STRETCHING: AN INVESTIGATION AMONG STUDENTS OF PHYSICAL EDUCATION IN THE REGION OF CAMPINAS

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ABSTRACT

The present study concerns the professional performance on stretching, which depends on the qualification of the professional of Physical Education. A descriptive study was conducted using a questionnaire with four questions. The sample included 106 students of undergraduated college courses in Physical Education in three different schools in the region of Campinas. Questioned on the objective of stretching, only 34.61% answered that it served to elongate; it was observed complicated to elaborate with scientific basement, resembling its reply with the one of the lay practitioners, not being able to clearly define stretching, as they had also demonstrated duplicity of answers with 3^a question, regarding its use; 27% answered that it serves to increase flexibility when inquired which would be the objective of its use; the majority (57.7%) did not know the methods of working with stretching; many of them (35.6%) when being questioned they had learned about how stretching, applealed to professional experience. The majority (90.4%) is conscientious of the necessity of the inclusion of disciplines of stretching in the program of under graduation in Physical Education. The pupils do not possess more specific and scientific knowledge on the subject, which will be able to come to compromise the quality of performance this offering to risks to the physical integrity of patientes.

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INTRODUCTION

Health has some sort of opposition to the increasing mechanization of life and thus, there is an increased valorization of Physical Education as part of a moving process of transformation. Physical activities usually demand some extra effort and require some caution to be adopted before, during and after them. This is a sound reason for the importance of a stretching program.

Through a stretching program individuals are submitted to a process of muscular adaptation to physical effort since this procedure aims to keep and improve flexibility, a physical capacity responsible for expanded joint and muscular range of movement.

Even informally it is observed that Physical Education profissionals are not always adequately prepared to act as trainer or maintainer of the health of an individual not used to professional competitions but that is willingly to develop some physical activity to acquire or maintain body fitness as, for example, a scientifically based program for stretching.

In this context it is important to discuss the essential issues to be dealt with during the professional development of Physical Education professionals, as well as to analyze the different interpretations and veiculations on the importance of the study of stretching in physical activities, aiming to strengthen the theoretical and practical subsides that facilitate its understanding. To attain this purpose, it is presented some ideas of authors that take an interdisciplinary approach on the curricular composition of this issue.

Carvallho, cited by Carvalho and Hatje (1996), refers that the survival of Physical Education as a program component for professional or as a science on research field depends on how much it gives attention to the appeals of the mass media, since it refuses or seems to be indifferent to the interpretations of the technological advances and its social representation or significations.

Showing concern regarding the survival of Physical Education as a research field and searching for an identity and design of a theoretical matrix to this area, Tojal (1994) analyzed the epistemological basis of the science of the human motricity, through the studies of Manuel Sergio, as an autonomous science, that is, as a new human science (social and human science).

This statement has a concrete link with the studies of Farinatti (1998) according to which it is the objective of any undergraduate program in Physical Education is to prepare professionals able to deal with general and specific problems of programs of physical activity. In this sense, the group of subjects should be directed towards a deep

RAMOS, Marcy Garcia; TOJAL, João Batista Andreotti Gomes. Stretching: an investigation among students of Physical Education in the region of Campinas. *Salusvita*, Bauru, v. 23, n. 1, p. 101-108, 2004. RAMOS, Marcy Garcia; TOJAL, João Batista Andreotti Gomes. Stretching: an investigation among students of Physical Education in the region of Campinas. *Salusvita*, Bauru, v. 23, n. 1, p. 101-108, 2004. understanding of the phenomenon related to the moving human being with application of this knowledge to the specific situations faced during the daily professional activities. The author focus on the fact that the main task of the teacher should be to expose some mental attitude facing the discipline, an attitude that allows them to present a given content taking into consideration the professional contact that grants sense to its function.

This study has the aim to investigate if undergraduate students of Physical Education Schools in the region of Campinas, São Paulo, have a scientific knowledge on stretching.

MATERIAL AND METHODS

The object of study was a group of 106 undergraduated students, females and males, from three distinct Schools of Physical Education in the region of Campinas.

During the second semester of 2000 it was applied a questionnaire of five open and close questions. The questionnaire was applied during the school period and no difficulties, objections or restrictions were observed concerning the content of the questionnaire or its application.

After filling the questionnaires, the answers were tabulated, analyzed and expressed in sectorgram graphics.

RESULTS

Answers to the questionnaires can be grouped in the following results:

TABLE 1 – Knowledge on strectching.

Answers	%
I do not know	7.70
To increase flexibility	20.19
Warming up	19.30
Stretch	34.61
Diversion of origin and insertion	2.90
To prevent lesions	5.80
Ligament development	2.88
Relaxing	1.92
Other answers	4.80

In what concerns the definition of stretching 34.61% asserted that their practice was used to elongate, followed by 20.19% participants that associated stretching to an increasing of flexibility and 19.30% to warming up.

TABLE 2 – Working methods with stretching.

answers	%
I do not know	3.80
To prepare muscles	25.00
To increase flexibility	27.00
Relaxing	3.80
To prevent lesions	29.00
To increase muscular irrigation	1.90
To improve muscle system	1.90
To stretch muscle	3.80
Other answers	3.80

Regarding the stretching methods, 57.7% could not refer what these methods are and only 39 (40%) indicate having some technical knowledge of stretching.

TABLE 3 – Objectives for stretching.

answers	%
I do not know	57.00
Active and passive	11.50
Active, passive, 3S	2.00
3S	2.00
Occurs during warming-up	11.50
R.P.G.	1.90
Static	1.90
Use of double rope	3.90
Yoga. Relaxing	2.90
Antigymnastic, laboral gymnastic	1.90
Other answers	2.90

RAMOS, Marcy Garcia; TOJAL, João Batista Andreotti Gomes. Stretching: an investigation among students of Physical Education in the region of Campinas. *Salusvita*, Bauru, v. 23, n. 1, p. 101-108, 2004. RAMOS, Marcy Garcia; TOJAL, João Batista Andreotti Gomes. Stretching: an investigation among students of Physical Education in the region of Campinas. *Salusvita*, Bauru, v. 23, n. 1, p. 101-108, 2004. Some of them (29.0%) referred that indication for stretching includes prevention of lesions and increase of flexibility (27.0%), whilst other (25.0%) referred the use of stretching to prepare musculature.

TABLE 4 – Sites where stretching was learnt.

answers	%
I do not know	11.50
College	20.10
Job experience	35.60
Both	15.40
Sports	13.50
I did not learned	1.90
Observing others	1.00
At school	1.00

The answers of the last question are valid since in the next question 35.6% reported that their knowledge on stretching was obtained through professional experience. In fact, 90.4% are aware that stretching should be included in the curriculum of undergraduate college courses on Physical Education.

TABLE 5 – Importance of including a discipline on stretching in the school of Physical Education.

answers	%
No answer at all	1.00
Yes	90.40
no	8.60

DISCUSSION

Kunz, Garcia and Resende et al. (1998), reporting on a study on professional development in what refers to the equilibrium of the formation of a professional of Physical Education, affirm that it is necessary to offer a solid basic formation (generalist dimension) complemented with a solid formation at the in deep level in the realm of intervention of a specialized field (specialist dimension).

Tojal (1995) stresses that the Physical Education professional needs to integrate themselves to their workplace, having the possibility to develop their knowledge, psychological and motor capacity, in the social sphere, in order to be able to perceive society's system of valuation, which will grant them individual efficacy. The author also stresses that the formation of the professional of human motricity should include the vision of integrality in order they can help their clients to use the movement of their body so they can corporealize the search for transcendence.

By the analyzes of the specific answers about the use of stretching and its differed methods it was verified that the students' knowledge is similar to the common practice. It was noted that this knowledge was due more to information from the media on this issue than to the knowledge acquired in the Physical Education school. More than that, comparison among answers to questions 3 and 4 reveal that the knowledge on stretching techniques is due more to the professional practice than to the knowledge acquired during the undergraduation course.

In fact, these professionals need the scientific and technical knowledge on what is known as "gymnastic", games, sports, and dance. A lot of knowledge is necessary on certain specific issues a lot more than what is presented by media in order to break the simplified language of the mass culture on body activities (SOARES, 1995).

As a result of studies by Guisellini (1996), Achour Júnior (1995), Sharkey (1998), Pollock e Wilmore (1993), the physical capacity and flexibility, through stretching, is closely related to the improvement and sustainability of the physical fitness related to health and athletic performance. Therefore, there are implications and risks if one does not have enough knowledge on this subject, what corroborates the importance of this subject in the curriculum of Physical Education courses, in order to assure that the future professionals may act in a safe way in their job.

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CONCLUSION

For the specific group of undergraduate students in Physical Education in the region of Campinas, SP, the knowledge on stretching is predominantly empiric and it would be convenient to introduce aspects on this important practice in Physical Education in the curriculum of these courses.

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ANNEX

QUESTIONNAIRE
1) What is stretching?
2) Which are the methods for stretching?
3) What is the objective of stretching?
4) How did you learn stretching techniques?
At the school ()
By professional practice ()
5) Was there any specific discipline for flexibility/stretching in your
Physical Education school?
Yes ()
No ()
6) Do you thing that the inclusion of a discipline on Stretching is
important in the curriculum of the School of Physical Education –
FEE/UNICAMP?
Yes ()
No ()