

COPING IN SOCCER ATHLETES: A SYSTEMATIC REVIEW

ENFRENTAMENTO EM ATLETAS DE FUTEBOL: UMA REVISÃO SISTEMÁTICA

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RESUMO

Objetivo: Revisar sistematicamente os estudos que investigaram o coping no futebol. **Métodos:** Foi realizada busca sistêmica nas seguintes bases de dados: Pubmed, Web of Science, Scielo, Scopus, PsychINFO e SPORTDiscus. Os descritores relacionados aos termos (Habilidades de enfrentamento, Esporte e Futebol) foram verificados na base de dados MeSH (Medical Subject Headings). Os critérios de inclusão utilizados foram: Estudos empíricos publicados em periódicos artigos científicos revisados por pares; b) Estudos publicados de dezembro de 2014 a dezembro de 2019; c) com pelo menos uma medida quantitativa; d) Estudos com amostras de atletas de futebol; e e) Artigos com referência específica ao tema 'Habilidades de enfrentamento'. **Resultados:** Os resultados mostraram que as habilidades de enfrentamento interagem com variáveis importantes para o bom desempenho no futebol de elite, como nível competitivo, talento esportivo, psicopatologias, faixa etária e sexo. Mais especificamente, notou-se que o desenvolvimento de algumas estratégias de enfrentamento, como enfrentar adversidades, confiança/motivação e desempenho sob pressão, são potencialmente comuns a essas variáveis. **Conclusão:** Conclui-se que o desenvolvimento de algumas estratégias de enfrentamento é fundamental para o atleta de elite, pois está positivamente associado ao desenvolvimento ótimo da maioria das variáveis analisadas nos estudos sintetizados.

Palavras-chave: Estratégias de enfrentamento; Esporte; Futebol

ABSTRACT

Objective: Review the studies that investigated coping in soccer. **Methods:** A systemic search was carried out in the following databases: Pubmed, Web of Science, Scielo, Scopus, PsychINFO and SPORTDiscus. The descriptors related to the terms (Coping skills, Sport and Football) were verified in the MeSH (Medical Subject Headings) database. The inclusion criteria used were: Empirical studies published in journals peer-reviewed scientific papers; b) Studies published from December 2014 to December 2019; c) with at least one quantitative measure; d) Studies with samples of soccer athletes; and e) Articles with specific reference to the topic 'Coping skills'. **Results:** The results showed that coping skills interact with important variables for good performance in elite soccer, such as competitive level, sports talent, psychopathologies, age group and sex. More specifically, it was noted that the development of some coping strategies, such as facing adversity, trust/motivation and performance under pressure, are potentially common to these variables. **Conclusion:** It is concluded that the development of some coping strategies is fundamental to the elite athlete, since it is positively associated with the optimal development of most of the variables analyzed in the synthesized studies.

Keywords: Coping strategies; Sport; Soccer

Introduction

In the last years, an increase in the number of youth athletes integrated to the most varied sports modalities with high physical, technical and tactical demand has been noticed¹. Among these modalities, soccer is highlighted for its worldwide popularity² and great visibility in the media. Such scenario attracts more investors, increasing the responsibilities of the clubs and athletes, who, in turn, are more required to achieve higher performance standards³. In this perspective, places for soccer practice, training and competitions have been used as a great laboratory to understand how these athletes behave when facing countless difficulties in the sport⁴. It is worth pointing out that the success of the athlete in sport depends on his/her ability to adapt to the specific requirements of the sport⁵.

A psychological ability that aids athletes in overcoming the most varied difficulties in high performance sports are the coping strategies⁶. The coping strategies are cognitive resources that gather the interaction between thought ability and behavior action, by which the individual is able to deal with the most varied stressing situations⁷. Thought ability acts in the evaluation of the importance that the individual give to a problem-causing situation, while behavior action regards the actions that a person takes to manage the occurrences provoked by stressing situations⁸. Such cognitive resources can be used to solve the problem (when used to face the stress-causing problem) and can be guided by emotion, which refers to the control of the negative emotions caused by stress⁹.

When strategies are used to solve the problem, the athlete gathers all his/her resources in order to solve the problem, manage the situation and eliminate the agents that are causing the problem¹⁰. While when the strategies for facing the problem are guided by emotions, the athlete seeks to control emotions, analyze the problem under another point of view and avoid thinking about the stressing agent¹¹. The strategies for facing problems are mostly used when the individual cannot overcome the stressing agent, however, he/she needs to continue to interact with it^{12,13}. These two functions are linked, since as the individual uses coping strategies to overcome the problem, he/she automatically helps to regulate negative emotions caused by stress. The opposite is also true, since when the individual uses strategies directed to control emotions, he/she automatically ends up helping to solve the problem¹³.

Moreover, Britton et al.¹⁴ verified, in a study with 229 youth athletes, that the use of coping strategies directed to the performance of tasks presented a linear association with positive emotions, while poorly adaptive strategies were negatively related to satisfaction with sports performance. However, Nicholls et al.¹⁵ findings diverge from Britton's study, since the authors concluded that the use of coping strategies directed to control of emotions cannot contribute to the optimization of sports performance. Moreover, poorly adaptive coping strategies are considered one of the main causes of burnout and depression, psychic diseases that can compromise an athlete's performance¹⁶.

In order to verify the importance of coping abilities in sports success, Van Yperen¹⁷ followed young athletes for 15 years, and observed that the athletes that managed to build a career throughout this period were the same ones that best used coping strategies based on problem solving. A systematic review by Sabato et al.¹ concluded that the use of coping abilities directed to problem solving can contribute to sports performance, as well as to reduce injuries in youth elite athletes. It is noted that strategies for facing problems are essential psychological elements for both sports success¹⁸ and athlete's mental health¹⁹. Also, it is known that for a better understanding of the relevance of psychological constructs, a thorough investigation regarding its role in a specific population is necessary.

According to Petticrew and Roberts²⁰, systematic reviews are methods of investigation of areas in which is possible to reveal if little or no relevant study has been performed, and direct new investigations. Therefore, the development of a wide understanding about the use of coping strategies for soccer athletes has the potential to promote models to manage these abilities in this population, which, consequently, can aid in the optimization of development, since it will seek to identify common strategies to the optimal development of variables that are important to elite soccer. This concept is necessary to provide guidance for coaches, medical staff, sports psychologist, and for the development of the coping skills of athletes⁶.

In this scenario, the present systematic review aims to strengthen the discussion regarding studies that investigate coping skills in soccer athletes and to describe the profile of the studies available in literature, as well as to synthesize researches about the theme and identify possible gaps in literature in order to contribute with future studies. Thus, the aims of the present systematic review were: Review the studies that investigated coping in soccer.

Methods

Study design

The present study is a systematic review and was conducted according to the recommendations of the Cochrane Handbook for Systematic Reviews of Interventions²¹ and of the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA)²². The present study was registered in the International Prospective Register of Systematic Reviews (PROSPERO), April 28, 2020 (N° CRD42020161168).

Eligibility

Empirical studies published in peer-reviewed journals, of which participants had to be soccer players, were eligible. In order to determine the quality of the observational studies, the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guidelines were used²³. The inclusion criteria adopted in this systematic review were: a) empirical studies published in peer-reviewed scientific journals; b) studies published between December of 2014 and December of 2019; c) studies with results containing at least on quantitative measure (for example, points and scores); d) studies with samples of soccer players; and e) studies with specific reference to “coping skills”. The exclusion criteria were the following: a) non-empirical or theoretical studies, doctorate or master’s degree thesis, book or newspaper chapters, sports diaries, as well as records from seminars or meetings published in peer-reviewed journals that were later published as articles in other journals; b) empirical studies published in journals with peer-review but without free access; c) studies that only used qualitative analysis; d) reviews of literature; and e) studies that did not approach the theme.

Sources of information and search strategies

The initial search strategies were conducted without language restriction, up to 2019, and included the use of the following research databases: PubMed, Web of Science, Scielo, Scopus, PsychINFO and SPORTDiscus. Studies published in a 5-year period, from December of 2014 until December of 2019, were included, the time arc of only 5 years is justified by the fact that a recent meta-analysis, without time limit, has explored the coping skills in athletes including football¹⁵. The research databases were selected based on the evaluation of the databases indexed in the journals with highest impact factor of the national and international literature.

Specific search strategies were performed for each used research database. However, the same descriptors were used in all of them. The descriptors were verified in the Medical Subject Headings (MeSH) database and in specific studies of the area (Chart 1). The Boolean operators “AND” and “OR” were applied in the search strategies in the databases.

Coping skills - (“Adaptation Psychologic” OR “Psychologic Adaptation” OR “Psychological Adaptation” OR “Coping Behavior” OR “Behavior Coping” OR “Behaviors, Coping” OR “Coping Behaviors” OR “Coping Skills” OR “Coping Skill” OR “Skill, Coping” OR “Skills Coping” OR “Behavior Adaptive” OR Adaptive Behavior” OR Adaptive Behaviors” OR “Behaviors Adaptive”)
Sport - AND (“sport” OR “sportgel” OR “sporting” OR “sports”)
Soccer - AND (“soccer” OR “soccers” OR “football”)

Chart 1. Search strategies in the databases

Source: authors

Selection of the studies

The initial selection of the studies was based on the searches performed regarding theme, keywords, abstracts and titles. The titles and abstracts of the studies lead to the reading of the full text to verify the eligibility criteria and, thus, include or exclude the studies. Two reviewers (A and B) independently performed the choice of the selected studies. A third reviewer (C) solved eventual disagreements.

Process of data extraction

The extraction of information of the studies was individually and independently performed. Considering that the aim of the present study was to synthesize existing studies regarding coping skills, the articles that fitted in the inclusion criteria were identified. After choosing these articles, they were systematically reviewed in order to extract relevant information.

This process involved an exhausting analysis of each study in order to retrieve representative characteristics. More specifically, to identify and summarize the type of study, objectives of each study, participants, and main conclusions that the articles presented regarding coping skills in soccer athletes.

This individual analysis revealed that the studies that were included presented similar design, however, it was possible to observe a heterogeneity in the variables that interacted with coping in the investigations. Nonetheless, the lack of randomized clinical trials made it impossible to perform a meta-analysis and, thus, a standard evaluation of risk of bias. Instead of that, all studies were evaluated to portray their quality based on the established standards.

More precisely, 100% of the studies presented descriptive characteristics and cross-sectional design. However, the studies used in this review investigated the interactions of coping skills in soccer athletes with distinct variables, such as: burnout and time of practice, anthropometrical characteristics, soccer talent, motivation among different categories and competitive level. In order to synthesize and systematize the selected articles, three steps were performed: 1) organization of the studies in logical categories; 2) analysis of the results in each category; and 3) synthesis of the results of all studies included.

Results

The initial results of the research in literature presented 286 references, from which 245 were removed due to duplicity, title and/or abstract, and 36 for not attending to all inclusion criteria; 17 they were not studies with specific reference to coping skills and 19 were not composed exclusively of studies with samples of soccer players. Thus, five references remained in the study as were included for definitive analysis, as shown in Figure 1. All studies included in the review met all points of the STROBE guidelines for observational studies.

After the process of selecting articles, the remaining studies were summarized and their main characteristics were extracted. However, due to the heterogeneity of the studies in their characteristics, design and diversity of variables analyzed, and their interaction with coping, it was not possible to perform a division by categories. Instead, the studies were individually analyzed under a single category named “Studies involving the interaction of coping skills with other constructs”.

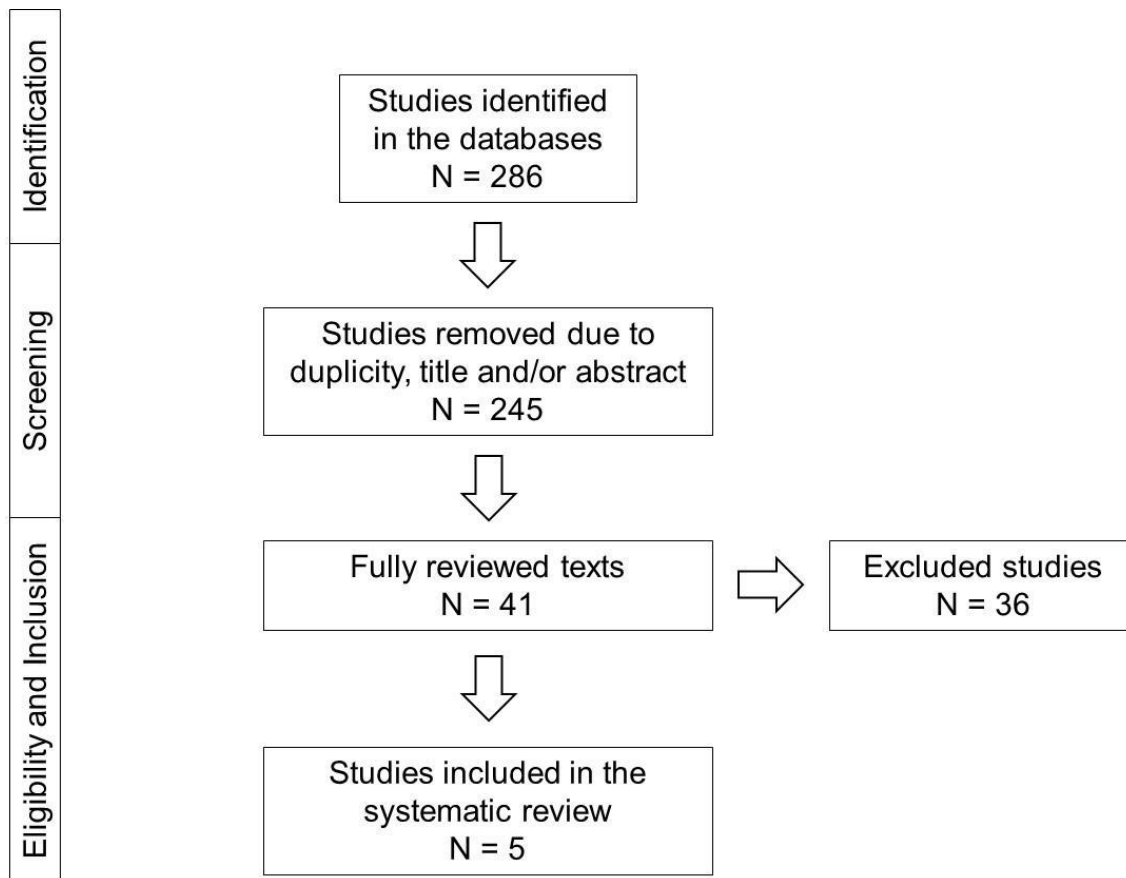


Figure 1. Results of the strategy of study selection.

Source: authors

Chart 2 presents the only category described, and illustrates, in a summarized way, all studies that were included, considering author, aim of the study, participants, instruments and conclusions. Five studies regarding coping skills in soccer athletes were analyzed. All studies were quantitatively analyzed and presented descriptive characteristics with cross-sectional design. The number of participants in the studies varied from 54 to 425, and the ages were between 13 and 40 years. The studies were conducted with samples composed predominantly by male athletes (4 studies, 80.0%). Moreover, athletes who played in amateur and/or were professional athletes of elite soccer clubs composed all studies. The instrument used to analyze coping strategies, in all studies, was the Athletic Coping Skills Inventory (ACSI-28).

Regarding the validation of this instrument, it was developed by Smith et al.²⁴ and validated for the Brazilian context by Miranda et al.²⁵. It consists of measuring the coping strategies for facing stress, or “coping skills”, of athletes. The instrument has 28 items divided in seven dimensions composed by four items each. The dimensions of the ACSI-28BR were defined as follows: Facing adversity; Performance under pressure; Goals/Mental preparation; Focus; Free of worries; Trust/Motivation; and Trainability. The items are answered in a likert type scale from “0” (almost never) to “3” (almost always), varying from 0 to 12 points in each subscale. The sum of all subscales is called “Personal Coping Resource”.

Authors	Aims of the study	Participants	Instruments	Conclusions
<i>Oliveira et al.</i> ²⁶	This study investigated the association between coping and motivation in professional and amateur soccer players from a team in the elite division of the Brazilian soccer league.	182 footballers in two different stages of their career.	Sports Motivation Scale (SMS) and Athletic Coping Skills Inventory (ACSI-28).	It was concluded that, for professional athletes, autonomic motivation is a key factor to increase coping, while the same association was not found in amateur players.
<i>Orosz, Mezo</i> ²⁷	This study examined the role of psychologic factors in the development of talents in soccer.	425 soccer players from the Junior and Adolescent Championships of the first division of the Hungarian Soccer League.	Sporting Background Questionnaire, Tennessee Self-Concept Scale (TSCS – Hungarian version), Psychological Immunology Competence Inventory (PICI), Athletic Coping Skills Inventory (ACSI-28), Advanced Progressive Matrix (APM), Questionnaire of Co-Athlete and Coach Questionnaire.	More talented players showed more favorable values in each of the 27 intra- and interpersonal dimensions. The study also concluded that the development of psychologic factors (for instance, focus, lack of anxiety, self-confidence, coping skills and social skills), in an integrative approach, can increase personal efficiency in the development of high mental skills in soccer.
<i>Pires et al.</i> ¹³	This study aimed to analyze the correlation between the following variables in professional soccer players: a) dimensions of burnout vs. coping strategies; b) time of practice as a registered athlete vs. dimensions of burnout; c) time of practice as a registered athlete vs. coping strategies.	54 professional athletes from the first division of the 2018 Pará State Championship.	Athletic Coping Skills Inventory (ACSI-28) and Athlete Burnout Questionnaire (ABQ).	The main findings of the study point that athletes with more time of practice as registered players tend to present better performance under pressure, and the development of the trainability strategy can be useful for the perception of sports accomplishment in athletes.
<i>Csáki et al.</i> ²⁸	This study aimed to examine the psychological abilities of soccer athletes from an elite soccer training center and associate them with age and position.	119 youth athletes from one of the biggest and most successful soccer training center in the country (mean age 16.44 ± 1.17 years).	Sport Motivation Scale (SMS), Perceived Motivational Climate in Sport Questionnaire (PMCSQ-2) and Athletic Coping Skills Inventory (ACSI-28).	The sample was divided in four age groups according to the championship's system (U-16, U-17, U18 and U-21), and in specific soccer positions (goalkeeper, defender, midfielder and striker). Based on the results, the youth athletes of the training center presented low levels of motivation (1.45 ± 0.68), high levels of extrinsic motivation (5.96 ± 0.64) and can be characterized with a task (4.02 ± 0.62) higher than the ego (3.01 ± 0.62). All results for coping skills were considered medium ($M = 3.00-3.41$).
<i>Rossi et al.</i> ²⁹	To analyze and compare coping strategies between female high performance soccer athletes and practitioners.	56 athletes divided in two groups: G1- high performance female athletes and G2 – female soccer practitioners.	Athletic Coping Skills Inventory-28 (ACSI-28)	High performance athletes presented better results in all dimensions, except “trainability” and “free of worries”, when compared to the female soccer practitioner's group.

Chart 2. Characteristics of the studies included in the systematic review.

Source: authors

Specifically, one study analyzed how the relationship between coping strategies and intrinsic and extrinsic motivation occurs according to the competitive level of the athlete²⁶. While another study investigated which coping skills are associated with the perception of

success and competence according to the sports talent of youth soccer athletes²⁷. Pires et al. 2019¹³, on the other hand, analyzed the coping strategies used by professional athletes as a function of time as a registered athlete, in addition to the association between coping skills and burnout syndrome. Moreover, Csáki et al.²⁸ examined how coping skills are related to age and position in youth elite soccer athletes. Lastly, one study analyzed how coping skills are characterized in female soccer athletes that play high performance soccer and women who practice recreational soccer²⁹.

Discussion

Considering the results and the synthesis of the studies included in the present systematic review, it was possible to observe that coping skills interact with variables that are relevant in elite soccer, such as competitive level, sports talent, psychopathologies, age and sex. Thus, this shows the importance of developing an efficient management of strategies for facing stress in elite sports. More specifically, it is noted that coping strategies, such as facing adversity, trust/motivation and performance under pressure, are potentially common to the good development of these variables.

Scientific evidence indicates that high performance athletes are more susceptible to problems derived from a poor management of the uncountable stressors that act in sports³⁰. Allied to this are training and competitions, which have extremely high psychical and emotional demands on athletes^{31,32}. In this scenario, Oliveira et al. 2016²⁶ investigated 182 professional and amateur soccer athletes, and concluded that professional athletes performed the activities simply motivated by the pleasure that the activities provided. According to the authors, this behavior was capable of explaining up to 36% of the success of these athletes when facing several difficulties of elite sports (major mistakes, loss of position in the team, injuries, red cards). On the other hand, Rossi et al.²⁹ conducted a similar study with female soccer athletes and concluded that higher performance athletes performed better when they were required to increase their physical and technical levels in training and competitions. They are also able to perform their daily activities, training and competitions with more focus. In this scenario, only the strategies that referred to athletes being more confident and motivated in training and competitions were similar between both studies.

Other study investigated 425 elite soccer athletes from Hungary and found that the same coping strategies cited by Oliveira et al. 2016²⁶ were also associated to athletes' sports talent. It was possible to notice that more talented athletes behave more adequately when facing difficult moments in soccer (major mistakes, loss of position in the team, injuries, red cards, etc.). They are also better at planning of goals and objectives to achieve, focusing in training and competitions, not worrying with mistakes and/or low performance in training and competitions²⁷.

Moreover, coping strategies were also associated to psychologic illnesses such as the burnout syndrome. In a study with 54 professional athletes who played the Pará State Championship, it was possible to conclude that a good planning of goals and objectives to achieve, as well as being confident and motivated in training and competition can decrease the physical and emotional fatigue and the feeling of being unsuccessful in the sport. Moreover, athletes who had been registered for longer periods were less worried with mistakes and/or the possibility of not training or playing well, and were the ones who better reacted to the pressure for better performing¹³.

Lastly, when analyzing the coping skills, according to age and position, of 119 youth elite athletes from the most successful soccer training center in Hungary, Csáki et al.²⁸ concluded that age seems to be a factor that interferes in coping skills. According to the authors, being older favours the performance of the athlete when he/she is required to improve

performance in trainings and competitions. However, being younger seems to contribute to a better performance only in training.

In short, intrinsic motivation is a predictive variable of good use of coping strategies. In other words, an athlete that plays for the pleasure of practicing can successfully overcome most part of the stressing agents presents in sport, independently of sex. Moreover, athletes with higher competitive levels and with the most talent are able to better manage stress in sport when compared to the less talented and of lower levels. In addition, the efficient use of some coping strategies can attenuate the psychopathologies caused by chronic stress. Lastly, more experience athletes can better develop their strategies for facing stress.

Despite its contributions to the literature and future discussions on coping, this systematic review has some limitations, such as the low number of studies included due to the limitation of studies that investigated coping in soccer players, as well as in relation to the methodological criteria adopted, such as the inclusion of studies with a sample composed exclusively of soccer players. This results in little contribution regarding the analysis of coping with other psychological constructs. Thus, it is possible that some psychological constructs were not included in this review. Moreover, future studies should consider experimental and longitudinal approaches, since these studies help to establish a more precise conclusion regarding the use of coping skills and its variations throughout different moments of the season.

Conclusion

The present findings contribute to literature since they identify a lack of experimental and longitudinal studies in different moments of the season. In addition, the present study can help coaches, psychologists and sports professionals to identify, on a daily basis, behaviors that show lack of motivation, focus on work and activities, decrease in performance when pressured to improve, and problems when dealing with stress. In addition, studies showed that the development of coping skills positively interacted with most of the variables investigated in the synthesized studies. Therefore, interventions and guidance are essential to direct youth players in developing adequate strategies when facing stressing agents, and, consequently, improving the athletes' performance.

References

1. Sabato TM, Walch TJ, Caine DJ. The elite young athlete: strategies to ensure physical and emotional health. *Op. acc. journal of sports med.* 2016; v.7:99-113. DOI:10.2147/oajsm.s96821
2. Ritzer G, editor. *The Wiley-Blackwell encyclopedia of globalization*. Chichester, UK/Malden, MA: Wiley Blackwell; 2012.
3. Giacomoni C, Fonseca GMM. Principais indicadores de burnout em jovens atletas de futebol. *Rev. Mackenzie Educ. Fis. e Esporte* 2014[cited on Apr 12 2023];v.13(2). Disponível em: <http://editorarevistas.mackenzie.br/index.php/remef/article/view/4975>
4. Fletcher D, Sarkar MA grounded theory of psychological resilience in Olympic champions. *Psyc. sports and ex.* 2012;v.13(5):669-78. DOI: doi.org/10.1016/j.psychsport.2012.04.007
5. Sarkar MA, Fletcher D. Psychological resilience in sport performers: a review of stressors and protective factors. *J. sports sci.* 2014;v.32(15):1419-1434. DOI: 10.1080/02640414.2014.901551
6. Nicholls AR, Polman RCJ. Coping in sport: A systematic review. *J. Sports Sci.* 2007;25(1):11-31. DOI: doi.org/10.1080/02640410600630654
7. Nicholls AR, Ntoumanis N. Traditional and new methods of assessing coping in sport. In: Nicholls AR, editor. *Coping in Sport, Theory, Methods and Related Constructs*. Nova Science Publishers. UK ed, Nicholls AR. 2010;35-51.
8. Lazarus RS, Folkman S. *Stress, appraisal, and coping*. Springer publishing company. New York, 1984.
9. Folkman S, Lazarus RS. An analysis of coping in a middle-aged community sample. *J. health and soc. behav.* 1980;219-239. DOI: doi.org/10.2307/2136617

10. Lazarus RS, Folkman S. Transactional theory and research on emotions and coping. *Eur. J. personality* 1987;1(3):141-169. DOI: doi.org/10.1002/per.2410010304.
11. Lazarus RS. From psychological stress to the emotions: A history of changing outlooks. *Ann. rev. Psych.* 1993[cited on Apr 12 2023];44(1):1-22. Disponível em: <https://www.annualreviews.org/doi/pdf/10.1146/annurev.ps.44.020193.000245>
12. Tamayo MR, Tróccoli BT. Exaustão emocional: relações com a percepção de suporte organizacional e com as estratégias de coping no trabalho. *Estud. Psicol. (Natal)* 2002;7(1):37-46. DOI: doi.org/10.1590/S1413-294X2002000100005.
13. Pires DA, Ferreira RW, de Vasconcelos ÂS, Penna EM. Dimensões de burnout, estratégias de coping e tempo de prática como atleta federado em jogadores profissionais de futebol. *Cuad. Psicol. Deporte.* 2019;19(2):175-85. DOI: doi.org/10.6018/cpd.340741.
14. Britton DM, Kavanagh EJ, Polman RCJ. A path analysis of adolescent athletes' perceived stress reactivity, competition appraisals, emotions, coping, and performance satisfaction. *Front. Psych.* 2019;v.10:1151. DOI:10.3389/fpsyg.2019.01151.
15. Nicholls AR, Taylor NJ, Carroll S, Perry JL. The development of a new sport-specific classification of coping and a meta-analysis of the relationship between different coping strategies and moderators on sporting outcomes. *Front. Psych.* 2016;7:1674. DOI: 10.3389/fpsyg.2016.01674.
16. Gerber M. et al. Effects of stress and mental toughness on burnout and depressive symptoms: A prospective study with young elite athletes. *J. Sci. Med. Sport* 2018;21(12):1200-1205. DOI: doi.org/10.1016/j.jsams.2018.05.018.
17. Van Y, Nico W. Why some make it and others do not: Identifying psychological factors that predict career success in professional adult soccer. *Sport Psych.* 2009;23(3):317-329. DOI: 10.1123 / tsp.23.3.317.
18. Gaudreau P, Nicholls A, Levy AR. The ups and downs of coping and sport achievement: An episodic process analysis of within-person associations. *J. Sport Exer. Psych.* 2010;32 (3):298-311. DOI: doi.org/10.1123/jsep.32.3.298.
19. Clement D, Ivarsson A, Tranaeus U, Johnson U, Stenling A. Investigating the influence of intraindividual changes in perceived stress symptoms on injury risk in soccer. *Scandinavian J. Med. Sci. Sports.* 2018; 28(4):1461-6. DOI:10.1111/sms.13048.
20. Petticrew M, Roberts H. *Systematic reviews in the social sciences: A practical guide.* John Wiley & Sons 2008.
21. Higgins JP, Altman DG. Assessing risk of bias in included studies. In: Jiggins JP, Thomas J, Chandler J, Cumpston M, Li T, Page MJ et al., editors. *Cochrane handbook for systematic reviews of interventions: Cochrane book series.* Hoboken: Wiley-Blackwell; 2008, p.187-241. DOI: <https://doi.org/10.1002/9780470712184.ch8>
22. Galvão TF, Pansani TSA, Harrad D. Principais itens para relatar Revisões sistemáticas e Meta-análises: A recomendação PRISMA. *Epidemiol. Serv. saúde* 2015; 24:335-342. DOI: 10.5123/S1679-49742015000200017.
23. Malta M, Cardoso LO, Bastos FI, Magnanini MM, Silva CM. STROBE initiative: guidelines on reporting observational studies. *Rev. saúde pública.* 2010;44:559-65.
24. Smith RE, Schutz RW, Smoll FL, Ptacek JT. Development and validation of a multidimensional measure of sport-specific psychological skills: The Athletic Coping Skills Inventory-28. *J. sport. Exer. Psych.* 1995;17(4):379-98. DOI: doi.org/10.1123/jsep.17.4.379.
25. Miranda R, Coimbra DR, Bara Filho MG, Miranda Júnior MV, Andrade A. Brazilian version (ACSI-28BR) of athletic coping skills inventory-28. *Rev. Bras. Med. Esporte.* 2018;24:130-4. DOI: doi.org/10.1590/1517-869220182402160980.
26. de Oliveira LP, do Nascimento Junior JR, Vissoci JR, Ferreira L, da Silva PN, Vieira JL. Motivación autodeterminada y estrategias de afrontamiento en futbolistas: Un estudio con jugadores en diferentes fases de desarrollo deportivo. *Rev. Psicol. deporte.* 2016;25(2):261-9. Disponível em: <https://www.redalyc.org/pdf/2351/235146515007.pdf>
27. Orosz R, Ferenc MEZO. Psychological factors in the development of football-talent from the perspective of an integrative sport-talent model. *J. Educ. Gift. Young Sci.* 2015;3(1):58-76. DOI: 10.17478/JEGYS.2015112018.
28. Csáki I, Szakály Z, Fózer-Selmec B, Kiss SZ, Bognár J. Psychological and anthropometric characteristics of a Hungarian elite football academy's players. *Phys. Cult. Sport. Stud. Res.* 2017;73 (1):15-26. DOI: 10.1515/pccsr-2017-0002.
29. Rossi MR, Vitorino LM, Salles RP, Cortez PJO. Estratégias de coping em atletas de futebol feminino: Estudo comparativo. *Rev. Bras. Med. Esporte* 2016;22 (4): 282-286. DOI: doi.org/10.1590/1517-869220162204160572.
30. Isoard-Gauthier S, Guillet-descas E, Gustafsson H. Athlete burnout and the risk of dropout among young elite handball players. *Sport Psych.* 2016;30(2):123-30. DOI: doi.org/10.1123/tsp.2014-0140

31. Hughes L, Leavey G. Setting the bar: athletes and vulnerability to mental illness. *British J. Psych.* 2012; 200 (2):95-96. DOI.org/10.1192/bjp.bp.111.095976.
32. Reardon CL, Factor RM. Sport psychiatry. *Sports Med.* 2010; v.40(11):961-980. DOI: <https://doi.org/10.2165/11536580-000000000-00000>

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