

SPECIFIC SOURCES OF STRESS IN PHYSICAL EDUCATION AND SPORTS TEACHERS /PE TEACHERS/ DEPENDING ON PEDAGOGICAL EXPERIENCE

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ABSTRACT: Different studies of stress in the work environment enable the identification of risk professions and associated stress factors. Based on these studies, the teaching profession stands out with high levels of stress.

The purpose of this empirical study is to identify the specific sources of stress in PE teachers, depending on their pedagogical experience.

Tasks: identify the intensity (quantitative and qualitative characteristics) of specific sources of stress in PE teachers.

2)Identify the impact of specific sources of stress on the working environment of PE teachers, depending on their pedagogical practice.

Methods of study. The following methods are used to collect empirical information:

Questionnaire on sources of stress in the working environment of teachers. Includes 28 items and a 5-degree scale for evaluating responses – the Likert type. The items are divided into 6 subscales (factors).

A tool that includes a set of questions about the professional-demographic characteristics of the surveyed persons - sex, age, educational degree, subject, teaching experience, etc.

The most significant differences were found among teachers in the 6-10 and 11-20 years of pedagogical practice. With the increase of their teaching activity, respectively the age, other more stressful factors are also: the volume of the tasks during the school year they have to manage on a daily basis, the administrative and unrelated tasks of implementation, the assessment of the work guidance and the stressful work of the job as a whole.

Keywords: PE teachers, sources of stress, pedagogical experience

СПЕЦИФИЧНИ ИЗТОЧНИЦИ НА СТРЕС ПРИ УЧИТЕЛИТЕ ПО ФИЗИЧЕСКО ВЪЗПИТАНИЕ И СПОРТ В ЗАВИСИМОСТ ОТ ПЕДАГОГИЧЕСКИЯ СТАЖ

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РЕЗЮМЕ: Различни изследвания по отношение на стреса в трудовата среда, дават възможност за определяне на рисковите професии и съпътстващите ги стресогенни фактори. Въз основа на тези проучвания, учителската професия се откроява с високи нива на стрес.

Целта на настоящото емпирично изследване е да се установят специфичните източници на стрес при учителите по физическо възпитание и спорт, в зависимост от педагогическия им стаж.

Задачи: Да са разкрие интензивността (количествените и качествените характеристики) на специфичните източници на стрес при учителите по физическо възпитание и спорт. Да се установи въздействието на специфичните източници на стрес в трудовата среда на учителите по физическо възпитание и спорт, в зависимост от педагогическия им стаж.

Методи на изследването. Приложни са следните методи за събиране на емпирична информация:

Въпросник за източници на стрес в трудовата среда на учителите. Включва 28 айтеми и 5-степенна скала за оценка на отговорите – тип Ликерт. Айтемите са обособени в 6 субскали (фактори).

Инструментарий, който включва блок от въпроси за професионално-демографските характеристики на изследваните лица – пол, възраст, образователна степен, преподаван предмет, педагогически стаж и др.

Резултатите от проведеното изследване по отношение на специфичните източници на стрес в трудово-професионалната среда на учителите по физическо възпитание и спорт, в зависимост от педагогическия стаж, дадоха основание за формулиране на следните изводи:

Като най-значими стресогенни източници учителите по ФВС определят: осигуряването на безопасността на учениците по време на занятия, броят на учениците в класовете и шумът в училище по време на занятията и извън тях.

Ключови думи: учители по физическо възпитание и спорт, източници на стрес, педагогически стаж

Introduction

Teachers' work can be defined as a profession with daily stress. Along with the positive trends in the education system, aligning it with the level of European education, the introduction of innovative and information technologies in the management and pedagogical practice in many schools, there are also some basic problems - decreasing the social, material and health status of the teachers' profession, increasing the job insecurity and lack of opportunities for realization. All this determines the workplace of pedagogues as highly stressful and with increased risk of occurrence of a burnout (professional burnout) (Maslach, Schaufeli & Leiter, 2001).

Survey data on stress in various occupational fields allows for the identification of risky occupations and accompanying stress factors. The stimulus which induces stress is defined as a stress factor or stressors (Karastoyanov, 1996). In general, the stressors are divided into three main categories: *psychological, physical and behavioural* (Rusinova-Hristova and Karastoyanov, 2000).

Based on various studies, the teaching profession stands out among others as one of the leading risky professions in terms of stress. Pedagogical activity is very diverse in its practice. Regarding the conditions and ways of carrying out its activity and the opportunities for realization outside the educational

institutions, the subject is a basic prerequisite for difference. In this sense, the teacher of physical education and sports is "a unique subject of pedagogical activity" (Tosheva, 2012).

The professional activity of sports pedagogues determines the specificity and intensity of the sources of stress in the implementation of the teaching process. The working conditions differ significantly from those of the teachers of other subjects. Physical education and sports classes are held outdoors in the open air "outside the comfort of the classroom" (Tsigilis, N., Zourmatzi, E. & Koustelios, A., 2011) at the sports grounds, the school yard and the gymnasiums.

The unsatisfactory state of the material base, the lack of sufficient facilities for the optimum course of the classes, the volume of physical activity, the disrespectful attitude of colleagues and parents and many others are defined as specific sources of stress in the working environment of PE teachers.

The stress of PE teachers is steadily increasing. It is characterized by a cumulative effect. It has been found that a single stressful event cannot affect a person fatally but chronic stress increases the likelihood of a disease to a significant extent (Cohen S., Frank E., Doyle W., Skoner, D., Rabin B., Gwaltney, J, 1998).

The level of accumulated stress in everyday life, throughout the school year and during the entire pedagogical practice inevitably reflects on the behaviour of the teacher and the quality of his/her educational activity (Tzonkova, 2013).

Fig. 1 presents a model of interaction between specific sources of stress in the professional environment of PE teachers and their pedagogical experience.

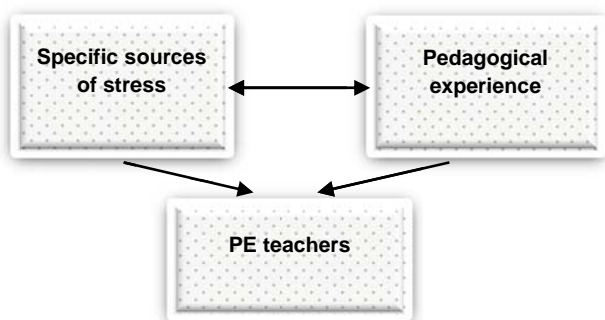


Fig. 1. Theoretical model of the interaction between the sources of stress and the pedagogical experience

Overall aim and objectives of the study:

The overall aim of this empirical study is to identify the specific sources of stress in physical education and sports teachers, depending on the pedagogical experience.

Objectives:

1. To disclose the intensity (quantitative and qualitative characteristics) of specific sources of stress for PE teachers.
2. To identify the impact of the specific sources of stress on the working environment of PE teachers, depending on their pedagogical experience.

Subject of research - 71 Bulgarian teachers of physical education and sports, of which 47 women and 24 men. The study is part of a thesis dissertation on stress of PE teachers and was conducted in secondary schools in Sofia and the country.

Table 1 gives a breakdown of the persons surveyed by age and pedagogical experience.

Table 1
Frequency distribution of the persons surveyed by age and pedagogical experience

Age		Pedagogical experience	
25-40	19.7 %	1-5	16.9 %
41-60	74.6 %	6-15	16.9 %
over 61 years	5.6 %	16-25	29.6 %
		over 25 years	36.6 %

The gender distribution is uneven and the number of women is almost twice as large as the number of men in the sample. This is to a certain extent expected due to the feminization of the profession in the Bulgarian schools. The large proportion of women practicing the teaching profession reaches the extent to which it can be defined as feminized. This probably is due to the fact that it satisfies their need for personal expression (Tosheva, I., Fenerova, D., Georgiev, M., 2008).

The percentage data with regard to the pedagogical experience of the teachers is also impressive, with the highest value being for the teachers with over 25 years of professional experience.

Methods of research. The following methods for collecting empirical information are applied:

1. Questionnaire on sources of stress in the working environment of teachers - the questionnaire was developed in connection with stress study in physical education and sports teachers (Tosheva and Kostova, 2015). It includes 28 items and a 5-step scale for evaluating responses - the Likert type. The items are divided into 6 subscales (factors) - *behaviour of the students; the amount of teaching workload; conditions for training and comfort of the working environment; organization of the work and relationships; general problems (peculiarities) of the teaching profession; work-personal life relationships.* The psychometric indicators of the questionnaire are good. The intrinsic consistency of the items according to the factors is generally high (Table 2).

2. A set of tools that includes a block of questions about the professional-demographic characteristics of the surveyed persons - gender, age, educational degree, subject, teaching experience, etc.

Table 2
Analysis for the internal consistency of the items in the questionnaire for the sources of stress

Factors	Cronbach's Alpha
Problems with the pupils	0.80
Work conditions and teaching activity	0.74
Organisation of the work and relationships	0.75
Amount of the teaching workload	0.73
Peculiarities (problems) of the profession	0.55
Work-personal life relation	0.79

The results of the study are subjected to mathematical and statistical methods for quantitative processing and analysis of experimental results, via variation analysis, internal coherence analysis of the scales (α of Kronbach), comparative analysis (Mann-Whitney). Calculations were made using the statistical program SPSS 19.0

Conclusion

Table 3 presents the values of the variance of the indicators of the stress sources questionnaire. It can be seen that the most important specific sources of stress in the work of PE teachers are: ensuring the safety of pupils during the classes ($M = 3.77$), the number of pupils in the classes ($M = 3.76$), noise during and outside the classes ($M = 3.74$).

The results of the analysis reflecting the high levels of the indicators is logical as the class of physical education and sports is accompanied with active physical activity. The safety of children is one of the most important requirements facing the sports pedagogue. Along with the implementation of the tasks to be learned in the lesson, it is also necessary to create order and discipline during the classes. The number of children in the classes is one of the main reasons for the optimal course of the learning process.

Concerning the analysis of the stress factors for the teachers with pedagogical experience of 1-5 years, there is a slight decrease in all directions, which can be explained by their period of adaptation to the teaching profession.

After the 6th year there is a gradual increase in the intensity of the stress factors, with the most significant indicators in terms of amount of workload, working conditions, organization of work and relationships (Figure 2).

The comparative analysis of the teachers divided into different groups according to the duration of the pedagogical service revealed significant differences between teachers with experience between 6 and 10 years and those with professional experience between 11 and 20 years (Table 4).

Table 3
Average values of the sources of stress in the work of teachers of physical education and sports

Sources of stress	Min	Max	M	SD
The amount of tasks that the PE teacher has to deal with	1.00	5.00	3.29	1.16
The time to fulfil all your engagement as a teacher	1.00	5.00	3.26	1.19
Administrative workload	1.00	5.00	3.39	1.24
The number of pupils in the classes you teach	1.00	5.00	3.76	1.35
Presence of pupils with special educational needs	1.00	5.00	2.70	1.30
Ensuring pupils' safety	1.00	5.00	3.77	1.28
Manifestation of aggression by the pupils	1.00	5.00	3.56	1.33
Problems with the discipline in class	1.00	5.00	3.18	1.30
Noise in school	1.00	5.00	3.74	1.09
Availability of educational and technical means	1.00	5.00	2.88	1.29
Lack of suitable premises for the classes	1.00	5.00	2.93	1.52
Comfort of the working environment - light, temperature, dustiness	1.00	5.00	3.18	1.33
Motivation of pupils to achieve results	1.00	5.00	3.18	1.04
The status of the subject	1.00	5.00	3.00	1.24
Frequent reforms in education	1.00	5.00	3.43	1.18
Need for continuous upgrading of the professional qualification	1.00	5.00	2.93	1.21
Opportunities for career development	1.00	5.00	2.62	1.23
The amount of payment	1.00	5.00	3.18	1.62
Danger of job loss	1.00	5.00	3.14	1.35
Relationships with parents	1.00	5.00	2.97	1.43
Relationships with colleagues	1.00	5.00	2.73	1.58
Style of leadership and organization of work	1.00	5.00	2.91	1.40
Assessment by the school management	1.00	5.00	2.97	1.33
Participation in the decision making process in the school	1.00	5.00	2.86	1.23
Psychological climate among the colleagues	1.00	5.00	2.79	1.37
Combining the work and personal engagements	1.00	5.00	2.82	1.39
Financial problems at the moment	1.00	5.00	3.49	1.26
Domestic problems	1.00	5.00	2.75	1.28
My work as a whole	1.00	5.00	3.23	1.34

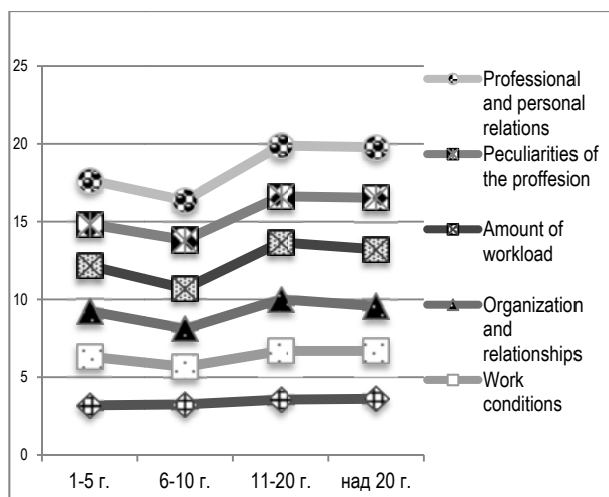


Fig.2. Average values of stress factors of PE teachers depending on the pedagogical experience.

Table 4

Sources/factors of stress	M Pedagog. experience 6-10 years	M Pedagog. experience 11-20 years	u	α
The amount of tasks during the school year	2.66	3.53	2.32	0.05
The administrative workload and the performance of unusual tasks	2.66	3.71	2.17	0.05
Assessment by the school management	2.42	3.48	2.16	0.05
My work as a whole	2.08	3.09	2.43	0.01
Factor 4: The workload amount	2.58	3.65	2.47	0.01

The results of the survey on the specific sources of stress in the working and professional environment of physical education and sports teachers, depending on the pedagogical practice, provided for the following conclusions:

1. As the most significant stressors in the classroom, PE teachers define: ensuring pupils' safety during classes, the number of pupils in class, and the noise at school in and outside the classroom.
2. When analysing the stress factors there is an increase in their intensity after the 6th year of professional activity.
3. The most significant differences were found among teachers with pedagogical experience of 6-10 and 11-20 years. The comparative analysis found these differences with respect to 4 sources of stress and one stress factor. With increasing the teaching practice and the age of the teachers as the more stressful factors were determined: the amount of tasks during the school year they have to deal with, the administrative and unusual tasks on a daily basis, the assessment of the work done by the school management and the perception about the stressfulness of work in general.

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