


**TEACHING ORIENTATION RUNNING IN SCHOOL PHYSICAL EDUCATION CLASSES:
LIMITATIONS AND POSSIBILITIES**

**ENSINO DA CORRIDA DE ORIENTAÇÃO NAS AULAS DE EDUCAÇÃO FÍSICA
ESCOLAR: LIMITAÇÕES E POSSIBILIDADES**

**ORIENTACIÓN DOCENTE DE LA CARRERA EN LAS CLASES DE EDUCACIÓN FÍSICA
ESCOLAR: LIMITACIONES Y POSIBILIDADES**

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ABSTRACT

The inclusion of Orienteering as a curricular component of Physical Education in schools only occurred after the enactment of the National Common Curricular Base (BNCC) in Brazil and has since generated a demand for teachers capable of teaching it effectively. This article presents the results of a survey aimed at identifying how Physical Education teachers are addressing Orienteering curricular content in their classes and the limitations and possibilities of its teaching in Physical Education (SPE) classes. Data collection was conducted with 164 Physical Education teachers from public and/or private schools in 12 Brazilian states (Amazonas, Ceará, Espírito Santo, Goiás, Mato Grosso, Minas Gerais, Paraná, Rio Grande do Sul, Rio de Janeiro, Santa Catarina, São Paulo, and Tocantins), as well as the Federal District. They responded to a semi-structured questionnaire about their practices related to teaching Orienteering. Using the organizational and interpretative procedures indicated by Content Analysis, it was found that 28% of teachers address the Orienteering curriculum in their classes, while 72% stated they do not. Factors hindering this approach include: lack of training; limited knowledge and experience in the sport; lack of teaching/instructional materials; lack of appropriate technical materials; and the culture of the sport. Given these facts, at the end of the research, the results of which are presented in this article, it is suggested that teachers' persistence, dedication, and ability to adapt and overcome challenges directly influence the possibility of addressing the content. This is made possible by adapting the materials necessary for practice, the school space and/or surrounding areas where the activities will take place, and by addressing deficiencies in initial training, whether through continuing education and/or through joint research and knowledge sharing, as emphasized by the respondents.

Keywords: Orienteering. Physical Education Teachers. Physical Education in Schools. Teaching.

RESUMO

A tematização da Corrida de Orientação, enquanto componente curricular da Educação Física Escolar, ocorreu somente a partir da promulgação, no Brasil, da Base Nacional Comum Curricular (BNCC) e vem gerando, desde então, uma demanda por professores

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aptos a lecioná-la eficientemente. Este artigo apresenta os resultados de uma pesquisa, cujo objetivo foi identificar como os professores de Educação Física estão tematizando o conteúdo curricular Corrida de Orientação em suas aulas e as limitações e possibilidades do seu ensino nas aulas de Educação Física Escolar (EFE). Participaram da coleta de dados 164 professores de Educação Física das redes pública e/ou particular de 12 estados do Brasil (Amazonas, Ceará, Espírito Santo, Goiás, Mato Grosso, Minas Gerais, Paraná, Rio Grande Sul, Rio de Janeiro, Santa Catarina, São Paulo e Tocantins), além do Distrito Federal, que responderam a um questionário semiestruturado que indagava sobre suas práticas relacionadas ao ensino do conteúdo Corrida de Orientação. Assumindo os procedimentos organizacionais e interpretativos indicados pela Análise de Conteúdo, foi possível constatar que 28% dos docentes abordam o conteúdo curricular Corrida de Orientação em suas aulas, enquanto 72% afirmaram que não o fazem. Entre os fatores que dificultam sua abordagem podemos listar: a falta de formação; pouco conhecimento e pouca vivência na modalidade; falta de material didático/instrucional; falta de materiais técnicos adequados; a cultura do esporte. Diante desses fatos, ao término da pesquisa, cujos resultados trazemos neste artigo, sugere-se que a persistência, a seriedade e a capacidade de adaptação e de superação dos docentes influencia diretamente na possibilidade de tematização do conteúdo, sendo isto possível por meio da adaptação dos materiais necessários para a prática, do espaço escolar e/ou proximidades onde se desenvolverão as atividades, e da busca pela superação da deficiência na formação inicial, quer seja por intermédio da formação continuada e/ou pela pesquisa e compartilhamento conjuntos de conhecimentos, conforme enfatizado pelos pesquisados.

Palavras-chave: Corrida de Orientação. Professores de Educação Física. Educação Física Escolar. Ensino.

RESUMEN

La inclusión de la Orientación como un componente curricular de la Educación Física en las escuelas solo ocurrió después de la promulgación de la Base Curricular Nacional Común (BNCC) en Brasil y desde entonces ha generado una demanda de docentes capaces de enseñarla eficazmente. Este artículo presenta los resultados de una encuesta destinada a identificar cómo los docentes de Educación Física están abordando el contenido curricular de Orientación en sus clases y las limitaciones y posibilidades de su enseñanza en las clases de Educación Física (EFE). La recopilación de datos se realizó con 164 docentes de Educación Física de escuelas públicas y/o privadas en 12 estados brasileños (Amazonas, Ceará, Espírito Santo, Goiás, Mato Grosso, Minas Gerais, Paraná, Rio Grande do Sul, Rio de Janeiro, Santa Catarina, São Paulo y Tocantins), así como el Distrito Federal. Respondieron a un cuestionario semiestruturado sobre sus prácticas relacionadas con la enseñanza de la Orientación. Utilizando los procedimientos organizativos e interpretativos indicados por el Análisis de Contenido, se encontró que el 28% del profesorado aborda el currículo de Orientación en sus clases, mientras que el 72% afirmó no hacerlo. Los factores que dificultan este enfoque incluyen: falta de formación; conocimientos y experiencia limitados en el deporte; falta de materiales didácticos; falta de materiales técnicos apropiados; y la cultura del deporte. Ante estos hechos, al final de la investigación, cuyos resultados se presentan en este artículo, se sugiere que la persistencia, la dedicación y la capacidad de adaptación y superación de los desafíos del profesorado influyen directamente en la posibilidad de abordar el contenido. Esto es posible mediante la adaptación de los materiales necesarios para la práctica, el espacio escolar y/o las áreas circundantes donde se realizarán las actividades, y abordando las deficiencias en la formación inicial, ya sea



mediante la formación continua y/o mediante la investigación conjunta y el intercambio de conocimientos, como destacaron los encuestados.

Palabras clave: Orientación. Profesorado de Educación Física. Educación Física en las Escuelas. Docencia.

1 INTRODUCTION

Orienteering Running, as assumed and named by us, is described in the National Common Curricular Base (BNCC) (Brazil, 2018) as "Guided Running" and reported by other authors as: Orienteering Sport, Orienteering Sport or, simply, Orienteering, is an individual sport practiced both in natural and urban environments, in which the practitioner performs an unknown route, marked on a map and physically materialized on the ground, with a series of control points. The main objective is to carry out the route in the sequence proposed by the organizers, in the shortest possible time (Campos; Poletto; Neto, 2022).

It should be clarified that all the designations indicated in the previous paragraph will be considered as uni terms, because we understand that the main motor activity developed during its practice is running, in addition, several authors of Brazilian School Physical Education (PES) also assume it as Orienteering Race.

In the BNCC (Brazil, 2018) the content related to Orienteering Running is present in the body practices of adventure in nature, as it considers its practice only in natural environments. However, the modality evolved, appropriating urban environments, which gave rise to a variation called Sprint Orienteering Race, whose practice takes place in environments such as parks, urban centers and/or residential present in cities.

In the Thematic Unit Body Practices of Adventure, described in the BNCC (Brasil, 2018), the knowledge required for its practice permeates interdisciplinarity, bringing to itself the reading of maps, the use of the compass, the reading/measurement of angles, the performance of calculations and the interpretation of scales and reinforces those typical of Physical Education (motor ability, agility, endurance, speed and strength) (Campos; Poletto; Neto, 2022).

In this sense, when used in the school environment, the Orienteering Race has the potential to become a pedagogical tool, facilitating the approach of different school contents and cross-cutting themes (Rodríguez, 2017). However, for this to occur, it is necessary that the modality, as a content of PE, be didactically structured, intentionally proposed and adequately presented to the students.

However, research and the experience "on the floor of the court" in Brazil record that the teaching of content in the school environment follows a divergent path from what Rodríguez (2017) suggests, as it is a difficult task to perform for many teachers, who, in the face of difficulties, choose to "skip" the content.

In view of the above, we have elaborated two research questions to guide us in the development of the investigation, the results of which we describe in this article; they are: How are Physical Education teachers thematizing the curricular content Orienteering Race in their classes? What are the limitations and possibilities for the Orienteering Race to become a pedagogical tool and be presented to students in an appropriate way?

In this research, the qualitative/quantitative methodology was used to approach the investigated phenomenon, from the perspective of Salomon (1991), for whom:

[...] in the investigation of the educational reality (classroom, school, family, culture), it is necessary to "transcend the qualitative-quantitative debate", because its analysis and study cannot be faced in the manner of the exact sciences, since the analysis of educational problems requires diversified approaches that combine the best of each of them (Salomon, 1991, p. 17).

Flick (2008, in turn, also points out that the convergence of these two approaches provides credibility to the results, since, in addition to a vast descriptive theoretical basis, the statistical data will validate the observations, while at the same time supporting the information acquired.

In this sense, a semi-structured questionnaire was used for data collection, and to analyze the information expressed by the research participants regarding its qualitative aspect, Content Analysis was used from the perspective of Bardin (2021), and as for its quantitative aspect, the data spreadsheets generated by the *Excel 365* software.

In the continuation of the article, we present some highlights of the theoretical framework, several nuances of the methodological approach, the presentation and analysis of the data, some final considerations.

2 THE BNCC AND THE ORIENTEERING RACE IN TEACHING

The BNCC is a normative document for education in Brazil, which defines in its text the set of essential learning to be developed in Basic Education in all school networks and institutions in the country, being a national and mandatory reference for the elaboration and/or adaptation of pedagogical proposals and curricula (Brasil, 2018).

It establishes the contents of the EFE and systematizes the teaching of Body Practices of Adventure in Brazilian schools (Severino; Pear tree; Santos, 2016), evidencing teachers as subjects of the teaching process, attributing to them the important task of creating,

inventing, resorting to their own experience and students' knowledge to organize and develop the pedagogical work of the contents (Grando *et al.*, 2016).

This protagonism given to teachers attributes to them the responsibility for the management of content or subjects, and as Gauthier (1998) indicates, the task of teaching requires certain skills, competencies and knowledge that can be "formalized" and constitute the teachers' teaching knowledge.

The management of the subjects is related to operations, which the teacher uses for the student to learn the content, or:

[...] to the planning, teaching, and evaluation of a lesson or part of a lesson. This dimension is linked to the set of operations organized to lead the student to learn the content: way of structuring the lesson, type of questions asked, proposed exercises, procedures for evaluating learning (Gauthier, 1998, p. 436).

Gauthier's (1998) exposition refers us to the strategies for teaching the contents and in relation to which the teacher needs to mobilize his training, disciplinary and, mainly, experiential or practical knowledge, and, in the absence of these, depend on the available instructional didactic material, the knowledge shared by his peers, or the experiential knowledge and preexisting skills of his students about the modalities, to teach them efficiently.

As for the "knowledge" mentioned above, to list them in the previous paraFigure, we were inspired by Tardif (2020), who assumes that the teacher's professional action is structured by two series of constraints: those related to the transmission of the subject (constraints of time, sequential organization of contents, achievement of purposes, learning by students, assessments, etc.); and those linked to the management of interactions with students (maintenance of discipline, management of actions triggered by students, class motivation, etc.).

Although the referrals and *expertise* indicated by the aforementioned authors seem to "work" with the other curricular contents, they are inadequate for the Orienteering Race, because, as Severino, Pereira and Santos (2016) warn us, the theme of "Adventure" is a new content in the curricula of Physical Education teacher training courses.

Kirchhof and Costa (2021) corroborate our expectations and those of other authors, when they state that the Orienteering Race modality is little taught in Physical Education teacher training courses. Following this same argumentative direction, Campos, Poletto, and

Neto (2022) disclosed the reduced number of publications of didactic-instructional materials available, which means that the content is often taught in EFE, based on the practical experience of teachers.

Such manifestations lead us to the following questions: How many Physical Education teachers in service have practical experience in Orienteering Race, which enables them to teach it efficiently? How many students have the practical experience of the modality, which allows them to assist teachers during the course of classes?

Assuming that the quantifiers to answer the questions elaborated in the previous paraFigure tend to zero, we can suppose that many teachers choose to "skip" the content, because they feel unprepared to thematize them in PE, because as Forquin (1993, *apud* Rufino and Darido, 2015, p. 510) warns us, "the teacher teaches in a significant way only aspects arising from the culture he knows, that is familiar to him, that it is part of his understanding and vision of the world, that which he has mastered".

In this sense, the present research becomes relevant, as it seeks to bring light to these assumptions, clarifying how Physical Education teachers are thematizing the Orienteering Race content in their classes and the limitations and possibilities of its teaching in EFE.

3 METHODOLOGICAL RECORDS

In this study we used the qualitative/quantitative methodology from the perspective of Salomon (1991), for whom:

[...] in the investigation of the educational reality (classroom, school, family, culture), it is necessary to "transcend the qualitative-quantitative debate", because its analysis and study cannot be faced in the manner of the exact sciences, since the analysis of educational problems requires diversified approaches that combine the best of each of them (Salomon, 1991, p. 17).

The data were obtained through a semi-structured questionnaire composed of 15 questions that covered, in addition to the name, the Higher Education Institution and the year it graduated, at which school level(s) it teaches, the interest in participating in continuing education courses and in receiving didactic and pedagogical materials about the content, and, mainly, the epistemic knowledge and pedagogical practices of the Physical Education teachers in service, about the Orienteering Race.

Due to the expressive amount of information we collected, for the preparation of this article, we present the analysis of 3 of the 15 questions presented to the research

participants. They were selected at this time because they are related to their pedagogical practices:

- 1) Do you teach or not teach the content about Orienteering Race in your classes?
- 2) If you don't teach the content, what is the reason(s) (limitations) for not doing so?
- 3) If you teach the content, how do you carry out this practice in the school environment?

The questionnaire and some information about the research we developed were sent to the participants through messages disseminated in specific *WhatsApp* groups of Physical Education teachers, and had the participation of 147 of them (87 men and 60 women), all working in 12 states of Brazil (Amazonas, Ceará, Espírito Santo, Goiás, Mato Grosso, Minas Gerais, Paraná, Rio Grande Sul, Rio de Janeiro, Santa Catarina, São Paulo and Tocantins), in addition to the Federal District.

The research was registered with the Certificate of Presentation for Ethical Appreciation (CAAE): 56186722.8.0000.8123, and authorized by opinion 5.501.332, of June 30, 2022, and its data were analyzed from the perspective of Content Analysis (CA), based on Bardin (2021), for whom CA is:

A set of communication analysis techniques aimed at obtaining, through systematic and objective procedures for describing the content of messages, indicators (quantitative or not) that allow the inference of knowledge related to the conditions of production/reception (inferred variables) of these messages (Bardin, 2021, p. 48).

According to the author, CA is organized into three chronological poles: the "pre-analysis", the "exploration of the material", and the "treatment of the results", a phase in which the elaboration of inferences occurs, followed by an interpretative movement on the part of the researcher (Bardin, 2021, p. 121).

In this sense, in the first pole – the pre-analysis: organization and choice of documents to be submitted for analysis –, our *corpus*⁴ was constituted by the answers formulated by the teachers to the 3 questions listed above, and established as *a priori categories* for analysis, the terms: teaches, how teaches, does not teach, why does not teach.

In the exploration of the material: decomposition and coding of the elements of the sample and their transformation of raw data into a message that allows its understanding – we chose to use the answer in its entirety as the unit of record, because "it is also possible

⁴ According to Bardin (2021, p. 122), a *corpus* is a set of documents taken into account to be submitted to analytical procedures.

to take as the unit of record the answer (to an open question) or the interview, on the condition that the dominant or main idea is sufficient for the objective sought" (Bardin, 2021, p. 132).

In this process, the following symbolic indicators were used: P1, P2, P3, etc., to identify the teachers whose answers were analyzed, and Q1, Q2 and Q3, to identify the question of origin of the analyzed answers. We assume, therefore, that the answers given by the teachers to the questions were sufficient for us to infer whether or not they teach the content, if they teach, how they develop their practices, and if they do not, what are the impeding factors.

Finally, in the treatment of the results, the quantifiable data were tabulated in the program in *the Excel spreadsheet software* and converted into Figures (one of them being Figure 1, which we brought in this article), and the qualifying data were submitted to a process of elaboration of inferences, followed by an interpretative movement by the researchers, and will be presented in continuity.

4 PRESENTATION AND ANALYSIS OF DATA

In the analytical process, the answers given by the participants were gathered and transcribed respecting the spelling of the words, as used by the participants of the investigation, in order to maintain the veracity of the discourse. The results were expressed as percentages of answers given.

The first question directed to teachers (Q1) concerns whether or not they teach the content (Orientation Race) in their classes, and 72% of them stated that they did not do so; On the other hand, 28% answered positively to this question.

The teachers' answers to this question confirm our initial hypothesis, about their difficulty in teaching the modality and their option to "skip" the content, raising the need to investigate the reasons why this occurred.

With this action, we sought to identify what were the possible limitations for the teaching of the modality in the school environment, and to obtain this answer, the second question (Q2) was formulated, in which we tried to ascertain the reason(s) for the teachers not to teach the content.

In the answers offered by them, five limitations were evidenced for the teaching of Orienteering Race in the school environment:

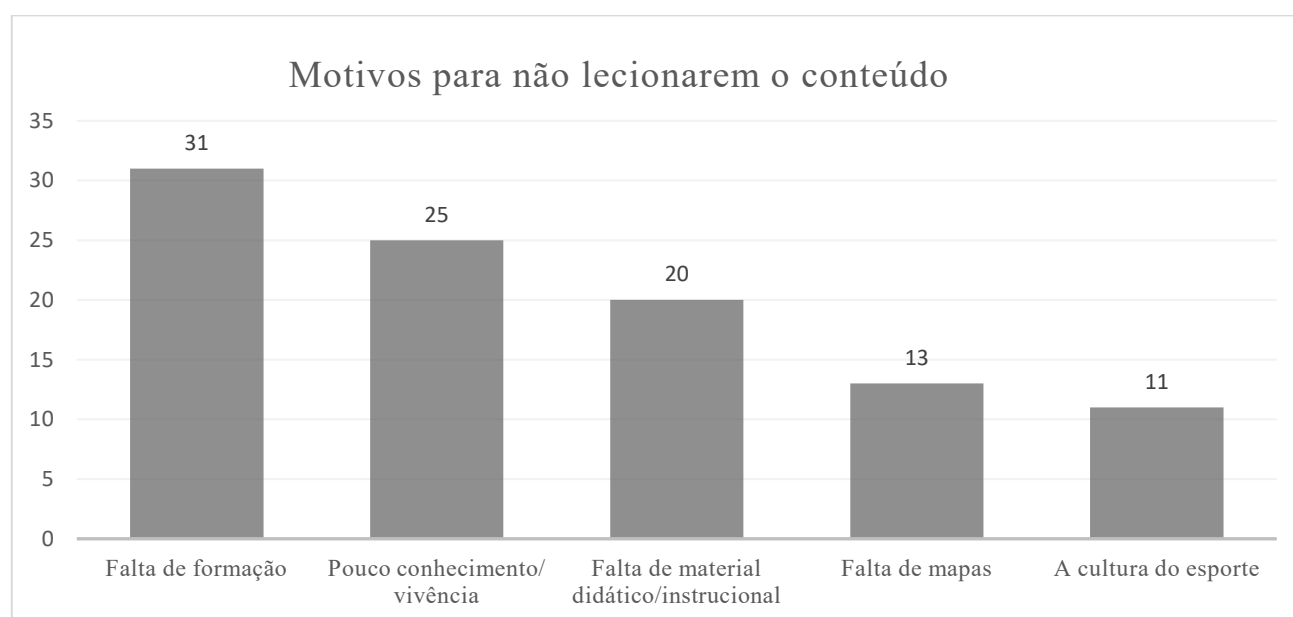
- 1) Lack of training;
- 2) Little knowledge and little experience in the sport;
- 3) Lack of didactic/instructional material;

- 4) Lack of adequate technical materials (maps, prisms, compasses, etc.); and
- 5) The culture of sport.

The information related to these 5 items was organized and represented in Figure 1 and will be described and analyzed below.

Figure 1

Organization of the reasons listed by the teachers



Source: The authors.

As we can see in the Figure, the greatest limitation, pointed out by 31% of the teachers, was the lack of training.

This is a reality, which was identified by Kirchhof and Costa (2021), who found, when conducting a survey of 43 public Higher Education Institutions that offered undergraduate degrees in Physical Education, that only 5 of them had the content Orienteering Race as a mandatory subject, 2 as content present in the syllabus of other disciplines (Teaching and Research Methodology in Athletics and Leisure), and 1 as optional content.

This deficiency of offer in training is clearly reflected as a limiting factor for the teaching of the modality, as explained in the answers of teacher P3: "In college I learned about the existence of the sport, then [I learned]⁵ superficially from a friend from college and a

⁵ The descriptions inserted between [brackets] were added by us to make more sense of the deponent's argument.

professional in the area who practices and studying privately to deepen the content (...)⁶"; from P34: "[I learned] researching on the internet about the variations of the treasure hunt game"; and P132: [I learned] from a friend who did orienteering running, I went to the race to get to know it and ran, I had never even seen a compass (...)".

These excerpts suggest, therefore, that the lack of initial training on the content is a relevant fact, and causes an important portion of teachers to acquire their knowledge by resorting to self-teaching or some other alternative form of learning, which does not guarantee them effective learning and that assures them, at the end of the process, transform it into an efficient pedagogical experience in the school environment, as they limited themselves to learning "how to do".

According to Zabala (1998), "know-how", that is, being able to efficiently perform activities and skills, constitutes the procedural dimension of the knowledge to be taught, which, in the case of PES, is characterized by the teaching of motor skills. However, if practice is essential for learning a skill, it alone is not enough. The motivation for learning and the use of a procedure, as the author pointed out, depends on the attribution of meaning and meaning in its execution, so that there is an understanding of the execution, which if by chance does not occur, that is, there is no understanding of this execution and its implications, can transform it into a practice that is not very relevant.

The second limitation related by 25% of the teachers is their little knowledge and experience in the Orienteering Race. This fact does not surprise us, since the modality only began to be themed in EFE from 2018 with the enactment of the BNCC, when it began to be included in the curricula of public and private schools in the country. However, it should be clarified that the BNCC "suggests" that the "Guided Race" (Brasil, 2018) is present in the students' training process, but does not define what would be the topics to be addressed by the teachers who teach it.

This lack of knowledge about Orienteering Race can be identified in several testimonies. Below we list some of them to elucidate to the reader how they happened: "I know people who practice and I have read about them. But I don't have the knowledge to set up the course, or to participate in a competition (...)" (P35); "I know it through lectures and videos and the work of other professors. However, I never developed it in class (...)" (P68);

⁶ The parentheses with ellipsis (...) indicate that the records had continuity and we chose to suppress some sentences or part of them.

"I actually became aware this year in the media center classes. And in this year's São Paulo Curriculum that is addressing the theme" (P50).

The analysis of the answers shows that effective knowledge about the modality (its internal logic, rules, codes, rituals, forms of practice, functioning systems, organization, its tactics and its possibilities of adaptation and variations, etc.), and the practical experience of it by the teachers, reflected in the participation in competitive, recreational and/or leisure activities, do not actually exist. showing themselves to be superficial.

We understand that this superficiality is due, in large part, to the fact that Orienteering Race, despite its potential to be used as a pedagogical tool in the school environment, is not a popular sport in Brazil. On the contrary, the modality suffers from a notorious anonymity for the majority of the population and, therefore, for a large part of the Physical Education teachers themselves, making their experiences in the modality also limited.

As Forquin (1993, *apud* Rufino and Darido, 2015, p. 510) warns us: "The teacher teaches in a meaningful way only aspects that come from the culture that he knows, that is familiar to him, that is part of his understanding and vision of the world, that which he has mastered".

For 20% of the teachers, another important limitation is the lack of didactic/instructional material available for consultation and planning of their classes.

Campos, Poletto, and Neto (2022) identified this deficiency during a systematic literature review, which surveyed the bibliographic production on the teaching of Orienteering Running, made available for consultation in 18 national and international databases on the *internet*, from 1970 onwards, in which only 30 studies addressed pedagogical methodologies and practices, only 9 of them are in Portuguese.

This low amount of materials limits the teachers' ability to plan classes and, consequently, the teaching of the modality, forcing teachers to seek the didactic foundation of their classes, in other sources, as is evident in the examples we selected to present in the article: for P103 "[I got information] through a friend, a professional in the area, that works with this content in Belém do Pará"; according to P149, "[I got information] from a Facebook page."; as P39 indicates, "General searches on the *internet*".

The excerpts obtained, not only those described in the previous paragraph, but the others that we omitted so as not to make the article too long, indicate that a significant portion of teachers seek to base their pedagogical practices and plan their didactic activities through

various materials, especially those available on the *internet*, even if they lack scientism and adequate didactic/pedagogical treatment.

For Gauthier (1998), the task of teaching requires certain skills, competencies and knowledge that constitute the teaching knowledge of teachers, one of them being the management of the subject, that is, the set of operations, which the teacher uses for the student to learn the content (way of structuring the lesson, type of questions asked, proposed exercises, learning assessment procedures, etc.).

In turn, the lack of adequate technical materials (maps, compasses, prisms, perforators, etc.) is a limitation for the teaching of the modality for 13% of teachers. However, among the technical materials listed, the most difficult to replace/produce is not the map, because its preparation involves a technical knowledge of CartoFigurey, GeoFigurey and Mathematics, which teachers do not always have, in addition to the acquisition and technical knowledge about the use of specific *software* for this purpose.

The lack of a map hinders the practical teaching of the modality and generates the need for adaptations and/or simplifications, or even the suppression of practices, as evidenced by the examples we selected: P22 points out: "[I presented the modality] through videos about orienteering running (...)" ; P136 argues: "[I presented the modality] through videos of the Paraná class (...)" ; P8 justifies: "I passed on content in an explanatory video (...)" ; and P28 clarifies: "[I presented the modality] through an *online* class prepared by SEED, using pedagogical resources, such as *YouTube videos*".

These excerpts, when verified in all the data collected and analyzed, show that a significant portion of teachers reduce their pedagogical practices to the presentation of audiovisual materials made available by the Departments of Education (SEED), or made available on the *internet*, as in the case of the argument that highlights the lack of didactic/instructional materials, summing up to "presenting" the modality to their students.

However, as Freire and Oliveira (2004) warn us:

[...] the teaching of Physical Education in school should enable the learning of different knowledge about movement, contemplating the three dimensions: procedural (knowing how to do), conceptual (knowing about) and attitudinal (knowing how to be). From this learning, we will be enabling our students to use, autonomously, their potential to move, knowing how, when and why to perform motor activities or skills (Freire; Oliveira, 2004, p. 142).

It seems to us, therefore, that the simple presentation of explanatory videos about the modality becomes insufficient for effective learning by students.

The last limitation pointed out by 11% of the teachers is the culture of the sport itself. This limitation must be understood from two perspectives that are interrelated: the perspective of the national culture on the sport and the internal culture of the sport Orienteering Race.

The national culture has transformed us into the "country of football", with an overvaluation of this team sport, both by the public and by the media, which disfavors and limits the performance of other body practices in the school environment. The BNCC itself assigns to this curricular component a considerably higher workload than that allocated to the other components, especially to Adventure Body Practices.

As for the aspect of the internal culture of the Orienteering Race, the modality is understood by some of the teachers who experience it, as "very militarized". We understand that this view is due to the history of the creation of the modality in the world, when it was initially developed for the purpose of training Norwegian and Swedish military personnel.

The Swedish Military Academy already specified in 1840 that cadets should be familiar with the knowledge of distance and height measurements and should be able to make sketches of maps in the field. Orienteering as a sport began as a military navigation test/training in the late nineteenth century, mainly in Norway and Sweden (navigation as an outdoor physical exercise became part of the military training curriculum around 1880) (Zentai, 2011, p. 19).

And in Brazil, when the modality was introduced and developed with the bias of military sport, as explained in the history of the modality, available on the page of the Brazilian Orienteering Confederation:

In 1970, Brazil sent [...] three representatives of the Singular Forces to the city of Alborg – Denmark, as observers of the IV World Military Orienteering Championship of the CISM (International Council of Military Sport), held between September 6th and 11th. [...] who attended all the competitions of the aforementioned championship. Upon returning to Brazil, a report [was prepared] [...], where [several aspects of the orientation were addressed], still in a rudimentary way (CBO, 2019).

To this undeniable protagonism is added, however, a limited interest in transmitting to Physical Education teachers the technical knowledge necessary for the development of the

modality, such as the skills for the execution of the mapping, ways for organizing competitions, pedagogical possibilities, etc.

The result is that there is still a strong dependence of teachers on the military for the development of the modality in the school environment, as can be seen in some testimonies that we selected: "It was done in partnership with the Army personnel, they lent compasses and prepared the map, with the route within the schoolyard" (P96); "[the activity was] carried out with the support of military personnel in São Gabriel da Cachoeira – AM" (P70); "[the activities] were carried out in the barracks (...)" (P167).

These excerpts corroborate, therefore, the indication of the dependence of many teachers on the support of the military to carry out their practices, whether in the technical aspects or in the supply of adequate materials, such as prisms, perforators and compasses, a dependence that needs and can be overcome, because, despite these limiting aspects identified here and which have not yet been pointed out by other studies, Orienteering Race is taught.

Having confirmation that its teaching occurs, the following question is resumed: How is it taught? To answer this question, the teachers participating in the research were asked how their practice takes place in the school environment (Q3).

In the answers to this question, the teachers presented some of their pedagogical strategies used in their classes, which we understood as possibilities that made it possible to teach the Orientation Race in the school environment and to overcome the dependence on third parties and the limitations often imposed by the economic/social reality of the schools in which they worked.

Among these strategies (possibilities), those related to the adaptation of appropriate technical materials (maps, compasses, prisms, perforators, etc.) are apparently the ones that are easily implemented. Some testimonies selected by us clarify these analytical perceptions that we have arrived at. For P116 we have that: "I built the signs with the students, built the map of the school through a satellite view, selected the places to leave the signs with a numerical order (...) each sign was a color and had to collect the stickers applied"; according to P123, "I built a map of a place in the city that will allow us to carry out it individually for a period, I spread numerical signs along the route, where the students with the map would go and demarcate in the numerical order I placed"; P105 highlights that: "[I carried out the activity with] adaptations to the age group and the space used; In my case, I used the space of the school building, both internal and external".

These excerpts suggest possibilities for the development of the modality in the educational environment, through adaptations of all the technical material necessary for the practices, and show that the creativity and willingness of teachers to carry out the Orienteering Race are determining aspects for success. The teachers in question made materials with labels, adhesive tapes, paper, glue, fabric, among others, and used the schoolyard, adjacent streets and squares as a playing field, characterizing, therefore, that the lack of technical materials makes it difficult, but does not make impossible the teaching and practice of the modality, even if it occurs in a limited way.

In an ideal scenario, students practice the modality on the map with the use of a compass, but the map can be replaced by an aerial photoFigure, which can be easily obtained from specific *websites* on the *internet*. And even the compass can be replaced, making it possible to teach the modality from an educational perspective, without necessarily using it, as Campos (2023) described in the conclusion of his investigative process.

For the lack of training, the little knowledge and the lack of didactic/instructional material, the teachers have resorted to the knowledge of other teachers, to friends with greater knowledge of the sport, and to the materials available on the *internet*, as shown in the testimonies that we bring below. P83 states: "[I learned] through colleagues and friends who practiced and invited me to practice and taught me how to do it"; P3 highlights that: "In college I learned about the existence of the sport, and then [I learned] from a friend, but in a superficial way (...)" ; P39 explains that it was as follows: "By the curriculum of the State of São Paulo and research on the *internet*".

We assume, therefore, that the deficiency in the initial and/or continuing training of teachers, as well as the lack of didactic/instructional material, are limiting factors for the thematization of the content in the school environment, however these excerpts suggest typical alternatives of the "research teacher", the one who, according to Gauthier (1998), exercises the pedagogical function of subject management, which begins with research and lesson planning, through the interaction with the students, to the evaluation phase" (Gauthier, 1998, p. 276).

We propose as a form of alternative to the little experience of the modality (understood here as inexpressive possibilities of participation in training and competitions organized by the practice institutions), the use of mobile applications (APPs), mostly available for free, in the application stores of the IOS and Android systems, found on the *internet*.

Initially developed for the training of athletes, they can be used by teachers to plan simple routes to be used for teaching, or even for unpretentious competitions, as they use as a map the images of applications such as *Google Earth* and allow the rental of virtual or physical Control Posts (PCs), and in the latter case there is no need for prisms or perforators, because they are easily replaced by *QR-Codes* that are posted in the chosen locations.

Finally, regarding the culture of sport, with regard to its aspect of imposing the culture of the "country of soccer", we propose a pedagogical position, based on the premise of Freire and Oliveira (2004), already mentioned above: "The teaching of Physical Education in school should enable the learning of different knowledge about movement, contemplating the three dimensions: procedural (knowing how to do), conceptual (knowing about) and attitudinal (knowing how to be)".

On the other hand, regarding the aspect of the "military" culture of the modality, and its "dependence" on their technical knowledge for the making of maps and the assembly of educational routes, it seems to us that the search for continuing education and the sharing of information in discussion groups or communities of practice of teachers⁷, is the most viable solution, and that will make the challenge of teaching the Orienteering Race in the school environment an achievable and stimulating goal for the autonomy of teachers.

5 FINAL CONSIDERATIONS

In this article we present the results of a survey carried out with 147 Physical Education teachers in service in 12 states and the Federal District, on the teaching of the Orienteering Race content. Our objective was to identify how Physical Education teachers are thematizing the curricular content Orienteering Race in their classes and the limitations and possibilities of its teaching in School Physical Education (PES) classes.

For the selection of the data used in the analysis, we adopted the criteria of the qualitative/quantitative methodology for approach, from the perspective of Salomon (1991), and to organize and analyze them, we assumed the procedures indicated by Content Analysis from the perspective of Bardin (2021).

The data obtained in the questionnaires answered by the 147 teachers who participated in the study indicated that 28% of them address the curricular content

⁷ In this research, we assume the definition of community of practice, proposed by Wenger (1998), for whom it is a group of people who share an interest, a set of problems or a passion for a topic and who elaborate and develop their knowledge and expertise in this area through continuous interaction.

Orienteering Race in their classes, while 72% stated that they do not do so, a fact that brought us an initial hypothesis and directed the investigation to the search for the factors that led to this situation (not doing).

The teachers highlighted 5 factors that made it difficult to approach the content in PE classes, namely: Lack of training; Little knowledge and little experience in the sport; Lack of didactic/instructional material; Lack of adequate technical materials (maps, prisms, compasses, etc.); The culture of sport. The limitations, for the most part, refer to the difficulties for the pedagogical practice of teachers, and only the last limitation listed (culture of sport) refers to both them and the students.

In addition to all the material, technical and deficiency limitations in the training found in this research, the overvaluation of mass team sports and the space allocated to them in the media, make them occupy a significant physical place in PE classes, disfavoring the performance of other body practices (as is the case of the Orienteering Race), often due to the descriptive and explanatory limitation given to it in the BNCC (Brasil, 2018).

The research suggests, however, that the persistence, seriousness and ability of teachers to adapt and overcome directly influences the possibility of thematizing the content. These teachers are the ones who presented different possibilities of adaptations (both in terms of materials and space), in addition to overcoming the limitations of initial training, whether through continuing education and/or research and knowledge sharing among them, as emphasized by the respondents.

In this sense, we understand that it is up to universities to readjust their curricula to offer future Physical Education teachers training on this content, in addition to providing, through extension or postgraduate courses, continuing education to those already graduated, in addition to assuming the leading role in the development of research that provides instructional didactic material for the practice of teachers in their places of teaching activity.

It is expected, therefore, that the results presented in this article will contribute to the area of School Physical Education, especially in the scope of Adventure Body Practices and in the teaching of Orienteering Race, aiming to inspire the realization of other researches that converge to overcome the limitations already identified and others that will be recognized in the future.

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