

# Ethics, bioethics and physical education: a systematic review of a necessary convergence

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## Abstract

This article seeks to identify what scientific journals have been publishing in terms of ethics and bioethics in the field of physical education. We carried out a systematic literature review in January 2020 in LILACS, SciELO, Web of Science, Virtual Health Library, PubMed, Scopus, ERIC, and SPORTDiscus. Articles in English published between 2005 and 2018 were found, with 12 studies selected according to the expected inclusion criteria. It resulted in four categories: physical education as a means for personal development in the school environment, potential of sport as a means for moral education as virtue formation, level of knowledge of physical education professionals about ethics, and ethics in the training of these professionals. We consider that, although issues related to ethics and bioethics in physical education appear in the literature, expanding studies on this theme, still on the margins of scientific production in the field, is necessary.

**Keywords:** Bioethics. Ethics. Education. Physical education and training.

## Resumo

### Ética, bioética e educação física: revisão sistematizada de uma convergência necessária

Este artigo busca identificar o que se tem publicado em termos de ética e bioética no campo da educação física em revistas científicas. Realizou-se uma revisão sistematizada da literatura em janeiro de 2020 nas bases LILACS, SciELO, Web of Science, Biblioteca Virtual em Saúde, PubMed, Scopus, Eric e SPORTDiscus. Foram encontrados artigos em inglês publicados entre 2005 e 2018, sendo 12 estudos selecionados de acordo com os critérios de inclusão previstos. Resultaram quatro categorias: educação física como meio para o desenvolvimento pessoal no âmbito escolar, potencial do esporte como meio para a educação moral como formação de virtudes, nível de conhecimento de profissionais de educação física sobre ética e ética na formação desses profissionais. Considera-se que, apesar de questões alusivas a ética e bioética na educação física figurarem na literatura, é necessário ampliar os estudos nessa temática, ainda à margem da produção científica no campo.

**Palavras-chave:** Bioética. Ética. Educação. Educação física e treinamento.

## Resumen

### Ética, bioética y educación física: revisión sistemática de una necesaria convergencia

Este artículo pretende identificar las publicaciones sobre ética y bioética en el campo de la educación física en revistas científicas. Se realizó una revisión sistemática de la literatura en enero de 2020 en las bases LILACS, SciELO, Web of Science, Biblioteca Virtual en Salud, PubMed, Scopus, Eric y SPORTDiscus. Se encontraron artículos en inglés publicados entre 2005 y 2018, de estos 12 se seleccionaron por los criterios de inclusión. Resultaron cuatro categorías: la educación física como medio para el desarrollo personal en escuelas, potencialidades del deporte como herramienta para la educación moral formadora de virtudes, nivel de conocimiento de los profesionales de este campo sobre la ética y la ética en la formación profesional. Si bien registran en la literatura cuestiones relacionadas con la ética y la bioética en la educación física, es necesario ampliar los estudios sobre este tema, todavía al margen de la producción científica en el campo.

**Palabras clave:** Bioética. Ética. Educación. Educación y entrenamiento físico.

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Ethics and bioethics are close and necessary concepts regarding the field of physical education (PE). Ethics can be understood as an exercise of reflection on morality, by ideal standards of what may be good for individuals and society<sup>1</sup>. Bioethics, in turn, can be understood as applied ethics, characterized by the systematic study on moral dimensions, using a variety of precepts and methods in an interdisciplinary context, conceived based on the society, culture, and moral values of contemporary civilization<sup>2</sup>.

PE is a field of knowledge and a professional field whose object of study consists in practices applied to motor skills, or human movement, as well as the culture of body movement, focusing on the different forms and modalities of physical exercises, such as gymnastics, games, sports, fights, and dances, aiming at meeting the social needs in the fields of health, education and training, culture, high-performance sports, and leisure<sup>3</sup>. For this study, we chose to use the term “physical education professional” to designate both professionals with a Bachelor’s degree and those with a Teaching degree.

Ethical issues related to academic education, professional practices, and interpersonal and social relationships emerge in the education of PE professionals as well as in other undergraduate programs focused on health care<sup>4</sup>. PE is an area that dialogues with knowledge of education, sports, and health and, therefore, the teaching and practice of PE is perceived as a path to the physical, intellectual, social, and emotional. Taking this into consideration, implications arise for PE professionals to expand their understanding of subjectivity and the reconstruction of their practices<sup>4</sup>, demonstrating the need for lifelong training consistent with the changes observed in contemporary times.

In this scenario of the search for a critically-active continuing education, a harmonious relationship, based on ethics and bioethics, implies commitment of the involved subjects, that is, students, teachers, educational institutions, and PE professionals. In addition, the understanding of the existential dimensions within the area of PE can and should be contextualized<sup>5</sup> in concrete everyday practices.

We can perceive that studies investigating the topics “ethics” and “bioethics” in PE indicate

that these are still mostly related to the school environment, with discussions and reflections on reflective practices and sports, with debates on moral development and values education<sup>6-9</sup>. However, to strengthen an ethical professional practice, it is essential to understand the ethics of everyday life in the everyday contexts of PE<sup>10</sup>. Hence, research on ethical training and on the role of universities in educating professionals in the field of PE for increasingly complex and plural workplaces is necessary<sup>11</sup>.

PE professionals are surrounded by ethical issues and are co-responsible for the well-being of students/clients/patients<sup>12</sup>. Taking this into consideration, continuous professional development and qualification programs should aim at the ethical reflection of the practices and challenges encountered in the daily lives of these professionals, seeking to expand opportunities to reflect on real ethical issues, dilemmas, or problems in their own contexts<sup>8</sup>.

Nevertheless, the international and national scientific literature seems scarce due to the numerous possible existing ethical conflicts, alluding to the culture of body movement, especially in the modalities in which PE professionals exercise their skills. Thus, the key question of this study is to identify how the discussion on ethics and bioethics related to PE takes place in the scientific literature.

## Method

A systematic qualitative review was carried out in January 2020, to systematize what the national and international scientific literature has published in terms of discussions on ethics and bioethics in relation to PE, in addition to indicating the knowledge gaps that must be investigated in further studies. To increase the rigor of the review, five steps were followed:

1. Choice of descriptors;
2. Selection of databases for searching;
3. Establishment of sample selection criteria;
4. General analysis of the research results;
5. Definition of the final sample<sup>13</sup>.

In order to better delimit the field of production of the addressed topic, the following

Descriptors in Health Sciences (DeCS) were used, in Portuguese, English, and Spanish languages: “bioethics,” “ethics,” and “physical education.” Only these three descriptors were chosen because they were more comprehensive at the time of the investigation. The search was performed in the following databases: Latin American and Caribbean Health Sciences Literature (LILACS), Scientific Electronic Library Online (SciELO), Web of Science, Virtual Health Library (VHL), and National Library of Medicine (PubMed). The search was also carried out on multidisciplinary databases and in the fields of education and physical education: Scopus, Education Resources Information Center (ERIC), and SPORTDiscus.

The PubMed database used the search strategy with terms registered in the Medical Subject Headings (MeSH) and words, such as “*all fields*,” to aggregate studies that have not yet been indexed. For the LILACS, SciELO, and Web of Science databases, the search strategy was used with the health descriptors, organized according to the Boolean operators “and” and “or” to retrieve the qualified information.

In the selection of articles, the following inclusion criteria were considered: full texts, with free access via the database portal of the Brazilian Coordination for the Improvement of Higher Education Personnel (CAPES), *Portal de Periódicos Capes*, in Portuguese, English, French, and Spanish, addressing the “ethics” and/or “bioethics” topics and their direct relation to PE. No criteria were established regarding the time limit for performing the studies. The exclusion criteria were: studies with clinical research design, editorials, theses and dissertations, evaluation of protocols on physical activity programs, and reviews. Moreover, a backward searching was performed based on the references of the identified articles, that is, the search for references cited in the studies identified during the research.

Data was examined using the thematic content analysis technique proposed by Bardin<sup>14</sup>, with the following steps: 1) pre-analysis (organization of the articles selected in the review); 2) investigation of the material; 3) treatment of results; 4) inferences; and 5) interpretation. To aid content analysis, the Atlas.ti software version 7 was used. This study results from research carried out by the authors within the scope of the Graduate Program in Public Health of Universidade Federal de Santa Catarina (UFSC).

## Results

We retrieved 1,447 articles in the databases search, which were distributed as follows: PubMed: 271 articles; LILACS: 50 articles; SciELO: 14 articles; Scopus: 117 articles; SPORTDiscus: 613 articles; Web of Science: 67 articles; VHL: 189 articles; and ERIC: 126 articles. Of the total number of retrieved articles, 16 were duplicates, remaining 1,431 articles. When applying the exclusion criteria, 1,245 articles were excluded by reading the titles, thus resulting in 186 studies in the end. Subsequently, the analysis of abstracts was carried out, and 166 articles whose topics involved sport performance, code of ethics in sports, and ethics in research not directly related to the field of PE were excluded.

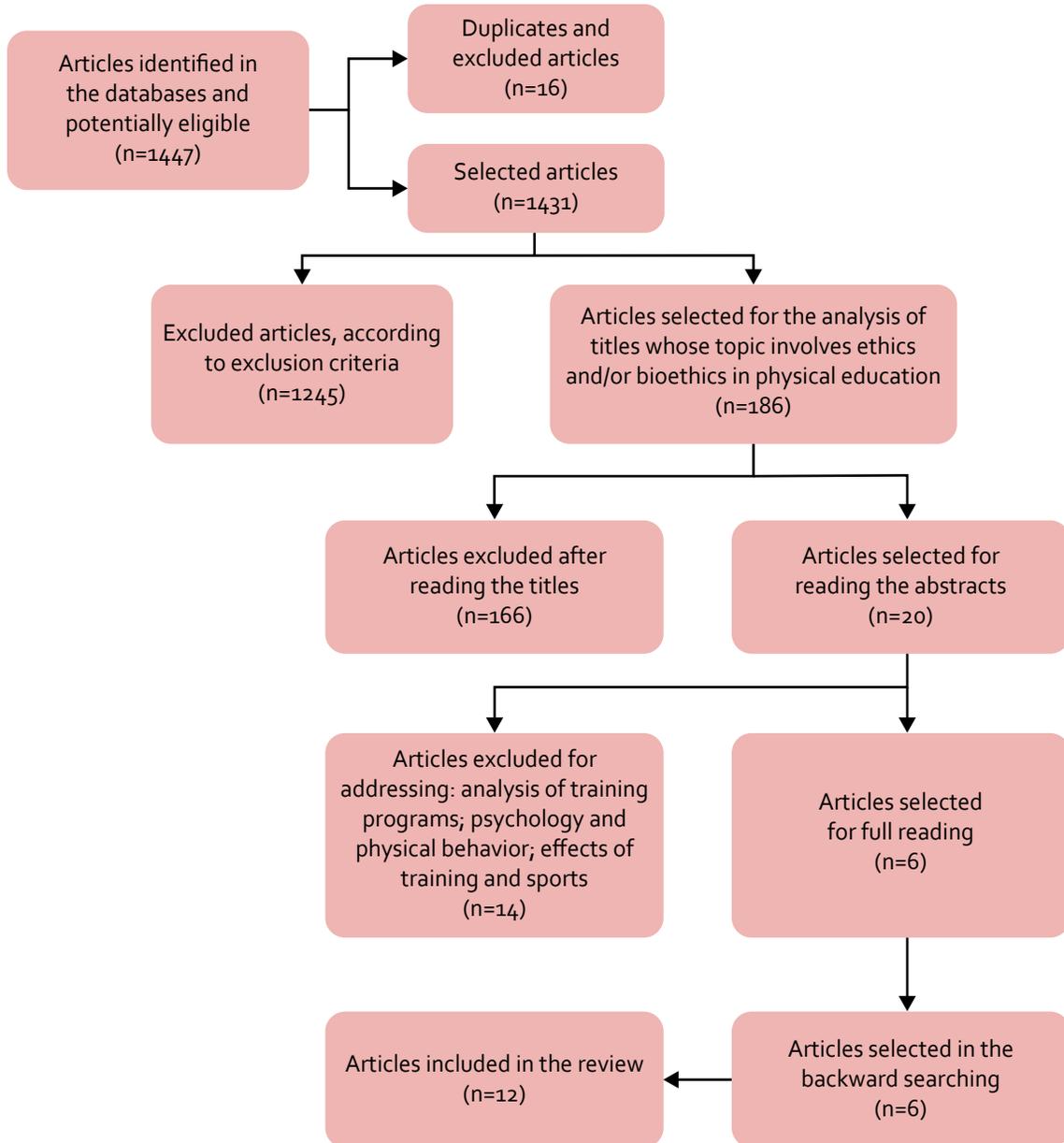
Thus, 20 studies were read in full. Of these, 14 addressed the analysis of training programs, psychology and physical behavior, effects of training and sports, that is, they are not directly related to the topic of the present study. Hence, six articles were included after full reading. From the backward searching of the references of the remaining six articles, another six articles were included in the review, totaling 12 (Figure 1).

The 12 selected articles were published in nine different journals. Three journals had two publications each: *Sport, Education and Society* (impact factor: 1,962), *European Physical Education Review* (impact factor: 2,000), and *Quest* (impact factor: 1,333). The other journals had one study each. The journal with the highest impact factor was *Physical Education & Sport Pedagogy* (impact factor: 2,035), and the others do not present impact factor assessment, namely: *Recerca: Revista de Pensament i Anàlisi*, *Adapted Physical Activity Quarterly*, *Life Science Journal*, *Acta Universitatis Carolinae: Kinanthropologica* and *Universal Journal of Education Research*.

Most of the studies were published in journals from the United Kingdom<sup>4,5,8,9,11,15,16</sup>, followed by journals from the United States of America<sup>6,17</sup>, one journal from Spain<sup>10</sup>, one from China<sup>12</sup>, and one from the Czech Republic<sup>7</sup>. The studies included in the sample were published from the year 2005 onwards, with three publications dated from 2012<sup>7,8,17</sup>, and the most recent was published in 2018<sup>6</sup>.

Studies from universities in different countries were included, two of which were developed by Canadian universities<sup>11,17</sup>; two by Portuguese universities<sup>10,15</sup>, two by Turkish universities<sup>6,12</sup>, and one by universities in the following countries: Switzerland<sup>9</sup>, United Kingdom<sup>16</sup>, United States of America<sup>8</sup>, Czech Republic<sup>7</sup>, Norway<sup>5</sup>, and Australia<sup>4</sup>. All studies were published in English.

**Figure 1.** Flowchart for the selection of eligible articles



As for the design of the studies, it can be noted that they are all qualitative research. Regarding data collection, some studies combined semi-structural interviews, field diary, and non-participant observation<sup>4,6,8,10</sup>, case study<sup>8,12</sup>, and focus group<sup>4</sup>. Regarding the analysis methodology mentioned in

the studies, there were theoretical essay<sup>5,7,11,16,17</sup>, ethnography<sup>9</sup>, content analysis<sup>8,11,12</sup>, dialectical analysis<sup>4</sup>, and hermeneutics<sup>10</sup>.

After analyzing the thematic content<sup>14</sup>, four categories of issues representative for ethics/bioethics were highlighted: PE as a means for

ethical development in the school environment; the potential of sports as a means for moral education as virtue formation; the level of

knowledge of PE professionals concerning ethics; and ethics in the training of PE professionals. These categories are illustrated in Chart 1.

**Chart 1.** Categories of analysis according to representative issues for the relationship between physical education and ethics/bioethics

<b>Category 1: physical education as a means for personal development in the school environment</b>
Values (core and peripheral values: hedonistic, moral, religious, aesthetic, physical culture, utilitarian) <sup>4,7</sup> ; moral/ethical formation within the school environment (personal development, behavior, norms, school discipline, moral behavior, engagement) <sup>6,7,9,15</sup> .
<b>Category 2: The potential of sports as a means for moral education as virtue formation</b>
Ethical values of sport <sup>6,7,9,15</sup> ; ethics of sport <sup>16</sup> ; ethical elements of sport <sup>10</sup> ; ethical issues of sport <sup>10,15</sup> ; ethical contribution of sports to physical education <sup>7</sup> .
<b>Category 3: Level of knowledge of Physical Education professionals concerning ethics</b>
Ethical education <sup>4</sup> ; level of information <sup>6,17</sup> ; training of professionals at the university <sup>5,8</sup> ; low level of knowledge <sup>6</sup> ; moral dilemmas <sup>10</sup> ; judgment <sup>11</sup> ; different situations <sup>11,17</sup> .
<b>Category 4: Ethics in the training of Physical Education professionals</b>
Programs of values education <sup>6</sup> ; reflective practice model <sup>4,5</sup> ; adequacy of education programs <sup>4,7,11,12,15</sup> ; physical education curriculum <sup>12</sup> ; humanistic knowledge <sup>6,7</sup> ; professional training <sup>8,9</sup> ; critical reflection <sup>4,8,12</sup> ; ethical reflection <sup>11,16</sup> ; ethical awareness <sup>11,4</sup> ; ethical competence of the professional <sup>7</sup> .

## Physical education

### Personal development in the school environment

Next, we discuss the four categories resulting from the content analysis<sup>14</sup>. This category groups the findings in the articles written by Wrench and Garrett<sup>4</sup>, Görgüt and Tutkun<sup>6</sup>, Pezdek<sup>7</sup>, Barker, Barker-Ruchti and Pühse<sup>9</sup>, Costa, McNamee and Lacerda<sup>15</sup>, who address the importance of school PE in the personal and social development of the students, and may, in this sense, include the ethical dimension. This category is discussed based on the values and moral and ethical training of students in the context of PE classes.

In order to better understand moral development, it is initially necessary to conceptualize the term “value” as qualities attributed by the subjects, perceived by reasons and emotions and distinguished from their opposites (devaluation), from things, actions, institutions, and systems, which allows to condition the world and make it habitable, so that one can fully live in it<sup>18-21</sup>.

Based on the identified articles, one of the most important characteristics that form the character of an individual for life in society are the values

that they appreciate and seek to put into practice during life<sup>6</sup>. By morals of the school institution, the system of values and beliefs is understood as the morals to be learned by students in the school environment, who may occupy a core or peripheral position<sup>7</sup>. Core values constitute the focus of interest and specific individual actions, shaping positions to a considerable degree, in addition to defining the direction of students’ personal development. Peripheral values do not greatly influence the lives of the subjects in training, in this case, the students, as they do not affect the mainstream of their daily lives<sup>7</sup>.

In this perspective, PE is a sociocultural construction created by people, for people, and based on specific human goals and values<sup>5</sup>; therefore, it is based on the so-called core values. Hence, school PE is responsible for the development of students’ axiological-attitudinal competence, which conditions their moral choices, desires, and goals, constituting both the image of the world and their own image within the world<sup>4</sup>.

However, it is worth emphasizing that moral education can be put into practice in the institution in four ways: 1) moral education as socialization (adjusting individuals to the community in which they live); 2) moral education

as clarification of values (liberal perspective); 3) moral education as the development of moral judgment; and 4) moral education as the formation of virtuous habits or character<sup>22</sup>.

Although the crucial value in this axiology in PE is the body, it is addressed in such a broad context that it significantly exceeds its typically physical understanding, considering that it is inserted in several relationships, influences, and mutual dependencies with other types of values, for example, aesthetic, social, religious, utilitarian, moral, and hedonist<sup>4,7</sup>.

School PE is understood as a means for personal development, considering that cultural diversity and plurality must be contextualized in all pedagogical practices. This scenario is based on the very object of PE: human movement, which makes children and young people psychologically, physically, and physiologically active<sup>6,7</sup>. In addition, PE professionals, their values, character, and personality are crucial factors in moral education and must assume considerable responsibility for the ethical education of the children and young people for whom they are responsible<sup>7,16</sup>.

It can be noticed that the values and meanings present in PE are as ancient as PE itself. From a psychological, sociological, and pedagogical point of view, PE is often seen as a significant sphere for the socialization of young people<sup>5</sup>. From a physiological and medical perspective, PE is deemed an important contributor to health and well-being in general<sup>5</sup>.

There are also other points of view on values and meanings alluding to PE that suggest the development of sensitivity in PE from four vectors in the school environment: education of epistemic sensitivity, education of ethical sensitivity, education of aesthetic sensitivity, and education of political sensitivity<sup>15</sup>.

With regard to the first vector, the education of epistemic sensitivity is necessary, by the search for knowledge of reality, understanding it as a result of the fullness of human capacities. The second refers to the education of ethical sensitivity, seeking to develop autonomy, freedom, and responsibility. The third refers to the education of aesthetic sensitivity, in an attempt to develop the capacity for appreciation, contemplation, pleasure,

and aesthetic judgment of reality. And the fourth and last vector concerns the education of political sensitivity (social consciousness) to form citizens duly dedicated to the polis, the society, the creation of common consciousness, promoting harmonious relationships between them and the world<sup>15</sup>.

In addition to the vectors present in PE in the school environment that converge for the personal training of students<sup>15</sup>, two plans that guide school PE are observed, namely: the technological and the axiological. The first is responsible for developing the ability to use one's own body, collecting and processing information about physical culture. The second is responsible for the axiological development of the students. In addition, there is the students' system of values.

Besides core and peripheral values, we find autotelic and instrumental ones. The former constitute an objective in itself, and the latter are a tool used to achieve it<sup>7</sup>. Thus, education, and specifically PE, occupy an important place in the conduct of activities as encouragement or development of the values of individuals<sup>6</sup>.

Pezdek<sup>7</sup> points out that ethical education is generally considered in two types of understandings: a narrow and a broad one. A narrow understanding reduces ethical education to a certain school subject, which familiarizes students with ethical theories and norms, in addition to descriptions and assessments of moral behavior. Conversely, a broad understanding consists of weaving ethical issues in relation to society and to an individual<sup>7</sup>. Taking this into consideration, when students reflect on these issues, an engagement is promoted towards a more deliberative attitude that is involved with the ethical content of classroom activities. Thus, greater advances are promoted in terms of ethical education<sup>15</sup>.

It should be noted that, among the analyzed articles, the definitions of "ethics" and "morals" were used more as synonyms than as distinct concepts; therefore, both were addressed as elements that contribute to personal development in the school environment, especially regarding children. It is worth resuming that ethics and morals have similar etymology. However, morals represent the formation of character in everyday life, related to specific

cultural phenomena, involving values that each group shares<sup>22</sup>, and ethics is the reflection on this moral formation, on the values.

Furthermore, moral doctrines, on the one hand, systematize concrete sets of principles, norms, precepts, and values. Ethical theories, on the other hand, seek to explain the fact that human beings are guided by moral codes<sup>23</sup>. Therefore, a value deemed correct for one social group may not be correct for another. Consequently, given the existence of moral plurality, ethical reflection is imperative for life in society, and early childhood education is a propitious locus for ethical exercise, including in the field of PE.

The morals of human beings consists of a system of rules based on values and beliefs. Ethics is the reflective exercise in the face of a conflict of values, in the search for a responsible, prudent solution. Ethics is related to decisions made in this type of value-conflicting situation and, for this purpose, moral deliberation is used<sup>24</sup>.

The process of personal development of children is considered to be the result of interaction between family, school, and social environments. Within the school environment, supported by a pedagogical praxis, the PE class provides interpersonal situations, physical and cultural experiences that enable socialization as a moral education process.

## The potential of the sport

### Moral education as virtue formation

This category includes the potential of sports as a means for moral development. The topic is composed by the findings of the following articles: Görgüt and Tutkun<sup>6</sup>, Pezdek<sup>7</sup>, Barker, Barker-Ruchti and Pühse<sup>9</sup>, Costa, McNamee and Lacerda<sup>10,15</sup>, and Jones<sup>16</sup>. Here, an expanded view of sport is attributed in a universal language to the potential for moral development, in addition to PE and sports as a social milestone for children and adolescents, as presented in the first category.

Sports contributes to health and well-being and has as its purpose the formation of the ethical subject. In this sense, the practice of sports, whether at school or clubs, as an element of culture in the professional sphere and in the soccer team of a country, provides a propitious space for

learning situations and different performance criteria that increasingly value the ethical content of sports<sup>10</sup>. Hence, sports has a moral potential, materialized in a struggle for excellence, which requires deep respect for moral values such as fair play, equality, tolerance, and justice<sup>15</sup>.

On this subject, Jones<sup>16</sup> points out that moral action in general and particularly in sports is composed of other concepts and constructions, such as virtue, motivational orientation, maturity, principles, judgment, reasoning, perception, emotion, and numerous situational factors. Moreover, the issue of the elements of sports ethics in the context of PE is attributed to this potential, which are used in the pedagogical sense, such as: regulation and normative structure of sport; spirit of sport and its internal values; the right to do sports; overcoming in sports; and sports as an opportunity for ethics that exceeds the fulfillment of duties<sup>10</sup>.

For this reason, sports activities play an important role in personal development, as they can be done as a right for all, whether in school sports, in sports as leisure, and in performance sports. Furthermore, the content and meaning of sports are apprehended at both the behavioral and conceptual levels, as both are interrelated<sup>15</sup>. It is understood that the popularization of sports among young people contributes not only to the improvement of the health condition of the society, but also to the growth of the ethical awareness of citizens in full exercise<sup>7</sup>.

Sports activity contributes to the development of cognitive, affective, ethical, aesthetic, interpersonal-relationship, and social-inclusion skills. The distribution of roles, the interaction with the rules, the relationship established between victory and failure and, finally, rivalry and cooperation cultivate values and behaviors consistent with the very democratic bases on which contemporary society is founded<sup>25</sup>.

Three vectors related to sports could contribute to the ethical perspective: 1) the first contributes to the role of PE in the development of students' sensitivity and respect for the internal goods and the constitutive characteristics of each sport; 2) the second refers to the cultivation of the responsibility of providing learning contexts that promote athletic overcoming and perfectionism among students in terms of sport performance; and 3) the third

is related to the cultivation of the responsibility of promoting among students, through the sports pedagogical experience, respect for themselves and for others and for integrity by sports activities<sup>15</sup>. Noletto<sup>25</sup> points out the positive effects that sports activities have on the education of children and young people considering that, in addition to integrating them, the provision of sports, artistic, and cultural activities helps in the socialization and reconstruction of citizenship.

It is noteworthy that, in a phenomenological approach, sports can result in good or bad behaviors, which only depends on those individuals in particular, who give meaning to it and, sometimes, on entire societies. Thus, the intent and meaning of the sport were created based on the values through which each person defines their goals and makes decisions. These goals may be competitive in nature (agonistic values), involve body care (aesthetic values), signing a contract with a club (utilitarian value), pleasure (hedonistic values), worship (religious values), or becoming a good person (moral values)<sup>7</sup>.

In addition to the perspective of sports ethics and values education in the context of sports practice (modesty, respect, honesty, equality, defense of rights, solidarity, and fair play)<sup>6,9</sup>, the issue of flexibility and space for pragmatism can be mentioned, without compromising basic values. That is, in the short term, PE proponents can point to moral development and/or health. In the long term, relational and humanistic values confer educational ideals with guidance and stability<sup>5</sup>.

In this perspective, the ethical potential of sports surpasses legal, regulatory, and functionalist boundaries, as they also reproduce issues of ethical commitment and ethical awareness by its practitioners in the way of feeling and thinking, understanding and evaluating. Therefore, sports ethics is not limited to technical aspects and, naturally, it should be noted that some relevant aspects of sports ethics in general still need to be systematically investigated<sup>10</sup>.

Although the articles address values and potentialities of sport, we observed that issues concerning the sports universe were not mentioned and they should be widely discussed, such as cooperative values in sport, the importance of defeat in sport and doping practices, which is a gap of scientific production.

In the literature, there is a debate on cooperative games in various contexts, and this study is based on the reflections of Brotto<sup>26</sup>, who discusses the importance of the cooperative games category. According to the author, games and sports are socio-educational principles that can enhance cooperation and solidarity among those involved in the process. In this perspective, knowing how to deal with the negative emotions arising from defeat in sports is deemed extremely important.

According to Nunes<sup>27</sup>, one of the main objectives of sports initiation is developing specific psychological skills such as knowing how to win and lose, play fair, and knowing how to control oneself in times of difficulty. To do so, it is necessary to develop emotional education, both in the family environment and in other environments, because in cooperative/competitive games there is a greater negative perception, due to competitiveness, as many negative emotions arise when one loses<sup>27</sup>.

Lastly, a recurring topic in sports involves values such as fair play, respect, and honesty regarding doping in sports. Doping is understood as the use of illicit substances, drugs, or methods employed to improve sport performance. On this topic, Cardoso<sup>28</sup> states that it is a problem of modern and contemporary sports, constituting a violation of the principle of formal equality between competitors, which is both unethical and illegal, in addition to being harmful to health and it may cause death, a true contradiction to the sport ideal.

In this category, overall, favorable aspects or what is considered to be potentially positive for an ethical/moral development by sport were highlighted. Sports practice, in addition to contributing to health and well-being, enables its participants to experience the understanding of values and the reflection on everyday behavior. It is worth highlighting the gaps in the international literature pointed out in this review such as doping, cooperative values, and defeat in sports.

## Ethics

### *Level of knowledge of Physical Education professionals*

This category discusses the level of knowledge of PE professionals concerning ethics, based on the following studies: Wrench and Garrett<sup>4</sup>, Loland<sup>5</sup>,

Görgüt and Tutkun<sup>6</sup>, Jung<sup>8</sup>, Costa, McNamee and Lacerda<sup>10</sup>, Goodwin and Howe<sup>11</sup>, and Goodwin and Rossow-Kimball<sup>17</sup>. The findings refer to the issues of professionals' training in universities, level of information on ethical education, and the implications of a low level of knowledge of ethics in everyday practice, in decision-making, and in the confrontation of moral dilemmas in varied contexts.

Among the problems related to the skills and abilities of PE professionals in dealing with complex situations in the workplace, the training process in universities is identified. The criticism towards universities is based on the need to promote ethical education in a contextualized manner in the experienced reality<sup>5,8,10,15</sup>. It is understood that, to develop ethical sensitivity, it is necessary to mature through experiences and coping situations during training.

Therefore, for a better engagement in ethical education, there must be the involvement with socially critical discourses in the training of PE professionals, seeking to make ethical education a place of inclusion, and not of marginalization and exclusion, in their various fields of activity<sup>4</sup>. The study by Görgüt and Tutkun<sup>6</sup>, whose objective was to assess the opinion of PE teachers on the concept of values education, corroborates the findings. The authors observed that the level of information of PE professionals on values education is insufficient.

Despite this constitution of the potential of PE, whether by sports or other practices in the area for an ethical education, it is still observed that PE professionals report having a low level of knowledge of ethics and its implications for everyday practice<sup>6</sup>. It is possible to infer that the exchange of information based on debates, courses, and disciplines in universities on the subject of ethics and bioethics is still incipient.

The need for problematizing issues related to ethics and bioethics in the context of PE can be observed by the reporting of barriers to coping with situations of ethical conflicts<sup>6</sup>. In this sense, Goodwin and Howe<sup>11</sup> point out that ethical judgments are part of professional life, thus stressing the importance of a change in the training of PE professionals, and this will be possible if universities promote critical reflection to contribute to the understanding of ethical problems in complex contexts<sup>11,17</sup>.

Complexity in terms of ethics in PE was addressed by Goodwin and Rossow-Kimball<sup>17</sup>,

who describe four ethical approaches (Principlism, Virtue Ethics, Ethics of care, and Relational ethics) in the context of adapted physical activity (APA). The authors discuss the use of the approaches alone and their implications and, later, present a better way of ethically thinking about professional practice in the APA<sup>17</sup>. According to them, when using each approach alone, complex situations can occur in the context of adapted physical activity.

The level of knowledge of the plurality of ethical approaches can broaden the understanding and minimize ethical problems in professional practice in PE. Goodwin and Rossow-Kimball<sup>17</sup> report that ethical theory provides the conceptual space to seek plurality and diversity from different theoretical perspectives. By considering multiple perspectives for various situations, one can deepen enriching interpretative possibilities.

Each of the ethical approaches presented, for example, could be debated to the extent that they reflect autonomy and interdependence, universality, and particularistic context, reason and emotion. It should be noted that not all approaches are equally useful in all the presented circumstances, and that one approach is not necessarily more appropriate than another. Instead, ethical approaches can be seen as complementary to each other, and not as contradictory<sup>17</sup>. Goodwin and Howe<sup>11</sup> emphasize the importance of increasing the level of knowledge concerning ethical theories, in such a way that reflection on ethical practice is fair and adequate.

There are challenges to overcome in the training of PE professionals. From the university, it is expected the commitment to reflective-critical education, ethical debate and encouragement to the engagement of professors and students in the search for excellence, in addition to the possibility of discussing various topics relevant to the field of PE in formal education and continuing education environments and of which PE professionals can understand the ethical approaches to avoid misunderstandings in everyday practice.

### Ethical training of physical education professionals

The following articles are included in this category: Wrench and Garrett<sup>4</sup>, Loland<sup>5</sup>, Görgüt and Tutkun<sup>6</sup>, Pezdek<sup>7</sup>, Jung<sup>8</sup>, Barker, Barker-Ruchti

and Pühse<sup>9</sup>, Goodwin and Howe<sup>11</sup>, Özbek<sup>12</sup>, Costa, McNamee and Lacerda<sup>15</sup>, and Jones<sup>16</sup>. This category deals with the ethical training of PE professionals with the capacity to strengthen the fields of activity (teaching and bachelor's degrees) as a means for ethical education<sup>5,10</sup>, including issues related to training program models based on the adoption of humanistic knowledge in the basic curriculum as well as the expansion of the critical and ethical reflective practice of these new professionals.

With regard to qualification, most of the studies in this review point to models of professional training and continuing education programs focused on ethical education<sup>4,7,11,12,15</sup>. Among the proposed models, it is suggested to adopt a training program in values education with the potential to qualify future professionals<sup>6</sup>. For instance, in the school environment, based on this training, PE professionals learn how to meet the needs of children and young people by socially critical pedagogical practices<sup>4</sup>.

Taking this into consideration, thinking about curricula and programs aligned with the theoretical basis of the individual's physical development, as well as with humanistic theories regarding the formation of attitudes, broadens the reflection on professional practices<sup>6,7</sup>. PE professionals in certain contexts have difficulties in making decisions<sup>8,11,12</sup> when facing moral conflicts. In this sense, the findings indicate the need for a new profile of PE professionals, by encouraging changes in professional practice<sup>4,8,9,11</sup>.

The ethical work involves critical reflection on practices consolidated in PE<sup>4,8,9,11,16</sup>, which, in certain contexts, may promote or inhibit work, cause burnout, injuries to students/patients/clients, and also promote the devaluation of the professionals<sup>8</sup>. In the training of PE professionals, it is necessary to foster an education for diversity<sup>6</sup>, with values, such as autonomy and integrity,<sup>11</sup> and ethical awareness.

Perceiving the lack of tools on the part of PE professionals, who increasingly face moral conflicts, requires them to have interpersonal knowledge and skills<sup>7</sup>. Among the experienced problems, we highlight issues related to work, progression, education, mistakes and successes, issues related to the rights of ethnic and religious groups in the school environment, moral dimensions of student behavior, and general issues at school<sup>12</sup>.

Somehow, the ethical problems faced in increasingly complex workplaces by PE professionals

mainly stem from the lack of formal training in ethics. This may be justified by the fact that the ethical work required from PE professionals involves understanding how ethical issues arise, how they are structured, and how they are managed in the workplace<sup>11</sup>. This shows that it is pertinent to discuss the training of PE professionals with regard to the targeting of issues for the ethical and bioethical approach directed to the complex and multidimensional context present in human life<sup>6,8</sup>.

In this context, it is evident that deontology alone in the curriculum is not capable of dealing with the ethical and moral issues to which future professionals will be exposed<sup>12</sup>. The need for an ethical perspective in PE, by applied ethics<sup>11</sup>, implies a deliberation model based on the problematization of moral conflicts contemplated in the relationship between ethics, bioethics, and PE.

Bioethics allows us to understand the plurality of society, its diversities, and values, with principles that can protect these corporate relationships without establishing rigid and inflexible rules<sup>29</sup>. In other words, a diverse and interdisciplinary curriculum makes professionals who seek the paths of bioethics qualified to contextualize moral problems, resulting in plural and dynamic learning<sup>30</sup>. The ethical education reported in the studies advocates the contextualization of the experienced reality<sup>5,8-10,15,16</sup> as a process through which professionals reflect the practice in the context in which they are situated<sup>8</sup>. Thus, socially critical practices highlight the potential of PE as a means for ethical education<sup>5,10</sup>.

The professionals' lack of training in dealing with conflicts, identified in this review as a problem, stems from the education based on a traditional and hegemonic conception, that is, the one linked to the biomedical model and technical and instrumental knowledge of PE<sup>4,7</sup>. A reflective professional training model should consist of technical, instrumental, and humanistic knowledge<sup>4,5,7,11,15</sup>, implying the development of knowledge, behavioral norms, and ethical ways of relating to oneself and to others<sup>4</sup>.

In this sense, ethical competence requires a new type of PE professional, who simultaneously seeks to develop humanistic understandings and teaching skills of effective practices for conflict resolution<sup>4,7,8,11</sup>. Another issue reported in the studies refers to reflection by self-assessment, which

enables a stimulus to change in everyday practice. Reflecting on ethical conduct in workspaces contributes to deliberate decision-making<sup>8,11,12</sup>.

In ethical decision-making, personal beliefs, principles, rules, and solving skills of ethical problems are effective. As aforementioned, many professionals have difficulties in making decisions when faced with ethical dilemmas in complex situations. In this context, the exercise for ethical decision-making involves moral conscience, moral judgment, moral intent, and the application of moral behavior<sup>12</sup>.

It is understood that training programs based on humanistic knowledge may represent a unique space for the critical debate on topics of ethics and bioethics in the context of PE. The level of commitment of PE professionals in this training process should be emphasized, considering that the qualification of ethical conduct is related to the level of development and ethical knowledge apprehended.

## Final considerations

With the intention of contributing to the reflection on ethics and bioethics in the field of PE, this study identified ethical issues inherent in the professional practice of PE professionals with regard to intervention in the school environment, the sport scenario as a space for value experiences, the need for a continually stimulated moral and ethical sensitivity to adequate training and, finally, to the importance of PE professionals capable of reflecting and critically understanding everyday situations.

It is worth noting that, in the first category, the focus of the PE professional's intervention is related to the school environment. This space is understood as an environment conducive to unique teaching situations that encourage learning, observation, and cooperation experiences and the assessment of attitudes and behaviors. Thus, we must bear in mind that PE professionals must understand values and develop a practice consistent with reflective, critical, and ethical teaching.

At the same time, in the second category, a broader perspective of sport as a potential for moral education is addressed. It is understood that the practice of sports is capable of providing the experience of values; nevertheless, for this objective to be fulfilled, PE professionals working

in this area must invest in ethical training, so that they become able to reflect on possible conflicts and the means to solve them.

In the third category, we found that it is necessary to pay attention to the role of the university in the engagement by teaching and/or continuing education in ethics, which reverberates in the development of ethical skills and sensitivity of PE professionals. In addition, it reinforces the idea of qualifying the understanding of ethical approaches, seeking to avoid any erroneous understandings. Long-term ethical training is necessary, adopting everyday reflections in the context of PE.

Issues related to ethical training, reflective professional practice, and values education, deepened in the fourth category, indicate the understanding that technical-instrumental knowledge in PE is insufficient, considering that broadening the understanding of diversity and humanistic knowledge is essential to the education of PE professionals. In this process, it is paramount to include the contextualization of the professionals' daily lives, with the purpose of encouraging fair decision-making and changes in practices in conflicting situations.

As limitations of the study, it should be noted that it only addressed articles available for free in the CAPES databases, and no theses and dissertations were included. Nonetheless, the scarcity of scientific production on the topic of ethics and/or bioethics in PE is noteworthy. Therefore, it is important to encourage the development of studies with an ethical/bioethical perspective of the practices experienced by PE professionals.

In this article, we sought to discuss issues related to interventions by PE professionals from a critical and reflective perspective. It is important to sensitize scholars to carry out research on this topic, still on the margins of scientific production in the field of PE, mainly considering the following verified gaps: studies on doping, cooperative values, and defeat in sports.

All in all, we can consider that professionals should know the social and cultural context in which they develop their daily practices and face the potential of the PE area for moral and ethical development — although with responsibility, committed, above all, to the understanding of how, why, and when to use ethical competence (knowledge, skill, and attitude) and bioethics in their practices.

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