Motivational profiles of student-athletes in sports-focused schools: Associations with individual and contextual factors

Perfiles motivacionales de los estudiantes deportistas en escuelas con enfoque deportivo: asociaciones con factores individuales y contextuales

Authors

Jaime Della Corte [1]
Guilherme Tucher [1]
Felipe da Silva Triani [2]
Leonardo Carmo Santos [1]
Rômulo Meira Reis [2]
Caio Cesar Serpa [1]
Juliana Brandão Pinto de Castro [2,3]
Mário Coelho Teixeira [4]
Nuno Miguel Castanheira de Almeida [5]
Silvio de Cassio Costa Telles [1,2]

[1] Federal University of Rio de Janeiro (Brazil)
[2] Rio de Janeiro State University (Brazil)
[3] Oswaldo Cruz Foundation (Brazil)
[4] University of Évora (Portugal)
[5] School of Tourism and Maritime Technology of the Polytechnic Institute of Leiria (Portugal)

Corresponding author:
Jaime Della Corte
jaimedellacorte@yahoo.it

Received: 14-04-26
Accepted: 30-05-26

How to cite in APA

Della Corte, J., Tucher, G., Triani, F. S., Santos, L. C., Reis, R. M., Serpa, C. C., Castro, J. B. P., Teixeira, M. C., Almeida, N. M. C., & Telles, S. C. C. (2026). Motivational profiles of student-athletes in sports-focused schools: Associations with individual and contextual factors. *Retos, 82*, 918-938. https://doi.org/10.47197/retos.v82.119481

Abstract

Introduction: In school sports, motivation influences student-athletes' adherence and persistence and may be expressed through intrinsic and extrinsic components.
Objective: To identify and compare factors associated with motivation levels for sports practice among student-athletes from sports-oriented elementary schools (upper elementary grades).
Methods: Cross-sectional, descriptive, and quantitative study with 563 student-athletes (279 girls; 284 boys), mean age 14.16 ± 0.73 years, enrolled in 2023 in the 8th or 9th grade of the Olympic Educational Gymnasiums (GEOs) in the municipality of Rio de Janeiro, Brazil. Motivation was assessed using the Sport Motivation Scale (SMS; 28 items; 1–7 Likert scale).
Results: A similar distribution of participation was observed in team sports (55%) and individual sports (45%). Boys showed higher levels of intrinsic motivation (IM) and extrinsic motivation (EM) compared to girls (IM = 5.75 [4.50–6.75]; EM = 4.75 [3.50–6.00]; p≤0.05). Intrinsic motivation was higher among individual sports practitioners (IM = 6.00 [4.50–6.75]; p≤0.05), whereas extrinsic motivation was higher in team sports (EM = 4.75 [3.50–5.75]; p≤0.05). Student-athletes who studied near home showed higher intrinsic motivation (IM = 5.75 [4.50–6.75]; p≤0.05), while those who lived farther away exhibited higher extrinsic motivation (EM = 4.50 [3.25–5.75]; p≤0.05).
Conclusions: The results indicate that motivation for sports practice among GEO student-athletes varies according to sex, sport modality (individual/team), and home to school commuting conditions. These findings may support school strategies for engagement and retention in sports, especially in groups with greater dependence on extrinsic motivation.

Keywords

Academic achievement; physical activity; schoolchildren; sports participation; teaching-learning.

Resumen

Introducción: En el deporte escolar, la motivación influye en la adherencia y la persistencia de los estudiantes-atletas, pudiendo expresarse a través de componentes intrínsecos y extrínsecos.
Objetivo: Identificar y comparar los factores asociados a los niveles de motivación para la práctica deportiva en estudiantes-atletas de escuelas vocacionadas al deporte de la Educación Fundamental (los años finales).
Metodología: Estudio transversal, descriptivo y cuantitativo, con 563 estudiantes-atletas (279 niñas; 284 niños), edad media de 14,16 ± 0,73 años, matriculados en 2023 en 8º o 9º año de Gimnasios Educacionais Olímpicos (GEOs) del municipio de Río de Janeiro, Brasil. La motivación fue evaluada mediante la Escala de Motivación Deportiva (EMD; 28 ítems; escala Likert de 1–7).
Resultados: Se observó una distribución similar de la participación entre las modalidades colectivas (55%) y las individuales (45%). Los niños presentaron niveles más altos de motivación intrínseca (MI) y extrínseca (ME) en comparación con las niñas (MI = 5,75 [4,50–6,75]; ME = 4,75 [3,50–6,00]; p≤0,05). La motivación intrínseca fue mayor entre los practicantes de modalidades individuales (MI = 6,00 [4,50–6,75]; p≤0,05), mientras que la motivación extrínseca fue mayor en las modalidades colectivas (ME = 4,75 [3,50–5,75]; p≤0,05). Estudiantes-atletas que estudiaban cerca de casa mostraron mayor motivación intrínseca (MI = 5,75 [4,50–6,75]; p≤0,05), mientras que quienes residían más lejos mostraron mayor motivación extrínseca (ME = 4,50 [3,25–5,75]; p≤0,05).
Conclusiones: Los resultados indican que la motivación para la práctica deportiva en estudiantes-atletas de GEOs varía según el sexo, la modalidad deportiva (individual/colectiva) y las condiciones de desplazamiento entre residencia y escuela. Estos hallazgos pueden respaldar estrategias escolares de compromiso y permanencia en el deporte, especialmente en grupos con mayor dependencia de la motivación extrínseca.

Palabras clave

Éxito académico; actividad física; escolares; participación deportiva; enseñanza-aprendizaje.

Introduction

Sport is a sociocultural phenomenon that extends beyond mere physical activity. Sports serve as a reflection of society in which individuals are embedded and encompass cultural, social, political, and economic aspects (Marinho, 2010). In this context, it is essential to approach sport comprehensively, considering its different dimensions and its impact on individuals' lives and society. By understanding the interaction between sport and society, it is possible to identify how sport influences and is influenced by different issues and sociocultural phenomena (Barbanti, 2012).

Institutional, social, and organizational factors directly shape how young people perceive sport as a space for personal and social development. According to Teixeira and Sesinando (2022), Portuguese scientific production on governance, public policy, and local sport development has evolved significantly. The authors identified that contemporary sports management transcends a narrow focus on competitive performance. Hence, educational, psychosocial, and structural factors have become fundamental for promoting human development and sports participation. Complementarily, recent studies on local sports governance indicate that the institutional environment influences public perception of municipal sport programs, especially regarding the quality of facilities, equitable access to physical activities, and the recognition of sport as an instrument of social inclusion and citizenship (Sesinando et al., 2026).

In turn, Teixeira and Ribeiro (2016) highlight that local athletic development depends not only on expanding infrastructure, but mainly on the strategic coordination of public policies, municipal management, financial resources, and qualified human capital. They emphasize that higher levels of sports participation are closely linked to efficient public governance, sound organizational planning, and decisions oriented toward the democratization of sport. This perspective is reinforced by Teixeira et al. (2023a), who analyze public sports companies for modernizing management. It is further supported by Teixeira et al. (2024), who demonstrate that initiatives such as the European Cities of Sport are designed to foster community engagement, ensure the continuity of sports practice, and strengthen the sense of social belonging. In this way, sport is consolidated as a strategy for local development and social inclusion.

As Reis et al. (2023; 2025) state, the legacies of mega-sporting events transcend the economic and structural impacts traditionally discussed in the literature, encompassing social, cultural, symbolic, and sporting dimensions. Assessing these legacies requires indicators related to the continued use of sports facilities, public participation in sports, and social experiences associated with sports. Moreover, mega-events can produce significant subjective and sociocultural effects, such as strengthening social bonds, stimulating a sense of belonging, valuing sporting experiences, and expanding opportunities for public engagement in systematized sporting practices. It is even more evident when supported by sustainable planning and management of the legacy in the post-event period.

Based on the evidence presented by Teixeira et al. (2023b; 2023c), it is observed that participation in mega-sporting events is strongly associated with pleasure, personal satisfaction, passion for sport, and a sense of belonging to the Olympic movement, elements that contribute to high levels of engagement and intention to continue practicing the sport. Studies have shown that factors such as personal and professional development, recognition, and appreciation of interpersonal relationships constitute central motivations for involvement and continued participation in future sporting activities. In this sense, sporting environments capable of promoting social support, integration, autonomy, and opportunities for human growth tend to strengthen the connection of participants with sports practice. Besides, the authors indicated that the feeling of personal accomplishment acts as an important motivational reinforcer, particularly in the context of intrinsic motivation.

Sex and social markers are analytically distinct categories that shape how individuals relate to sports practices, influencing their self-image and sense of belonging. In the present study, the operational category adopted is biological sex (girls and boys), not gender. Gender refers to socially constructed roles and identities that were not directly measured by our instrument. Gender inequalities in sport persist, revealing disparities in opportunities, visibility, and remuneration, highlighting the need to promote equity and inclusion (Souza et al., 2024). Similarly, social class significantly interferes with access to and participation in the sports world, reflecting power dynamics and privileges that need to be analyzed and confronted to ensure a fairer and more democratic sports environment (Bourdieu, 2000). These social

markers tend to operate interdependently and may be reflected in how students engage, persist, and attribute meaning to sports practice in the school context.

Neuenfeldt (2008) underlines that sports practice, as an educational tool, aims at the integral development of the individual, enabling them to deal with their needs, desires, and expectations. Moreover, it contributes to the individual considering the interests, aspirations, and perspectives of others, balancing technical, social, and communicative skills essential to interpersonal relationships. However, the purpose of activities conducted in classes should be considered. The same activities that motivate and enable moments of growth for some may constitute moments of exclusion, discouraging sports practice and, consequently, non-socialization for others (Neuenfeldt, 2008).

For Barroso and Darido (2006), it is in Physical Education classes that students often have their first contact with sport. Therefore, understanding the motives that stimulate children and adolescents to engage in sports practice becomes fundamental. Thus, teachers and/or coaches can build an encouraging environment with more attractive, challenging, and meaningful classes, potentially reducing the likelihood of negative sports experiences that may hinder continued engagement in physical activity.

Despite the recognized importance of motivation for sustained sports engagement, limited research has examined how individual and contextual factors shape the motivational profiles of student-athletes enrolled in sport-oriented public schools. In Brazil, the Olympic Educational Gymnasiums (GEOs) represent a unique educational model within the public school system that integrates academic instruction with structured sports training. However, the motivational dynamics of this population remain largely unexplored. In 2012, the Rio de Janeiro City Hall (PCRJ), through the Municipal Department of Education (SME) and in accordance with Decree No. 35,261/2012 (Rio de Janeiro, 2012), inaugurated the first sports-oriented public school in the Santa Teresa neighborhood. This initiative was driven by the social legacies and the promotion of citizenship associated with the city's role as a host for major sporting events, including the 2013 FIFA Confederations Cup, the 2014 FIFA World Cup, and the Rio 2016 Summer Olympic and Paralympic Games. By 2019, five additional units had been established or repurposed and designated as GEOs (Rio de Janeiro, 2021). These institutions employ an innovative full-time instructional model that integrates pedagogical quality with sports preparation excellence, serving students from the 6th to 9th grades within the Rio de Janeiro municipal public school system (Rio de Janeiro, 2023). The GEOs provide important breeding grounds for sports talent in Rio de Janeiro; their rigorous training routines propel many students to the highest levels of school sports in the country.

As stated by Silva (2014), GEO provides students with opportunities to engage in systematized and planned athletic activities designed to foster holistic individual development. Within this framework, sport serves as a motivational tool and a driver of high-quality education. Furthermore, it contributes to human development and social interaction while reinforcing core values such as teamwork, respect, discipline, and resilience.

In this context, Silva (2014) highlights that the student-athlete concept involves two primary axes. The first is the "student", whose academic development is structured through the articulation of teaching and learning. This process is grounded in the four pillars of education proposed by Delors (1999): learning to know, learning to do, learning to live together, and learning to be. This approach ensures that student-athletes achieve a solid mastery of the knowledge areas required in the upper elementary grades. The second axis is the "athlete", characterized by a diverse repertoire of motor skills and participation in age-appropriate sports training. This training centers on playful, technical, and tactical activities, encompassing cognitive, psychological, and physical development.

According to De Rose Júnior (1999), high-level competitive athletes face significant physical, technical, and psychological demands. These athletes usually seek to stand out within their own team and among opponents practicing the same sport. Conversely, intense dedication to competitions and strenuous training sessions can make daily life stressful for them. For student-athletes, this pressure can coexist with academic demands, underscoring the importance of understanding the factors associated with sports engagement in this group. In that regard, Picamilho et al. (2021) emphasize that, in addition to institutional support mechanisms, such as holistic monitoring and organizational skills, motivation is a primary factor that enables student-athletes to effectively manage their dual careers.

Motivation can be understood as an "internal force" that instigates the athlete to perform certain actions, as well as the extent to which they feel encouraged to face and endure certain situations, or the amount

of effort they exert to complete different activities. Intrinsic motivation centers on the athlete's own self-perception of success and internal goals, whereas extrinsic motivation is directed toward what society or the sporting context offers as rewards, such as recognition, awards, fame, and money; however, when superimposed on intrinsic motivation, it may be associated with performance declines (Figueiredo, 2000; Weinberg & Gould, 2017).

Within the framework of Self-Determination Theory (Ryan & Deci, 2020), motivation is conceptualized along a continuum ranging from amotivation to increasingly self-determined forms of extrinsic and intrinsic motivation. Intrinsic motivation is typically divided into three subtypes: motivation to know (engagement driven by curiosity and the desire to learn), motivation toward accomplishment (satisfaction derived from mastering tasks and achieving goals), and motivation to experience stimulation (pursuit of pleasurable and exciting sensations linked to the activity). Extrinsic motivation, in turn, can be subdivided into external regulation (behavior guided by rewards and punishments), introjected regulation (behavior driven by internal pressures such as guilt or the need to preserve self-esteem), and identified regulation (when the individual recognizes and accepts the personal value of the activity, even if it remains instrumental). Self-Determination Theory posits that intrinsic motivation is sustained by the satisfaction of three basic psychological needs: autonomy, competence, and relatedness (Ryan & Deci, 2020). These conceptual distinctions are particularly relevant to the present study because the Sport Motivation Scale (SMS) used here assesses specific subdimensions that align with the different types of intrinsic and extrinsic motivation. This alignment enables a more nuanced profile of student-athletes' motivational regulation to be identified. Consequently, understanding their motivational profile may inform more appropriate pedagogical and sporting interventions within the school context.

From the perspective of Self-Determination Theory, students' everyday behaviors are regulated by different forms of motivation, whose intensity depends on the satisfaction of the basic psychological needs for autonomy, competence, and belonging (Deci & Ryan, 1985; Ryan & Deci, 2020). In this context, the daily commute between home and school is not merely a logistical necessity but a behavior shaped by the same motivational processes. Consistent with this view, Burgueño et al. (2019) developed and validated the Behavioural Regulation in Active Commuting to and from School Questionnaire (BR-ACS). Using this instrument, they demonstrated that active commuting to school is regulated by the forms of motivation described in Self-Determination Theory, confirming that the decision to walk or cycle to school is a motivated behavior.

In this regard, Bangun et al. (2024) found that greater distances between home and school tend to increase the time and effort spent commuting, potentially reducing willingness to learn and, consequently, academic motivation. Similarly, Yohana et al. (2025) reported that commuting distance had a statistically significant negative influence on learning motivation, with greater distances associated with reduced student motivation. These findings suggest that the home-to-school commute is a motivated behavior shaped by environmental conditions.

Under this view, sports motivation is shaped by multiple factors, including individual characteristics such as sex, contextual features such as the type of sport practiced, and environmental conditions such as the commuting distance between home and school. Identifying those factors can provide useful knowledge into individuals' motivational levels. From this perspective, Venturini et al. (2024) emphasize that motivation in school Physical Education is multifaceted and depends on factors that extend beyond the training environment, including the institution's pedagogical structure. Additionally, conducting a deeper analysis of this scenario can help improve activity design, making it more inspiring, satisfying, and higher quality for the community (Januário et al., 2012). Nevertheless, further progress is needed to understand how individual and contextual characteristics (particularly sex, sport modality, and residential proximity to the school) relate to motivation among student-athletes enrolled in sport-oriented school models, such as GEOs.

To address this gap, the present study aims to identify motivational factors for sports participation among elementary school student-athletes (final years) from sport-oriented public schools in the municipality of Rio de Janeiro, according to sex, sport modality, and commuting distance between home and school.

Method

Study design

The present study is characterized as field research with a cross-sectional design, descriptive in nature, and a quantitative approach (Thomas et al., 2012).

GEO program characteristics

The GEOs were implemented to expand structured physical activities and sports participation among students. The GEOs are distributed across four Regional Education Coordinations (CREs) of the Rio de Janeiro municipal education system: the 1st, 8th, 10th, and 11th CREs. These four CREs were selected because they concentrate the six GEOs that had been fully operational for at least two years at the time of data collection, thereby ensuring adequate student exposure to the sports program.

These schools operate on a full-time single-shift model with an extended 8-hour school day. Students participate in 1 hour and 20 minutes of sports training per day, five times a week, in addition to two weekly Physical Education classes of 50 minutes each. This schedule provides substantially more hours of structured physical activity than regular municipal schools, as summarized in Table 1.

The implementation of GEOs across these CREs aligned with the SME's strategy to expand access to educational sports in priority areas. This strategy aimed to strengthen educational opportunities, address the needs of socially vulnerable communities, and leverage Rio de Janeiro's Olympic sports legacy. Accordingly, the geographic distribution of GEOs was designed to integrate educational and sports policies that foster students' holistic development.

Upon enrollment in the 6th grade, students are exposed to various sports throughout the academic year, promoting diversification and the discovery of individual interests and skills. Students who have already chosen a sport or are awaiting a possible selection process may dedicate more practice time to their preferred modality while continuing to participate in others. The program also includes participation in inter-class tournaments and official municipal, state, or national championships, such as Rio de Janeiro School Games (JERJ) and Brazilian School Games (JEBs). Additionally, it offers pathways for talented students to be referred to sports federations, clubs, or training centers, although the primary focus remains on sports initiation and holistic development rather than early professionalization.

Table 1. Characteristics of the Olympic Educational Gymnasiums (GEOs)

Aspect	GEOs	Regular municipal schools
Daily school hours	8 h (full-time single shift)	4 h and 30 min (partial shift) or 7 h (single shift)
Daily sports training	1 h and 20 min per day, 5 ×/week	–
PE classes	2 weekly PE classes of 50 min each	Partial shift: 2 classes/week Single shift: 3 classes/week Both: 50 min each PE class
Sports modalities offered	Team: beach volleyball, basketball, futsal, handball, soccer, and volleyball; Individual: athletics, badminton, chess, judo, Olympic wrestling, swimming, and table tennis	Determined by BNCC guidelines, teacher planning, available physical infrastructure, and student interests based on local factors
Initial diversification	6th-grade students experience different modalities throughout the year	–
Participation in competitions	Inter-class tournaments and official municipal, state, or national championships (e.g., JERJ and JEBs), in accordance with the academic-sports calendar	Voluntary participation in inter-class tournaments and official municipal competitions
Talent referral	Student-athletes who excel in official competitions or are identified by talent scouts may be referred to sports federations, clubs, or training centers	–
Main program focus	Sports initiation + development + potential talent identification	Regular PE classes

PE: Physical Education; BNCC: National Common Curricular Base; JERJ: Rio de Janeiro School Games; JEBs: Brazilian School Games; h: hours; min: minutes; ×/week: times per week; classes/week: classes per week

Eligibility criteria

For inclusion in the study, participants were required to meet the following criteria: a) regular enrollment in the 8th or 9th grade of elementary school at one of the six GEOs; b) regular participation in Physical Education classes in the second semester of 2023; c) engagement in at least one sport modality at the GEO. Students were excluded if they presented: a) low school attendance (more than eight recurrent unexcused absences in two or more school months); b) enrollment time at the GEO of less than two years.

The selection of the final years (8th and 9th grades) of elementary school is justified by the greater sports maturity and longer exposure time of these students to the systematic experiences within the GEO pedagogical model in previous years.

Residential proximity classification

Participants were categorized into two residential proximity levels based on their perceived travel time and established viability thresholds for active school commuting (Rodríguez-López et al., 2017; Wangzom et al., 2023). Students who reported a walking commute of approximately 20 minutes or less were classified as "near". Contrariwise, those reporting a walking commute exceeding 20 minutes, or relying on motorized transport (e.g., bus, car, motorcycle) to reach the school, were classified as "far".

A time-based metric was used because it is more intuitive for the studied age group than absolute distance. This classification is supported by evidence that the tolerance threshold for active commuting in adolescents is approximately 1,350 meters (Rodríguez-López et al., 2017). This distance corresponds to approximately 13 to 20 minutes of walking at speeds between 4.0 and 6.4 km/h, which is considered a moderate pace for adolescents (Graser et al., 2011). Accordingly, the 20-minute mark represents a critical threshold beyond which distance becomes a logistical barrier to active commuting (Rodríguez-López et al., 2017).

Data collection instruments

To collect data on participants' perceived influence of sports practice on academic achievement and on the sociodemographic, sociocultural, and socioeconomic characteristics of their families, participants completed an anonymous structured questionnaire with closed-ended self-report items. The instrument gathered information on age, sex, self-declared race/ethnicity, school of enrollment, school year, length of participation in the GEO sports program, history of grade repetition, place of residence, travel time from home to the GEO, support network for sports practice, household composition, guardians' education level and profession, sport practiced, and perception of its influence on academic performance.

Motivation for sports participation was assessed using the SMS, originally developed by Pelletier et al. (1995) and adapted to the Brazilian context by Costa et al. (2011). Despite being originally developed in the 1990s, the SMS remains a robust theoretical and empirical framework grounded in Self-Determination Theory (Deci & Ryan, 1985). This theory postulates that universal psychological needs (such as autonomy, competence, and relatedness) are core drivers of human behavior. This framework provides a stable foundation for evaluating motivational dynamics across different sociocultural contexts and time periods, maintaining its relevance for contemporary studies on adolescent sports participation.

Costa et al. (2011) followed standardized cross-cultural procedures in adapting the instrument, including translation, back-translation, expert committee evaluation, and pilot testing, to ensure semantic, idiomatic, experiential, and conceptual equivalence. The SMS is a 28-item self-report questionnaire designed that assesses the factors underlying adherence to and persistence in voluntary sports practice. Its items are distributed across seven motivational dimensions: three for intrinsic motivation (to know, to accomplish, and to experience stimulation), three for extrinsic motivation (external regulation, introjection, and identification), and one for amotivation. Each dimension comprises four items, as detailed in Table 2. Responses are rated on a seven-point Likert scale ranging from 1 (does not correspond at all) to 7 (corresponds exactly). Dimension scores are computed as the arithmetic means of the respective

items. Higher scores indicate greater motivation in that dimension, except for amotivation, where higher scores reflect a stronger absence of motivation. In the present sample, the SMS demonstrated excellent internal consistency, with a Cronbach's alpha of $\alpha = 0.912$ for the total scale and $\alpha > 0.90$ for each subscale.

Table 2. Structure and operational definitions of the Sport Motivation Scale (SMS)

Dimensions	Operational Definition	Items
Intrinsic Motivation to Know (IM-K)	Related to personal factors linked to curiosity and the search for understanding that the student-athlete wishes to obtain about the practiced sport modality	2, 4, 23, 27
Intrinsic Motivation to Accomplish (IM-A)	Related to personal factors in which the student-athlete feels pleasure in seeking new skills and movements within the sport modality	8, 12, 15, 20
Intrinsic Motivation to Experience Stimulation (IM-ES)	Related to personal factors that lead the student-athlete to seek stimulating experiences in sport that may cause excitement, pleasure, and fun	1, 13, 18, 25
Extrinsic Motivation - External Regulation (EM-ER)	Related to external environmental factors linked to rewards resulting from good performance, such as winning trophies, financial rewards, or status before the coach and the group	6, 10, 16, 22
Extrinsic Motivation - Introjection (EM-I)	Internal pressures that the student-athlete may place on themselves. Embarrassment or shame for being involved in situations where they fail or cannot achieve their best performance	9, 14, 21, 26
Extrinsic Motivation - Identification (EM-ID)	Associated with student-athletes who actively participate in sports because they feel it helps them grow personally, considering sport and life in general	7, 11, 17, 24
Amotivation (AM)	Characterized by a feeling of hopelessness where extrinsic or intrinsic motivations do not affect the student-athlete's performance, who feels no reason to keep practicing the sport	3, 5, 19, 28

Ethical aspects

The present study was conducted in accordance with the ethical principles of the Declaration of Helsinki (WMA, 2013) and Resolutions No. 466/2012 (Brasil, 2012) and No. 510/2016 (Brasil, 2016) of the National Health Council, which regulate research involving human beings in Brazil. The study was approved by the Research Ethics Committee of the Center for Philosophy and Human Sciences at the Federal University of Rio de Janeiro (CEP/CFCH/UFRJ), under protocol CAAE No. 66002722.4.0000.5582 and favorable opinion No. 6.019.375.

Confidentiality and anonymity of volunteers were ensured at all stages of the research. Participation was voluntary, based on the signature of the Informed Consent Form by participants aged 18 years or older. For student-athletes under 18 years of age, prior authorization from legal guardians was obtained, followed by the signature of the Informed Assent Form by the youths themselves, ensuring full clarification regarding the study procedures.

Data analysis

Data were processed using IBM Statistical Package for Social Sciences (SPSS) software version 22.0 (Chicago, IL, USA). Cronbach's alpha was used to assess the internal consistency of the SMS. The Kolmogorov-Smirnov test was used to verify the normality of data distribution and confirmed the non-parametric behavior of the variables. Accordingly, data were reported as median and interquartile range (Q1–Q3). Group comparisons (sex, sport modality, and residential proximity) were performed using the Mann-Whitney test. The level of statistical significance was set at 5% ($p \leq 0.05$) for all analyses.

Results

The sample consisted of 563 volunteer and apparently healthy student-athletes, with a mean age of 14.16 ± 0.73 years (range: 13–16 years). Participants were regularly enrolled in the 2023 school year in the 8th grade (44.76%) or 9th grade (55.24%) at six GEOs in the municipality of Rio de Janeiro, Brazil. Table 3 shows the sample distribution by CRE.

Table 3. Sample distribution by Regional Education Coordination (CRE)

Administrative Unit	Student-Athletes (n)	Girls % (n)	Boys % (n)
1st CRE	125	52.00% (65)	48.00% (60)
8th CRE	126	51.59% (65)	48.41% (61)
10th CRE	145	44.14% (64)	55.86% (81)
11th CRE	167	50.90% (85)	49.10% (82)
Total	563	49.56% (279)	50.44% (284)

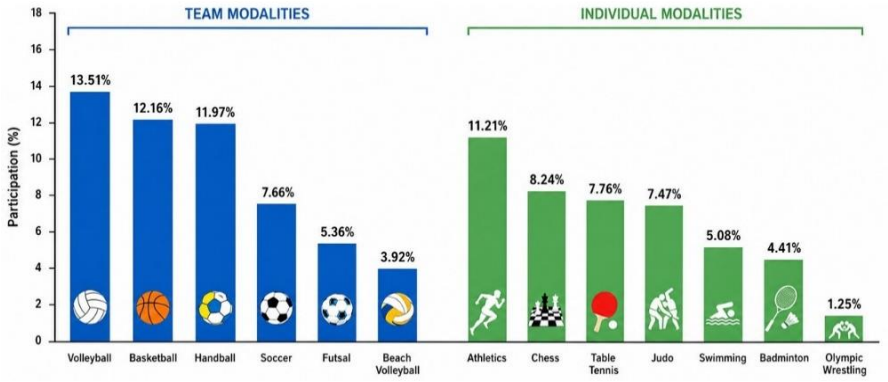
Data gathered from student-athletes' self-assessments highlighted their perspectives on how athletic engagement affects academic achievement (Table 4). A predominant share of the cohort (56.67%) identified a constructive link between sports participation and school results, whereas 18.29% reported detrimental effects.

Table 4. Perception of the influence of sport on academic performance and sports practiced

Does sport positively influence your academic achievement?	Percentages
Strongly agree	17.76 %
Agree	38.91 %
Undecided/Not sure	25.04 %
Disagree	13.32 %
Strongly disagree	4.97 %

Figure 1 shows the specific sports modalities practiced. The modalities were classified into individual or team-based categories. This classification depended on the nature of competitive performance and the social interaction required during practice and competition. Therefore, team modalities involve interdependent cooperation and collective tactical coordination, while individual modalities are those where performance is independent of teammates. Of the total sample, 54.58% practiced team sports and 45.42% practiced individual sports.

Figure 1. Participation percentage by sport modality.



Regarding the participants' education level, 44.76% were enrolled in the 8th grade and 55.24% in the 9th grade of elementary school, with the time of entry into the GEOs distributed similarly between 2020 (50.09%) and 2021 (49.91%). The school approval rate was high (94.14%), while the failure rate was 5.86%.

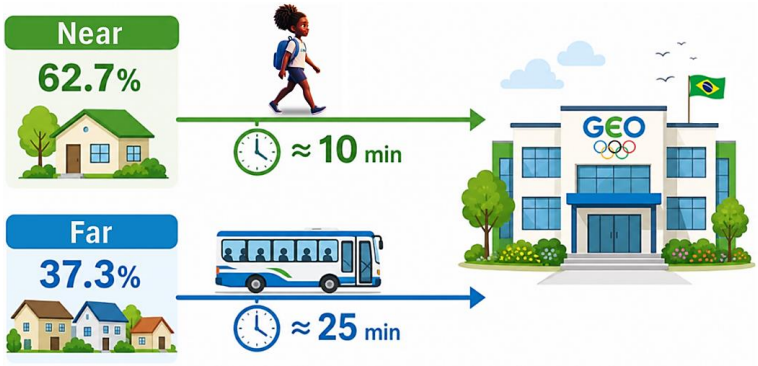
Table 5 presents the sociodemographic and socioeconomic characteristics of the sample's families, as well as their support network for sports participation. Concerning the ethnic-racial distribution, there was a predominance of participants self-identifying as Brown (41.39%) and White (34.10%). In terms of educational background of the guardians, high school completion prevailed for both parents. Mothers were identified as the main source of support for sports participation (31.02%), followed by fathers (23.59%).

Table 5. Sociodemographic profile and support network of student-athletes (n=563)

Race/Ethnicity		Percentages
Brown		41.39 %
White		34.10 %
Black		18.65 %
Indigenous		3.73 %
Yellow		2.13 %
Average inhabitants per household		3.72 individuals
Parents' Education Level (in percentages)	Mother	Father
Completed High School	42.10 %	43.16 %
Complete Elementary School	17.41 %	19.72 %
Incomplete High School	15.63 %	14.39 %
Complete Higher Education	13.32 %	10.83 %
Incomplete Elementary School	5.86 %	6.57 %
Incomplete Higher Education	5.68 %	5.33 %
Perceived support network		Percentages
Mother		31.02 %
Father		23.59 %
Grandmother		10.27 %
Coach		9.13 %
Grandfather		8.20 %
Aunt		7.04 %
Uncle		6.46 %
Brother		2.59 %
Sister		1.70 %

Figure 2 shows proximity and time spent getting to GEO. Most participants lived in the same neighborhood as the GEO. They had an average travel time of 9 minutes and 37 seconds on foot. Otherwise, participants coming from adjacent areas traveled approximately 25 minutes and 20 seconds by motorized transport.

Figure 2. Commuting distance between home and school.



≈: approximately; min: minutes

The comparison of motivational levels by sex (Table 6) revealed that male students presented significantly higher scores than female students in both general intrinsic motivation ($p = 0.001$) and extrinsic motivation ($p < 0.001$). Among the subdimensions, only intrinsic motivation to experience stimulation showed no significant difference ($p = 0.143$). Boys also demonstrated a lower index of amotivation compared to girls ($p = 0.028$).

Table 6. Motivational levels by sex

Variables	Male	Female	p-value
	Median (IQR)	Median (IQR)	
Intrinsic Motivation to Learn	5.50 (4.25–6.50)	5.25 (3.75–6.25)	0.027*
Intrinsic Motivation to Achieve Goals	6.00 (4.50–7.00)	5.75 (4.00–6.75)	0.044*
Intrinsic Motivation for Stimulating Experiences	5.50 (4.50–6.75)	5.50 (3.75–6.50)	0.143
Extrinsic Motivation of External Regulation	4.25 (3.00–5.50)	3.75 (2.50–4.75)	0.000*
Extrinsic Motivation of Introjection	4.75 (3.75–6.00)	4.50 (3.25–5.50)	0.003*
Extrinsic Motivation of Identification	5.00 (3.50–6.25)	4.25 (3.00–5.50)	0.000*
Amotivation	2.50 (1.50–3.75)	2.75 (1.75–4.00)	0.028*
Intrinsic Motivation	5.75 (4.50–6.75)	5.50 (3.75–6.50)	0.001*
Extrinsic Motivation	4.75 (3.50–6.00)	4.00 (3.00–5.25)	0.000*

IQR: Interquartile Range (25–75); *: Significant difference between groups ($p \leq 0.05$) for the Mann-Whitney test.

The comparison of motivational levels by sport modality (Table 7) revealed that student-athletes who practice individual modalities presented significantly higher scores in the dimensions of intrinsic motivation ($p < 0.001$). On the other hand, extrinsic motivation ($p < 0.001$) was higher in team modalities. Amotivation did not present significant differences between the groups ($p = 0.117$).

Table 7. Motivational levels by sport

Variables	Individual	Collective	p-value
	Median (IQR)	Median (IQR)	
Intrinsic Motivation to Learn	5.75 (4.38–6.50)	5.00 (3.25–6.25)	0.000*
Intrinsic Motivation to Achieve Goals	6.00 (5.00–7.00)	5.50 (3.75–6.50)	0.000*
Intrinsic Motivation for Stimulating Experiences	6.00 (4.50–6.75)	5.00 (3.00–6.25)	0.000*
Extrinsic Motivation of External Regulation	3.75 (2.25–5.00)	4.25 (3.00–5.25)	0.005*
Extrinsic Motivation of Introjection	4.25 (2.75–5.50)	5.00 (3.75–6.00)	0.000*
Extrinsic Motivation of Identification	4.25 (2.75–5.50)	4.75 (3.50–6.15)	0.001*
Amotivation	2.75 (1.75–4.00)	2.50 (1.50–3.75)	0.117
Intrinsic Motivation	6.00 (4.50–6.75)	5.00 (3.25–6.25)	0.000*
Extrinsic Motivation	4.00 (2.75–5.25)	4.75 (3.50–5.75)	0.000*

IQR: Interquartile Range (25–75); *: Significant difference between groups ($p \leq 0.05$) for the Mann-Whitney test.

The assessment of motivational profiles regarding residential proximity (Table 8) indicated that student-athletes classified as "near" exhibited significantly higher levels of intrinsic motivation ($p < 0.001$) and its three subdimensions: intrinsic motivation to learn, to achieve goals, and for stimulating experiences. Conversely, those classified as "distant" showed a predominance of extrinsic motivation ($p = 0.001$), driven by external regulation and identified regulation, but not by introjected regulation. No statistically significant difference was observed between groups regarding amotivation ($p = 0.840$).

Table 8. Motivational levels based on proximity of residence to the educational institution

Variables	Near	Distant	p-value
	Median (IQR)	Median (IQR)	
Intrinsic Motivation to Learn	5.75 (4.25–6.50)	5.00 (3.75–6.25)	0.013*
Intrinsic Motivation to Achieve Goals	6.00 (4.75–7.00)	5.75 (4.00–6.75)	0.031*
Intrinsic Motivation for Stimulating Experiences	5.75 (4.50–6.70)	5.25 (3.75–6.50)	0.016*
Extrinsic Motivation of External Regulation	3.75 (2.50–5.00)	4.25 (3.00–5.25)	0.049*
Extrinsic Motivation of Introjection	4.75 (3.50–6.00)	4.50 (3.25–5.75)	0.077
Extrinsic Motivation of Identification	4.25 (3.00–5.50)	4.75 (3.50–6.00)	0.015*
Amotivation	2.50 (1.50–3.75)	2.50 (1.50–3.75)	0.840
Intrinsic Motivation	5.75 (4.50–6.75)	5.25 (4.00–6.50)	0.000*
Extrinsic Motivation	4.25 (3.00–5.50)	4.50 (3.25–5.75)	0.001*

Near: Student-athletes who live in the same neighborhood as the educational institution or arrive on foot; Distant: Student-athletes who live in a different neighborhood and arrive by motorized transport; IQR: 25th–75th percentile range; *: Significant difference between groups ($p \leq 0.05$) for the Mann-Whitney U test.

Discussion

Synthesis of main findings

The study's outcomes indicate that motivational for sports participation among student-athletes in GEOs are heterogeneous, varying according to individual and contextual characteristics. Significant disparities in intrinsic and extrinsic motivation levels were identified concerning sex, sport modality (individual versus team), and residential proximity to the educational institution. Also, a prevailing consensus among participants suggests that sports engagement yields positive academic impacts, with parental figures, specifically mothers and fathers, serving as the primary cornerstones of perceived athletic encouragement.

Perception of the impact of sport on academic achievement

Many student-athletes agreed that sports participation is associated with positive effects on academic performance. This finding converges with previous investigations that identified a favorable relationship between sports engagement and school indicators (Chen et al., 2021; Maciel et al., 2017; Rizzo et al., 2021; Zhang et al., 2023).

A possible explanation found in the literature is that regular practice of physical and sports activities may contribute to reducing episodes of anxiety and stress (Borrega-Mouquinho et al., 2021; Della Corte et al., 2022) and to improving cognitive and socioemotional capabilities, such as concentration, discipline, and resilience (Paris et al., 2019; Viana-Meireles et al., 2020). Although the present study did not evaluate the mechanisms underlying these associations, such competencies have demonstrated positive repercussions in the school context (Maciel et al., 2023).

Moreover, it is important to consider that other elements reported in the literature, such as family support and the quality of education, play significant roles in the academic achievement of student-athletes (Conceição & Vaz, 2020; Della Corte et al., 2026; Peserico et al., 2015). Convergently, García and Luján (2019) identified that the quality of relationships established with coaches, peers, and family members significantly influences the intention to continue participating in sports, mainly when associated with the development of a harmonious passion, which is positively related to psychological well-being, emotional balance, and healthy sports participation. Complementarily, Medrano and Mateos (2018) found that factors such as enjoyment, perceived competence, autonomy, and personal development are central elements in strengthening students' connection to sports practice, promoting persistence, adherence, and a balance between sports and school life.

However, because this is a cross-sectional study, it is not possible to establish a causal relationship between sports participation and academic performance. It is suggested that future longitudinal investigations examine this issue with greater rigor.

Motivational differences by sex

Boys presented significantly higher scores than girls in almost all dimensions of the SMS, except for Intrinsic Motivation to Experience Stimulation. This pattern is consistent with the research conducted by Oliveira et al. (2020), which assessed motivational levels for sports participation in 846 school students aged 10 to 19 years. That study indicated higher intrinsic and extrinsic motivation in boys in the school sports context.

Some investigations (Andrade-Sánchez et al., 2015; Kilpatrick et al., 2005; Teo et al., 2015; Voser et al., 2014) corroborate these findings, though not with the intensity revealed in the present study, given the discrepancies in the scores observed in the scale dimensions. In contrast, in the intervention by Guedes and Missaka (2015), the study indicated that men tend to care more about improving their skills and seeking to stand out in competitions, while for women there is a greater association with sport being oriented toward social relationships.

Another aspect that may have negatively interfered with a more apathetic motivation among girls is the historically later approximation with sport. In addition, involvement in sports practices may occur only recreationally or sporadically, which tends to be less motivating (Alberto & Figueira Júnior, 2016; Silva et al., 2018; Voser et al., 2017). Moreover, girls frequently report lower perception of motor competence

in mixed sports contexts, which can negatively impact intrinsic motivation if the motivational climate is not inclusive (Clancy et al., 2017).

In view of this, Bourdieu (2019) emphasizes that male domination is an oppressive system that manifests through culturally reproduced behaviors, learned by men and absorbed, often unconsciously, by women. This process reinforces the notion of domination embedded in schemes of thought and bodies, frequently ratified by institutions such as family, school, church, and State. By being legitimized as something "natural", this form of symbolic violence tends to persist tacitly in contemporary society.

Nevertheless, the school and the family need to foster paradigm shifts, guiding, providing opportunities, and encouraging girls to practice the sport of their preference, regardless of stereotypes and the prevalence of a given gender in each modality. Furthermore, Physical Education classes structured with attractive dynamics can transform sports experience into an inspiring element. This contributes to the promotion of equality, reducing spaces for prejudices and discrimination and making sports participation more accessible to student-athletes (Ribeiro et al., 2023).

Thus, motivational differences may reflect the influence of social and cultural expectations regarding the "place" of boys and girls in sport, including inequalities in encouragement, visibility, and access to certain modalities and training environments. These factors can modulate both intrinsic components (autonomy and perceived competence) and extrinsic components (recognition and reward).

On the other hand, the literature suggests that when girls are inserted in contexts of vigorous, structured practice with clear goals, motivational profiles can approach or even surpass those of boys in some dimensions (Campos et al., 2011; Salselas et al., 2007). Thus, the findings reinforce the need to consider the context of provision, local sports culture, and pedagogical organization of practices to interpret differences by sex more accurately.

Sports preferences

Regarding the sports practice of student-athletes, there is a balance between preferences for team modalities (54.58%) and individual modalities (45.42%). Among team sports, there is a growing acceptance of modalities that have been consolidating in Brazilian sports culture, such as volleyball and basketball. This movement may be partly related to media mediation, which has increased the visibility of these practices and stimulated participation, especially among adolescents and young people.

Furthermore, in recent years, some individual modalities have also stood out, such as judo, athletics, and table tennis. This scenario may indicate a process of de-traditionalization of sports practices, in which individuals begin to construct more diversified motor biographies (Souza, 2019).

In convergence with this interpretation, Beck (2012) and Giddens (2012) argue that as society transforms, individuals also modify their ways of relating to sports practices. Over time, these changes may alter the social hierarchy of sports, influencing both the choice of modalities and the associated motivation patterns.

Differences by sport modality

Higher intrinsic motivation was observed among practitioners of individual sports and greater extrinsic motivation among practitioners of team modalities. This result is consistent with studies indicating that the choice and persistence in modalities may relate to personal preferences, previous experiences, participation opportunities, and characteristics of the sports environment (Murcia et al., 2007; Top et al., 2018). A possible interpretation in literature is that in individual may more directly foster experiences related to autonomy, control, and self-responsibility, thereby favoring intrinsic components linked to skill mastery and enjoyment of performance. In contrast, team sports may contribute to group dynamics that intensify elements such as social recognition, a sense of belonging, and external rewards, resulting in higher levels of extrinsic motivation (Coimbra et al., 2013).

However, it is important to interpret these differences without reductionism: individual and team modalities can simultaneously contain intrinsic and extrinsic components, depending on the level of competition, the leadership style of the coach, and the motivational climate of the group. Juan et al. (2021), based on Self-Determination Theory, found that both individual and team sports contribute to the psychological development of students, principally in strengthening autonomy, competence, and social relationships. Nevertheless, individual sports demonstrated greater potential to enhance the perception

of autonomy after pedagogical interventions, indicating that sports practices structured based on self-determined pedagogical strategies can enhance intrinsic motivation, increase student involvement, and promote more self-regulated and sustainable sports experiences.

Furthermore, participation in sports activities can serve as an important means of identity construction, given that a preference for specific sports often stems from a confluence of cultural, familial, and personal backgrounds. This dynamic may suggest a dual sense of individual distinctiveness and collective belonging. Student-athletes' identification with a particular sport may be linked to the reproduction of values and preferences that reflect their socioeconomic and educational backgrounds. From a theoretical perspective, this process aligns with the concept of *habitus* (Bourdieu, 2014), defined as a system of embodied dispositions that structures social perception and action. Based on this theoretical framework, *habitus* acts as a generative basis for distinct and distinctive practices, manifesting through specific tastes, classification schemes, and principles of social division.

Residence-school proximity and motivational profile

The proximity between residence and school was also associated with differences in the motivational profile. Student-athletes who lived near the school presented higher intrinsic motivation, while those who lived farther away exhibited greater extrinsic motivation. This finding suggests that territorial and contextual factors may play a relevant role in shaping the quality of motivation among student-athletes. As proposed by Self-Determination Theory (Ryan & Deci, 2020), a possible explanation is that students living near the school likely experience higher levels of community belonging, familiarity with the institutional environment, and integration into local social networks. These conditions favor the internalization of values associated with sports practice and strengthen intrinsic motivation mechanisms grounded in autonomy, competence, and social connection. Conversely, students who travel longer distances to participate in extracurricular activities face additional travel costs, higher time commitment, and less daily interaction with the school community outside of class hours.

These circumstances may lead to sports practice being perceived predominantly as an investment motivated by future rewards, social mobility, sports recognition, or educational opportunities. These characteristics are more closely aligned with extrinsic regulatory mechanisms. This interpretation is corroborated by studies showing that geographical proximity favors a sense of institutional identification and school engagement (Haguette et al., 2016; Oliveira et al., 2021; Reeve, 2009). In contrast, longer commutes tend to increase dependence on external incentives to maintain participation in sports and educational activities (Fernandes, 2021; Matos et al., 2022).

In the specific context of the GEOs, this phenomenon appears particularly relevant, since these schools function as hybrid spaces for academic and athletic development, where the daily interaction with the territory, the local community, and opportunities for sports participation may be linked to how student-athletes interpret their ongoing involvement in the program. Taken together, the results suggest that sports motivation should not be understood solely as a function of individual characteristics, but also as a product of the social, spatial, and institutional conditions that structure young people's access to and continued participation in sports-oriented educational programs.

Additionally, sports environments that provide psychological support, relational quality, satisfaction, and pleasurable experiences favor higher levels of self-determined motivation, positively affecting daily organization, performance, and the overall well-being of student-athletes. As demonstrated by Aznar-Ballesta and Santana (2023), high levels of pleasure, satisfaction with sports services, and a positive perception of the quality of extracurricular physical activities are associated with strengthening intrinsic motivation and adherence to sports practice, contributing to persistence, maintenance of healthy habits, and continued participation in sports. Conversely, experiences marked by boredom showed a negative association with motivational indicators, potentially compromising students' continued participation in sports and hindering the balance of multiple academic and sporting demands.

Considering Self-Determination Theory (Deci & Ryan, 1985; Ryan & Deci, 2020), longer commutes can increase the perceived cost of attending school, thereby reducing the willingness to engage in academic activities, particularly when the commute encroaches on time available for rest, study, and participation in other educational experiences. This interpretation extends our understanding of how context affects student motivation and provides a solid theoretical basis for investigating how geographical factors can

impact school retention, engagement, and academic performance (Bangun et al., 2024; Burgueño et al., 2019; Yohana et al., 2025).

To our knowledge, the association between residence-school proximity and motivational profile has not been previously reported in school sports contexts, constituting a novel contribution of the present study. However, caution is warranted when interpreting the mechanisms underlying this relationship. The study design is cross-sectional, allowing identification of between-group differences but not determination of the causal processes through which commuting conditions may influence motivational regulation.

Perceived support network: implications and cautions

The sociodemographic, sociocultural characterization and socioeconomic indicators of the sample' families revealed a high rate of school approval and identified the family as the main source of perceived encouragement for sports practice, with emphasis on the mother and father, both predominantly with an education level up to high school. Although this finding was obtained from a descriptive self-report measure, it converges with studies that point to parental involvement as a relevant element in the sporting trajectory of children and adolescents, manifesting itself through emotional support, encouragement, monitoring of activities and support for the demands associated with sports practice (Momesso et al., 2016; Souza et al., 2022).

In this conception, it is comprehended that some working-class families, possibly concerned about their children's education and apprehensive about their success or failure, establish selection criteria to find a higher-quality and more prestigious public educational institution. Even with limited resources, these families are likely to adjust their investments to the probabilities of success in the school trajectory, with the perspective of expanding social and cultural dispositions. From Bourdieu's (2014) perspective, the appropriation of this social space, understood as a set of symbolic and often unobservable relationships, occurs through the interaction between social actors.

Supporting this idea, Bungenstab et al. (2022) and Lahire (1997) indicated that academic success is a tangible concern even within working-class households, often catalyzing deliberate strategies to secure placement in public institutions perceived as superior in quality. Despite facing economic constraints, these families engage in rational decision-making by leveraging social and cultural assets, such as experiential knowledge and interpersonal networks, to broaden educational prospects. Added to this, the integration of "sports capital" serves as a symbolic instrument that enhances social prestige and streamlines entry into esteemed organizations. Consequently, these findings imply that such families actively pursue social mobility and distinction, skillfully navigating the structural boundaries that define their socio-economic reality.

In this sense, Piotto (2025) argues that the strategic selection of high-quality public schools by working-class families does not inherently signify a detachment from their foundational values; rather, it functions as a negotiation between domestic cultural repertoires and the demands of the academic environment. Through a Bourdieusian lens, these families intentionally mobilize social and cultural capitals to harmonize their origins with integration into prestigious educational settings. Within this framework, scholastic success is viewed not merely because of individual merit, but as a product of the family's capacity to convert available resources into educational advantages, fostering a more reflexive and adaptive *habitus* amidst structural inequalities.

Nevertheless, to mitigate the risk of extrapolations, it is suggested that future research utilize inferential statistical models to examine the associations between diverse support networks, including family, school, and coaching staff, and specific motivational constructs. This approach is particularly relevant for specialized, sports-oriented contexts such as the GEOs, where the interplay between different forms of encouragement and athlete engagement can be more rigorously analyzed.

Strengths and important highlights

Among the strengths of this study, we highlight relevant data demonstrating that motivational profiles vary not only according to individual characteristics, but also in relation to elements associated with school experience. This evidence reinforces the need to understand sports motivation from an ecological perspective, in which educational, sporting, and institutional factors interact in the construction of the experiences of student-athletes. In this way, the study contributes to expanding a field that is still little

explored in literature: the investigation of sports motivation in school models that simultaneously integrate academic training and systematized sports practice.

An additional contribution of our research lies in the inclusion of residence-school proximity as a contextual characteristic associated with sports motivation in a school-based sports environment. It is noticeable that this variable has received limited attention in the literature on adolescent sports motivation, particularly in educational models that integrate teaching-learning and structured sports participation within the same institutional setting. Although the present findings do not establish causal mechanisms, they highlight the potential relevance of territorial and organizational dimensions for understanding motivational processes in school sport.

Limitations and practical implications

This study presents limitations that must be considered. First, the cross-sectional design does not allow establishing causal relationships between the investigated variables. Second, the sample, although representative of the GEOs from different CREs, does not encompass all school units in the municipality of Rio de Janeiro, which restricts the generalization of findings. Finally, some potentially relevant variables were not evaluated, such as the motivational climate promoted by coaches, the level of competition, injury history, and sleep quality.

Despite these limitations, the findings have important practical implications. They suggest that motivation for sports participation among student-athletes in sports-focused schools is multidetermined and varies according to individual and contextual profiles. From a pedagogical perspective, actions that strengthen intrinsic components of motivation, such as autonomy, sense of competence, and belonging, can be especially relevant for girls, for practitioners of team modalities, and for students who face greater commuting challenges. On the other hand, recognizing that extrinsic motivation can also sustain engagement, especially in more demanding contexts, allows interventions to be more realistic and sensitive to the diversity of motivational profiles.

Directions for future research

Future investigations could adopt longitudinal designs to examine the stability and changes in motivational profiles over time, especially during school transition periods. It would also be relevant to test explanatory models that integrate individual variables (sex, age, sports experience), contextual variables (family support, school climate, training quality), and structural variables (residence-school distance, commuting conditions) to better understand the mechanisms underlying the observed differences. Finally, qualitative studies could deepen the understanding of the subjective experiences of student-athletes in different contexts, enriching the interpretation of quantitative findings.

Conclusions

The present study identified that motivation levels for sports participation among student-athletes enrolled in GEOs is not a homogeneous phenomenon, but rather a multidimensional construct influenced by individual and contextual factors. Differences associated with sex, sport modality (individual/team), and residence-school proximity indicate that motivational processes are shaped by the interaction between personal experiences and the educational environment in which sports practice occurs. From a scientific perspective, these findings contribute to advancing the understanding of sports motivation in specialized school contexts, reinforcing the assumptions of Self-Determination Theory and highlighting the importance of considering sociocultural, pedagogical, and structural factors when investigating engagement and persistence in sports among adolescents. Furthermore, the study expands the still limited body of evidence on sports-oriented public schools in Latin America, offering empirical support for future investigations on motivation, school involvement, and student-athlete development.

From an educational standpoint, the findings reinforce the potential of the GEO model as an innovative experience of integral education mediated by sport. The high levels of motivation identified among student-athletes, combined with evidence of strong engagement in sports practice and positive perceptions regarding the relationship between sport and academic achievement, suggest that sports-focused schools can promote educational experiences that transcend physical performance. These experiences also contribute to students' cognitive, social, emotional, and ethical development. In this sense, sport

emerges not merely as an extracurricular activity, but as a pedagogical strategy capable of strengthening school belonging, autonomy, responsibility, resilience, and the construction of life projects. Consequently, the GEO experience offers important lessons for the expansion and qualification of full-time education policies in Brazil, particularly in contexts marked by social vulnerability and educational inequalities.

Finally, the results reveal broader implications for public policies in the fields of education, sport, and leisure. By integrating academic education and systematized sports practice within the same institutional framework, sports-oriented schools can function as mechanisms for social inclusion, human development, and democratization of access to quality educational opportunities. Beyond contributing to the promotion of physically active lifestyles and the identification of sporting talents, initiatives such as the GEOs have the potential to strengthen social capital, expand educational opportunities, and foster citizenship among young people from diverse social backgrounds. Therefore, the evidence presented supports the argument that investments in sports-focused schools should be understood not merely as sectoral sports policies. Rather, they should be seen as strategic interventions capable of generating educational, social, cultural, and public health benefits, constituting a relevant pathway for the sustainable development of Brazilian society.

Acknowledgements

We are grateful to the members of the Research Group on School, Sport and Culture (GPEEsC) for their support and encouragement of research and continuing education.

Financing

The publication of this work was funded by Portuguese national funds through the FCT - Foundation for Science and Technology, IP, within the scope of the reference project CiTUR UIDB/04470/2025.

References

Alberto, A. A. D., & Figueira Júnior, A. J. (2016). Prevalência de inatividade física em adolescentes e sua associação com variáveis socioculturais. *Pensar a Prática*, *19*(4), 800–813. https://doi.org/10.5216/rpp.v19i4.35317

Andrade-Sánchez, A. I., Galindo-Villardón, M. P., & Cuevas, J. R. (2015). Análisis multivariante del perfil psicológico de los deportistas universitarios. *Educación Física y Ciencia*, *17*(2), 1–11. https://efyc.fahce.unlp.edu.ar/article/view/EFyCv17n02a02/7061

Aznar-Ballesta, A., & Santana, M. (2023). Enjoyment and motivation in the practice of physical activity and satisfaction with sports services during adolescence. *Retos*, *47*, 51–60. https://doi.org/10.47197/retos.v47.94986

Bangun, D. B. P., Sihombing, E. P., Nababan, I. O., Simanullang, S. C., & Yunita, S. (2024). Implikasi Jarak Rumah ke Sckolah Terhadap Motivasi Belajar Siswa. *Indo-MathEdu Intellectuals Journal, 5*(3), 3367–3373. http://doi.org/10.54373/imeij.v5i3.1262

Barbanti, V. (2012). O que é esporte? *Revista Brasileira de Atividade Física e Saúde*, *11*(1), 54–58. https://doi.org/10.12820/rbafs.v.11n1p54-58

Barroso, A. L. R., & Darido, S. C. (2006). Escola, educação física e esporte: Possibilidades pedagógicas. *Revista Brasileira de Educação Física, Esporte, Lazer e Dança*, *1*(4), 101–114.

Beck, A. (2012). Reinvenção da política: Rumo a uma teoria da modernização reflexiva. In A. Giddens, L. Scott, & U. Beck (Eds.), *Modernização reflexiva: Política, tradição e estética na ordem social moderna* (pp. 11–87). Editora da Unesp.

Bourdieu, P. (2019). *A dominação masculina* (19ª ed.). Bertrand Brasil.

Bourdieu, P. (2000). *O campo econômico*: A dimensão simbólica da dominação. Papirus.

Bourdieu, P. (2014). *Razões práticas*: Sobre a teoria da ação (11ª ed.). Papirus.

Borrega-Mouquinho, Y., Sánchez-Gómez, J., Fuentes-García, J. P., Collado-Mateo, D., & Villafaina, S. (2021). Effects of high-intensity interval training and moderate-intensity training on stress, depression, anxiety, and resilience in healthy adults during Coronavirus disease 2019 confinement: A randomized controlled trial. *Frontiers in Psychology, 12*, 643069. https://doi.org/10.3389/fpsyg.2021.643069

Brasil. (2012). *Resolução nº 466, de 12 de dezembro de 2012: Diretrizes e normas regulamentadoras de pesquisa envolvendo seres humanos*. Ministério da Justiça. Conselho Nacional de Saúde. *Diário Oficial da União*. https://bvsms.saude.gov.br/bvs/saudelegis/cns/2013/res0466_12_12_2012.html

Brasil. (2016). *Resolução nº 510, de 07 de abril de 2016: Ética na pesquisa na área de Ciências Humanas e Soci*ais. Ministério da Justiça. Conselho Nacional de Saúde. *Diário Oficial da União*. https://bvsms.saude.gov.br/bvs/saudelegis/cns/2016/res0510_07_04_2016.html

Bungenstab, G. C., Souza, J., & Garcia, R. P. (2022). Para uma teoria do capital esportivo: Conversações com Bourdieu e Lahire. *Educação e Pesquisa*, 48, e253013. https://doi.org/10.1590/S1678-4634202248253013

Burgueño, R., González-Cutre, D., Sevil-Serrano, J., Herrador-Colmenero, M., Segura-Díaz, J. M., Medina-Casaubón, J., & Chillón, P. (2019). Understanding the motivational processes involved in adolescents' active commuting behaviour: Development and validation of the Behavioural Regulation in Active Commuting to and from School (BR-ACS) Questionnaire. *Transportation Research Part F: Traffic Psychology and Behaviour, 62*, 615–625. https://doi.org/10.1016/j.trf.2019.02.016

Campos, L. T. S., Vigário, O. S., & Lüdorf, S. M. A. (2011). Motivation factors of young volleyball athletes. *Revista Brasileira de Ciências do Esporte*, *33*(2), 303–317. https://doi.org/10.1590/S0101-32892011000200003

Chen, S., Li, X., Yan, J., & Ren, Z. (2021). To be a sportsman? Sport participation is associated with optimal academic achievement in a nationally representative sample of high school students. *Frontiers in Public Health*, 9, 730497. https://doi.org/10.3389/fpubh.2021.730497

Clancy, R. B., Herring, M. P., & Campbell, M. J. (2017). Motivation measures in sport: A critical review and bibliometric analysis. *Frontiers in Psychology*, *8*, 348. https://doi.org/10.3389/fpsyg.2017.00348

Coimbra, D. R., Gomes, S. S., Oliveira, H. Z., Rezende, R. A., Castro, D., Miranda, R., & Bara Filho, M. G. (2013). Características motivacionais de atletas brasileiros. *Motricidade*, *9*(4), 64–72. https://doi.org/10.6063/motricidade.9(4).1179

Conceição, D. M., & Vaz, A. F. (2020). A concomitância entre estudar e jogar: Observações sobre o processo de descontinuidade na escolarização de jogadores de futebol em formação. *Revista Eletrônica de Ciências Sociais*, *31*(1), 91–108. https://doi.org/10.34019/1981-2140.2020.30510

Costa, V. T., Albuquerque, M. R., Lopes, M. C., Noce, F., Costa, I. T., Ferreira, R. M., & Samulski, D. M. (2011). Validação da escala de motivação no esporte (SMS) no futebol para a língua portuguesa brasileira. *Revista Brasileira de Educação Física e Esporte*, *25*(3), 537–546. https://doi.org/10.1590/S1807-55092011000300015

De Rose Júnior, D., Deschamps, S., & Korsakas, P. (1999). Situações causadoras de "stress" no basquetebol de alto rendimento: Fatores competitivos. *Revista Brasileira de Educação Física e Esporte*, *13*(2), 217–229. https://doi.org/10.11606/issn.2594-5904.rpef.1999.137871

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum Press. https://doi.org/10.1007/978-1-4899-2271-7

Della Corte, J., Santos, L. C., Chrispino, R. F., Castro, J. B. P., Cabral, E. A., Miarka, B., & Telles, S. C. C. (2022). Impact of physical activity on anxiety levels during the COVID-19 pandemic: An integrative review. *Revista Brasileira de Fisiologia do Exercício*, *21*(1), 61–76. https://doi.org/10.33233/rbfex.v21i1.5011

Della Corte, J., Tucher, G., Triani, F. S., Novaes, R. C., Santos, L. C., Serpa, C. C., Castro, J. B. P., & Telles, S. C. C. (2026). Sports and academic performance: Associations contributing to the (un)success of student-athletes. *Retos*, *75*, 199–219. https://doi.org/10.47197/retos.v75.116930

Delors, J. (Ed.). (1999). *Educação: Um tesouro a descobrir, relatório para a UNESCO da Comissão Internacional sobre Educação para o Século XXI* (3ª ed.). Cortez; MEC/UNESCO.

Fernandes, B. G. (2021). Experiências juvenis em espaços urbanos: A influência do contexto escolar. *Revista Mundaú*, *10*(1), 183–207. https://doi.org/10.28998/rm.2021.n.10.11848

Figueiredo, S. H. (2000). Variáveis que interferem no desempenho do atleta de alto rendimento. In K. Rubio (Org.), *Psicologia do esporte: Interfaces, pesquisa e intervenção* (pp. 114–124). Casa do Psicólogo.

García, D. P., & Luján, J. F. G. (2019). Cognitive predictors of the intention of practice and the perception of relationships in sports: analysis of passion as a mediator. *Retos, 36*, 193–202. https://doi.org/10.47197/retos.v36i36.64745

Giddens, A. (2012). A vida em uma sociedade pós-tradicional. In A. Giddens, L. Scott, & U. Beck (Orgs.), *Modernização reflexiva: Política, tradição e estética na ordem social moderna* (pp. 89–166). Editora da Unesp.

Graser, S. V., Groves, A., Prusak, K. A., & Pennington, T. R. (2011). Pedometer steps-per-minute, moderate intensity, and individual differences in 12- to 14-year-old youth. *Journal of Physical Activity & Health*, *8*(2), 272–278. https://doi.org/10.1123/jpah.8.2.272

Guedes, D. P., & Missaka, M. S. (2015). Sport participation motives of young Brazilian judo athletes. *Motriz: Revista de Educação Física*, *21*(1), 84–91. https://doi.org/10.1590/S1980-65742015000100011

Haguette, A., Pessoa, M. K. M., & Vidal, E. M. (2016). Dez escolas, dois padrões de qualidade: Uma pesquisa em dez escolas públicas de Ensino Médio do Estado do Ceará. *Ensaio: Avaliação e Políticas Públicas em Educação*, *24*(92), 609–636. https://doi.org/10.1590/S0104-40362016000300005

Januário, N., Colaço, C., Rosado, A., Ferreira, V., & Gil, R. (2012). Motivação para a prática desportiva nos alunos do ensino básico e secundário: Influência do género, idade e nível de escolaridade. *Motricidade*, *8(4)*, 38–51. https://doi.org/10.6063/motricidade.8(4).1551

Juan, E. P., Martínez, S. G., & Valero, A. F. (2021). Basic psychological needs associated with the practice of individual and collective sport. *Retos*, *42*, 500–506. https://doi.org/10.47197/retos.v42i0.87480

Kilpatrick, M., Hebert, E., & Bartholomew, J. (2005). College students' motivation for physical activity: Differentiating men's and women's motives for sport participation and exercise. *Journal of American College Health*, *54*(2), 87–94. https://doi.org/10.3200/JACH.54.2.87-94

Lahire, B. (1997). *Sucesso escolar nos meios populares: As razões do improvável*. Ática.

Maciel, L. F. P., Folle, A., Souza, P. H. X., Vaz, G., & Salles, W. N. (2017). Sporting and scholar involvement: perceptions of student-athletes from "Basquetebol Para Todos" program. *Revista Brasileira de Ciência e Movimento*, *25*(4), 92–103. https://doi.org/10.31501/rbcm.v25i4.7776

Maciel, L. F. P., Oliveira Farias, G., Dallegrave, E. J., Flach, M. C., Nascimento, J. V., & Folle, A. (2023). Sports and school involvement and performance: a systematic review of literature. *Retos, 47*, 12–24. https://doi.org/10.47197/retos.v46.90498

Marinho, V. (2010). *O esporte pode tudo*. Cortez.

Matos, C. C., Carneiro, M. N. A., & Oliveira, M. S. (2022). Entre a casa e a escola: Nuances do cotidiano do transporte escolar de alunos ribeirinhos da Escola Maria das Dores Sá, Vila Recreio do Piriá, Curralinho/PA. *Revista Falas Breves*, *11*(1), 34–49.

Medrano, E. F., & Mateos, M. E. (2018). Evaluation of motivation in teenagers who practice sports in school age. *Retos*, *33*, 27-33. https://doi.org/10.47197/retos.v0i33.52779

Momesso, C. T., Verardi, C. E. L., Arthuso, F. Z., Silva, F. S. C., Rodrigues, R. N., Hirota, V. B., & Maffei, W. S. (2016). Percepção de jovens atletas sobre o envolvimento dos pais em relação à sua participação esportiva. *Cadernos de Pós-Graduação em Distúrbios do Desenvolvimento*, *16*(1), 66–73. https://doi.org/10.22310/1809-4139/cpdd.v16n1p66-73

Murcia, J. A. M., Gimeno, E. C., & Coll, D. G. (2007). Analizando la motivación en el deporte: Un estudio a través de la teoria de la autodeterminación. *Apuntes de Psicología*, *25*(1), 35–51. https://doi.org/10.55414/4fz3fp19

Neuenfeldt, D. J. (2008). *Esporte, educação física e formação profissional*. Editora Univates.

Oliveira, V. M., Brasil, M. R., Volski Mattes, V., & Silva, S. R. (2020). Nível motivacional para a prática esportiva em escolares: Fatores de influência. *Educación Física y Ciencia*, *22*(3), e133. https://doi.org/10.24215/23142561e133

Oliveira, V. M., Brasil, M. R., Volski Mattes, V., & Silva, S. R. (2021). A motivação esportiva entre escolares da educação urbana e educação do campo. *Revista Brasileira de Ciência e Movimento*, *29*(1), 1–16. https://doi.org/10.31501/rbcm.v29i1.10580

Paris, J. (2019). La práctica deportiva en la infancia. In *Seminario de Protección al Deportista Menor*, October, Antigua, Guatemala. Palestra. AECID.

Pelletier, L. G., Tuson, K. M., Fortier, M. S., Vallerand, R. J., Briére, N. M., & Blais, M. R. (1995). Toward a new measure of intrinsic motivation, extrinsic motivation, and amotivation in sports: The Sport Motivation Scale (SMS). *Journal of Sport & Exercise Psychology*, *17*(1), 35–53. https://doi.org/10.1123/jsep.17.1.35

Peserico, C. S., Kravchychyn, C., & Oliveira, A. A. B. (2015). Análise da relação entre esporte e desempenho escolar: Um estudo de caso. *Pensar a Prática*, *18*(2), 260–277. https://doi.org/10.5216/rpp.v18i2.27965

Picamilho, S., Saragoça, J., & Teixeira, M. (2021). Dual careers in high sporting performance in Europe: a systematic literature review. *Motricidade, 17*(3), 290–305. https://doi.org/10.6063/motricidade.21422

Piotto, D. C. (2025). Trajetórias de sucesso escolar em meios populares: Ruptura ou conformismo? *Educar em Revista*, *41*, e95812. https://doi.org/10.1590/1984-0411.95812

Reeve, J. (2009). Why teachers adopt a controlling motivating style toward students and how they can become more autonomy supportive. *Educational Psychologist*, *44*(3), 159–177. https://doi.org/10.1080/00461520903028990

Reis, R. M., Almeida, N. M. C., Teixeira, M. C., Cardoso, M. V. F., & Telles, S. C. C. (2025). Sports mega event legacy: a proposed measurement of Brazil 2014 FIFA World Cup™ Arenas. *Retos, 72*, 1044–1055. https://doi.org/10.47197/retos.v72.117062

Reis, R. M., Telles, S. C. C., & Teixeira, M. (2023). Measuring the legacies of sports mega events: a systematic review. *Journal of Physical Education and Sport, 23*(4), 996–1009. https://doi.org/10.7752/jpes.2023.04125

Ribeiro, R. P. P., Andrade, M. S., Souza, G. C., & Triani, F. S. (2023). Futebol feminino, escola e cultura: Possíveis impactos das aulas de educação física na perspectiva das atletas. *Corpoconsciência*, *27*, e16582. https://doi.org/10.51283/rc.27.e16582

Rio de Janeiro. (2012). *Decreto nº 35.261, de 19 de março de 2012: Criação do Programa Ginásio Experimental Olímpico e Paraolímpico*. Diário Oficial do Município do Rio de Janeiro. http://leismunicipa.is/qudal

Rio de Janeiro. (2021). *Resolução SME nº 297, de 17 de novembro de 2021: Matriz Curricular das Unidades Escolares da Rede Pública de Ensino da Cidade do Rio de Janeiro*. Diário Oficial do Município do Rio de Janeiro. https://www.rio.rj.gov.br/dlstatic/10112/12555768/4345103/RESSME29721MATRIZcurricular.pdf

Rio de Janeiro. (2023). *Resolução SME nº 417, de 29 de setembro de 2023: Matriz Curricular das Unidades Escolares da Rede Pública de Ensino do Município do Rio de Janeiro*. Diário Oficial do Município do Rio de Janeiro. https://educacao.prefeitura.rio/wp-content/uploads/sites/42/2023/10/RESOLUCAO-SME-N-417-DE-29-DE-SETEMBRO-DE-2023-MATRIZ-COM-ANEXO-I.pdf

Rizzo, D. T. S., Melo, R. Z., Scaglia, A. J., Taques, M. J., & Sousa, A. P. M. (2021). O rendimento escolar e o esporte na vida de alunos/atletas. *Pensar a Prática*, *24*, e64737. https://doi.org/10.5216/rpp.v24.64737

Rodríguez-López, C., Salas-Fariña, Z. M., Villa-González, E., Borges-Cosic, M., Herrador-Colmenero, M., Medina-Casaubón, J., Ortega, F. B., & Chillón, P. (2017). The threshold distance associated with walking from home to school. *Health Education & Behavior*, *44*(6), 857–866. https://doi.org/10.1177/1090198116688429

Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective. *Contemporary Educational Psychology*, 61, 101860. https://doi.org/10.1016/j.cedpsych.2020.101860

Salselas, V., Gonzalez-Boto, R., Tuero, C., & Márquez, S. (2007). The relationship between sources of motivation and level of practice in young Portuguese swimmers. *The Journal of Sports Medicine and Physical Fitness*, *47*, 228–233. https://www.ncbi.nlm.nih.gov/pubmed/17557064

Sesinando, A. D., Seguí-Urbaneja, J., & Teixeira, M. C. (2026). Local governance of sport: a national survey on how public opinion evaluates municipal sports development and priorities, *Frontiers in Sports and Active Living - Sports Politics, Policy and Law*, *8*, 1751428. https://doi.org/10.3389/fspor.2026.1751428

Silva, C. A. F. (Ed.). (2014). *Aluno-atleta-cidadão: Estudos no Ginásio Experimental Olímpico*. HP Comunicação Editora.

Silva, J., Andrade, R. D., Capistrano, R., Felden, E. P. G., Lisboa, T., Andrade, A., & Beltrame, T. S. (2018). Níveis insuficientes de atividade física de adolescentes associados a fatores sociodemográficos,

ambientais e escolares. *Ciência & Saúde Coletiva*, *23*(12), 4277–4288. https://doi.org/10.1590/1413-812320182312.30712016

Souza, C. R. M., Gomes, W. P., Prates, E. A. R., & Viana, H. B. (2022). A influência dos pais na prática do esporte de seus filhos infanto-juvenis. *Contemporânea – Revista de Ética e Filosofia Política*, *2*(6), 1252–1273. https://doi.org/10.56083/RCV2N6-012

Souza, G. C., Triani, F. S., & Telles, S. C. C. (2024). Narrativas das mulheres do judô veterano no estado do Rio de Janeiro. *Corpoconsciência*, *28*, e17235. https://doi.org/10.51283/rc.28.e17235

Souza, J. (2019). Educação Física reflexiva: Problemas, hipóteses e programa de pesquisa. *Movimento*, *25*(1), 1–15. https://doi.org/10.22456/1982-8918.78269

Teixeira, M., Nunes, V., García-Fernández, J., & Sesinando, A. (2023a). Sports Management in Local Authorities: a conceptual analysis of Municipal Sports Companies. *Motricidade, 19*(2), 180–189. https://doi.org/10.6063/motricidade.28309

Teixeira, M., Banza, T., Almeida, N., & Sesinando, A. (2023b). Motivations and Expectations of Olympic Volunteers: Building a Legacy of Personal Development as a Key Factor for the Success of Sports Mega-Events. *Physical Culture and Sport. Studies and Research*, *102*(1), 1-18. https://doi.org/10.2478/pcssr-2024-0001

Teixeira, M., Banza, T., Almeida, N., & Sesinando, A. (2023c). Sport mega-events, volunteer motivation, and self-assessment: Reasons and expectations for participating in the Rio 2016 Olympic Games. *Journal of Physical Education and Sport*, *23*(5), 1221–1236. https://doi.org/10.7752/jpes.2023.05151

Teixeira, M., Mamede, N., Segui-Urbaneja, J., & Sesinando, A. (2024). European Cities of Sport as a Strategic Policy for Local Development of Sports: A Perspective from Sports Management in the Last Decade. *Physical Culture and Sport. Studies and Research, 103*(1), 28–43. https://doi.org/10.2478/pcssr-2024-0010

Teixeira, M., Rijo, V., & Sesinando, A. (2022). Sports management research: analysis of scientific development in Portugal (2008-2017). *Journal of Physical Education, 33*(1), Article e3353. https://doi.org/10.4025/jphyseduc.v33i1.3353

Teixeira, M. R. C., & Ribeiro, T. M. P. (2016). Sport policy and sports development: Study of demographic, organizational, financial and political dimensions to the local level in Portugal. *The Open Sports Sciences Journal, 9*(1), 26-34. https://doi.org/10.2174/1875399X01609010026

Teo, E., Khoo, S., Wong, R., Wee, E., Lim, B., & Rengasamy, S. S. (2015). Intrinsic and extrinsic motivation among adolescent ten-pin bowlers in Kuala Lumpur, Malaysia. *Journal of Human Kinetics*, *45*(1), 241–251. https://doi.org/10.1515/hukin-2015-0025

Thomas, J. R., Nelson, J. K., & Silverman, S. J. (2012). *Métodos de pesquisa em atividade física* (6ª ed.). Artmed.

Top, E., Akil, M., & Akyüz, M. (2018). Investigation of the children's motives for participating in sports and the difficulties they experience. *Acta Kinesiologica*, *12*(2), 36–44. https://akinesiologica.com/wp-content/uploads/2018/12/512-1.pdf

Venturini, G. R. O., Mazini Filho, M. L., Castro, J. B. P., Jesus, H. R., Souza, R. S., Freitas, J. V., & Silva, N. S. L. (2024). Motivation for sports practice in school Physical Education. *Revista Brasileira de Educação Física e Esporte*, *38*, e38185517. https://doi.org/10.11606/issn.1981-4690.2024e38185517

Viana-Meireles, L. G., Saldanha, D. M. F., Menescal, D. M. P., Oliveira, R. K. A., & Gonzalez, R. H. (2020). Projetos esportivos sociais para adolescentes no Brasil: Impactos, implicações e barreiras. *Caderno de Educação Física e Esporte*, *18*(1), 77–82. https://doi.org/10.36453/2318-5104.2020.v18.n1.p77

Voser, R. C., Hernandez, J. A. E., Ortiz, L. F. R., & Voser, P. E. G. (2014). A motivação para a prática do futsal: Comparação entre atletas federados do sexo masculino e feminino. *Revista Brasileira de Futsal e Futebol*, *6*(21), 196–201. https://www.rbff.com.br/index.php/rbff/article/view/287/234

Voser, R. C., Lima, D. V., Voser, P. E. G., & Duarte Júnior, M. A. S. (2017). Mensuração do nível de atividade física de escolares da rede pública de ensino da cidade de Pelotas-RS. *Revista Brasileira de Prescrição e Fisiologia do Exercício*, *11*(70), 820–825. https://www.rbpfex.com.br/index.php/rbpfex/article/view/1279/987

Wangzom, D., White, M., & Paay, J. (2023). Perceived safety influencing active travel to school-A built environment perspective. *International Journal of Environmental Research and Public Health*, *20*(2), 1026. https://doi.org/10.3390/ijerph20021026

Weinberg, R. S., & Gould, D. (2017). *Fundamentos da psicologia do esporte e do exercício* (6ª ed.). Artmed.

World Medical Association. (2013). *Declaration of Helsinki: Ethical principles for medical research involving human subjects*. https://www.wma.net/wp-content/uploads/2024/10/DoH-Oct2013.pdf

Yohana, Y., Anasi, P. T., Harjanti, D. T., & Wiyono, H. (2025). Pengaruh Jarak Tempuh ke Sekolah terhadap Motivasi Belajar Siswa di SMP Negeri 2 Sajingan Besar. *Jurnal Pendidikan Geografi Undiksha*, *13*(2), 238–244. https://doi.org/10.23887/jjpg.v13i2.94908

Zhang, Y., Yan, J., Jin, X., Yang, H., Zhang, Y., Ma, H., & Ma, R. (2023). Sports participation and academic performance in primary school: A cross-sectional study in Chinese children. *International Journal of Environmental Research and Public Health*, *20*(4), 3678. https://doi.org/10.3390/ijerph20043678

Authors and translators' details:

Jaime Della Corte	jaimedellacorte@ufrj.br	Author
Guilherme Tucher	g.tucher@eefd.ufrj.br	Author
Felipe da Silva Triani	felipetriani@gmail.com	Author
Leonardo Carmo Santos	lleonardosanttos@gmail.com	Author
Rômulo Meira Reis	romulomreis@hotmail.com	Author
Caio Cesar Serpa	caiocserpa@gmail.com	Author
Juliana Brandão Pinto de Castro	juliana.castro@fiocruz.br	Author/Translator
Mário Coelho Teixeira	mario.teixeira@uevora.pt	Author
Nuno Miguel Castanheira de Almeida	nunoalmeida@ipleiria.pt	Author
Silvio de Cassio Costa Telles	telles.ntg@terra.com.br	Author