# Devaluation of sports culture in the school environment 

Desvalorização da cultura esportiva no ambiente escolar
Desvalorización de la cultura deportiva en el ámbito escolar

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#### Abstract

The objectives of this study were to analyze and identify probable relationships between sedentary behavior and physical inactivity in children and adolescents, with the predominance of the Cartesian body concept in the school environment and the lack of learning about sports culture in Physical Education classes in elementary school. The research was based on a qualitative transversal approach with the participation of 19 students aged between 14 and 17 years, both sexes. The information collection instrument - questionnaire - discursive question submitted to the adapted technique of discourse analysis. It was identified that the devaluation of sports culture, which are apparently physical activities, in the school environment from the predominance of Cartesian conception of the body and the absence of access and appropriation of sports culture during Physical Education classes can contribute to sedentary behavior and inactivity. physical activity of children and adolescent students.


Keywords: Adolescent; Child; Physical education; Sedentary behavior; Students.

## Resumo

Os objetivos deste estudo foram analisar e identificar prováveis relações entre comportamento sedentário e inatividade física de crianças e adolescentes discentes com a predominância do conceito de corpo Cartesiano no ambiente escolar e a falta de aprendizado sobre cultura esportiva nas aulas de Educação Física no ensino fundamental. A pesquisa foi por uma abordagem transversal qualitativa com participação de 19 discentes com faixa etária entre 14 a 17 anos, ambos os sexos. O instrumento de coleta de informações - questionário - questão discursiva submetida à técnica adaptada de análise de discurso. Identificou-se que a desvalorização da cultura esportiva que são atividades aparentemente físicas, no ambiente escolar a partir da predominância de concepção Cartesiana de corpo e a ausência do acesso e apropriação da cultura esportiva durante as aulas de Educação Física podem contribuir para o comportamento sedentário e inatividade física de crianças e adolescentes discentes.
Palavras-chave: Adolescente; Criança; Educação física; Comportamento sedentário; Estudantes.

## Resumen

Los objetivos de este estudio fueron analizar e identificar probables relaciones entre el sedentarismo y la inactividad física en niños y adolescentes, con el predominio del concepto Cartesiano del cuerpo en el ámbito escolar y la falta de aprendizaje de la cultura deportiva en las clases de Educación Física en la escuela primaria. La investigación se basó en un enfoque transversal cualitativo con la participación de 19 estudiantes con edades entre 14 y 17 años, de ambos sexos. El instrumento de recolección de información - cuestionario - pregunta discursiva sometido a la técnica adaptada de análisis del discurso. Se identificó que la desvalorización de la cultura deportiva, que son aparentemente actividades físicas, en el ámbito escolar a partir del predominio de la concepción Cartesiana del cuerpo y la ausencia de acceso y apropiación de la cultura deportiva durante las clases de Educación Física puede contribuir al sedentarismo y la inactividad. actividad física de los niños y adolescentes estudiantes.
Palabras clave: Adolescente; Niño; Educación física; Comportamiento sedentario; Estudiantes.

## 1. Introduction

Most young people do not meet the recommended minimum levels of physical activity. Over $81 \%$ of adolescents worldwide are considered physically inactive, and the situation in Brazil is even more worrisome, at about $83 \%$ (Guthold, et al., 2019). Sedentary behavior and physical inactivity are often treated as synonyms. Therefore, it is important to distinguish between the terms "sedentary behavior" and "physical inactivity." Sedentary behavior is defined as any waking behavior requiring low energy expenditure (sitting, lying down, or reclining), whereas physical inactivity is defined as the nonperformance of physical activities beyond basic movements (Tremblay et al., 2017).

Physical education based on the dichotomy of Cartesian logic, which is intellectualized and sedentary, has no place in today's society, which is becoming increasingly physically inactive. Sedentary behavior and physical inactivity are quite complex, and these behaviors escalate when intellectual activities are valued to the detriment of children and adolescents' physical activities in schools (Sousa, et al., 2021).

In this scenario, the National Survey of School Health (Instituto Brasileiro de Geográfia Estatística, 2015) found that the proportion of adolescents who usually perform sitting activities for more than three hours per day corresponded to $53.1 \%$ in total, that is, $54.3 \%$ for females and $51.9 \%$ for males. Studies specific to this group are scarce and their results vary. PeNSE did not consider the amount of time students spend sitting during or because of school activities, or the time they spend on Saturdays, Sundays, and holidays (Instituto Brasileiro de Geográfia Estatística, 2015). In this respect, physical inactivity and sedentary behavior among children and adolescents are public health problems, which have been analyzed in different contexts, especially regarding their consequences.

Therefore, this study aimed to identify and analyze what students learn about sports during physical education classes in primary education. The study considered the students' perceptions, as they can contribute to the creation of public policies in both health and education through the development and implementation of strategic actions for intervention in schools, to reduce the growing number of children and adolescents exhibiting sedentary and physically inactive behavior. To utilize the data, a theoretical framework was built around the Cartesian concept of the body in schools, physical education in schools, and sports and their educational and formative possibilities in schools.

### 1.1 Cartesian Concept of the Body in Schools

The organizational structure of schools is based on, or at least intensely influenced by, the dichotomous Cartesian thought, which understands the manifestation of human existence in cogito, which, in turn, impacts understanding of the body and maintains its marginalization in the educational process. As a result, intellectual activities are valued to the detriment of bodily activities. The body is made secondary, and it is an object to be used by rational objectivity.

Thus, any physical activity in school may be considered unnecessary or an obstacle to the formative and educational process, since the mind is responsible for acquiring knowledge (Sousa et al., 2021). This predominant way of thinking and understanding the body as something separate from the mind, the recognition of intellectual skills developed by students, and the devaluation of physical activity increasingly demotivate both teachers and students involved in school activities considered to be only physical.

Thus, "individuals in the more advanced grades and older individuals seem to be more likely to engage in sedentary tasks outside of school hours and to use the Internet" (Ferreira, et al., 2016). From this perspective, it is important to highlight the relationship between age, physical activity, and sedentary behavior. Physical activity tends to be maintained in childhood and pre-adolescence, with a gradual decline over the years, while sedentary behavior tends to increase as a consequence (Guerra et al., 2020). This is probably associated with a greater concern for academic performance and future professions, as these will give them access to power and enable them to exercise it.

Thus, students are subjected and conditioned to focus their efforts on intellectual development, as in childhood. In this sense, the body is neglected by physical education teachers. It is about offering not just physical exercise/sports in physical education classes, in order to unravel the restricted nature of physical fitness or participation in sport. Therefore, physical education, administrators, and schools need to consider multiple dimensions: Biological, social, and cultural, among others.

It is important to question whether schools have contributed to the development of sedentary behavior and physical inactivity in children and adolescents. As childhood habits are carried into adulthood, it is more difficult to change them (Tassitano et al., 2007). Thus, introducing children to healthy habits of physical activity in the preschool period increases their likelihood of maintaining them throughout their lives (Guerra et al., 2020).

## 2. Methodology

Two approaches contributed to the structure of this paper: Bibliographical research and data from a master's research project, which was carried out transversally in a qualitative approach toward the object of study. This is an appropriate approach for taking a closer look "... at a perceptible side in the world of meanings of actions and human relations that cannot be captured in equations, averages, and statistics" (Minayo, 2007).

This study adopted a qualitative cross-sectional approach, and we used a questionnaire to collect information and discourse analysis to analyze the data. We observed and carried out all the protocols and procedures for human subject research with the consent of the respondents, who were aware that they could withdraw their participation at any time without prejudice. The research was approved by decision 658.778 of the Research Ethics Committee of the Federal University of Triângulo Mineiro.

### 2.1 Research Participants

First year full-time high school students from a federal institute of professional and technological education in the state of Goiás, participated in the study voluntarily, as this is the only institution that offers programs from the secondary level and beyond. This may boost the students' confidence in providing more detailed answers in the data collection instrument about their academic career - physical education classes - and schools, without being affiliated to them, or about the people who were their teachers.

The inclusion criteria were students enrolled and with regular attendance in the Electronics Technician program who agreed to participate in the study by signing the "Informed Consent Form." Exclusion criteria were students enrolled in hybrid, distance education, and Youth and Adult Education programs or students who do not attend physical education classes.

The following table gives details of the survey respondents (Table 1).

Table 1 - Survey respondents in relation to content analysis - 2014.

| DETAILS ABOUT THE <br> RESPONDENTS |  |  | MALE |  |  | FEMALE |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age <br> Group | Number | $\%$ | Age Group | Number | $\%$ | Age Group | Number | $\%$ |
| 14 years | 8 | 42,1 | 14 years | 2 | 10,6 | 14 years | 6 | 31,6 |
| 15 years | 9 | 47,3 | 15 years | 4 | 21 | 15 years | 5 | 26,2 |
| 16 years | 1 | 5,3 | 16 years | --- | --- | 16 years | 1 | 5,3 |
| 17 years | 1 | 5,3 | 17 years | 1 | 5,3 | 17 years | --- | --- |
| Mean age | Number | $\%$ | Mean age | Number | $\%$ | Mean age | Number | $\%$ |
| -- | 19 | 100 | --- | 7 | 36,9 | 12 |  | 63,1 |

### 2.2 Data Collection Instruments

The information was collected via a questionnaire consisting of a list of sequential questions that aimed to obtain information from a person or a group of people through critical responses (Chaer, et al., 2011). The following questions were asked in the questionnaire that generated the data in this paper: What did you learn in physical education classes in elementary school, and how did this learning experience benefit and contribute to your life?

The questionnaire script was validated by six evaluators: three professors with a PhD in Physical Education and three professors with a PhD in Education, with an overall average experience of 18 years in research. For the content analysis, each evaluator received an editable file with the interview script and assessed each question based on the following criteria: 1) organization; 2) clarity; 3) readability; 4) proper vocabulary; and 5) objectivity. The instrument also al-lowed the evaluators to provide comments, suggestions, and criticism for each question.

### 2.3 Data Collection Procedure

Developing the study required presenting and explaining the research project to the General Director and Academic Coordination of the Program. The central source of empirical data was male and female physical education students who had recently entered high school, hereafter referred to as the survey respondents.

Prior to applying the questionnaire to respondents under the age of 18 years, the pedagogical coordination of the schools submitted the "Informed Consent Form" to the respondents' parents or guardians for their consent. Next, the questionnaire was submitted to the respondents for data collection.

Respondents over the age of 18 were given the "Informed Consent Form" so that they could read it and clarify any questions before they filled it out and signed it. The data collection instrument was then applied. The protocols and procedures were carried out with the consent of the survey respondents, who were made aware that they could withdraw their participation at any time without prejudice.

### 2.4 Data Analysis

An adapted technique for preparing and analyzing units of meaning, as proposed by (Moreira, et al., 2017), was used to analyze the data, i.e., for content analysis. The adaptation meant preparing categories of meaning instead of units of meaning. The content analysis made use of a table to identify the categories, which were submitted to an interpretative analysis of the survey respondents' discursive responses generated by question 14 of the questionnaire.

The results were compared against the bibliographic research to verify convergences and divergences to the reality of sports as a source of physical education knowledge in primary education and their contributions to a student's human development. The students' sedentary behavior and physical inactivity, probable indicators related to a predominant Cartesian concept of the body in schools and the absence of learning about sports culture in physical education classes in primary education, were also examined by International Physical Activity Questionnaire (IPAQ) (Craig et al., 2003).

## 3. Results

### 3.1 Content Analysis

Table 2 - Units of meanings identified from the students' perception of this question - guiding question: "1) What did you learn in physical education classes in elementary school, and how did this learning experience benefit and contribute to your life?" - 2014.

| Subjects |  |  | $\begin{aligned} & 17 \\ & \mathrm{M} \\ & 03 \end{aligned}$ | 15 $M$ 04 | $\begin{aligned} & 15 \\ & \mathrm{M} \\ & 05 \end{aligned}$ | $\begin{gathered} 16 \\ \mathrm{~F} \\ 06 \end{gathered}$ | $\begin{aligned} & 14 \\ & \mathrm{M} \\ & 07 \end{aligned}$ | $\begin{gathered} 15 \\ \mathrm{~F} \\ 08 \end{gathered}$ | $\begin{aligned} & 15 \\ & \mathrm{M} \\ & 09 \end{aligned}$ | $\begin{gathered} 14 \\ \mathrm{~F} \\ 10 \end{gathered}$ | $\begin{gathered} 15 \\ \mathrm{~F} \\ 11 \end{gathered}$ |  | $\begin{gathered} 14 \\ \mathrm{~F} \\ 13 \end{gathered}$ | 14 F 14 | 15 F 15 | 14 F 16 | $\begin{gathered} 15 \\ \mathrm{~F} \\ 17 \end{gathered}$ | $\begin{gathered} 14 \\ \mathrm{~F} \\ 18 \end{gathered}$ | $\begin{gathered} 15 \\ \mathrm{~F} \\ 19 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sports education related to results in student competitions | X |  | X |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| Sports' contribution in improving intrapersonal and interpersonal relationships | X |  |  | X |  |  |  |  | X |  | X |  |  | X |  | X |  | X | X |
| The relevance of developing healthy habits, such as physical exercise and proper nutrition |  |  |  |  |  |  | X | X |  | X | X |  |  | X | X | X | X | X | X |
| Separation by sex for both time and space in the lessons' organizational structure |  | X |  |  |  |  |  |  |  |  |  |  | X |  |  |  | X |  |  |
| Perception of a lack of planning, regularity, control, and discipline during physical education classes |  | X | X | X | X | X |  |  |  | X |  | X |  | X | X | X | X |  | X |
| No concern for teaching values that contribute to human development |  | X |  |  |  | X | X |  |  |  |  |  |  |  |  |  |  |  |  |
| Exclusion due to lack of ability for the proposed sportive practices |  | X | X |  |  |  |  |  |  |  | X |  |  | X |  | X |  |  |  |
| Theoretical lectures without explanations and/or disconnected from the experiences made possible during class |  |  |  |  | X | X | X |  |  | X |  |  |  |  | X |  |  |  |  |
| Absence of lessons around the topics of health and the body |  |  |  |  |  | X |  |  |  |  |  | X |  |  |  |  |  |  |  |
| Possibility of appropriating knowledge about one, two, or three sports | X |  | X |  |  |  | X |  | X | X | X | X | X | X | X | X | X | X | X |
| Values that promote the student's human development |  |  |  |  |  |  |  |  | X |  | X |  |  | X | X |  |  | X | X |
| Lack of adequate infrastructure to practice certain sports |  |  |  |  |  |  |  |  |  | X |  |  | X |  |  |  |  |  |  |

Source: Authors.

The Cartesian concept of the body in schools transforms it into a utilitarian instrument, a mere object to be manipulated according to various interests, which are often removed from formative and educational objectives. This is evidenced by the administration's lack of concern for physical education classes or for possibilities of appropriating and improving sportive practices, much less for teaching values, such as respect, cooperation, inclusion, and others, from experience of sports culture.

Respondent 3 (Table 2) seems to allude to this lack of pedagogical approaches to sport:
"I didn't learn much because the teachers lacked interest. The coordinators and the school principal didn't care about this because they were only interested in forming teams to play in the Student Olympics. So much so that when the time came for these competitions, the teacher would pick the best students to play, and the rest would do their best to learn a little. I learned the basics of futsal, and I didn't practice much because I was discouraged ${ }^{1 "}$.

We can observe that the administration hardly valued physical activities and opportunely recognized them to meet interests of social representation in sporting events that could gain recognition for the school. An action contrary to the process of education and comprehensive development, which should be inclusive and should contemplate the individual's multidimensionality, is evident. Moreover, the superimposition of intellectual activities over physical activities, which are marginalized in schools, is reinforced, given the lack of pedagogical concern of the administration and other teachers over what is taught (if it is even taught), much less how it is taught by physical education teachers.

Respondents $2,3,4,5,6,10,12,14,15,16,17$, and 19 disclosed the absence of planning, regularity, control, and discipline in physical education classes in elementary school. Identified over two decades ago, the lack of continuity remains, justifying debates in the 21 st century. This absence of planning, direction, and control during the classes probably contributes to the students' sedentary behavior and physical inactivity, as there is no proposal that favors and encourages the experience or the appropriation of sports culture. The student may possess information about the health benefits of physical exercise, as revealed by Respondent 11:
"I learned that physical exercise helps one's health in many ways. ... However, even though I learned about the
importance of exercising, I didn't play because the teacher always chose the best, those who already knew how to
play. So, I didn't have the opportunity to play with my classmates".

This response indicates that the intellectual dimension, according to Cartesian thought and its approach to acquiring knowledge, alone does not always generate changes in people's behavior. Often, acquiring information alone is not enough to change sedimented attitudes. For example, users of tobacco and alcohol are aware of the health risks of these substances, but they continue to consume them.

This does not mean that information is unnecessary; on the contrary, it is essential. Physical education, in particular, and education, in general, must orient learning toward the existential aspect felt in experimentation, whose nature demands effort to incorporate knowledge through the feet, hands, and heart, not just through the mind, so that the rest of the body can provide the service of carrying the head, which often forgets what it "learned" in school when given the opportunity to learn.

It is essential - and this would be the physical education teachers' responsibility - to encourage and orient the practice of regular physical exercise and not solely follow the paradigm of the perfect body, which often encourages behaviors contrary to a healthy lifestyle, such as the use of supplements without professional orientation in nutrition and physical education or, even worse, the use of anabolic steroids. Both represent immediacy and ease, the body-object to be purchased from the shelves of pharmacies or other environments.

Respondent 5 - as well as respondents $6,7,10$, and 15 - gave us the opportunity to verify the existence of expository classes, which suggest a distance and fragmentation between theory and practice. Sometimes the classes do not provide explanations. The students are encouraged to rewrite what is written on the blackboard in their notebooks. Sometimes the classes provide explanations that are out of context with the activities proposed in the practical experiences.

Respondent 14 reported:

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#### Abstract

"I learned about hygiene and eating habits, how to stay in good health, always respect others even if the other is disrespectful, how many players there are in a game like futsal and handball, and also some moves in these games. I learned about the game of checkers and its rules. There weren't many theoretical classes, and the sports we played in the practical classes were always the same. When it varied, it was handball, but even then, only for students who were going to the Olympics. There was not the slightest interest in teaching the right ways of making each move."


The systematic structuring of actions, both theoretically, regarding the relevance of physical exercise and good nutrition, and practically, regarding the provision of sports equipment to be used during recreation and physical education classes in moderate or vigorous intensity, did not demonstrate positive effects in relation to sedentary behavior and physical activity at school. Given this context, it is evident that occasional actions and theoretical order, even if associated with practical actions, may be insufficient to inspire significant changes biologically, especially with respect to cultural and social aspects. These activities are considered to be merely physical in schools, especially in sports culture, having little purpose or meaning.

Respondent 12 reveals probable elements that contribute to students’ discouragement from attending physical education classes in high school or even in the last years of elementary school. One element was not having learned the potential meanings of the repertoire of bodily expressions. The non-appropriation of knowledge about the proposed sports culture was another element. For the purposes of this observation, the last element was the lack of access to the potential topics that can be covered in physical education classes in primary education, resulting in the repetition of sports topics for almost nine consecutive years.

Respondent 12 describes this situation in these terms:
"In Elementary 1, my physical education classes were more productive. We did more activities. But from Elementary 2 onward, my physical education classes were not very productive. We always played the same sport, and when we did learn something new, the teacher was not so concerned about teaching techniques or how to play. ... Although I didn't learn much in my physical education classes in elementary school, I think it would be ideal for all teachers to encourage their students to exercise, because having an "active life" is very important to me."

Respondent 12's description corroborates and presents indicative elements of the findings in another study, which identified a decline in physical activity with age and a rise in sedentary behavior. Moreover, there is a propensity to engage in sedentary activities outside school hours and for using the Internet. In this sense, the Cartesian concept of the body prevails in marginalizing activities that are apparently only physical. As a result, the individual is gradually educated and conditioned to think according to the logic of reason, resulting in contempt for the body.

## 4. Discussion

It is important to note that studies about sedentary behavior focus on the amount of time for sedentary behavior patterns and some applied interventions. However, a deeper understanding of the reasons that lead a growing number of children and adolescents to adopt sedentary behavior is crucial to structuring formative and educational actions that exceed punctual actions, without being undervalued by such strategies (Mendonça, Pet al., 2018).

Therefore, it is necessary to identify and understand the possible causes (Ferreira Silva et al., 2022), not just the consequences, that may contribute to sedentary behavior and physical inactivity in children and adolescents. Even if physical inactivity cannot be understood as sedentary behavior, a relationship exists, as active adolescents are less prone than their inactive peers to engaging in sedentary behavior for two or more hours (Ferreira et al., 2016).

It is not possible to meet all the objectives outlined for physical education in the time made available for it (Mckenzie \& Lounsbery, 2009). Sometimes "physical education classes in the theoretical field" are disconnected and do not present an
opportunity for experience, and sometimes "physical education classes in the practical field" present recreational moments without objectives, in which "participation" is enough, when there is participation.

Another interesting point concerns the overload - intensity - applied in physical education classes in relation to low cardiorespiratory activity. This was associated with the objectives for physical education in their respective school units because the activities proposed by teachers had no concern for intensity, which decreases the possibility of overload and morphophysiological adaptation as a consequence (Melo et al., 2021).

The main focus of studies is on knowledge related to the biological implications of physical exercise, which reinforces a reductionist and instrumental view of health and physical education, wherein the classes for the curricular component are used to develop the students' physical fitness. Evidently, the results of this study diverge from this statement that physical education classes are used to develop physical fitness. However, they may find support in the study by (Melo et al., 2021), who identified free-form classes that were completely unconcerned with physical fitness. Nevertheless, there are several elements that may interfere with the intensity and volume that students are subjected to in physical education classes, such as the existence and amount of sports equipment, among other things.

Currently, there is concern about developing interventions at school that help reduce the growing number of sedentary or physically inactive children and adolescents, either through projects or through the intensity of the activities proposed to students in physical education classes. However, not teaching the repertoire of sportive bodily expressions makes it impossible for the students to gain their autonomy relative to the sports culture experience that interests them, both in and outside the school.

Given this context, these types of technologies are more appealing than the practices of sports culture. In this scenario, the lack of concern for teaching the elements inherent to sports (techniques, tactics, rules, and others) may have further strengthened this group's gravitation toward recreational activities on electronic devices. The students' responses point to the absence of opportunities to access and appropriate sports culture, much less the development of motivational and significant incentives in physical education classes in primary education.

The results are indicators for new studies that consider the devaluation of sports culture in schools based on the influential paradigm of the Cartesian concept of the body that marginalizes apparently physical activities and heightens intellectual activities. Administrators, teachers, and other curricular components are responsible for this devaluation. Public health policies and educational policies need to consider social, cultural, and other barriers in their intervention strategies for sedentary behavior and physical inactivity among children and adolescents, including those constructed or promoted by the school itself, which contribute to the individual's fragmented development and education.

## 5. Conclusion

The social values arising from the sports culture have not been passed on to students. Thus, the lack of lesson planning seems to be contributing to the devaluation of sports culture, to sedentary behavior, to physical inactivity. Therefore, all the mentioned factors aggravate the devaluation of the physical education discipline.

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[^0]:    ${ }^{1}$ When necessary, the students' answers were adjusted for punctuation and agreement to provide more clarity of meaning. In some passages, imprecise punctuation makes it difficult to read the reports in Appendix 2, where the answers are as they appear in the questionnaires submitted for comparison. We affirm that the adjustments were made to provide more clarity without distorting the intended meaning and expression of ideas.

