32 - THINKING STYLES IN PHYSICAL EDUCATION PERFORMING WITHIN THE SUS

MURILO LYRA, RAFAEL CEZERE CELI, MARINA GOELZER KIELING,
RITA DE CÁSSIA GABRIELLI SOUZA LIMA, MARCO AURÉLIO DA ROS
Universidade do Vale do Itajaí - UNIVALI, Itajaí/SC, Brasil.
mu.lyra@gmail.com; celirafael@yahoo.com.br; marinakieling@gmail.com; rita.lima@univali.br; ros@univali.br

doi:10.16887/87.a1.32

INTRODUCTION

This work has been carried out as an attempt to contribute for the construction of an epistemology that discusses specific aspects of the professional practice in physical education. It is also about one unfolding of a state research (SC) underway with the objective of analyzing the social impact of the More Medical Doctors Program (PMM) in this state, financed by FAPESC and with direct support of SES/SC and especially of UNIVALI researchers. It aims to contribute for the reflection on the role of the physical education professional within the staff of primary healthcare, especially of his/her insertion in the Family Health Support Center (NASF), what we consider a natural unfolding of the PMM if, besides an inclusive country, we wish more efficiency from the Health Unique System and to comply with the Constitution regarding respect to the integral healthcare.

It is our assumption that epistemology is not an ordinary discussion in the education of the physical educator. In order to elaborate this article, we revisited the Master degree dissertation by Rafael Cezere Celi that received the supervision of Marco Aurélio Da Ros. Upon the construction of the proposal for this congress, its elaboration counted on the support of three collaborators who contributed with writing suggestions, new synthesis on the original paper, and the adequacy to the theme for the presentation.

Celi worked with Fleck´s Epistemology in 2013 with the purpose of making considerations on Thinking Styles (EPs) in Physical Education within the SUS context. It is about understanding what features the differences in the practice of physical education professionals when they work in the SUS. We take Cutolo and Maeyama´s assumption (2010) that the theoretical conception determines the practice and vice-versa, i.e., if we take a glance on practice or on what is written about it, we can infer that theory is behind it. The target is to identify the different EPs and the issue is to gather a deeper understanding on this category, what is only possible by introducing to the readers a few topics on the history and thoughts of Ludwik Fleck (1986).

L. Fleck, who was the pioneer of the knowledge sociogenesis, wrote his work about Genesis and the development of a scientific fact in 1935, in Poland. Due to his Jewish origin living in a country with growing anti-Semitic conflicts, his work had to be edited in Swiss. The edition issued 600 copies. In 1937, when Hitler troops invaded Poland, Fleck and his family were confined in a concentration camp. He would only be “rediscovered” in the foreword of the book The Structure of the Scientific Revolutions by Thomas Kuhn in 1961. (DA ROS, 2000) Two researchers, Schäfer and Schnelle (1986), recovered Fleck´s work that had been translated into several languages in Europe in the 1980´s. Fleck died in Israel in 1961. In the foreword of the Spanish edition, these authors present a synthesis of Fleck´s life and work from Kuhn´s point of view. Lowy (1990) presents another version which is much more coherent, where he establishes that Fleck was the fourth generation of a school called Polish School of Medicine Philosophy – EPFM. A visit to the works of his antecessors evidences clearly the foundation on which Fleck constructs his original epistemology. Fleck was a physician and the investigation of his work took place following a reflection about the history of thought on syphilis. After each chapter about syphilis, he makes an epistemological reflection where he constructs its categories. Da Ros (2000), in his doctorate thesis, established eleven EPs in the field of public health by creating, with analytical structure, two macro-trends which he names collective health and public health.

Fleck is not concerned with devising a definition of what he understands as style/thought collectives, his most important epistemological category. Some scholars in Brazil have tried to make clear such understanding (Cutolo, Da Ros, Lima, Maeyama, Delizoicov, Condé). Like the constructivist epistemologists, Fleck makes use of Gestalt conceptions to explain the differences of seeing ways, by starting from the clarity that the image seen may receive different interpretations depending on the context. He proposes to himself starting a construction of how a thinking style is established, always within a collective sense and that is preceded by a confusion period where the previous “truth” begins to seem inconsistent and the new truth does not manifest itself clearly yet. After this period, a new EP is established where the collective tries to show how they reached a new truth. Here, they begin to live together with a harmony of illusions where everything that was confused starts to be clearly demonstrated. This is called EP extension. This new truth begins to suffer inconsistencies, not explanations, and there is then a change of the EP. Fleck´s conception always incorporates that such truth has an historical character and it is compatible with a social organization and a culture. Only then, a new thinking style arises. Aim to guarantee the EP extension, the collective producer of the theory (esoteric) needs a group that consumes this knowledge and divulges it, the esoteric circle. What occurs is that once the thinking style is established, it tends to consider the other styles incongruous, incomprehensible and worth of fights. Kuhn (1992) appropriates this idea and then talks about incommensurability.

Celi (2013) seized Da Ros (2000) categories and superimposed a bibliographic review on academic productions in the field of physical education and SUS by adapting them to ten out of the eleven EPs used by Da Ros. This is the work that this article intends to approach.

STARTING WITH FLECK´S CONCEPTION

Considering that Celi´s dissertation (2013) analyses the thinking styles in physical education by adapting them to the EPs of public health/collective health of Da Ros (2000), it is important that we focus the discussion on Fleck´s conception in the theoretical frame of reference of the last author. Da Ros (2000) works with Ilana Lowy´s conception (1990) where Fleck is the fourth generation of the EPFM that can be understood as one unfolding of the European social medicine movement. (ROSEN, 1980). Virchow was a colleague of Sniedecki and Schleiden, both teachers of the school pioneer Tytus Chalubinski who, in 1874, publishes his work where he affirms “the disease as a disturbance of the normal condition”, “rejection to the reduction of the physical chemical phenomenon”, “never forget that one does not treat diseases, but people”, “each new generation will criticize the old one. Science changes as knowledge grows”, “each school, way of thinking, instills the strongest way possible the education of young physicians”. These affirmatives were the basis for the need to avoid changing medicine into an exact science.

Lowy (1990) is concerned about rescuing the ideas that fecundated the EPFM. She describes the second generation represented by Biernacki and Bieganski who give continuity to the thought of Chalubinski by signalling in their works that “science is solving ´puzzles´” (an idea that would be rescued 60 years thereafter by Kuhn). They identify, in 1890, that there are three ways of performing medicine: the scientist physician, the therapeutic physician and the preventive physician. In his work, Bieganski

mentions Virchow (ROSEN, 1980) whereby he evidences the connection of health epistemological aspects with the movement of social medicine. One of the key points of this author, in accordance with Lowy (1990) is that "scientists already work with previous truths, and that every scientific vision is a vision with a particular focus. There is no fact, but a vision about what seems to be occurring, compatible with history".

The third generation has a representative, Kramsztyk, who was Fleck´s teacher. At the end of the XIX century, this author creates magazines where the great discussion was the epistemology in the health area. His statements are the basis for Fleck´s thought and the synthesis of previous generations simultaneously. He affirmed "there is no neutral observation. It depends on the ideas a priori from the observer. In the investigation process, the pre-conceived ideas modify the outside world. The scientist is not a blank game board". In his questions about the way of educating in health, he affirms that "Only the history of changes in the vision of the same phenomenon is what can give light to the ideas of the present". (LOWY, 1990)

When Fleck writes his monograph in 1935, he rescues these ideas to compose his category of epistemological analysis: the styles/thinking collectives. The concept of EP arises from the reading and especially from the opportunity of utilizing it for epistemological analysis above all in the health area. Cutolo (1999) tried the following definition:

"It is a way of seeing, understanding and conceiving; it is procedural, dynamic, subject to regulation mechanisms, determined psycho/historical/culturally, that leads to a body of knowledge and practices shared by a collective with specific education".

An EP usually starts from an inconsistency of the previous "truth". It establishes here what Fleck calls the confusion period. After that, there is an intense scientific production that finds out the new "truth", until there is an historical determination that favors the change of the thinking style. The old style has a trend to persistence and it lives along with the style that derived from it. On the other hand, there is an inconsistency (Niewspolmiernosc), a term that was taken by Kuhn (1992) as immeasurability between one thinking style and another being inadmissible that the other "truth" is taken into consideration. There is, thus, a light coercion so that the EP be considered as true.

After the confusion period, the thinking collective experiences a "harmony of illusions" where the EP is the single scientific truth. There is an historical, material and cultural conditionality that allows this to happen (externality of science). Fleck does not outline the EP change as a revolutionary rupture but, instead, as a process that is historical and, also, from the constructions (internality) of science itself.

No doubt, the study about this author (Fleck) is starting in Brazil with collectives in Santa Catarina (UFSC and UNIVALI), in Rio de Janeiro (Manguinhos) and in Minas Gerais (UFMG). Switching the discussion specifically to Physical Education, Celi´s dissertation (2013) treats EPs in Physical Education as follows.

THINKING STYLES IN PUBLIC HEALTH

The EPs categories in Public Health were taken from the doctorate thesis of Marco Da Ros (2000) with the title "Thinking Styles in Public Health: A Study of the Production from FSP-USP and ENSP-FIOCRUZ between 1948 and 1994, from the Epistemology of Ludwik Fleck".

The EPs utilized for the analytical category comprise ten styles out of the eleven styles identified by Da Ros (2000). So, to contextualize EF, the following EPs were utilized: Strategic Planning in Health, Normative Planning and Administration of Health Services, Social Actors and Health Policies, Education in Health, Sanitary Education, Classic Epidemiology, Critical Epidemiology, Preventive Medicine, Health and Discriminated Social Segments, and Epistemology and Health. The EP Biology of Vectors was excluded because EF does not fit in this style.

Therefore, in the present study, these categories were utilized to unveil EF in the SUS, that is, "what" and "how" they are researched and published and which are their respective influences.

It was a qualitative research, characterized by a technical documental analysis with the objective of delimiting the EPs. The prospect process of this study consisted on the search for scientific articles from national magazines. It resulted in the choice of 55 articles from the years between 1996 and 2013, besides 5 books organized by EF teachers connected with the great area of health.

It is not about evaluating if a style is superior to the other. It is just the attempt of locating the EPs so that one can systematize dialogues what sometimes does not happen between one EP and another. Due to the long bibliography, we are not going to mention the researched works either. We have such information in hands, and we can avail them to the participants of the congress.

1 Normative Planning and Administration of Health Services

In this EP, one advocates a scientific neutrality; there is a blame on the subjects; the illness process is biologic and psychologic; it does not discuss the social determination (Celi, 2013). The focus is to defend its EP in the legislation of the Brazilian Association of Teaching Physical Education for Health (ABENEFS), in the NASF (2010) and even in the National Policy for Health Promotion (2006). It is undoubtedly the widest utilization of the Physical Education Professional (PEF) in the health sector. It is the hegemonic thinking in the insertion of the PEF in the SUS, by assessing programs of physical activity and by standardizing rules for application within the Primary Health Units (UBS) and the NASF

2 Strategic Planning

Although it does not make a full breakdown with the previous EP, it works with social determination and the possibility of changing society. Its researches are mainly qualitative and it tries to remove the individual blame. There is a criticism regarding the health concept from the World Health Organization (WHO) and it works much more with the PEF insertion in the staff than with interventions with physical activity. Its scientific papers have the main objective of reflecting and questioning the PEF practice.

3 Social Players in Health Policies.

In this EP, it can be clearly seen two shades (variations within the same EP), however both emphasize the importance of the social players. The focus is in the analysis of the social players (PEFs inclusive) acting within the SUS. One of the shades is based on the historical materialism, on a horizontal pedagogy, on epistemology and on the social sciences; it makes qualitative researches but it does not have a specific magazine for its production. The other shade utilizes publications that are mainly quantitative and the involved social players are generally the authors of the articles themselves, besides its relation with foreign articles. Its articles are published in a specific magazine of physical activity and health. Although they work with social players, the two shades are in quick "incommensurability".

4 Sanitary Education

The roots of this work are hygienist since the responsibility of the subjects and their conception is based on the fight against risk factors. Its main actions are to promote an “active lifestyle”. It is an EP with strong presence in the relation of the PEF with SUS primary healthcare. It relates with normative planning and with preventive medicine. In this EP, the health concept is uni-causal and biologicist. Within it, there is also a confusion about the understanding between health promotion and disease prevention.

5 Health Education

Education is conceived as a liberating practice whereby the researcher is not neutral and the relation between the PEF and the user is horizontal. Its understanding is that the health/disease process has a social determination and the key words for the professional practice are to promote autonomy and emancipation, by understanding that health promotion is not the same thing as disease prevention since one works with a social object (health) while the other works with a biological object (disease). This EP is incommensurable with that of sanitary education.

6 Classic Epidemiology

The articles of this EP make only qualitative researches. Health is inferred as deductible and mathematical while the researches are multi-factorial, but all of them determine a biologic variation by the calculations made. It researches frequency, distribution and determinants of disease by considering the population as homogeneous without making any relation between the denominator of mathematic equations and the health/disease process.

7 Critical Epidemiology

The frame of reference is the historical materialism. It questions the positivism of the classic epidemiology, it starts from the social determination of the health/disease process and it modifies the data denominator in accordance with the social insertion (social class, working way, dwelling social conditions, among others). It has a strong concern with a liberating and emancipating physical education but it works primarily with data, so that it differs from the EP Health Education, but in fast antagonism with the classical epidemiology.

8 Preventive Medicine

In this EP, the health/disease process is understood as of single cause and it usually refers to habits and attitudes to be developed by the protagonists by utilizing hygienist principles. It calls for recommendations and its clearer example refers to “active lifestyles”. There is a great congruence with the EPs Classic Epidemiology and Sanitary Education. Its more evident application is that laziness and inactivity are diseases of modern society and that the science of exercise is going to reduce the grievances of the population.

9 Society and Discriminated Social Segments

The frame of reference of this EP is always related to the social sciences and its proposal is working with the social determination conception of the health/disease process and, therefore, it is in this space that the PEFs must work and cooperate with the population in the sense of its organization and move onto autonomy/emancipation. In connection to this EP are body practices, including the individual ones, with priority to the pleasure of performing them.

10 Epistemology and Health

In this EP, what one tries to construct is a more solid basis for the practice of physical education, by connecting it to the theoretical frames of reference from the social sciences and education. The new conceptual bases would allow the development of physical education related directly to the EPs of Strategic Planning, Critical Epidemiology and to the EPs that are directly related to the social relation of the health/disease process.

FINAL CONSIDERATIONS

The study of epistemology, especially Fleck´s epistemology, is essential to understand the conception and the practice of the PEFs; besides, it allows them to enlarge their view of the world and, also, to have a clear comprehension of their insertion in the labor market. At present, SUS experiences a duality between health promoting policies and prevention of diseases. The More Medical Doctors program is characterized as a counter hegemonic program since it prioritizes the primary healthcare and the enormous unassisted population needing support professionals for its practice. It is needed that, at an urgent stage, one thinks about broadening the program for more health or more professionals or more care, but without any doubt, enlarging the range of the number of professionals that will work to meet the integrality preconized in the Constitution. One of the ways is the NASF and, within this program, the PEF has been called and his/her practice can establish a relation with the macro-trend Public Health and therein the following EPs will be present: Normative Planning, Sanitary education, Classic Epidemiology and Preventive Medicine. These EPs are prescriptive, i. e., they do not propose autonomy and they blame the sick people for their disease. It is the hegemonic thought in physical education and we think that this reflection can help to include one PEF with other macro-trend, the Collective Health, that would incorporate the EPs: Strategic Planning, Health Education Health, Critical Epidemiology, Society and Discriminated Social Segments, and Epistemology in Health itself, provided that it intends to break with positivism.

Keywords: Epistemology; More Medical Doctors Program; Physical Education Professional

REFERENCES

BRASIL. Ministério da Saúde. Política Nacional de promoção de Saúde. Brasília, DF, 2006.

BRASIL. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Diretrizes do NASF: Núcleo de Apoio a Saúde da Família. Brasília, DF, 2010.

CELI, R. C. Estudos Sobre Estilos de Pensamento na Educação Física no Contexto do SUS. 2013. 182 f. Dissertação (Mestrado) - Curso de Programa de Mestrado Profissional em Saúde e Gestão do Trabalho, Universidade do Vale do Itajaí, Itajaí, 2013.

CUTOLO, L.R. A. Algumas considerações sobre os primeiros estudos na disciplina. Florianópolis. PPG – CED/UFSC, 1999 (mimeo).

DA ROS, M. A. Fleck e os estilos de pensamento em saúde pública. Tese(doutorado)-Programa de Pós-Graduação em Educação. 206 f. 2000. Universidade Federal de Santa Catarina.

FLECK, L. La Génesis y el Desarrollo de un Hecho Científico. Madrid: Alianza Editorial, 1986.

KUHN, T. A. Estrutura das Revoluções científicas. 3ª ed. São Paulo: Editora Perspectiva, 1992.

LOWY, I. The Polish School of Philosophy of Medicine. Kluwer Ac. Publis. Netherland, 1990.

MAEYAMA, M. A; CUTOLO, L. R. A. As concepções de saúde e suas ações consequentes. Arquivos Catarinenses de Medicina, Florianópolis, v. 1, n. 39, p.89-96, 2010.

ROSEN, G. Da Polícia Médica à Medicina Social. Rio de Janeiro: Editora Graal, 1980.

SCHÄFER, L.; SCHNELLE, T. Los Fundamentos de la Visión Sociológica de Ludwik Fleck de la Teoría de la Ciência. In: Fleck, L.: La Genesis y el Desarrollo de un Hecho Científico. Madrid: Alianza Editorial, 1986. p. 9-42.

THINKING STYLES IN PHYSICAL EDUCATION PERFORMING WITHIN THE SUS

Abstract: This article is one unfolding of a research carried out by researchers from UNIVALI for FAPESC about the More Medical Doctors Program (PMM). It also utilizes as source, the dissertation by Rafael Celi titled Thinking Styles in Physical Education in the SUS Context. It has the objective of making a double contribution: for the insertion of physical education professionals in the NASF (this way, aiming at the PMM integrality) and with an epistemology to think on the insertion of such professionals in the SUS. The utilized method comprised a bibliographic review of 55 articles from 5 Brazilian books that connect physical education with health and an analysis in the light of the Thinking Styles (EP) in Public Health, fruits of a doctorate thesis by Marco Da Ros. It has been found 10 different EPs which can be grouped into 2 macro-trends. One macro-trend contemplates Public Health that gathers 4 EPs: Normative Planning, Sanitary Education, Classic Epidemiology and Preventive Medicine. The other regards Collective Health with 5 EPs: Strategic Planning, Health Education, Critical Epidemiology, Society and Discriminated Social Segments, and Epistemology in Health.

Key words: Epistemology; More Medical Doctors Program; Physical Education Professional.

STYLES DE LA PENSÉE DANS L´ EDUCACIÓN PHYSIQUE AGISSANT DANS LE SUS

Résumé: Cet article est un dédoublement d´une recherche faite para des chercheurs d´UNIVALI, pour la FAPESC sur le Projet Plus de Médicins (PMM). Il utilise aussi comme source la dissertation de Rafael Celi intitulée Styles de la Pensée dans l´ Éducation Physique dans le Contexte du SUS. Il a pour objectif de contribuer doublement: tant a l´insertion des personnels d´éducation physique dans le NASF (ainsi pour chercher l´integralité du PMM), qu´avec une épistémologie pour penser leur insertion dans le SUS. La méthode utilisée a compris une étude bibliographique dans 55 articles de 5 livres brésieliens que lient l´éducation physique a la santé et leur analyse à la lumière des Styles de Pensée (EP) en Santé Publique, les fruits de la thèse de doctorat de Marco Da Ros. On a retrouvé un total de 10 EPs diferentes mais qu´on peut regrouper en 2 macro tendances: une de Santé Publique que regrouperait 4 EPs: Planificación Réglementaire, Éducation Sanitaire, Épidémiologie Classique et Médicine Préventive et l´autre, de Santé Collective avec 5 EPs: Planificación Stratégique, Education pour la Santé, Épidémiologie Critique, Société et Groupes Sociaux Vulnérables, et Épistemologie en Santé.

Mots clês: Épistémologie; Projet Plus de Médicins; Personnel d´Éducación Physique.

ESTILOS DE PENSAMIENTO EN EDUCACIÓN FÍSICA CON ACTUACIÓN EN EL SUS

Resumen: Este artículo es un desdoblamiento de una investigación realizada por investigadores de la UNIVALI, para la FAPESC acerca del Programa Más Médicos (PMM). Además, utiliza la disertación de Rafael Celi titulada Estilos de Pensamiento en Educación Física en el Contexto del SUS. Su propósito es hacer una doble contribución: tanto en la inserción del profesional de educación física en el NASF (de esta forma buscando a la integralidad del PMM) como con una epistemología para pensar su inserción en el SUS. El método usado fue realizar una revisión bibliográfica en 55 artículos de 5 libros brasileños que relacionan educación física con salud y los analiza desde el punto de vista de los Estilos de Pensamiento (EP) en Salud Pública, frutos de la tesis de doctorado de Marco Da Ros. Fueron encontrados 10 EPs diferentes, pero se pueden agruparlos en 2 macrotendencias: una de Salud Pública, que agruparía 4 EPs: Planeamiento Normativo, Educación Sanitaria, Epidemiología Clásica y Medicina Preventiva, y la otra, de Salud Colectiva con 5 EPs: Planeamiento Estratégico, Educación en Salud, Epidemiología Crítica, Sociedad y Segmentos Sociales Discriminados y Epistemología en Salud.

Palabras clave: Epistemología; Programa Más Médicos; Profesional de Educación Física.

ESTILOS DE PENSAMENTO NA EDUCAÇÃO FÍSICA QUE ATUA NO SUS

Resumo: Este artigo é um desdobramento de uma pesquisa realizada por pesquisadores da UNIVALI, para a FAPESC sobre o Programa Mais Médicos (PMM). Utiliza, também, como fonte, a dissertação de Rafael Celi denominada Estilos de Pensamento na Educação Física no Contexto do SUS. Tem o propósito de contribuir duplamente: tanto na inserção do profissional de educação física no NASF (desta forma buscando a integralidade do PMM), como com uma epistemologia para pensar a inserção de profissionais da área no SUS. O método usado foi realizar uma revisão bibliográfica em 55 artigos de 5 livros brasileiros que relacionam educação física com saúde e analisa-los à luz dos Estilos de Pensamento (EP) em Saúde Pública, frutos da tese de doutorado de Marco Da Ros. Foram localizados 10 EPs diferentes, mas que podem ser agrupados em 2 macrotendências. Uma de Saúde Pública, que agruparia 4 EPs: Planejamento Normativo, Educação Sanitária, Epidemiologia Clássica e Medicina Preventiva, e a outra, de Saúde Coletiva com 5 EPs: Planejamento Estratégico, Educação em Saúde, Epidemiologia Crítica, Sociedade e Segmentos Sociais Discriminados e Epistemologia em Saúde.

Descritores: Epistemologia; Programa Mais Médicos; Profissional de Educação Física.