, além de mecanismos de controle como diários de treinamento e questionários autopreenchíveis, que possam de alguma forma controlar respostas psicofisiológicas por meio da percepção subjetiva desses atletas, tais como: fadiga, horas e qualidade de sono, vontade de treinar, prontidão competitiva, apetite, dores musculares, entre outros, e que as mesmas possam de alguma forma ser utilizadas na prescrição desses treinamentos.

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# Paradesporto: da avaliação ao treinamento psicológico (APN008)

Márcia Regina Walter<sup>1</sup>

<sup>1</sup>Universidade Tuiuti do Paraná.

### Introdução

A avaliação psicológica no paradesporto também deve considerar a forma como os atletas são classificados na competição. Para a deficiência física existe uma classificação funcional e a deficiência intelectual é atestada através de testes psicológicos o grau da deficiência intelectual.

### **Desenvolvimento**

No Paradesporto, o treinamento psicológico além dos objetivos descritos por Nitsch (1), devem considerar os fatores que motivam a participação da pessoa com deficiência no esporte. Ser campeão, superar os seus limites e ter um retorno financeiro são comuns a ambos: esporte olímpico e paraolímpico. Porém no Paradesporto, superar os seus limites, suas dificuldades, suas barreiras e o preconceito vem em primeiro lugar. Alguns atletas olímpicos vão além de superar os seus limites e buscam a igualdade de oportunidades para competir nos Jogos Olímpicos.

#### Conclusão

Para o paratleta, mais do que a identificação com a sua modalidade, existe o prazer por fazer parte daquele contexto, pelas amizades e pelo relacionamento que se estabelece com os colegas, os familiares e a equipe técnica. A família, em modalidades em que o paratleta precisa de assistência e auxilio, torna-se parte da equipe técnica e influência diretamente na permanência ou não do atleta no esporte e, em consequência na sua motivação.

Para o paratleta acostumado com as competições e os desafios da sua modalidade, a deficiência não se constitui de um empecilho na conquista de suas metas. Porém nem sempre foi assim e para muitos ainda existem muitos obstáculos a serem ultrapassados. A doença pode

ser um dos fatores que impedem a continuidade no esporte.

O contexto esportivo para a pessoa com deficiência permite dar um novo significado a sua identidade e ampliar suas relações sociais e, principalmente de amizades.

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# Preparação psicológica no esporte olímpico e paralímpico (APN009)

Maria Regina F. Brandão<sup>1</sup>

<sup>1</sup>Universidade são Judas Tadeu.

# Introdução

No esporte, pode-se dizer que as pressões psicológicas e fisiológicas que estão associadas aos treinamentos, competições e a sua organização social mostram que o desempenho esportivo é um fenômeno complexo que é afetado características individuais e por fatores ambientais. Uma das teorias que pode ser utilizada para explicar as implicações psicológicas do fenômeno esportivo em geral e a consequente preparação psicológica no esporte olímpico e paralímpico é a Teoria Ecológica do Desenvolvimento Humano de Bronfenbrenner. Esta visão ecológica do contexto esportivo torna possível analisar os atletas em seu mundo real, dar a devida atenção à importância da relação e interrelação entre o ambiente esportivo e as pessoas que dele participam e observar as capacidades psicológicas que permitem ao atleta ter êxito no esporte de rendimento. Sendo assim, cabe nos perguntar que propriedades psicológicas dos atletas são importantes e devem ser desenvolvidas ao longo da vida esportiva, independente de serem atletas olímpicos ou paralímpicos.

# Desenvolvimento

O principal aspecto a se considerar são os atributos psicológicos dos atletas, em outras palavras, a trama subjetiva do atleta. Para compreender esses atributos, temos que analisar três características psicológicas importantes: suas disposições (forças psicológicas), seus recursos e suas demandas. As disposições têm uma relação direta com o comportamento dos atletas, podem fazê-lo se adaptar às características do ambiente e colocar seu processo de interação em movimento, ou ao contrário, interferir ativamente, retardar ou até impedir sua ocorrência. Essas disposições são denominadas no modelo bioecológico como desenvolvimentalmente-geradoras 011

desenvolvimentalmente-disruptivas. As primeiras podem ser associadas com as características positivas do jogador de futebol, como por exemplo, motivação, vontade de cooperar com companheiros de equipe, iniciativa para aceitar tarefas que favoreçam a equipe, etc. Já as segundas podem ser vistas como características negativas do atleta. Os recursos pessoais constituem ativos e passivos biopsicológicos que influenciam a capacidade para um atleta adaptar-se aos requisitos do ambiente e influenciar positivamente o contexto. Há três recursos que são absolutamente essenciais para se compreender e explicar o comportamento dos atletas: adaptação permanente, resiliência e competência competitiva. Em relação às demandas pode-se dizer que dependem da capacidade do atleta para convidar ou desencorajar reações dos ambientes sociais. As demandas são o terceiro tipo de características pessoais que afetam o atleta. Sua ocorrência se dá por sua capacidade para convidar ou desencorajar reações dos ambientes sociais de um grupo, por exemplo, uma equipe esportiva, as quais podem romper ou favorecer processos de crescimento psicológico e esportivo.

#### Conclusão

O objetivo escolhido para esta palestra foi propor a Teoria Bioecológica do Desenvolvimento Humano como um paradigma para explicar a preparação psicológica de um atleta olímpico ou paralímpico. Preparar um atleta nos obriga a um estudo exaustivo do individuo, de suas competências, de suas potencialidades, de seus valores e crenças.

# Estresse emocional, nível de atividade física e mobilidade em idosos comunitários (APN011)

Vinicius Gomes de Freitas, Andre Torres de Lima, Franco Noce

# Introdução

Os benefícios da AF são inúmeros e os seus efeitos tem sido investigados em diversas populações. Sabemos que o sedentarismo, a incapacidade física e a dependência são as maiores adversidades da saúde associadas ao envelhecimento sendo potenciais fatores estressantes. Diante do exposto, o presente trabalho teve como objetivo verificar se a mobilidade do idoso é um fator estressante.

#### **Desenvolvimento**

Foram utilizados como instrumentos de coleta de dados o Teste Timed Up and Go (TUG), a Escala de Estresse Percebido (EEP) e um questionário estruturado. A análise de dados foi realizada por meio do software estatístico SPSS 17.0, realizou-se o teste Kolmogorov-Smirnov e o teste não paramétrico de Friedman. Para encontrar onde estão as interações foi feito o post hoc de Dunn. Participaram do estudo 197 idosos de ambos os sexos (81,2% mulheres; 18,8% homens) com média de idade de 70,4 (± 6,26). No teste TUG a média foi de 9,3 segundos, já no EEP o escore médio foi de 20,0 pontos e o tempo médio de prática de atividade física foi de 82 meses. Primeiramente estratificou-se a amostra quanto à faixa etária e observou-se correlação fraca entre mobilidade e tempo de prática de atividade física e não teve correlação entre mobilidade e estresse. Ao estratificar por desempenho no teste TUG foi encontrada interação entre as variáveis: mobilidade, tempo de atividade física e estresse.

#### Conclusão

Concluiu-se que existe uma interação entre: mobilidade e tempo de atividade física; mobilidade e estresse; tempo de atividade física e estresse. Sendo assim o estudo tem importância para que os profissionais da saúde possam compreender com maior clareza esses desfechos e, assim, possam desenvolver estratégias mais assertivas de intervenção clínica para idosos.