Revista de Psicología del Deporte. 2017, Vol 27, Suppl 1, pp. 103-109 Journal of Sport Psychology 2017, Vol 27, Suppl 1, pp. 103-109

ISSN: 1132-239X ISSNe: 1988-5636

Measuring coaching efficacy: a theoretical review

Andréa Duarte Pesca*, Daniela Schramm Szeneszi**, Paola Barros Delben***, Cyntia Nunes***, Fabrício Raupp** e Roberto Moraes Cruz***

MEASURING COACHING EFFICACY: A THEORETICAL REVIEW

KEY WORDS: Coaching Efficacy, Measurement, Coach Training

ABSTRACT: The definition of the coaching efficacy construct has recently been incorporated in sports literature and was based on the social cognitive approach more specifically, on the self-efficacy construct. The coaching efficacy phenomenon refers to the confidence development in coaches and their capacities to influence the learning and performance of their athletes. Coaching efficacy is an important variable within a range of personal characteristics that involves coaches' behaviors. The purpose of this paper was investigating the contributions of studies about the measurement of coaching efficacy in sport psychology and its methodological derivations. The methodology used in this paper was the bibliographic research, and to achieve the goal a integrative review was hold. The results of the review indicate that the coaching efficacy construct is directly associated with and integrated into the self-efficacy phenomenon and with the coach's training. Considering the data collected in this review, there is only one coaching efficacy measurement in the world, which has been developed in the United States it has currently been adapted and validated to some countries, including Brazil. Most of the studies about this topic are related to other phenomena, such as leadership styles and organizational behavior.

Studies about the human behavior in the sports context are structured and controlled without the need of laboratory intervention. In an effort to explain and predict sports phenomena, a popular research field for investigation with athletes and coaches, studies have been focused on various personal attributes. Among those identified attributes, one that stands out is related to the influence of self-efficacy in human behavior, as well as in effort, persistence, patterns of thinking and in goals and attributions (Sullivan & Kent, 2003).

The concept of self-efficacy emerged from the need of understanding how people think, feel, get motivated and behave in various situations. Driven by those needs, Albert Bandura (1986), in his studies, defined self-efficacy as the "judgment of one's own capacities to execute courses of action demanded to attain a certain level of performance", incorporating, in the selfefficacy construct, the perceptions, beliefs or expectations that people attribute to themselves in certain situations, i.e. the belief in the capacity to organize and execute actions that produce achievements (Bandura, 1997). Self-efficacy is also described as an individual adaptive skill to seek and reach a specific goal, locating itself on the basis of human agency, because it exerts a central role in the self-regulation of motivation by challenging goals and expectations of results (Wu, 2009). Bandura (2001) and Adegbesan, Oluwatoyin, Uzoma and Ekpo (2014) emphases, moreover, that the beliefs used by people to achieve success predict better the behavior of their self-efficacy beliefs, which are relevant to the mastery of particular performances.

In Bandura's socio-cognitive perspective, self-efficacy performs an essential role in human functioning, such as: goals and aspirations, expectations of results, affective tendencies, perceptions of impediments (obstacles) and opportunities of the social environment (Bandura, 2001; Phillips, Strauss & Weis, 2011).

The definition of coaching efficacy construct has recently been incorporated in sports literature by Feltz, Chase, Moritz and Sullivan (1999) based on Bandura's (1986) social cognitive approach and more specifically, on the self-efficacy construct. Feltz et al. (1999) began their coaching efficacy studies based on researches related to self-efficacy in classroom teaching and it was shown to be an important teaching aspect. The similarity among teachers and sports coaches can be clearly perceived once these coaches are teachers (Kavussanu, Boardley, Jutkiewicz, Vincent & Ring, 2008; Thelwell, Lane, Weston & Greenlees, 2008) who are responsible for their athletes' learning and their performances, Therefore, in order to be effective they must execute many functions.

The considerations above bring us to the purpose of this study, which is investigating the contributions of studies about the measurement of coaching efficacy in sport psychology and its methodological derivations. Since the coaching efficacy construct is relatively recent in the scientific literature, the same is to be expected about the measurement of the phenomenon. It is important to realize that to study such phenomenon it is necessary to acknowledge its other methodological derivations, like leadership style, coaching behavior and coach training.

Method

To achieve the goal a integrative review was hold (Souza, Silva, & Carvalho, 2010), a synthesis of the scientific knowledge

Correspondências relacionadas a esse artigo devem ser enviadas para Andréa Duarte Pesca. Endereço de correspondência: Rod. José Carlos Daux, (SC-401), nº 9.301, Km 10, Santo Antônio de Lisboa - Florianópolis/SC. CEP 88050-001. E-mail: adpesca07@gmail.com

^{*} Faculdade CESUSC.

^{**} Psicologia Clínica Esportiva.

^{***} Universidade Federal de Santa Catarina.

[&]quot;Artículo invitado con revisión por pares"

already published which respond to specific and strict criteria for its achievement (Botelho, Cunha & Macedo, 2011) such as a definition for a research question, for the keywords, for the data basis. The bibliographic research collected data of the last 10 years, between 2006 and 2016 in secondary sources and based on contacts with authors who were references in this field at the occasion of the doctorate thesis.

The descriptor "coaching efficacy" was inserted in the basis of the interdisciplinary scope and the storage of journals published factor impact, Web of Science, SCOPUS, and also a Scielo, relevant library containing dates of Latin America, and the, PsycNet, the most important basis in the area of psychology. For the criteria of deciding which should be analyzed in the is

whole were the reading of the titles and of abstracts, looking for coherence between the goal of this study, in the sport context, even without a definition of this context in the search, in order not to limited the findings, restricting article and reviews published in English, Portuguese and Spanish.

There were found 109 articles in three databases, 15 of them were selected for a final analysis, according to figure 1. There were also added 24 integrated materials for a discussion, including chapters of books and articles offered through direct contact with the most prominent writers in this area. A synthesis pattern was organized with the following variables defined previously: measurement of coaching efficacy, sport context and the definition of the construct, countries, dates and journals.

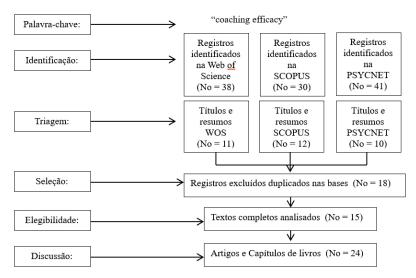


Figura 1. Gráficos de dispersão entre TUG e o tempo de prática (TP) de acordo com faixa etária.

Results and Discussions

From the 15 selected and analyzed articles for this research 6 were published by the Journal sport psychologist and 2 works by the Journal research quarterly for exercise and sport. As the publications were concentrated in the year of 2008, seven in its total, and also two occurrences in 2011 and 2014, as shown in the tabela 1 below. One can observe a dispersal of the areas of science which reveal the results of the researches. The subjects that have been given major emphasis in the topic were Psychology (78,6%) and issues related to sports, even if in association to psychology (71,4%).

On coaching efficacy in the sporting context the countries that developed most studies were the USA, 40% of the publications, Great Britain, 20%, and Canada, 13.3%. The data of this is arranged in tabela 2. It is noted that all studies used the same instrument, Assessing 5C Coaching Efficacy. The original CES (Feltz et al., 1999; Malete & Feltz, 2000; Malete, Chow & Feltz, 2013; Manouchehri, Tojau & Soheili, 2013).

The results on the definition of the construct, the context and the measurement instrument are not available in the work for the understanding of systematized information. The data of the selected articles in the mentioned bases were added to sources diverse, recommendations of readings and direct orientations of authors who study the phenomenon.

Conceptualization of the Coaching Efficacy Construct

Feltz, et.al (1999) study suggests coaching efficacy as being the development of coaches confidence in their capacities to influence the learning and the performance of their athletes (Kavussanu et al., 2008). Coaching efficacy is an important variable within a constellation of personal characteristics that involves the coache's behavior (Myers, Vargas-Tonsing & Feltz, 2005).

On the course of the studies about coaching efficacy, the authors, Feltz et.al (1999), developed four (4) dimensions for the construct: Game Strategy Efficacy - GSE, which refers to the confidence that the coach has in his/her coaching and to the capacity of the team to learn to perform successfully the skills taught by the coach during the competitions; Motivation Efficacy - ME, which concerns to the confidence and the capacity to change the athletet's psychological states and capacities; Technique Efficacy – TE is the level of confidence to diagnose and teach technical abilities to their athletes; Character Building Efficacy – CBE is the perception of the capacity to influence the personal maturity of each athlete and the positive attitudes towards the sport (Malete & Sullivan, 2000; Chase, Feltz, Hayashi & Hepler, 2005). The authors (Feltz et. al, 1999) also projected that these coaching efficacy dimensions are influenced by the following coaching efficacy sources: past experience and performance (coaching experience, coaching preparation and previous records of success and failure), perceived skill or talent

	2008	2009	2011	2012	2013	2014	
Educational and Psychological Measurement.	1						1
Gazzetta Medica Italiana Archivio per le Scienze Mediche					1		1
IFE PsychologIA: An International Journal						1	1
International Journal of Sport and Exercise Psychology	1						1
Journal of Applied Social Psychology						1	1
Journal of Sport & Exercise Psychology	1						1
Research quarterly for exercise and sport	1		1				2
The sport psychologist	3	1	1	1			6
	7	1	2	1	1	2	

Tabela 1. Year and Journals with more Publications.

Country	n	%
Iranian	1	6,70%
United States	6	40,00%
Greece	1	6,70%
Nigerian	1	6,70%
Botswana	1	6,70%
Great Britain	3	20,00%
Canada	2	13,30%
Total	15	

Tabela 2. Countries with the highest number of publications..

of the athletes themselves and perceived social support. Coaching experience, coaching preparation and previous records of success and failure are efficacy information sources based on prevalent experiences. This statement supports Bandura's (1977) studies that points out that this is a more reliable information for the formation of an efficacy assessment and is the hypothesis of being the strongest predictor of coaching efficacy (Feltz et.al., 1999).

In order to better understand coaching efficacy, imagine the following example: if a coach has a high level of technical efficacy, he/she will be able to detect more easily the mistakes and skills of his/her athletes through an analysis of their performance and as a consequence, the coach will provide corrective feedback and provide a more individualized teaching and coaching (Feltz, Short & Sullivan, 2008). According to Gomes and Cruz (2006), in order to understand the function of a coach in a sports team, it is of the utmost importance to realize that the coach's actions affect the teaching and enhancement of physical, technical and motor competences, as well as the psychological development of the athletes, providing contact with new sports principles and values or helping them to deal gradually better with the demands of competitions.

The sports performance integrates the following dimensions: the technical, tactical, physical and psychological that are predictive factors of success or failure in sports performance both for the athlete and the coach (Weinberg & Gould, 2008, 2011). There are other aspects that are important to emphasize as obstacles to sports efficacy, such as unmotivated athletes, with low/high competitiveness, the ones who are away from family and friends (with a feeling of lack of affection), the bureaucracy that is inherent to sports institutions, and the demands of discipline on the part of technical commissions (Weinberg & Gould, 2008, 2011). In terms of the perception of considering oneself capable of performing effectively the coach's activity, other than the technical, tactical and physical competences acquired in one's formation, it is also important to investigate the

psychological competences of those coaches. Couto Junior, Moreno, Souza, Prado and Machado (2007) state that the success in athletic competitions requires more than physical skills and that psychological processes are intensified by efficacy beliefs that compromise the performance of the athlete, of the coach and consequently of the team (Boardley, Kavussanu & Ring, 2008).

Sports coaches have a significant role in the motivation and performance of their athletes and teams (Myers, Feltz, Chase, Reckase, & Hancock, 2008). They provide instructions, guide the sport's practice and skills and give feedback to the team (Feltz et al., 2008). Coaches worry about the learning and performance of their athletes and need to exert various roles to be effective, as for example: being a teacher, motivator, strategist, organizer and character developer (Gould, 1987). That is why athletes rely on their coaches' capacity and on the techniques that they employ to motivate the athletes and attain personal goals (Cruz et al., 2001). Although such coaches can employ various leadership styles to fulfill their goals, their perceptions toward their coaching and capacities, as well as their own behavior, shall influence the performance and behavior of their athletes (Feltz et al., 2008). Cruz and Gomes (1996) state that, even though the influence of the coach goes beyond the context of sports, it is also true that the lack of training and information of the coach, as well as his/her behavior, may affect the behavior and performance of the athletes in and out of the sport.

There are various styles of coaches. For instance, there are those who are coaches only part-time and while on vacation, i.e., those who don't coach as an occupation and exert that function in moments of leisure, due to feelings of pleasure and satisfaction. But, there are also those who are full time coaches, who are considered professional coaches who understand that coaching is scientific that demands study, strategy and "feeling", choosing it as their profession. For those full time professional coaches the dimensions of work goes beyond tactical knowledge specifically. They need to teach the skills with success and also

motivate their athletes and teams (Kent & Sullivan, 2003; Myers et al., 2008).

Everhart and Chelladurai (1998) investigated the existing underlying differences in the preferences of coaching choices. Those authors claimed three (3) specific criteria about what decisions are taken concerning the coach's career: 1- one's own competences to have success in a certain job; 2- a perspective of occupation capacity or a job to fulfill ambitions or goals and; 3-obstacles to enter the occupation field.

While studying coach training, coaching styles, decision making and coaching efficacy, it is important to focus on another construct that is interrelated to the ones exposed above, which is the leadership style (Magle-Haberek & Borber, 2011; Myers, Feltz, & Wolfe, 2008). In the leadership style literature, two models were found concerning effective leadership for the success of athletic performance and psychologically positive responses for the athletes (Myers, Chase, Pierce & Martin, 2011). One of the models was proposed by Chelladurai (Everhart & Chelladurai, 1998; Sullivan, Paquette, Holt & Bloom, 2012), which was named Multidimensional Model of leadership, and the other one was proposed by Smoll and Smith (1989), named Meridional Model of leadership. Lately, leadership models have been examined together with the coaching efficacy model (Horn, 2002). According to Myers et al. (2003) both models aim to fulfill the following aspects: 1 - Antecedent factors (sociocultural context, organizational climate, personal and coach characteristics), personal characteristics of the athlete's (age, gender...) exert influence on the coach's behavior indirectly, through experiences, beliefs and goals; 2 - Coach behavior affects the evolution of the athletes and team development; 3 – The effectiveness of coaching interventions is influenced by various situational factors and individual differences.

There is a relationship between coaching efficacy and leadership type of coaches specifically in the multidimensional leadership model (Myers et al., 2011; Sullivan & Kent, 2003). Feltz et al. (1999) examined the relationship between coaching efficacy and coach behavior, focusing on the perception and style of leadership of coaches as a distinct aspect, and emphasized aspects of coaching behavior. Specifically, coaches' behaviors were measured through LSS ("Leadership Scale of Sport"), a self report of the multidimensional leadership scale that particularly allows more in-depth analysis of the relationship between efficacy and leadership (Sullivan et al., 2012).

Gomes and Cruz (2006) stress that a recent approach in leadership studies has focused more on questions of the psychological influence that is exerted by coaches over their athletes, seeking to analyze such leaders' capacity to introduce change in the values and ideals of group members or of the sports organization, as well as an improvement in the performance in those organizations in which those leaders are inserted. Bass and Avolio (1994) and Conger (1999, as cited by Gomes & Cruz, 2006, p.6) underline that leaders with those characteristics must follow four (4) different strategies to obtain positive results with the group and the organization: a) willingness to adapt new perspectives on work, valuing ideals and values that are common to all; b) higher acceptance and involvement on the mission and view to realize; c) improvement in the feelings of competence and efficacy in work; and d) higher availability to make sacrifices and relinquish personal interest when such is needed.

Most of the coaching efficacy studies that compose another construct in research are related to leadership styles and find a strong connection between both constructs for coaching training. Below there is a topic based on researches that report about the measurement of coaching efficacy and other related constructs.

Measuring Coaching Efficacy

Additionally to the conceptualization of the coaching efficacy construct, the psychometric process of measurement is also of interest, because that phenomenon is more known and explored only in the United States, Canada and Portugal, with studies being started in Turkey and Korea. In Brazil there are no studies about the topic.

The measurement of coaching efficacy became more explored and assessed after the construction of the Coaching Efficacy Scale developed by Feltz, et.al (1999), who structured a coaching efficacy model and gave a framework to study the relationship between coaching efficacy, coaching behavior, motivation and the performance of athletes as previously described when coaching efficacy dimensions were reported. In addition to that model, the same authors developed the Coaching Efficacy Scale - CES that assesses multidimensional aspects of coaching efficacy (Feltz, Short & Sullivan, 2008). Various studies were conducted on the topic of coaching efficacy. Some of them related the construct above, especially with the phenomena of leadership and organizational commitment. Other factors were related in studies with coaching efficacy such as: the coach's education program, coach's behavior and the influence of efficacy information sources on the dimensions of the coaching efficacy construct (Feltz, Hepler, Roman & Paiement, 2009; Hepler, Feltz, Roman & Paiement, 2007; Adegbesan et al., 2014; Meletakos, Bayios, Hatziharistos & Psychountaki, 2013).

One of the main studies about the coaching efficacy construct was conducted by Feltz et al. (1999) and deals with "A conceptual Model of coaching Efficacy: Preliminary Investigation and Instrument Development". The main aim of that study was to present a conceptual model of coaching efficacy and to explain how the development process of a reliable and valid instrument to measure the construct in question took place and, therefore, examine the hypothesis of its sources and results. In that study, the authors defined coaching efficacy as being the degree to which coaches believe that they have the capacity to affect the learning and performance of their athletes. The study was conducted with two independent samples composed of 517 high school coaches of various sports, who participated in the factorial confirmation of the Coaching Efficacy Scale that is composed of four dimensions: game strategy, motivation, coaching technique and character building.

Another significant study about the construct in question was conducted by Kent and Sullivan (2003). It aimed to examine the difference between the coaching efficacy, leadership style and organizational commitment variables with college coaches from Canada and the US. The participant's sample was composed of 212 intercollegiate coaches who completed the following forms: CES (Feltz, et.al, 1999) composed of 24 items in a 9-point Likert scale, in which Zero (0) stands for not at all confident and nine (9) for extremely confident; the Leadership Scale for Sport (Chelladurai & Saleh, 1980) the items are measured with a 5-point Likert scale with response options ranging from one (1) always, to five (5) never. And finally, participants completed the items belonging to the questionnaire about organizational commitment.

That questionnaire is a quantitative instrument with mediation continuity, effective and normative commitment scales, described by Meyers and Allen (1999, as cited by Kent & Sullivan, 2003). Each sub-scale of that instrument was composed by six 5-point Likert items, with response categories ranging from completely disagree to completely agree. The results have indicated significant differences between coaches from Canada and the US in the three types of organizational commitment. US coaches demonstrated higher scores in the efficacy strategy (coaching efficacy dimension) than coaches from Canada, whereas coaches from Canada showed higher indexes in technique and instruction of leadership (leadership style dimension) than the American coaches.

Thereafter, the research developed by Fung (2003) aimed at identifying the level of coaching efficacy of high school coaches so as to gain insight for the future planning of the coaching preparation program. The 4 dimensions of coaching efficacy were assessed: Motivation, Game strategy, Technical coaching and character building. The participants of the study were 74 volunteer high school coaches, 49 of them male and 25 female, who were part of Hong Kong's coach development program. The employed instrument was the CES (Feltz, et.al, 1999), which assesses the four dimensions of the coaching efficacy construct. The author verified that game strategy was the dimension with lower mean and that the character building dimension was the one that attained higher mean value, showing differences in comparison with the United States. Findings did not evidence a relationship between working hours and efficacy. Those findings suggest that the high school coaches from Hong Kong felt less confident during the analysis of strengths and weaknesses of the opposing team, making decisions about the type of strategy to be employed and stimulating more the strength of athletes in competitions than in tasks such as: motivating their athletes, developing the character of the athletes or even executing the aspects of coaching instruction. Maybe the American sports system and culture are more favorable to the development of strong relations between coach and athlete, in a way that American coaches feel more effective at influencing the character of their athletes.

As mentioned previously, the coaching efficacy construct is strongly related to the leadership phenomenon, due to both being correlated in a very effective way. There are studies that affirm and stress that cohesion between both phenomena, such as Sullivan and Kent's (2003) study that aimed to examine the relationship between intercollegiate coaches' coaching efficacy and their leadership styles. The study reports styles of leadership, and among all models the multidimensional one is emphasized. The inquired population on that study was 234 coaches, 122 American and 92 Canadian, and the population was also divided in 165 male coaches and 58 female ones. Such coaches worked with the following sports: basketball, volleyball, softball, swimming, gymnastics, golf, tennis, football, cross country and hockey. The instruments employed in the study were: CES -Coaching Efficacy Scale, and LSS - Leadership Scale for Sport, already identified in the reports of previous research. The most significant results obtained in the study were that two of the three regression models were significant with the coaching efficacy scale and with the leadership scale for sport, representing up to 42% of the variance of leadership style. The motivation and technical efficacy dimensions served as significant predictors for both models. Those results agree with the framing of coaching efficacy and leadership within sports, and also offer the construct validity of coaching efficacy. Social support and positive

feedback are predictors for leadership style in sports, as motivation and character building are predictors for coaching efficacy and coaching, and instructions are effective for teaching and strategy.

Finally, another important study was the one conducted by Myers et al. (2005), which aimed at examining the influence: a) of efficacy information sources on coaching efficacy dimensions and, b) coaching efficacy on coach behavior and team variables. For that, the study was conducted in two phases. On the first one, 135 coaches completed the Coaching Efficacy Scale and on the second phase, the participants were 101 coaches from the first phase and 1618 athletes. The coaches completed the questionnaire about the perceived frequency of their behaviors of reinforcement efficacy with their athletes and the athletes informed about the satisfaction with their coaches. Results showed that social support was the strongest of the efficacy information sources for female coaches, compared with male coaches. Character building was negatively reported with the satisfaction of the female team with male coaches, whereas motivation efficacy was positively reported for the satisfaction of the female team with women coaches. Information was found for new coaching efficacy models proposed by Feltz et al. (1999) and offered support for wider coaching efficacy models.

Final remark

It is important to underline that the coaching efficacy model proposed by Feltz et al. (1999) follows the guidelines of the self-efficacy concept proposed by Bandura (1977), in which coaching efficacy beliefs are influenced by coaches' past experiences and performances, e.g. coaching experience, coaching preparation and record of previous losses and victories, in addition to perceiving the skills of the athletes and the need of social support, which Bandura names in his studies as verbal persuasion.

It is true that coaching efficacy does not influence only the behavior of the coach, but also the performance and perception of the athletes and teams (Myers, Feltz, & Chase, 2011). However, it is necessary to emphasize that the coaching efficacy model has not specified if the results of athletes and teams in competitions are directly influenced by coaching efficacy beliefs or mediated through coaches' behavior, which cannot be affirmed since few studies were conducted on a significant association between coaching efficacy and the athlete and team variables.

It is relevant to stress that the role of coaches towards sports teams becomes essential when his or her actions influence both the performance and teaching of physical, technical and tactical competences and the psychological development of the athletes through the coach's beliefs and values about the experiences in the world of sports. Coaches' actions also affect the trust that athletes deposit in their coaches, due to their capacity to motivate them, teach them and help them achieve personal goals. Therefore, it is important that the coaches have a good education, because they perform an important role in the development of their athletes that goes beyond motor skills, helping in the development of the personality and character of such athletes.

In high performance sports, there is a growing need to integrate the different members that compose a multidisciplinary sports team. Through such approximation in the professional relationship it is necessary to clarify the aspects that are inherent to better outcome and to provide the maintenance of the athlete's performance, because high

performance sports might not be healthy to athletes from the physical and often psychological point of view. Therefore, well informed coaches with a global formation in terms of the physical, technical, tactical and psychological components that encompass the life of an athlete are essential.

Finally, it is important to accent the strong existing relationship between coaching efficacy dimensions and the fundamental components for the training of coaches, because it is perceived that the 4 dimensions of the coaching efficacy model proposed by Feltz et al. (1999) are of the utmost importance for coaching, but also possess a deficit in all aspects, having a restrictive effect in the quality of coaches and justifying necessary attention for those who work with coach preparation and development programs.

MEDICIÓN DE LA EFICACIA DE TRENAMIENTO: UNA REVISIÓN TEÓRICA

PALABRAS CLAVE: Eficacia de Entrenamiento, Medición, Entrenamiento de entrenadores.

RESUMEN: La definición del constructo de eficacia de entrenamiento fue recientemente incorporada en la literatura deportiva y fue basada más específicamente en el abordaje socio cognitivo, dentro del constructo autoeficacia. El fenómeno de la eficacia de entrenamiento se refiere al desarrollo de confianza de los entrenadores y sus capacidades para influenciar el aprendizaje y el desempeño de sus atletas. La eficacia de entrenamiento es una variable importante dentro de una serie de características personales que involucra comportamientos de los entrenadores. El objetivo de este trabajo fue investigar las contribuciones de estudios sobre la medición de la eficacia de entrenamiento en la psicología del deporte y sus derivaciones metodológicas. La metodología utilizada en este trabajo fue la investigación bibliográfica, y para alcanzar el objetivo, se realizó una revisión integrativa. Los resultados de la revisión indican que el constructo de eficacia de entrenamiento está directamente asociado e integrado al fenómeno de autoeficacia y al entrenamiento del entrenador. Considerando los datos recogidos en esta revisión, sólo hay una medida de eficacia de entrenamiento en el mundo, que se desarrolló en los Estados Unidos, actualmente ha sido adaptada y validada para algunos países, incluido Brasil. La mayoría de los estudios sobre este tema están relacionados con otros fenómenos, como estilos de liderazgo y comportamiento organizacional.

MENSURAÇÃO DA EFICÁCIA DE TREINAMENTO: UMA REVISÃO TEÓRICA.

PALAVRAS-CHAVE: Eficácia de Treinamento, Mensuração, Treinamento de treinadores.

RESUMO: A definição do construto de eficácia de treinamento foi recentemente incorporada na literatura esportiva e foi baseada mais especificamente na abordagem sócio cognitiva, dentro do construto autoeficácia. O fenômeno da eficácia de treinamento refere-se ao desenvolvimento de confiança dos treinadores e suas capacidades para influenciar a aprendizagem e o desempenho de seus atletas. A eficácia de treinamento é uma variável importante dentro de uma série de características pessoais que envolvem comportamentos dos treinadores. O objetivo deste trabalho foi investigar as contribuições de estudos sobre a mensuração da eficácia de treinamento na psicologia do esporte e suas derivações metodológicas. A metodologia utilizada neste trabalho foi a pesquisa bibliográfica, e para alcançar o objetivo, foi realizada uma revisão integrativa. Os resultados da revisão indicam que a construto de eficácia de treinamento está diretamente associada e integrada ao fenômeno de autoeficácia e ao treinamento do treinador. Considerando os dados coletados nesta revisão, há apenas uma medida de eficácia de treinamento no mundo, que foi desenvolvida nos Estados Unidos, atualmente foi adaptada e validada para alguns países, incluindo o Brasil. A maioria dos estudos sobre este tema está relacionado a outros fenômenos, como estilos de liderança e comportamento organizacional.

References

Adegbesan, O. A., Oluwatoyin, M. J., Uzoma, C., & Ekpo, G. U. (2014). Sources of coaching efficacy information as predictors of coaching efficacy of Nigerian coaches. IFE PsychologIA: An International Journal, 22(2), 108-113.

Bandura, A. (1986). Social foundations of thought and action: a social cognitive theory. Englewood Cliffs, N. J.: Prentice - Hall.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.

Bandura, A. (1997). Self-efficacy: the exercise of control. New York: Freeman.

Bandura, A. (2001). Guia para La construccion de Escalas de Autoeficacia. Evaluar 2. Argentina: Universidad Nacional de Córdoba.

Boardley, I. D., Kavussanu, M., & Ring, C. (2008). Athletes' perceptions of coaching effectiveness and athlete-related outcomes in rugby union: An investigation based on the coaching efficacy model. *The sport psychologist*, 22(3), 269-287.

Botelho, L. L. R., Cunha, C. C. de A., & Macedo, M. (2011). O método da revisão integrativa nos estudos organizacionais. *Gestão e sociedade*, 5(11), 121-136.

Chase, M. A., Feltz, D. L., Hayashi, S. W., & Hepler, T. J. (2005). Sources of coaching efficacy: The coaches' perspective. *International Journal of Sport and Exercise Psychology*, 3(1), 27-40.

Chelladurai, P., & Saleh, S. D. (1980). Dimensions of leader behavior in sports: Development of a leadership scale. *Journal of Sport Psychology*, 2, 34-35.

Cruz, J. F., Dias, C., Gomes, R.; Alvez, A.; Sá, S.; Viveiros, I., and Pinto, S. (2001). Um programa de formação para eficácia dos treinadores da iniciação e formação desportiva. *Análise Psicológica*, 1(19), 171-182.

Cruz, J. F., & Gomes, A. R. (1996). Liderança de equipas desportivas e comportamento do treinador. In: J.F. Cruz, *Manual de Psicologia do Desporto*. Braga: SHO – Sistema Humanos e Organizacionais, 389-409.

Souza, M. T. de, Silva, M. D, da., & Carvalho, R, de. (2010). Revisão integrativa: o que é e como fazer. Einstein, 8 (1), 102-6.

- Everhart, C., & Chelladurai, P. (1998). Gender differences in preferences for coaching as an occupation, the role of self-efficacy, valence and perceived barriers. Research quarterly for exercise and sport, 69(2), 188-189.
- Feltz, D. L., Chase, M. A., Moritz, S. E., & Sullivan, P. J. (1999). A conceptual model of coaching efficacy: preliminary investigation and instrument development. *Journal of Education Psychology*, 91(4), 765-776.
- Feltz, D. L., Hepler, T. J., Roman, N., & Paiement, C. (2009). Coaching efficacy and volunteer youth sport coaches. *The sport psychologist*, 23(1), 24-41.
- Feltz, D. L., Short, S.E., & Sullivan, P.J (2008). Self-Efficacy in Sport: research and strategies for working with athletes, teams, and coaches. Human Kinetics, P.O.
- Gomes, A. R., & Cruz, J. F. (2006). Relação treinador-atleta e exercício da liderança no desporto: a percepção de treinadores de alta competição. Estudos de Psicologia, 11 (1), 5-15.
- Gould, D. (1987). Your role as a youth sports coach. In V. Seefeldt (Ed.). *Handbook for youth sport coaches*. Reston, VA: American Alliance for Health, Physical Education, Recreation, and Dance, 17-32.
- Hepler, T. J., Feltz, D. L., Roman, N., & Paiement, C. A. (2007). Validating the coaching efficacy scale for youth sport coaches. *Journal of Sport & Exercise Psychology*, 29.
- Horn, T. S (2002). Coaching effectiveness in the sports domain. In T. S. Horn (Ed.), *Advances in sport psychology*, 2nd ed. Champaign, IL: Human Kinetics. 309–354
- Kavussanu, M., Boardley, I. D., Jutkiewicz, N., Vincent, S., & Ring, C. (2008). Coaching efficacy and coaching effectiveness: Examining their predictors and comparing coaches' and athletes' reports. *The Sport Psychologist*, 22(4), 383-404.
- Kent, A., & Sullivan, P.J. (2003). Comparisons of job Attitudes Among United States and Canadian Intercollegiate Coaches. *Journal of the International Council for Health, Physical Education, Recreation, Sport and Dance, 3*.
- Magle-Haberek, A., & Barber, H. (2011). Coaching efficacy and the coach-athlete relationship. *Journal of Sport & Exercise Psychology, 33*, 167-168.
- Malete, L., & Feltz, D. L. (2000). The effect of a coaching education program on coaching efficacy. The Sport Psychologist, 14(4), 410-417.
- Malete, L., Chow, G. M., & Feltz, D. L. (2013). Influence of coaching efficacy and coaching competency on athlete-level moral variables in Botswana youth soccer. *Journal of Applied Social Psychology*, 43(10), 2107-2119.
- Manouchehri, J., Tojari, F., & Soheili, B. (2013). Confirmatory factor analysis: The Coaching Efficacy Scale (CES) in *Iranian sports leagues*. Advances in Environmental Biology, 4709-4714.
- Meletakos, P., Bayios, I., Hatziharistos, D., Psychountaki, M. (2013). Effects of athletic and coaching experience on coaching efficacy in team sports. Gazzetta Medica Italiana Archivio per le Scienze Mediche, 172(6), pp. 457-464
- Myers, N. D., Chase, M. A., Pierce, S. W., & Martin, E. (2011). Coaching efficacy and exploratory structural equation modeling: A substantive-methodological synergy. *Journal of Sport and Exercise Psychology*, 33(6), 779-806.
- Myers, N., Feltz, D., & Chase, M. (2011). Proposed modifications to the conceptual model of coaching efficacy and additional validity evidence for the coaching efficacy scale II-high school teams. Research quarterly for exercise and sport, 82(1), 79-88.
- Myers, N. D., Feltz, D. L., Chase, M. A., Reckase, M. D., & Hancock, G. R. (2008). The Coaching Efficacy Scale II—High School Teams. *Educational and Psychological Measurement*, 68(6), 1059-1076.
- Myers, N. D., Feltz, D. L., & Wolfe, E. W. (2008). A confirmatory study of rating scale category effectiveness for the coaching efficacy scale. *Research Quarterly for Exercise and Sport*, 79(3), 300-311.
- Myers, N. D., Vargas-Tonsing, T. M., & Feltz, D. L. (2005). Coaching efficacy in intercollegiate coaches: Sources, coaching behavior, and team variables. Psychology of Sport and Exercise, 6(1), 129-143.
- Myers, N. D., Wolfe, E. W., & Feltz, D. L. (2005). An evaluation of the psychometric properties of the coaching efficacy scale for coaches from the United States of America. *Measurement in Physical Education and Exercise Science*, 9(3), 135-160.
- Phillips, A. C., Strauss, J., & Weiss, M. R. (2011). Utilizing Bandura's model of self-efficacy to expand current concepts of coaching efficacy. *Journal of Sport & Exercise Psychology*, 33, pp. S177-S178. 1607 Market St, Po Box 5076, Champaign, Il 61820-2200 USA. Human Kinetics Publ Inc.
- Smoll, F. L., & Smith, R. E. (1989). Leadership behaviors in sport: A theoretical model and research paradigm. *Journal of Applied Social Psychology*, 19, 1522–1551.
- Sullivan, P. J., & Kent, A. (2003). Coaching efficacy as a predictor of leadership style in intercollegiate athletics. *Journal of Applied Sport Psychology*, 15(1), 1-11.
- Sullivan, P., Paquette, K. J., Holt, N. L., & Bloom, G. A. (2012). The relation of coaching context and coach education to coaching efficacy and perceived leadership behaviors in youth sport. *The sport psychologist*, 26(1), 122-134.
- Thelwell, R. C., Lane, A. M., Weston, N. J., & Greenlees, I. A. (2008). Examining relationships between emotional intelligence and coaching efficacy. *International Journal of Sport and Exercise Psychology*, 6(2), 224-235.
- Weinberg, R. S., & Gould, D. (2008). Fundamentos da Psicologia do Esporte e do Exercício. (4th ed.). Porto Alegre: Artmed.
- Weinberg, R. S., and Gould, D. (2011). Foundations of sport and exercise psychology. (5th ed.). Champaing, IL: Human Kinetics.
- Wu, C. (2009). Factor analysis of the general self-efficacy scale and its relationship with individualism/collectivism among twenty-five countries: Application of multilevel confirmatory factor analysis. *Personality and individual differences*, 46, 699-703.