

## The questionnaire to detect the physical education teacher's philosophical profile: from theory to practice

**Emanuele Isidori<sup>1</sup>**

**Agita Abele<sup>2</sup>**

**Francesco Taddei<sup>1</sup>**

**Eridiola Buzi<sup>3</sup>**

University of Rome Foro Italico<sup>1</sup>

Latvian Academy of Sports Education<sup>2</sup>

Sports University of Tirana<sup>3</sup>

labopedagogia@gmail.com

### Abstract

As a sport and educational science, the philosophy of sport education serves as a theoretical means to develop the conceptual framework for sport pedagogy, developing the critical, reflective and deconstructionist perspective of this science. Starting from this point of view, the two main aims of this study are: to stress, through a hermeneutical methodology, the fundamental role played by sport philosophy as activity capable of developing critical thinking in physical education teachers, and to help them understand their world and seek the truth about things, facts and actions, asking themselves why and for what purpose they teach their subject through a questionnaire. For this reason, our study will reflect upon the philosophy of sport education, identifying its practical functions in light of five philosophical educational paradigms. Starting from these paradigms, we will sketch and administer to a small group of Italian PE teachers, a questionnaire to detect their philosophical educational paradigms, analyzing the results emerging from it.

Come scienza dello sport e dell'educazione, la filosofia dell'educazione sportiva viene utilizzata come mezzo per delineare il quadro concettuale della pedagogia dello sport e sviluppare la prospettiva critica, riflessiva e decostruzionista di questa scienza. Partendo da ciò, i due principali obiettivi di questa ricerca consistono nel mettere in evidenza, attraverso una metodologia ermeneutica, il ruolo fondamentale svolto dalla filosofia dello sport quale scienza in grado di sviluppare un pensiero critico negli insegnanti di educazione fisica, e di aiutarli a capire, attraverso uno strumento riflessivo, il loro mondo, i fatti, e le azioni, portandoli ad interrogarsi sul perché e per quale scopo insegnano la loro materia. Per questo motivo, la nostra ricerca partirà da una riflessione sulla filosofia dell'educazione sportiva, di cui verranno individuate le principali funzioni sulla base di cinque paradigmi filosofico-educativi. Partendo da questi paradigmi, stileremo e somministreremo ad un piccolo gruppo di insegnanti di educazione fisica italiani, un questionario per rilevare i loro paradigmi filosofico-educativi, analizzando poi i risultati che emergeranno da esso.

**Keywords:** philosophy, teachers, physical education, pedagogy

**Parole chiave:** filosofia, insegnanti, educazione fisica, pedagogia



## 1. Introduction

In Italy, and in most of the European countries, physical education teachers don't follow courses in educational philosophy applied to their subject during the training period in departments or specific courses for teachers' education. The previous curricula followed by them as students usually don't include any mandatory courses in the philosophy of education. It happens not only to physical education teachers but also to many categories of teachers who teach other subjects. Practitioners and scholars often argue, as do many students in schools of education, that although philosophy of education actually could add a new dimension to their view and interpretation of the school and the specific subject they teach, nevertheless, they don't want to waste their time in a discipline that doesn't offer them a tangible and concrete result. We know that the main aim of the philosophy of education is to teach educational practitioners to reflect on why they act and do things, on their behaviors (Reboul, 1971). But teachers are mainly interested in learning what they do because for many of them the practice of teaching is reduced to actions devoid of a rationale or justification. This concept and false belief gives rise to the well-known dichotomy between theory and practice (Thomas, 2007), and between scholars and practitioners. This dichotomy represents one of the main controversial issues of pedagogy as a science, and of teachers' education. Nowadays, there are many training models that are trying to solve the problem concerning this dichotomy in teachers' education (Schön, 1983). These models aim at helping teachers to develop as critical reflective practitioners capable of using critical thinking for understanding what they do and why do it, starting from what we can call a "philosophical" attitude towards the world and its problems.

We are convinced that teaching as a profession and personal practice cannot be separated from a philosophical foundation. Philosophy, as applied to education, allows teachers as educational practitioners to apply systematic approaches to problem-solving in schools, helping them not only develop critical and reflective thinking but also illuminate and deeply understand larger issues of the complex educational and political relationship of the school to the social order.

Philosophy is an activity that can help physical education teachers to be fully aware of their role as intellectuals. We should not forget that in ancient Greece sport was always thought of and conceived as a philosophical practice. A successful example of a philosopher-athlete is shown by Plato's biography. Plato (circa 429-347 B.C.), whose real name was Aristocles – Plato was his nickname as an athlete who had broad shoulders and a robust figure – was a wrestler and became, thanks to the teaching and tutorship of his schoolmaster Socrates, one of the greatest philosophers of the world and one of the wisest men of all time. In the III century B.C., Philostratus the Athenian (circa 170/172-247/250) stressed in his treatise entitled *Gymnastics* the importance of an integral *Paideia* and good education both for trainers and athletes, showing how the sport is always an intellectual and not a mere technical practice which requires well-educated people to be taught and practiced. We should be inspired by Plato's biography and seriously take into account the suggestions from Philostratus, and educate physical education teachers to use philosophy as a tool to develop their critical and reflective skills both as teachers and intellectuals (Reid, 2002).

Philosophy represents the efforts of human beings to understand their world,

themselves, why they exist and their search for truth. It stresses the importance of wisdom as mental activities aimed to search for the truth, to know and understand the world. Therefore, philosophy is a fundamental tool for the physical education teacher. She or he, like other academic colleagues, can utilize the tools of philosophy; mainly (Pelton, 1970):

- 1) To examine and explore the meaning of the world, the individual, and the interaction between the two;
- 2) To arrive at and develop a personal philosophy which gives meaning and direction to her/his efforts as teacher and human being;
- 3) To keep in perspective the teacher's role, direct her/his choices, and maintain her/his personal integrity both as human being and practitioner;
- 4) To structure the totality of her/his personal beliefs and thus avoid adverse actions and unrecognized compromise;
- 5) To analyze the consistency of her/his beliefs and determine if practices conform to her/his beliefs.

The prior statements regarding philosophy as a tool for physical education teachers in order to stress how the philosophy we are talking about is not a discipline in a strict sense but is an activity firmly rooted in, and one that affects educational practice. All physical education teachers, like other teachers, regardless of their action orientation, have a personal philosophy of life that influences the way they conceive of sport, select knowledge, order their classrooms, organize their sessions in the gym, interact with pupils, peers, parents, and administrators, and select sport values to emphasize within their lessons in the gym or pitch.

Engaging in philosophy helps physical education teachers clarify what they do or intend to do and, as they act or propose to act, to justify or explain why they do what they do in a logical, systematic manner in the classroom, gym or pitch. Thus, the activities of philosophy aid physical education teachers in understanding who they are or intend to be and why they do or propose to do what they do. Furthermore, through the action of clarification and justification of practice, physical education teachers develop specific reflective skills which are very beneficial to their decision-making.

## **2. Aim of the Study**

Philosophy provides physical education teachers with tools capable of clarifying their notions of existence, knowledge, and values in teaching: that is, as we have said above, capable of clarifying their personal philosophy of sport and of teaching sport/physical education. Moreover, this philosophy of life, as one comes to understand it, becomes the foundation upon which people construct pedagogic practice and models. The main aim of this study is to stress, through a hermeneutical methodology approach, the fundamental role played by sport philosophy as activity capable of developing critical thinking in physical education teachers, and to help them understand their world and seek the truth about things, facts and actions, asking themselves why and for what purpose they teach their subject. This is important for physical education teachers, who – in Italy and other European Countries, due to the prevalence of “technician” training and education models – continue to be influenced by a merely practical conception of sport and physical

activity, and not to be aware of their real role and function as educators who are not mere technicians but intellectuals.

### **3. Methods**

The study applied both theoretical and empirical methods. The theoretical method involved analyzing several philosophical paradigms in the field of sport science. The empirical method consisted of building a questionnaire of 50 items (10 items x 5 profiles). This research tool, based on a Likert scale, centered on a scoring system from 1 to 5. Mathematical method result calculation (standard error, standard deviation, median, and mode) were used as methods of analysis.

### **3. Results**

#### **3.1 Philosophy of education as a critical educational sport science**

There exists a specific philosophy capable of providing PE teachers with reflective skills. This philosophy, which positions itself between the two systems of so-called “sport sciences” and “educational sciences”, is the “philosophy of sport education”. In this wording, the term “sport” is seen as an umbrella term which implies the concepts of “body”, “sport”, and “movement” in accordance with Ommo Grupe’s theory of sport (Grupe, Krüger, 1997) and the definition given to it by the European Commission (EC, 2007).

This particular philosophy serves as a theoretical means to develop a conceptual framework for sport pedagogy, developing the critical and reflective perspective of this science (Grupe, Krüger, 1997). Applied to the cultural context of PE, philosophy of sport education can be considered as a tool (that is a critical and reflective means of reasoning) which allows teachers to examine and explore the meanings of this practice in relation to the construction of their identity as human beings and persons (Isidori 2012; Kretchmar, 1994). Starting from this “philosophical view,” individuals can become aware of their role as educators and their pedagogical function. The philosophy of sport education has the following practical functions:

- 1) It reflects the needs and conditions for legitimacy of the concept of education through sport, demonstrating the importance of sport for every human being;
- 2) It studies the characteristics through which sport can be said to be educational, arguing the reasons that justify this practice regarding a real promotion of human values and, in the case of school sport, its presence in the school curriculum in the form of physical education;
- 3) It researches the direct and indirect consequences of the absence of the educational and pedagogical component in high-level sport;
- 4) It analyzes the possible educational function of sport in society and the school and uses it as a critical tool against the prevailing capitalistic mentality and the crisis of values in society;
- 5) It makes proposals on how to develop educational activities, to promote values, social cohesion, and cultural pluralism in contemporary society through sport.

The philosophy of sport education reflects on the educational values of PE and sport through the following principles:

a) the principle that recognizes the dignity of all human and non-human beings as bearers of inalienable rights when they come to be engaged in sport. Sport is a right for all the people of the world and the right to “sport for all” must be taught and developed in the framework of a non-discriminatory culture.

b) the principle that recognizes the capacity of all human beings to discover, through sport and the analysis of its reality and essence, educational values, which are cross-cultural and universal. In every athlete, one can find a possibility and capacity to understand and accept cultural pluralism, diversity, and difference (of gender, ethnicity, etc.). Philosophy of sport education posits the need for educating athletes to make them understand the existence of such differences.

c) the principle that affirms the importance of sport as a tool to fight oppression in whatever form it appears. The first form of oppression in sport is nowadays the risk of reducing athletes and all the people who are engaged in sport (including spectators) into commodities.

d) the principle that recognizes in each person the possibility to understand the universal values of sport starting from the analysis of her/his existence and personal experience;

e) the fundamental principle which sees in sport an excellent means to educate new generations and a tool available to every person to live a better, fuller, more authentic and really “good” life.

f) the principle of strongly believing in the potential of sport education and training, seen as a real existential commitment that involves those who are engaged in sport or enjoy (as mere spectators) its values in the form of entertainment, and a tool able to build a better and a more democratic society.

The philosophy of sport education always looks with optimism at the learning and educational processes that can be developed from physical education and sport, and considers sport as an ideal ethical model for a better society. The philosophy of sport education is aware that sport represents a perennial philosophical and educational utopia, but it also knows that by following this utopia to achieve it we can make progress in building a better and more just society and democracy.

### **3.2 Seeking a reflective tool for PE teachers**

For all the reasons mentioned above, physical education teachers have to be helped develop as reflective practitioners who are aware of their role both as educators and as intellectuals. Sport pedagogy and sport philosophy shows us that one can become a reflective practitioner in sport and physical education (PE) if she or he becomes aware of the values, beliefs, and prejudices that influence her/his actions. This critical exercise is vital to teaching, a profession that requires critical skills and awareness of the worldviews that guide the practice of education.

As said in the introduction to this research, PE teachers, because of their training – traditionally focused on acquiring technical skills – are not used to reflecting on their worldviews. For this reason, very often they have no clear idea about the philosophical context of their teaching in terms of teaching techniques; the values connected to PE and sport they intend to transmit; the sense and meaning they give to human life through sport and physical activity; what goals connected to personality they intend to pursue their

teaching. This lack of awareness of the paradigms that guide teaching practice hinders PE teachers' development of both critical thinking and reflective attitudes towards the subject they teach in the school, in which sport and PE are often conceived just a mere technical activities and practice for competitions and performance.

### **3.3 Physical Education teachers' profiles**

As stressed in our previous theoretical background, due to the need for helping PE teachers to become aware of their educational views, the main aims of our study were as follows. First of all, to build and validate a research tool (a questionnaire) aimed both at detecting the philosophical paradigms and pedagogical profiles of a group of Italian PE teachers and at identifying the theories of education upon which they base their teaching. And secondly, the aim was to use this questionnaire as a first step towards building a self-reflective educational model for these educators.

This second part of our research consisted of a pilot study based on a questionnaire administered to a small sample of PE teachers. The first phase of the research, in which a hermeneutical approach was used (Pearson, 1990), consisted of an epistemological analysis of the concept of the educational paradigm applied to PE. The paradigm is conceived of as a matrix of beliefs and assumptions (Masterman; 1972; Kuhn, 1962; 1970) about the nature of physical education, its meanings and its purposes, which informs specific pedagogical attitudes and styles of teaching. These beliefs and assumptions can be more or less tacit, but they both serve to determine and influence the personal choice of education models used by PE teachers to teach their pupils. Each philosophical paradigm of PE, which is tied to the overall philosophical and educational conceptions of sport and human life, reflects a combination of guidelines that are the result of different perspectives implied in teachers' academic qualifications and in how they have been trained in schools of education. Since educational paradigms represent both a pre-understanding of the world and the root of human action, they reflect specific trends and they need specific pedagogical models to be implemented by teachers.

After defining the concept of paradigm in this way, a research analysis upon both sport philosophy and pedagogy scholarly literature (Safania, Ghorbanalizadeh, Tayebi, 2010; Wiles, Bondi, 2010; McFee, 2007; Davis, 1963) has allowed us to identify five basic PE teaching paradigms related to five main philosophical movements. These are:

- 1) pragmatist paradigm;
- 2) idealist paradigm;
- 3) positivist paradigm;
- 4) existentialist paradigm;
- 5) socio-critical paradigm.

Each paradigm is inspired by a specific philosophy of education that has its basis in the thinking of many influential Western philosophers associated with each movement (Fernandez-Balboa, 1997; Morgan, 2006; Thomas, 2007). Furthermore, since each paradigm shows specific characteristics and complex features due to the many variables which define it, we decided to analyze and to sum up the features of each PE paradigm in a specific educational, philosophical profile. To define these profiles, we have taken into

account three basic aspects of each one, namely:

- a) The anthropological vision proposed;
- b) The value implications tied to the sport regarding meanings, purposes and objectives;
- c) The teaching techniques used in perspective.

After that, we have identified five educational, philosophical profiles linked with and corresponding to the aforementioned five specific philosophical paradigms. These profiles can be summed up as follows:

1) Pragmatist profile.

This philosophical profile refers to the theories of the American philosopher John Dewey (1859-1952). The starting point of this profile is Dewey's concept of experience, understood as the relationship between the human being and the environment, in which she or he is not a mere spectator but interacts with the world around her/him and with others. The human being learns from experience through free and concrete actions: that is through practice, and always when together with other people. Learning is always the result of a practical interest from the individual, who, to learn, always has to be interested and motivated. Every experience can be an educational and enriching experience if the person lives in an environment where people accept pluralism of opinions and recognize the right of individuals to express their creativity in the name of freedom and democracy. Pragmatist profile implies by the PE teacher the use of a wide selection of types of sport and physical activities when she or he teaches her/his subject. This broad selection of different activities involving change is seen as a positive experience that allows pupils to grow up and develop as human beings with minds open to new learning opportunities.

A pragmatist PE teacher tends to choose activities such as team sport and sport games that improve cooperation and conflict resolution among pupils. A teacher who belongs to this profile avoids, in the gym, the use of daily formal exercises and any routine. For this teacher, traditions and authority (of the teacher, the school, and its programs, etc.) do not deserve respect in and of themselves; to communicate and share experiences in a non-directive communication environment, and to spend a lot of time being involved in physical and exploratory exercises and games, that is what really matters when she/he teaches PE. The exchange of ideas, collaboration, and active participation is seen as a fundamental tool to promote an active learning style in her/his pupils.

2) Idealist profile.

The starting point of this profile is that the nature of reality and what matters in our life is something spiritual and ethical. Human beings must always conform their life to the principles of moral duty and ethics. The PE teachers who embrace these educational, philosophical worldviews think that those things are better and more appropriate for her/his pupils to learn. What she or he teaches in the classroom, gym or out on the pitch does not specifically focus on technical aspects of physical exercise or sport games, but on theoretical concepts and values of learning. This profile puts emphasis on moral and spiritual values of the experiences related to sport. Sport activities and competitions are not important by themselves, but as a means to achieve a spiritual or moral end. This profile implies a vision of teaching-training centered on the discussion, analysis and decision-making dealing with, for example, fair play, the ethical choices and moral behaviors that sport, especially in its competitive form, implies. In this profile, values are

considered more important than athletic and physical performance, and personality is seen as central to the process of individual learning. The PE teacher who prefers this profile tends to encourage creative efforts, personal initiative, self-control, decision-making and performance analysis in sport, as it is believed to lead to the formulation of value judgments.

### 3) Positivist profile.

Positivism puts great emphasis and trust in the objectivity of science, in rationality, and in woman/man seen as a “rational animal” capable of developing, through science and its methodology, into a better human being. The PE teacher who follows this profile tends to select activities that enhance physical strength and technical sport skills. Moreover, she/he tends to use tests and measurements to verify the level of expertise achieved by her/his pupils, and to test the effectiveness of her/his teaching, rejecting any subjective and personal approach to the teaching of physical education and the sport. Within this profile, the teaching-learning of physical education is mostly implemented through methods that go from parts to the whole (through an inductive methodology) and are based on a systematic, sequential, and organized presentation of subject contents.

### 4) Existentialist profile.

This profile is based on the concept of existence as conceived by Existentialism, which looks at the world and human life as something precarious but at the same time also contingent and dynamic. This profile enhances the subjective dimension of knowledge, of behaviors and relationships with others, and highlights the character of the uncertainty of human life. This profile entails that it is not possible to predetermine or to establish *a priori*, both for pupils and PE teachers, any learning experience and teaching action. It is always the pupil who has to select and make a decision about what has to be learned/studied in depth or not. In making her/his decision, the pupil, as the person to be educated and trained, autonomously and independently builds her/his own value system and becomes responsible for what she/he is, thinks and feels.

The existentialist PE teacher is indifferent towards measurable objectives, even if, as a facilitator of learning content, they can organize training sessions so that pupils can autonomously achieve their learning objectives. The teacher who follows this profile does not favor the close and direct supervision/control of students through discipline; she/he tends to evaluate the pupil as a whole, taking into account both the skills achieved and the values transmitted through sport activities and physical exercises, as well as their effects on pupils' personality. For the PE teacher who acts within this particular profile, pupils have to be left in full freedom to adapt sport and physical activities carried out in the gym and on the pitch to their interests and specific needs without any direct interference from the teacher.

### 5) Socio-critical profile.

This profile, inspired by the critical theories of the Frankfurt School, on the assumption that physical education, sport, and its values should not be transmitted only within the walls of the classroom or the gym, stresses the importance of the PE teacher as an agent who conveys those values to the society. Physical education and sport always presuppose a political dimension, and they can be considered as tools capable of testing the level of democracy achieved by the society (Fernández-Balboa, 1997).

A socio-critical PE teacher trusts in sport, and physical education is seen as a means capable of developing critical and transformative abilities and skills in people. Skills that

allow the person to become aware of social problems, and to understand the social construction of different voices and identities in physical education and sport, how these are related to historical and social forces and how they can be used as the basis for change in our society.

The development of values related to critical and reflective thinking, mutual understanding and intercultural comprehension as opposed to pure performance are the main objectives of the PE teacher who adheres to a socio-cultural profile. This means that values and terms such as “inclusion”, “fairness” and “justice” are those which give meaning to physical education and sport and their practice, and are more important than those related to “efficiency”, “performance” and “victory”, conceived of as an achievement of the final result at any cost and merely aiming to succeed within a competition.

Moreover, this profile requires by the teacher a permanent use of dialogue and democratic communication with her/his pupils, and a view of the relationship between educators and students as a complementary relationship between equals, and never asymmetrical (that is to say, one-up, one-down). The socio-critical profile entails the PE teachers thinking of themselves as an “equal among equals” which encourages their athletes, motivates them through continuous dialogue, discussion groups and invites them to share experiences. Within this context, the teacher plays the role of a facilitator whose primary aim is to promote free creativity, body movement, the pleasure of playing sport, working with others, and sharing with them the gratification and joy that the experience of competing with others can offer.

### **3.4 The questionnaire and data**

By this hermeneutical interpretation aimed at identifying the five main educational, philosophical profiles of contemporary PE teachers, we have proceeded to build a questionnaire of 50 items (10 items x 5 profiles). This research tool, based on a Likert scale, centered on a scoring system from 1 to 5, aims to detect the level of agreement or disagreement of PE teachers concerning the items contained in the questionnaire.

The survey mentioned above was inspired by a previous research tool, statistically validated, and aimed at detecting the philosophical profiles of youth football coaches (Isidori, 2013; Isidori, Migliorati, Taddei, Abele, Sandor, 2011). Assuming that a coach can be considered as a teacher not only in terms of learning models used for training but also of teaching models used (Jones, 2006), our new questionnaire was adapted to the context dealing with physical education teachers' profiles through a focus group of experts.

This focus group, composed of 7 experts (2 sport psychologists, 2 sport pedagogics and 3 physical education teachers), who analyzed the questionnaire and reviewed it by focusing on its coherence with the existing scholarly literature on PE teachers' philosophical paradigms and the philosophy of sport education, on its internal consistency, and on clarity in relation to physical education teaching and learning models in contemporary society.

After verifying the formal clarity and consistency of the questionnaire from an epistemological point of view and its coherence with the criteria and specific aims of our research, the questionnaire was administered to a randomly chosen sample of PE teachers

from the city of Rome, Italy. The survey allowed us to define a philosophical profile for each PE teacher, and to identify her/his personal theory of PE as expressed by the profiles.

The questionnaire was administered to 15 PE teachers (average age=52.7 years, SD=4.4). The average school attendance level was 18.4 years (SD=1.9). The majority of teachers (80%) had a great deal of teaching experience (>20 years) and had practiced sport (athletics, swimming, tennis, basketball, football) at a competitive level (93%). The group consisted of 10 females (mean age=52.7, SD=4.4) and five males (mean age=51.6, SD=4.9).

Based on the scores obtained in each paradigm, we found prevailing profiles in a group of PE teachers. Profile scores were subjected to analysis of variance (ANOVA), using gender as the independent factor. All analyses were performed using age as a covariate. The alpha level was fixed at 0.05.

Pearson correlations were also conducted with the scores, profiles and age, schooling and years of teaching.

The data from the questionnaire showed a prevalence of the pragmatist profile (6.53). The other preferences are distributed in the following way: socio-critical paradigm (6.16), idealist paradigm (5.97), existentialist paradigm (5.41) and positivist paradigm (5.17) (see Figure 1). The ANOVAs on the profile scores showed the significant effect of the gender factor ( $F(1,12)=7.58, p<.05$ ) only for the Idealist profile (see Figure 2). The female PE teachers showed higher scores (6.31) than male PE teachers (5.46). Other ANOVAs have not shown significant results (see Figure 2). Pearson correlations did not show any significant result.

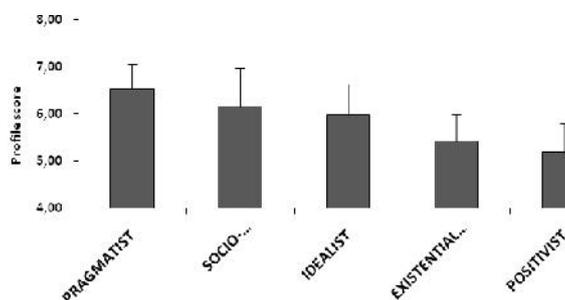


Figure 1. Prevalence of PE teachers' paradigms

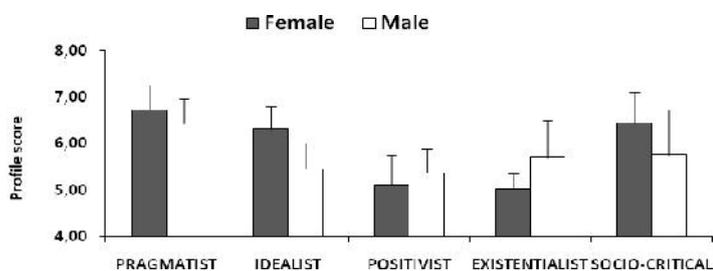


Figure 2. Differences in female and male PE teachers profiles (\* $p<.05$ )

#### 4. Discussion and conclusions

It is clear from this research that the philosophical profiles of PE teachers appear to be rooted in the five philosophical paradigms which are fragmented, and not easy to analyze or define. For this reason, PE teachers' educational philosophical profiles are difficult to be demarcated, reduced and summed up in logical sequences of orientations, schemes or models. Our pilot study shows that there exist different educational, philosophical profiles between female and male teachers. Female teachers show a higher score relating to the Idealist profile. To better explain this result, we could form the hypothesis that women as educational practitioners are more sensible to the ideal values of physical education and sport; in any case, this hypothesis needs to be better verified and analyzed by future studies based on a wider sample.

By analyzing their individual philosophical profiles, PE teachers can better understand their values, their teaching models, the meaning and sense they give to PE, sport, and to the relationship with their pupils. Therefore, we are convinced that the questionnaire we have built through this research can be used as a methodology for developing a critical and reflective attitude in PE teachers.

Currently, the need for improving philosophical attitudes in PE teachers encourages researchers helping them develop as critically reflective practitioners. The philosophy of sports education, as both science of education and sports science, can help PE teachers to become aware of their role as sports educationalists and intellectuals.

The questionnaire we have built can encourage, via educational support, people who are or aspire to become PE teachers, to reflect on their characteristics, orientations and pedagogical models. It was a pilot study; it will be necessary to continue to validate the questionnaire from a statistical point of view to have both a more reliable research tool and more data (only a small amount of data was used for this research and the sample of PE teachers chosen for the study is limited).

In conclusion, this study is an example of how the philosophy of sport education can be applied to practice in a context such as physical education teachers' training, in which there are often very few possibilities to develop critical thinking due to the misconception of sport and physical education as a merely technical and not critically reflective practice. The philosophy of sport education can help PE teachers analyze the foundations and presuppositions underlying physical education as discipline, investigating its underpinnings as science and form of human education. Moreover, this philosophy can help PE teachers develop a comprehensive conception and apprehension of the world, integrating the interdisciplinary knowledge of the sport and educational sciences with that of ethics to achieve a more critical and coherent view of their profession.

Through the lens of philosophy, physical education will never be perceived by PE teachers as a fragmented practice or knowledge based on mere technical bodily actions, but rather, they will perceive it as a whole and a totality linked to their life. Through philosophy, PE teacher will be capable to critically evaluate their most deeply held beliefs and attitudes towards their discipline; in particular, those which are often held uncritically. To be clear, the viewing their world through the lens of philosophy will force them to see the significance and consequences of their beliefs on their teaching, and sometimes their inconsistencies helping them approach and solve problems, clarify the

meaning of their everyday practice, improve communication with their students and, finally, to turn physical education into real democratic and reflective practice.

For all the above-mentioned reasons, philosophy in its form of philosophy of sport education should be taught as a mandatory subject matter in all university departments of sports sciences and kinesiology, as well as in the post-graduate schools and specialization courses for PE teachers education across Europe.

**Authors' contributions.** This study and the questionnaire is the result of a collaboration between the four authors. Their contribution can be summed up as follows: Emanuele Isidori: conception and design of the study and questionnaire; manuscript writing; obtaining funding; Introduction, discussion and conclusions. Agita Abele: acquisition of data and scientific literature; manuscript revision. Francesco Taddei and Eridiola Buzi: administration of the questionnaire; analysis and interpretation of data; questionnaire review.

## References

- Davis E. C. (1963). *Philosophies fashion physical education; pragmatism, idealism, realism, aritomism, existentialism*. Dubuque, Iowa: W. C. Brown.
- EC-European Commission (2007). *White paper on sport*. Brussels: EC.
- Fernández-Balboa M. (1997). *Critical postmodernism in human movement, physical education and sport*. Albany: SUNY.
- Grupe O., Krüger, M. (1997). *Einführung in die Sportpädagogik*. Schorndorf: Hofmann.
- Isidori E. (2013). *El entrenador como educador: perspectivas filosóficas y pedagógicas*. Viterbo: Sette Città.
- Isidori E. (2012). *Filosofia dell'educazione sportiva. Dalla teoria alla prassi*. Roma: Edizioni Nuova Cultura.
- Isidori E., Mascia M., Taddei, F., Abele, A., Sandor, J. (2011). *Philosophical Paradigms and Pedagogical Orientations of Italian Youth Football Coaches*. In I. Volkova, L. Zarembo, *Society, Integration, Education*. Rezekne: Rezekne Augustskola, Vol. 1. 611-619.
- Jones R. L. (2006). *The sports coach as educator*. London: Routledge.
- Kretchmar R. S. (1994). *Practical Philosophy of Sport*. Champaign, IL: Human Kinetics.
- Kuhn T. (1970). *The Structure of Scientific Revolutions*. Chicago: Chicago University Press.
- Masterman M. (1972). *The nature of a paradigm*. In I. Lakatos and A. Musgrave. *Criticism and the growth of knowledge*. Cambridge: Cambridge University Press.
- McFee G. (2007). Paradigms and possibility. Or, some concerns for the study of sport from the philosophy of science. *Sport, Ethics and Philosophy*, 1, 1, 58-77.
- Morgan W.J. (2006). *Philosophy and physical education*. In D. Kirk, D. Macdonald, M. O'Sullivan. *The Handbook of Physical Education*. Thousand Oaks, CA: Sage.
- Pearson K. (1990). *Methods of philosophic inquiry in physical activity*. In J. R. Thomas & J. K. Nelson. *Research methods in physical activity*. Champaign: Human Kinetics.
- Philostratus (2014). *Gymnasticus*. Edited and translated by J. König. Cambridge, MA: Harvard University Press.
- Reboul O. (1971). *La philosophie de l'éducation*. Paris: PUF.
- Reid H. L. (2002). *The philosophical athlete*. Durham, NC: Carolina Academic Press.
- Safania A.M, Ghorbanalizadeh F.G, Tayebi, S. M. (2010). Teaching Physical Education Principles and Philosophy: Induced Change in Educational Philosophy Preference from Idealism to Realism. *Quarterly Educational Psychology*, 6, 16, 59-75.

- Schön D. A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic books.
- Thomas G. (2007). *Education and Theory. Strangers in paradigms*. Maidenhead: McGraw Hill-Open University Press.
- Wiles, J. W., Bondi, J. C. (2010). *Curriculum Development: A Guide to Practice*. Boston: Allyn & Bacon.

**Authors' contributions.** This study and the questionnaire is the result of a collaboration between the four authors. Their contribution can be summed up as follows: Emanuele Isidori: conception and design of the study and questionnaire; introduction and conclusions; manuscript writing; obtaining funding. Agita Abele: acquisition of data and scientific literature; manuscript revision. Francesco Taddei and Eridiola Buzi: administration of the questionnaire; analysis and interpretation of data; questionnaire review.

## Appendix

### Statements

For each item below, respond according to the strength of your belief:  
Strong Disagreement 1 ----- 2 ----- 3 ----- 4 ----- 5 Strong Agreement

1. When one teaches PE, it is necessary to continuously change exercises for the pupil.
2. Pupils must always conform to the highest values of physical education (democracy, critical attitude, dialogue).
3. The purpose of physical education is the performance.
4. The results of physical education activities in the school are the product of the sum of many personal contributions.
5. The purpose of physical education is social inclusion.
6. The purpose of physical education is the transmission of democratic values.
7. In teaching PE it is fundamental to propose activities that develop pupils' neuromuscular control and strength.
8. In physical education, no result is ever predictable.
9. If one wants pupils to listen, she/he has to use directive communication.
10. Fair-play is the most important thing in physical education activities.
11. It is possible to objectively measure the performance of pupils.
12. We must always and completely control the activities of pupils.
13. It is good for the PE teacher to accept the dominant ideologies (money, success, etc.) of contemporary society.
14. Physical Education is an expression of human transcendence and spiritual values.
15. Tests to measure pupils' performance are fundamental.
16. When one teaches PE, she/he must always follow a definite program.
17. The purpose of Physical Education is to change society.
18. One has to let pupils be free to autonomously explore their own game situations.
19. Physical Education is not important in itself but for the values that it allows pupils to achieve.
20. It is necessary to maximize the conditional capacities in pupils.

21. It is necessary to question the effectiveness of PE teaching programs.
22. When one teaches, she/he must make reference to models of traditional teaching (teacher as leader, teacher as a provider of teaching programs, etc.).
23. The PE teacher is the central figure in the formation process of the pupil.
24. It is important to use tested teaching schemes and models.
25. The relationship between PE teacher and pupil is a relationship between equals.
26. It is fundamental to participate at one's own pupil's teaching-learning sessions.
27. The ethics of sport and PE is more important than myself and my pupils.
28. The performance of the pupil is more important than her/his creativity.
29. The pupil learns by herself/ himself without the strict supervision of the teacher.
30. The purpose of PE teaching is to build a personal relationship with the pupil.
31. Good PE teachers are born and not made.
32. The pupil must be given freedom of decision making in the gym and on the pitch.
33. When one teaches PE, it is necessary to give orders/instructions to the pupil.
34. When one teaches PE, it is necessary to teach pupils how to resolve conflicts.
35. Pupils grow up and mature if they make decisions autonomously.
36. Scientific knowledge makes you become an excellent PE teacher.
37. Pupils are able to understand sport and physical exercise techniques by themselves.
38. In a lesson of PE it is necessary to establish play and game schemes together with pupils.
39. One has to impose her/his point of view to the pupil.
40. To perform activities well in a Physical Education lesson, it is sufficient to have a good PE teacher.
41. The pupil who does not perform well enough should not play.
42. Discipline is not fundamental in Physical Education.
43. In PE, respect for democratic values is more important than winning.
44. The PE teacher is more important than equipment and sports facilities.
45. In teaching Physical Education, practical experience is more important than theoretical knowledge.
46. In a lesson of PE a pupil always learns not by herself/himself but with others.
47. Taking part in Physical Education activities always makes people feel better.
48. Team sports improve the personality of the pupil.
49. Physical Education assists the pupil to experience a spiritual dimension.
50. It is necessary to encourage pupils to propose solutions to solve game situations.

Total/ 5 = Score

Pragmatist 1, 6, 9,\* 18, 22,\* 26, 45, 46, 48, 50  
= \_\_\_/5= \_\_\_

Idealist 2, 10, 14, 23, 27, 31, 40, 44, 47, 49  
= \_\_\_/5= \_\_\_

Positivist 3, 7, 15, 16, 20, 24, 28, 36, 39, 41  
= \_\_\_/5= \_\_\_

Existentialist 4, 8, 11\*, 12\*, 21, 29, 32, 33\*, 35, 37  
= \_\_\_/5= \_\_\_

Socio-critical 5, 13\*, 17, 19, 25, 30, 34, 38, 42, 43  
= \_\_\_/5= \_\_\_

\*The score assigned for this item will be in reverse order from the Likert scale. For example, answer scored points "5" will be assigned "1" point (and 1=5; 2=4; 4=2); but answers that scored "3", will remain unchanged.