

Sport and Family related to academic performance: an integrative review

ARTICLE

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Abstract

The aim of this study was to carry out an integrative review related to the sports, family and academic contexts, using Botelho, Cunha and Macedo (2011) as a reference. Of the nine studies selected, the largest number were on the European and American continents. The majority of the studies were quantitative and, in terms of variables, there was a prevalence in the analysis of the influence of sport on academic performance. The link between the studies was sports practice, but the analysis of other variables made each study unique. Three categories emerged: Sport-School, Sport-Family-Academic Performance, and Sport-Academic Performance. The studies point out barriers, but suggest that through family and school support, these difficulties can be minimized. In addition, they recommend drawing up educational policies on the importance of physical activity and sports practice for the development of children and adolescents.

Keywords: Sport. Family. Academic achievement.

Esporte e família relacionados ao desempenho acadêmico: uma revisão integrativa

Resumo

O objetivo deste estudo foi realizar uma revisão integrativa relacionada aos contextos esportivo, familiar e acadêmico, utilizando como referência Botelho, Cunha e Macedo (2011). Dos nove estudos selecionados, o maior número concentra-se nos continentes europeu e americano. As pesquisas, em sua maioria, foram quantitativas e, nas variáveis, identificou-se prevalência na análise da influência do esporte no desempenho acadêmico. O elo entre os estudos foi a prática esportiva, mas a análise de outras variáveis tornou cada pesquisa única. Três categorias surgiram: Esporte-Escola, Esporte-Família-Desempenho Acadêmico, e Esporte-Desempenho Acadêmico. Os estudos apontam barreiras, mas sugerem que, por meio do suporte da família e da

escola, tais dificuldades podem ser minimizadas. Além disso, recomendam a elaboração de políticas educacionais sobre a importância da atividade física e da prática esportiva para o desenvolvimento de crianças e adolescentes.

Palavras-chave: Esporte. Família. Desempenho acadêmico.

1 Introduction

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Sport, as a socio-cultural manifestation, shows itself in different ways, with new meanings and in different contexts. According to Galatti *et al.* (2018), these meanings can be interrelated, as they are neither isolated nor stable. Due to its complexity and dynamism, contemporary sport is constantly changing, with new possibilities and characteristics (Marques, 2015). The sports environment, therefore, can influence and be influenced by the other contexts in which the individual is inserted (Rosa; Vagetti; Oliveira, 2023). The family is often responsible for introducing children to sport and plays an important role in their sporting career (Vis soci *et al.*, 2020).

The study by Fonseca and Stela (2015) identified the importance of building a healthy environment, promoted by parental encouragement, for the development of potential, safety and motivation for children to practice futsal. Folle *et al.* (2018) identified this positive support from family involvement in the sports training process of basketball athletes, boosting the athletes' confidence in their own abilities, especially among those who are less skilled and mature enough to make decisions in their personal and sporting lives.

On the other hand, the study by Alves and Becker (2021) noted the contributions of sport to the development of children and adults, emphasizing that parental expectations and demands can harm both the athlete's performance and their personal development, i.e. parental support can either maintain and sustain sports practice or interrupt it. In this sense, Suárez-Ortega and Moreno (2022), in their study on the impact of extracurricular sports activities on children and adolescents at school, point out that a lack of family support can lead to psychological problems as well as social risks due to the pressure for results.

Another context that plays a fundamental role in the development of children and adolescents is school, where they spend a large part of their lives. In their systematic review on the family-school relationship, Saraiva-Junges and Wagner (2016) understand that the family and school are systems that share the task of educating and socializing children and young people, and can therefore act as supporters of sports practice.

The study by Peserico, Kravchychyn and Oliveira (2015) verified the similarity between the school performance of athletes and other students. The authors concluded that there is no interference from sports practice on school performance. However, they emphasized the importance of properly guiding student athletes in their routines and supporting them in their difficulties, since they observed insufficient interaction between teachers and school sports activities.

Sulz *et al.* (2022) found, through the participants' perceptions, that school sports practice offered health benefits and developed skills and behaviors that support positive educational experiences, promoting life skills, as well as reducing results that are detrimental to academic performance and well-being. In this perspective, Lunardelli *et al.* (2023) systematically reviewed the contribution of school and family to the development of life skills in the context of sports training and concluded that family and school support in sport can contribute to the acquisition, refinement and transfer of skills that influence individuals' lives.

In addition, Milan *et al.* (2023) suggest that there should be an expansion of studies to understand the influence of parents on sports socialization related to human development, which corroborates that this review can consolidate evidence, synthesize the literature and guide future research.

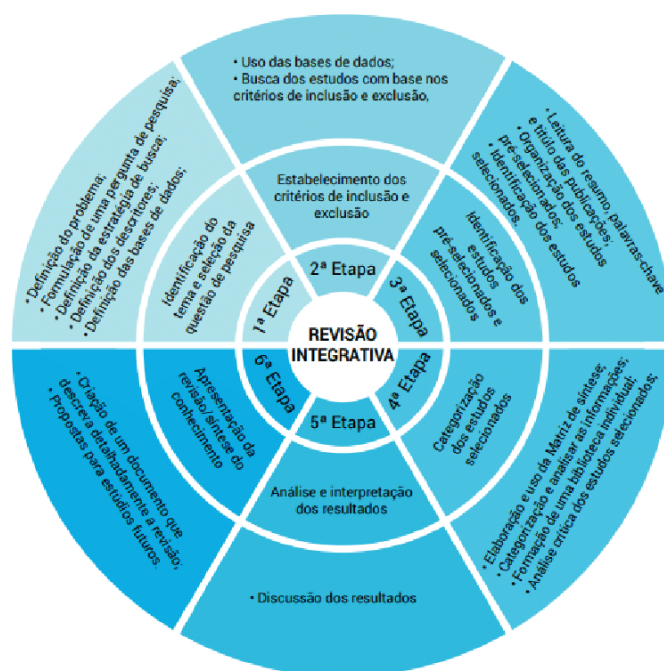
Therefore, the studies indicate that sport is an important tool for people's integral development. The question then arises: what is the influence of the sporting and family context on academic performance? In order to address this question, the aim of this study is to carry out an integrative review of the sporting, family and academic contexts.

2 Methodology

The integrative review makes it possible to systematize, synthesize and analyse the scientific knowledge already produced on the subject under investigation (Botelho; Cunha; Macedo, 2011). Therefore, an integrative literature review was conducted to examine research related to the phenomenon under study, which, in this case, is associated with the sports, family and academic contexts.

In this review, the search time frame covers the last ten years of scientific production (2013 to 2023), and the search period took place between June and August 2023. The 10-year cut-off provides a broader and more detailed view to increase the validity and reliability of the results found. The process proposed was the Botelho, Cunha and Macedo (2011) protocol, which guided this integrative review, characterized by six stages, as shown in Figure 1:

Figure 1 - Integrative review process.



Source: Botelho, Cunha e Macedo (2011).

In the first stage, after identifying the topic and selecting the research question: “what is the influence of the sporting and family context on academic performance?”, the literature search process took place. Combinations between the descriptors and the Boolean operator AND were used, resulting in the combination of the terms: sport AND family AND academic performance. It should be noted that the terms used are indexed on the Health Sciences Descriptors (DeCS) platform.

Scientific articles were searched in the following electronic databases: Brazilian Digital Library of Theses and Dissertations (BDTD), Virtual Health Library (BVS), Catalog of Theses and Dissertations, Eric, Periódicos Capes, PubMed/Medline, SciELO, Scopus, SportDiscus and Web of Science, all available on the portal of the Coordination for the Improvement of Higher Education Personnel (CAPES). The studies found were in English, Portuguese and Spanish.

After defining the databases, the second stage began with the search process, taking into account the inclusion criteria, such as original and review articles in Portuguese, English or Spanish, published in the last ten years, open access articles, theses and dissertations, book chapters and other documents of interest. Exclusion criteria were: studies irrelevant to the topic, articles not related to sport or that did not answer the guiding question, as well as articles that did not correspond to the objective of the integrative review.

The third stage involved carefully reading the titles, keywords and analyzing the abstracts of the pre-selected studies using the search strategy and according to the inclusion and exclusion criteria, and then selecting the studies to read in full.

These selection processes were carried out by peers and, in the event of disagreement between the evaluators, the studies were discussed. At this point, the studies in disagreement were read in full, checking which ones related to the sports, family and academic contexts, and then included in the next stage.

In the fourth stage, the studies were carefully analyzed, categorized and synthesized by means of a critical analysis, following the principle of presenting the information in a succinct and understandable way (Castro, 2006). Information was then

extracted from the articles using the tool selected by the authors: the synthesis matrix (Klopper; Lubbe; Rugbeer, 2007).

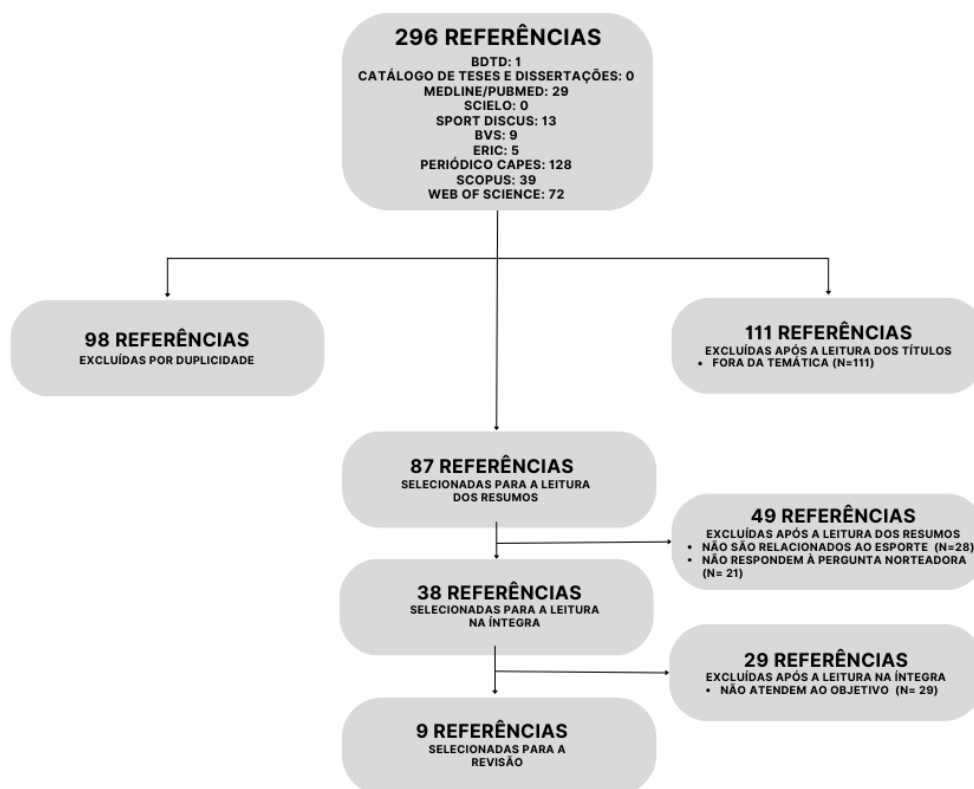
In this review, the overview of the study focused on the following aspects: author, year, objectives, location, population/sample, methodology, instruments and variable assessed. The synthesis matrices selected in this integrative review, based on the researchers' interpretation and organization, were related to the duplication or not of authors, the institutions of origin, the year of publication and the types of research. In addition, the studies were categorized and synthesized into three relevant themes: Sport and School; Sport, Family and Academic Performance; Sport and Academic Performance.

The fifth stage presents the discussion of the results, where the data is interpreted and knowledge gaps related to the guiding question of the research are identified. At this point, paths are also suggested for future researchers to base their studies on, contributing to the advancement of the scientific environment.

The sixth stage is the presentation of a document that integrates the synthesis of knowledge, review and understanding of the topic. It also contains final considerations and proposals for future studies, especially with regard to research related to sports, family and academic contexts.

The initial search identified 296 studies. After reading the titles, 98 were excluded for duplication and 111 for being off-topic, leaving 87 studies to read the abstracts. Of these, 49 were excluded because they didn't fit the established criteria: 28 because they didn't relate to sport and 21 because they didn't answer the guiding question. Of the remaining 38 studies, which were selected to be read in full, 29 did not meet the objective of the integrative review. At the end of this process, 9 studies were selected for the review. Figure 2 shows the flowchart describing this process:

Figure 2 - Flowchart.



Source: Elaborated by the authors (2024), based on Botelho, Cunha and Macedo (2011).

3 Results

In view of the results of this search, Table 1 shows the general characterization of the studies, a summary with a general description of the nine studies selected.

Table 1 - General description of the studies.

Author/year	Instruments	Methodology	Population/ Sample	Location	Objectives	Variable evaluated
Castañeda <i>et al.</i> (2023)	Semi-structured interview on their experiences of establishing a dual career combining sport and study/work.	Qualitative	7 elite Spanish athletes: 2 women and 5 men, aged between 18 and 32	Madrid - Spain	To explore resources and barriers in combining the spheres of athletic and academic life during the lifetime of elite Spanish track and field athletes.	Social support; barriers; time and resource management.
Suárez Ortega e Moreno (2022)	None.	Qualitative (literature review)	Children and young people of different ages, genders, socio-economic levels and cultural backgrounds	The research reviewed includes studies in various countries	To review recent research on extra-curricular sports activities and their relationship with school processes, their impact on socio-family and psychological aspects in children and young people who take part in them.	Extra-curricular sports activities, school processes, social, family and psychological aspects
Pinto-Escalona <i>et al.</i> (2021)	SDQ questionnaire.	Quantitative	388 children (187 girls and 201 boys) aged 7.4 ± 0.5 years old	20 schools from 5 European countries: Spain, Portugal, France, Germany and Poland.	To analyze inter-individual variability in response to a one-year school-based karate program, by analyzing responders and non-responders in psychosocial functioning and academic performance, as well as determining the characteristics associated with greater responsiveness.	Psychosocial functioning and academic performance.
Harbec, Goldfield e Linda (2021)	Classroom engagement trajectories (Fitzpatrick and Pagani, 2013; Pagani <i>et al.</i> , 2010; Pagani <i>et al.</i> , 2010); Extracurricular sports engagement trajectories (Brêre <i>et al.</i> , 2020).	Quantitative	966 children aged 6 to 12	Quebec Longitudinal Study of Child Development - Canada	To prospectively examine whether extracurricular sport predicts classroom involvement and whether classroom involvement predicts extracurricular sport at the age of 12 in boys and girls.	Extracurricular sport; Involvement in the classroom; Leisure PA; Sports participation; Mathematical skills; Verbal competence; Maternal education; Family functioning; Family configuration; Family income; Classroom engagement trajectories; Leisure physical activity (including sport).

Author /Year	Instruments	Methodology	Population/ Sample	Location	Objectives	Variable evaluated
Romero-Blanco <i>et al.</i> (2020)	Sports Habits Questionnaire promoted by the National Sports Council - Spain 2011.	Quantitative	10,096 schoolchildren aged 7 to 16: 5,003 boys and 5,093 girls	Public, private and subsidized schools - Spain	To evaluate factors in the school and family environment of children and adolescents in Spain that could be related to the practice of extracurricular physical activity.	Sociodemographics, extracurricular activities, parents' physical condition in terms of activity, academic performance, playground activities, screen time, means of transportation to school and self-perceived health.
Burns, Bai eBrusseau (2020)	Data from the 2017/2018 US National Survey of Children's Health. Collection: telephone interviews with parents or guardians.	Quantitative	Representative sample (37,392) of children and adolescents between 6 and 17 years old	United States	To examine the independent and joint associations between physical activity and participation in sports on academic performance variables in a representative sample of children and adolescents in the United States.	Associations between physical activity, sports participation and academic performance in children and adolescents.
Cerda, Garcia e Cerda. (2019)	Linear regression of the probability of obtaining good academic results. 2-stage Heckman sample selection (Cook <i>et al.</i> , 2020; Heckman, 1979): assessments of self-perception, school attendance, bad habits, information on physical abilities and sociodemographic variables.	Quantitative	2,010 high school students	13 Public, private, subsidized and fully private schools - Chile	To explore the effect of physical activity and self-esteem on the academic performance of high school students in south-central Chile.	Grade point average and dummy for perception of academic performance. Dependent variable grade point average, explanatory variables: school (type), family (whether parents and siblings play sports, substitute income) and student (age, gender, time spent studying and playing sports, hours dedicated to PA (sports plus physical activities).
Schultz, Katite (2017)	School record and sports participation record.	Quantitative	High school students/athletes	United States	Investigate whether student athletes perform better or worse during the semester in which they participate in sports.	Comparison of the athletes' performance with themselves.
Basak <i>et al.</i> (2014)	Sociodemographic questionnaire and problem-solving inventory (Heppner and Petersen 1982).	Quantitative	363 nursing students	Nursing School - Turkey	To identify the effects of sport on student nurses' problem-solving skills and academic performance.	Effects of sport on problem-solving skills

Source: Elaborated by the authors (2024).

The information from the included studies (n=9) was organized from the most recent (2023) to the oldest (2014), with emphasis on the years 2021 and 2020, which had more publications of quantitative studies. The objectives of each study had different characteristics, but they all addressed the topic proposed for this review. The ages of the population/sample differed and were identified as follows: elite athletes aged between 18 and 32 (Castañeda *et al.*, 2023), children taking part in extracurricular activities aged between 6 and 17 (Suárez-Ortega; Moreno, 2022; Pinto-Escalona *et al.*, 2021; Harbec; Goldfield; Pagani, 2021; Romero-Blanco *et al.*, 2020; Burns; Bai; Brusseau, 2020), high school student-athletes (Cerdeja; Garcia; Cerdeja, 2019; Schultz, 2017) and higher education student-athletes (Basak *et al.*, 2014).

It can also be seen that the European and American continents have the largest number of studies. In Europe, four studies were identified (Castañeda *et al.*, 2023; Pinto-Escalona *et al.*, 2021; Romero-Blanco *et al.*, 2020; Basak *et al.*, 2014), while in North America, there were three (Harbec; Goldfield; Pagani, 2021; Burns; Bai; Brusseau, 2020; Schultz, 2017). In South America, there was only one study (Cerdeja; Garcia; Cerdeja, 2019). In addition to the review study (Suárez-Ortega; Moreno, 2022), which did not specify the continent or country.

As for the instruments, most of the studies used questionnaires (n=5) (Pinto-Escalona *et al.*, 2021; Harbec; Goldfield; Pagani, 2021; Romero-Blanco *et al.*, 2020; Cerdeja; Garcia; Cerdeja, 2019; Basak *et al.*, 2014). This information is in line with Graph 2, which shows the highest number of quantitative studies. In addition, two studies used interviews (Castañeda *et al.*, 2023; Burns; Bai; Brusseau, 2020), and one study considered document records (Schultz, 2017).

As for the variables analyzed, there was a prevalence in the analysis of the influence of sport on the academic performance of research participants, followed by studies linking sport-school and sport-family-school. These variables were divided into categories and presented in Table 2, with the title and summary of the studies.

Table 2 - Category, title and data summary.

CATEGORY	PUBLICATION TITLE	SUMMARY
Sport and School	<i>A Holistic Vision of the Academic and Sports Development of Elite Spanish Track and Field Athletes</i>	The results show that elite Spanish track and field athletes face educational and institutional barriers to developing a dual career. Time management, social support and additional resources can play a key role in success or failure.
	<i>Healthy body, healthy mind: Long-term mutual benefits between classroom and sport engagement in children from ages 6 to 12 years</i>	Findings suggest that sports participation and engaged behavior in the classroom are positively influenced during childhood. They support the relevance of investing financial resources in youth intervention so that children can develop their potential in both sporting and classroom contexts.
Sport, Family and Academic Performance	<i>Incidencia de las actividades extraescolares deportivas en los procesos escolares y en aspectos sociofamiliares y psicológicos de niños, niñas y adolescentes</i>	The results show a certain polarity in the findings, especially those of the investigations linking sporting activities with academic performance. In addition, there are marked social and psychological differences between children and young people who practice some physical activity - sport - compared to those who do not. This highlights the need to promote adequate family support in order to not only avoid social risks, but also psychological problems due to the pressure for results in the face of competition.
	<i>School and Family Environment is Positively Associated with Extracurricular Physical Activity Practice among 8 to 16 Years Old School Boys and Girls</i>	The participation of children and adolescents in extracurricular sports activities seems to be associated with their immediate environment. It is therefore essential to emphasize the importance of establishing physical activity habits from an early age in the family and school environments.
Sport Academic Performance and	<i>Individual responsiveness to a school-based karate intervention: An ancillary analysis of a randomized controlled trial</i>	Respondents in one outcome obtained greater benefits from the intervention in the other outcome. A school sports intervention (karate) seems particularly effective for children with psychosocial difficulties and low academic performance.
	<i>Physical Activity and Sports Participation Associates with Cognitive Functioning and Academic Progression: An Analysis Using the Combined 2017-2018 National Survey of Children's Health</i>	Both physical activity (PA) and sports participation were independently and negatively associated with reports of difficulty concentrating, remembering or making decisions. We conclude that PA and sports participation can influence specific aspects of children's academic performance.

	<p><i>The effect of physical activities and self-esteem on school performance: A probabilistic analysis</i></p>	<p>The results provide evidence of the positive impact of physical activities and self-esteem on school performance. Therefore, high school students who practice sports activities and have positive self-esteem have better academic performance.</p>
	<p><i>Do High School Athletes Get Better Grades During the Off-Season?</i></p>	<p>Provides evidence on how student athletes alter their academic performance during the season, allowing for a better understanding of time allocation as a mechanism at work in the black box of sports participation.</p>
	<p><i>Effects of the Sports Activities of Female Nursing Students on their Problem-Solving Skills and Academic Achievement</i></p>	<p>The general academic means and the scores of students who do and do not play sports and this difference was not statistically significant ($p > 0.05$). On the other hand, the students' mean scores differed significantly in four dimensions of the problem-solving inventory: "evaluative", "planned", "considering" and "self-confident".</p>

Source: Elaborated by the authors (2024).

Most of the studies were conducted using a population/sample of children and adolescents, and some were carried out in the school context. The study by Pinto-Escalona *et al.* (2021) was carried out in twenty schools in five European countries - Spain, Portugal, France, Germany and Poland - and looked at psychosocial functioning and academic performance in a karate program carried out at school. Despite the same context (school), it was interesting to identify the different variables analyzed, as demonstrated by the study by Romero-Blanco *et al.* (2020), conducted in public and private schools in Spain, which evaluated how factors in the school and family environment of children and adolescents could be related to sports practice or extracurricular physical activity.

A study with adolescents from public and private schools in Chile explored the effect of physical/sporting activities and self-esteem on academic performance (Cerdeira; Garcia; Cerda, 2019). In the same vein, Schultz's research (2017) investigated whether student athletes perform better or worse during the semesters in which they participate in sports, comparing their own performance in different periods. Also in the school

context, but at university level, Basak *et al.* (2014) identified the effects of sport on the problem-solving skills and academic performance of nursing students.

Another relevant aspect to consider is the fact that most research is quantitative in nature, which implies using different questionnaires to analyze the variables. In order to verify psychosocial functioning and academic performance, Pinto-Escalona *et al.* (2021) applied the Strengths and Difficulties Questionnaire (SDQ), aimed at parents. This questionnaire consists of a 25-item screening with five scales, each consisting of five items, generating scores for emotional symptoms, conduct problems, hyperactivity/inattention, problems with peers and pro-social behavior. For academic performance, the average grade for all school subjects was analyzed.

In their longitudinal study, Harbec, Goldfield and Pagani (2021) used the Trajectories of Classroom Engagement questionnaire, in which teachers reported eleven items that showed behaviors indicative of adaptive and cognitive control. Another instrument used was Brière *et al.*'s (2020) extracurricular sports engagement trajectories questionnaire, in which parents answered two items. The study by Romero-Blanco *et al.* (2020) used the Sports Habits questionnaire, promoted by the National Sports Council in Spain in 2011, which gathered information on sociodemographic variables (such as age and gender) and the extracurricular activities they carried out, as well as their parents' physical activity practices.

The questionnaire applied in Cerda, Garcia and Cerda's research (2019) contained 18 questions and 45 sub-questions, including data on sociodemographic characterization, the number of hours dedicated to sports, the number of hours of physical education, a self-esteem scale, cigarette and alcohol consumption, drug use, grade point average, school establishment, school attendance rate and perceived benefits of sports activity, among others. According to the authors, the content of the instrument was validated by a group of six experts.

Basak *et al.* (2014) applied Heppner and Petersen's Problem Solving Inventory (1982), which includes 35 items on a Likert-type scale, as well as a sociodemographic questionnaire.

Based on the synthesis of the studies analyzed, the results will be discussed in order to gain a better understanding of the sports phenomenon and the role of the family in relation to academic performance.

4 Discussion

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Sports practice was the link between the studies found, but the analysis with other variables made each study unique. For a better understanding, as already mentioned in Table 2, the studies were divided into 3 categories: Sport-School; Sport-Family-Academic Performance and Sport-Academic Performance.

In the sport-school category, two studies dealt with this relationship from different perspectives. The study by Castañeda *et al.* (2023), based on the perception of elite athletes in the sport of athletics, identified barriers to the development of what the authors called a “dual career” (sport and study). The rigidity of the Spanish education system and the lack of support from political and educational institutions were considered barriers to the exercise of the dual career, in addition to the organization of time and the pressure that these two contexts exert. However, despite the limited support from political and educational institutions, the participants consider this to be a means of overcoming the barriers, as well as the social support offered by coaches, family and others.

On the other hand, the study by Harbec, Goldfield and Pagani (2021) examined whether sport influenced classroom engagement or vice versa. The authors concluded that participation in sport and engagement in the classroom have a positive influence on each other during childhood. This finding justifies investing in youth intervention so that children can develop their potential in both contexts.

According to Melo, Soares and Rocha (2014), with regard to reconciling sports and school education, the greater the investment in the athlete's career, the greater the possibility of sidelining investments in the educational field. Factors such as the shift change and low school capital can negatively affect their school career. Souza,

Farias and Nunes (2020) agree that sport, when applied as a tool to support the teaching-learning process, in the conceptual (cognitive), procedural (doing) and attitudinal (feeling/acting) dimensions, contributes to holistic development and not in a piecemeal way. In view of this, it is possible to analyze and understand that, on the sport and school axis, there are several variables that can contribute to or hinder its outcome. Each researcher must take a careful look at their study objective.

The sport-family-academic performance category includes studies that in some way relate the sport, family and school context (academic performance). Suárez-Ortega and Moreno (2022) carried out a literature review on extracurricular sports activities and their relationship with school processes, as well as their impact on socio-family and psychological aspects in children and young people who practice them. The results of this study pointed to a predominance of studies relating sports activities to academic performance. However, there were marked social and psychological differences between children and young people who practice physical activity and sport compared to those who don't, highlighting the need for family support for psychological problems arising from the competitive nature of sport.

Another study selected was by Romero-Blanco *et al.* (2020), which evaluated the extracurricular activities of primary and secondary school students, analyzing school and family factors. According to the authors, student athletes practice extracurricular physical activities influenced by their parents' sports practice, good academic performance, participation in other non-sports extracurricular activities, more active recreation and less screen time. Thus, the support offered by the family and school context favors extracurricular sports practice. For this reason, the authors recognize the need to develop policies that educate parents about the importance of physical activity from an early age and that encourage schools, through targeted recess, to promote sports practice, especially among girls.

Nascimento and Leite (2021) carried out a study focusing on female student-athletes and stated that family support is relevant, becoming a daily incentive to stay in sport. Santos (2021) corroborates the aforementioned studies by reporting that sport

is capable of providing new social realities for those who practice it, thus allowing them to maintain a balance between sport, family and school life. However, in the school environment, Fonseca and Stela (2015) state that encouragement from those responsible builds a healthy environment for children to develop their potential, as well as providing security and motivation to play sport.

The last category to be analyzed, sport-academic performance, had the largest number of studies selected (n=5), due to the relationship between sport and academic performance. The review by Suárez-Ortega and Moreno (2022) already pointed to this result, since, according to the authors, there is a polarity in the investigations under this focus. The study by Pinto-Escalona *et al.* (2021) looked at inter-individual variability in the response to a karate program, analyzing who had a positive change and who had no change in psychosocial functioning and academic performance. The authors found that participants who had a positive change with the karate intervention showed an improvement in academic performance compared to those who had no change. They therefore suggest that a sports intervention at school seems effective for children with psychosocial difficulties and low academic performance.

Another study selected was by Burns, Bai and Brusseau (2020), which aimed to examine the independent and joint associations between physical activity and sports participation in academic performance variables in a representative sample of North American children and adolescents. The results showed that physical activity and sports practice can influence specific aspects of a child's academic performance.

So far, studies have shown favorable results between sports practice and improved academic performance. Similarly, Cerda, Garcia and Cerda (2019) identified that high school students who play sports and have positive self-esteem have better academic performance. However, depending on the amount of time student-athletes devote to sports, this can negatively affect school performance.

Schultz (2017) took a different view in her study of high school student-athletes in the United States. The author compared the athletes' performance in different semesters. This study also presented evidence that the time spent practicing sports

can negatively affect academic performance, as in the study by Cerda, Garcia and Cerda (2019), but in a reduced way compared to the magnitude of the benefits. Similarly, Basak *et al.* (2014), in a study of female nursing students in Turkey, found that the difference between the academic average of those who practiced sport and those who didn't was statistically insignificant. Thus, the research cited in their conclusions shows that more studies are needed to identify the different effects that practicing sport, in its various forms, can have on students' academic performance.

5 Conclusions

The results of this study, which aimed to carry out an integrative literature review of research related to the sports, family and academic contexts, showed that, in the last ten years, there have been more publications in the years 2020 and 2021, with a predominance of studies on the European and American continents.

In the searches, no scientific works such as dissertations, theses, books, book chapters or just scientific articles were found. Most of the studies used quantitative research to verify and analyze the variables, but no specific instrument was found that relates sport and family to academic performance. However, it is possible to note that instruments with different variables are used to establish connections, especially family support.

With regard to the sport-school and sport-family-school relationship (academic performance), the studies show that there are barriers, but with the support of the family and the school, these can be minimized. They also suggest that policies should be drawn up to educate children and adolescents about the importance of physical activity and sport for their all-round development.

There was a predominance of studies that analyzed the relationship between sport and academic performance, but there was no unanimity on the benefit of sport on academic performance, probably due to the lack of a specific instrument that relates these two variables. Despite this, the majority of studies indicate that practicing sport

has a positive impact, not only on academic performance, but also on physical, psychological and social aspects.

In the search process, this review ensured that all methodological procedures were followed to ensure the highest quality, acting as a filter of studies for researchers discussing the subject. However, it is not without its limitations. One of them refers to the different characteristics of the studies selected, which makes it challenging to identify the precise topic covered. Another limitation, despite the care taken when searching national and international databases, was the lack of studies in Portuguese, suggesting that there are more studies on the subject in the literature. For this reason, it is suggested that future reviews on the subject include the word “school” in the search process, in order to find possible studies that were left out of this integrative review and even carry out a systematic review to analyze studies with the same characteristics.

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