

From the ideal of robustness to the ideal of thinness: Physical Education, health and a esthetics

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Abstract: Models of health and beauty come together and offer a wide range of education scenarios. The purpose of this study is to discuss the relationship between physical education, health and aesthetics, given the association between health and a specific standard of aesthetics. During the analysis process we established relationships with the ideology of the healthy human being emphasizing the ideal of robustness and the ideal of the thinness, and identified how Physical Education helps to associate health with specific aesthetics standards of the human body by means of anthropometrics measurements, either for the coefficient of robustness, either by the method to identify the somatotype or by corporal mass index.

Keywords: Physical Education. Health. Aesthetics.

1 INTRODUCTION

The close relationship between health and a esthetics is evidenced by different discourses and interventions throughout Western traditions and is revealed in ruptures and continuities. In the contemporary world it is possible to observe during different periods and places the association between health and a specific standard of body aesthetics.

Looking at the advertisement for nutrition supplements offered by company *Integral médica* we observed texts and images that show the athletic bodies of champions. Performance, health and beauty are evoked in their flyers to call the reader's attention to the company's goals, as in the following sentence:

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Integral médica's goal is to promote “Performance, Health& Beauty”, always looking for understanding human metabolism and all the changes it undergoes with nutrients.



Figure 1. Flyer

“We use in our products premium raw materials to offer to you the best in Nutrition Supplements.”¹

Models of beauty and health combine to be part of different education scenarios.

In the academic milieu one can also observe the association between health and a specific standard for body aesthetics in the discourse of students from the Physical Education Graduate Course. Hereunder we address discussions about Physical Education Philosophy taught at the Federal University of Rio Grande do Norte.²

¹ Quote from the text of a flyer about nutrition supplements of a manufacturer in São Paulo, acquired on November 2006 at a pharmacy in the city of em Assu, in the interior of the State of Rio Grande do Norte, to be discussed with students from the Technical Course on Agroecology for the Education of Youngsters and Adults on the Physical Education Subject, at CEFET-RN / UNED-Ipangaçu.

² Reference to discussions held during the first semester of 2003.

Given the issue at hand, we noted the need to ask how Physical Education fosters this association within different epistemological contexts. To this end, we hereunder discuss the relationship between Physical Education, health and a esthetics, and establish their association with the ideology of the healthy human being, emphasizing the ideal of robustness and the ideal of thinness.

To this end we firstly addressed studies from the late nineteenth century and the early twentieth century, mainly those made by doctor Renato Kehl and educator Fernando de Azevedo. Under this context, the creators of knowledge about working out were doctors, the military and especially pedagogues, as according to Bracht (1998).

Later, we refer to magazine (RBCE) digitalized from 1979 to 2003.³ RBCE is published by *Colégio Brasileiro de Ciências do Esporte* (CBCE), which is considered the most important Brazilian sciences institution, the members of which are researchers, professional and students from different fields of knowledge related to Physical Education, and in 2008 it celebrated its 30 years in the market.

We identified that Physical Education fosters the association between health and a specific standard for body aesthetics via anthropometric measurements, thud highlighting that one of the challenges faced by Physical Education professionals is to identify the different body types and explain the care with the body that leads to health without determining and ideal standard.

2 FROM THE IDEAL OF ROBUSTNESS TO THE IDEAL OF THINNESS

Physical Education is a social practice that since its establishment teaches physical exercises, games and sports in

³ The studied corpus comprises articles chosen according to the following: body, biology, physical activity, stress physiology and health.

educational institutions, which was then called scientific Gymnastics(SOARES, 2001).

The late nineteenth century e o the early twentieth century were emblematic periods for the acknowledgement of Brazilian Physical Education in the schools, according to the works by Azevedo (1920; 1960), Soares (2001) and Vago (1999).

In the late nineteenth century e the early twentieth century in Brazil, Physical Education was based on theories imported from Europe. These theories supported the knowledge detained by Brazilian physicians, aiming at building the new Brazilian human being (SOARES, 2001).

It was believed that the Brazilian people were on their way to degeneration and extinction. Further to being considered outside the standards of civility, they were regarded as sick, unclean, immoral and lazy. Physical Education taught in schools:

would help to mold strong, robust, healthy and disciplined individuals that were missing in the new Brazilian society in formation. [...] The first attempts to include Physical Education into the syllabus of Brazilian schools fostered the notions of physical health, physical and mental hygiene, moral education and the regeneration or recovery of the different races (SOARES, 2001, p. 91).

Under this scenario, the concept of health based on the precepts of modern Medicine and Biology was incorporated to Physical Education. The concept of health was influenced by the confidence that the advances and inventions of the late nineteenth century would heal the Brazilian malaises and bring progress and development to Brazil.

Hence, Physical Education helped to combine the concept of health with the concept of aesthetics within a reductionist perspective, which was perceived as the only standard of beauty modeled on the ideal of robustness.

The beautification of the body through exercising aimed at becoming robust in the late nineteenth century and the early twentieth century, as shown in the “*Cartilha de Higiene*” [Hygiene Primer] that presented many pictures and simple and direct language to reach. Dr. Renato Kehl, the author of the primer, writes to the teachers in the introduction page:



Figure 2. Exercises

Source: Kehl, 1936, p. 23.

Dear Teachers.

Finally, here is the promised “Hygiene Primer” that has been requested of me so many times. It is the introduction to the 1st Book on Hygiene (*Fada Hígia – Fairy Hygeia*), currently reviewed and about to be published as the 5th edition. I offer it to primary school teachers as a guide to teaching elementary notions related to health preservation in a suggestive and persuasive manner.

Forming good habits, according to pedagogical consensus, should begin in early childhood (KEHL, 1936, p. 4).

In “*Fada Hygeia*”, the first book on hygiene, Dr. Renato Kehl tells the story of the health fairy. She is a kind, beautiful fairy that protects children. “*Fada Hygeia*”, the health fairy,

lives in an enchanted palace made of gold, with beautiful gardens where children gathered to listen to hear. The health fairy “teaches the healthy to conserve life and to live it joyfully and pleasantly. She gives advice to the sick on how they can regain their strength and robustness, and how to avoid spreading their diseases” (KEHL, 1925, p. 2).

There is a section in “*Fada Hygeia*” that brings lessons on exercising that is related to health, beauty and robustness, while inactivity is associated with illness. Short and direct sentences, as shown below:

2 – Indolence and laziness, like sadness are generally signs of illness.

3 – Always try to be active and happy, by working, moving, playing or exercising in the outdoors.

4 – Exercising is indispensable for beauty and robustness.(KEHL, 1925, p. 85).

The association of robustness with health is also advocated by Dr. Renato Kehl in a scientific article published in the weekly magazines *Brazil-Medico* that was associated with the Faculty of Medicine of Rio de Janeiro and the Medical and Surgery Society of Rio de Janeiro. In 1920 he complained about the lack of anthropometrical studies in Brazil that would provide safe and accurate studies based on scientific measurements. In the opinion of the doctor, anthropometrical assessments would be able to help in diagnosing the physical state of people that lived in different regions of Brazil and by verifying the treatment given in public Health Centers (KEHL, 1920).

To carry out the scientific measurement Dr. Renato Kehl presented the model of robustness index for an individual that was devised by Dr. Pignet, a French military doctor; it was used in the French army to exclude men considered weak. Pignet’s coefficient of robustness was obtained by “subtracting from the centimeters of the height the figure that represents the

total of the weight with the centimeters of the thorax perimeter” (KEHL, 1920, p. 281).

The coefficient of robustness proposed by Dr. Pignet helped to create the health ideal to be disseminated by physicians. When considering the normal minimum average, Dr. Renato Kehl admitted that Brazilians were inferior to foreign people, which were considered Strong and healthy (KEHL, 1920).

Fernando de Azevedo advocated that the coefficient of robustness should be measured in schools as part of the pedagogical Gymnastics Program in a book he wrote in 1920 and that was reviewed in 1960. In order to measure the coefficient of robustness he proposed that anthropometrical exams should be performed in schools to follow the students’ growth, to know if their development was accelerated or too slow, but also to determine the amount and type of physical exercises they needed (AZEVEDO, 1960).

He proposed that the coefficient of robustness should be measured in schools on a monthly basis. Fernando de Azevedo noted that “the assessment of robustness using Pignet’s method is accurate for adults” (AZEVEDO, 1960, p. 192). Thus, he opted for the measurement method created by the French doctor, but with a slight change given it was to monitor thorax development of children and adolescents, which was still incomplete. With the slight modification of Pignet’s formula, the coefficient of robustness to be used could be reached by subtracting from the height the total of the weight with the thorax circumference during inspiration and thorax circumference during expiration.

Fernando de Azevedo, the advocate of Physical Education in schools, proposed yet sanitary memorandums for schools that would include information on anthropometrical assessments. In these memorandums doctors should provide details to classify students as “physically regular, i.e. boys usually enjoying good health, and physically irregular for boys usually in poor or bad health” (AZEVEDO, 1960, p. 194).

This classification would also inform who was apt or not to join Physical Education classes.

Thus, it can be noted that during this period Physical Education incorporated the idea of health closely associated with the index of physical robustness. This concept of health based of quantitative variations is reinforced by an ideal of health that was considered normal. However, this perception of normalcy was not determined by individual variations, but rather by the ratio of an average determined by the measurement.

The project of obtaining the ideal healthy human being disseminated to society by doctors with the purpose of implementing in human life a positive health arose in the late eighteenth century, as note by Foucault (2001), referring to European medicine. In a society that regarded the pursuing of the pleasure of life as the cause of the population's health and social imbalances, physicians played a political role. They role was to inform, have control and convince the population, where surveillance was often pulverized. Medical awareness became generalized and disseminated, where each individual had the obligation to be better informed about medicine-related issues. Hence, to attain its goals, modern medicine was not limited solely to a set of the required healing techniques and knowledge; it also included knowledge about the healthy human being as a model individual free of any illness. Under this normative stand, physicians were not mere advisors of how to live a well-balanced life; they also regulated the individuals' and society's physical and moral relationship.

Since the late eighteenth century, with the implementation of the ideology of the healthy human being, the human body is perceived as fragmented. Biopower is implemented and the living body that detains birth, death, longevity and health is controlled and included into the productive and economic field, thus placed in the service of industrial society. Biopolitical strategies were deployed to intervene on how life should be lived in order to extend life,

control accidents, random events and deficiencies. The power over life intended to implement a calculating management of existence (FOUCAULT, 1988).

The project of attaining the ideal healthy human being spreads through different periods and societies. In Brazil, from Piaget's index of robustness to the index of "thinness", Physical Education helped to give a different meaning to this project and to pursuing fitness, where it was subtly disseminated throughout society via an active life style.

The project of attaining the ideal healthy human being was formed by techniques and ways of guiding the conduct of human beings. According to (1997), techniques and ways of guiding the conduct of human beings relate to the ideal of government.

The idea of government associated with the unconditional obedience to medical precepts are part of modern forms of governing that were implemented with the secularization process of actions and discourses built at the Christian pastoral. In the Christian pastoral, the idea of government refers to a type of surveillance that encompasses unconditional obedience to the master, continuous examination and exhaustive confession.

Hence, unconditional obedience to the master, continuous examination and exhaustive confession for a set of values where each element implies the two other; the oral manifestation of the truth that hides within itself arises as an indispensable part of the government of men for men, such as idealized by monastic institution –mainly the Cenobitic – in the fourth century. But it should be noted that this manifestation is not meant to establish the sovereign dominance of the individual over himself; but rather, what is expected is humility and mortification, the distancing from oneself and the constitution of a relationship that dents to the destruction of the self (FOUCAULT, 1997, p. 105)

The idea of government is discussed by Fraga (2006), who makes important ponderings for Physical Education on governing over bodies in the active life market. By focusing the study on the *Programa Agita São Paulo* [Get Moving São Paulo Program], the author presents details about the political-sanitary rhetoric that was conducive to dissimulate the forms of control.

In face of discussions about the different forms of government, it is also relevant to discuss Fonseca's outlook on governed life and the government itself, which provokes us into being attentive to how to elude being governed by these commands. The author notes that

this fundamental issue of 'how to elude being governed' would be the counterpart – the partner and enemy at the same time of the forms of governing. It would be a way of mistrusting, limiting, refusing and transforming them(FONSECA, 2008, p. 245).

In regards to the RBCE articles studies, we note that techniques and ways of guiding the conduct of human beings are built from pursuing the athletic model of the ideal weight. Physical Education based on the understanding that it promotes health and prevents illness, endeavors to fight sedentarism and raise the population's awareness to exercising regularly. In this epistemological concept, the concept of health is built predominantly based on Sports Medicine and is substantiated mainly by North American theories.

The goal is then to attain low body fat by exercising and diet models. The attention is drawn to gaining or losing weight due to the relation between burning energy and eating. Eating the required amount of food is stipulated according to the activities, whereby we realized that diet and the different forms of exercising are intertwined in the pursue of fitness.

Food is recognized preferably by the amount of calories, for the potential source of energy and amount of fat. Types of exercises are chosen according to the source of energy used to

perform each sport and are determined according to tests used in functional and laboratory assessments.

Within this scenario, models that corroborate the exacerbation of discourses and interventions are dictated, all of which aiming at regulating individuals that are not concerned with the positive or negative individual perception of the elements of the environment.

Hence, prescriptions endeavored by researchers that published articles in RBCE, supported by the expert opinion of the American College of Sports Medicine helped to disseminate the ideal of attaining fitness that is synonymous of health.

In relation to determining body fat, the Heath-Carter method that identifies the somatotype (HEGG *et al.*, 1982; PETROSKI *et al.*, 1982; GUEDES, 1982; DUARTE; PETROSKI,1983; SOARES *et al.*, 1984) was used until the mid-1980s of the twentieth century, and in the 1990s of that same century the Body Mass Index appears in the publications by RBCE (DINOÁ; ASSIS, 1990; OLIVOTO, 1999; SILVA; PETROSKI, 1999; SILVA *et al.*, 1999; PITANGA, 1999; SILVA, 1999; BARA FILHO, 2000; BIESEK *et al.*, 2000; GUEDES; GRONDIN 2002; BANKOFF and MOUTINHO, 2002 and LEITE; NUNES, 2002), conducive to associating health to the a esthetics of thinness.

In their presentation of the continuity and crossing of the hygienist movement in the twentieth century, Góis Júnior and Lovisolo (2003) note the methodological similarities to identify the average anthropometrical levels of human beings. In the late twentieth century, Quételet's statistical method was largely used by physical health hygienists, more specifically in relation to body mass index (BMI) in order to identify the average human being and their deviations. In the 24th Sports Sciences International Symposium, of the twelve free themes presented in the cineanthropometry and body

composition field, 10 works applied Quêtelet's method. Recently, a master's dissertation defended Quêtelet's strong influence in Physical Education (GÓIS JÚNIOR; LOVISOLO, 2003, p. 46-47).

These “new” methodological parameters were conducive for the concept of health, considered as the absence of illness, to be linked to the reductionist aesthetics concept. This association has been the cause of discussions in the productions of RBCE in that it addresses strictly the physical appearance via the acquisition of an idealized fit body, as denounced by an article written by Anzai (2000); this issue had already been addressed in the book by Yara de Carvalho “*O ‘mito’ da atividade física e saúde*” [The myth of physical activity and health], where the author discusses the relationship between physical activity and the consumer-minded society, pointing out the “these are ‘neurotic’ days by the idea that physical activity means healthtoaesthetical beauty as the only road to success, happiness and wealth”(CARVALHO, 1995, p. 121).

To this end, the association of health to the aesthetics of thinness has been reinforced by some media-based scenarios and foster the process of selling health as a commodity. These discourses disseminate the ideal of health based on the consumption of different products, where a specific aesthetics standard of the body is used as bait, as denounced by Gonçalves *etal.*(1995); Gonçalves (1996); Della Fonte and Loureiro (1997); Quint and Matiello Júnior (1999); Anzai (2000); Palma(2001); Melo (2001); Silva (2001) and Góis Júnior and Lovisolo (2003).

According to Anzai (2000, p. 73):

If television, publicity, the film industry, magazines, newspapers and now the internet advocate miracle diets, worked out and suntanned muscles, vitamins that prevent aging, rejuvenation clinics and fitness centers, that's because there's a lot of money to be made. Little is said about the affection

and respect among common people, not so beautiful not elegant as the models, but yet, just as happy, and for sure it's because this other scenario is not anywhere as profitable.

Going back to the advertisement of *Integral médica* and observing what goes beyond what is printed on the flyers, we notice that text and images complement each other. What is said and what is implied interact and communicate that many different meanings to the readers, including the idea that taking nutritional supplements is associated with muscular, successful men that are considered “handsome” and “healthy”.

3 FINAL CONSIDERATIONS

After the discussion about the relationship between Physical Education, health and aesthetics in different epistemological scenarios, we identified the relationship between the ideology of the healthy human being linked to a wide range of discourses. From the ideal of robustness to the athletic model and ideal body weight, we observed discourses and interventions supported by a normative stance guided by determining models that advocate behavior guidelines calling for the compliance with medical precepts.

To this end, Physical Education foster the association of health with specific standard for body aesthetics via scientific measurement. From the coefficient of robustness to the method used to identify the somatotype and body mass index we found anthropometrical measurement that help classify individuals.

It was observed yet that media-based scenarios conducive to offering health as a commodity that disseminates the ideal of beauty associated to the consumption of different problems is regarded by Physical Educations researchers as a problem, as shown in the articles of RBCE studied hereunder.

Of all the points noted in our studies, we would like to emphasize the need to introducing these discussions to the

different educational scenarios rather than limiting anthropometrical measurement to the field of Physical Education, given that it helps to classify individuals based on the average considered “normal” that still furthers a non-inclusive logic.

Hence, we note that one of the challenges posed to Physical Education professional is acknowledging the diversity of body types in society and addressing body care as the pursuit of health where an ideal standard is not the goal. We emphasize yet the importance of identifying how youngsters and adults perceive this monitoring and control process over their bodies; of creating an open forum in our classes, where it is possible to identify the different ways our students perceive the meanings disseminated in advertisements that show so-called “beautiful” and “healthy” bodies associated to a given product; of pondering on how it is possible to elude these orders that are part of our daily life; of thinking about our choices and how to resist this type of mindset. The ideal of strength to the ideal of thinness:

Do ideal de robustez ao ideal de magreza: Educação Física, saúde e estética

Resumo: Modelos de beleza e saúde se misturam e percorrem uma diversidade de cenários educativos. Diante da associação entre saúde e um padrão específico de estética objetivamos discutir sobre a relação entre Educação Física, saúde e estética. Durante o processo de análise estabelecemos relações com a ideologia do ser saudável, enfatizando o ideal de robustez e o ideal de magreza e identificamos que a Educação Física contribui com a associação entre saúde e um padrão específico de estética corporal por meio de medições antropométricas, quer pelo coeficiente de robustez, quer pelo método para identificar o somatotipo ou pelo índice de massa corporal.

Palavras-chave: Educação Física. Saúde. Estética.

El ideal de fuerza al ideal de delgadez: la Educación Física, la salud y la estética

Resumen: Los modelos de salud y belleza se unen y ofrecen una variedad de escenarios de la educación. Dada la

asociación entre la salud y un patrón de estética propósito discutir la relación entre la educación física, la salud y la estética. Durante el proceso de La analisis establecemos relaciones con la ideologia Del ser saludable, enfatizando el ideal de robustez y El ideal de delgadez y identificamos que la Educación Física contribui con la asociación entre salud y um patrón específico de estética corporal por medio de mediciones antropometricas, seya por el coeficiente de robustez, pelo método para identificar el somatotipo ou pelo índice de masa corporal.

Palabras clave: Educación Física. Salud. Estética

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