

CONDITIONS AND IMPLEMENTATION OF PHYSICAL EDUCATION IN SCHOOLS IN RURAL AND URBAN AREAS IN PODKARPACIE PROVINCE

Justyna E. **LENIK**^{ABCDEF}

Faculty of Physical Education, University of Rzeszow

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- Podkarpacie province
- primary schools
- middle schools
- high schools
- physical education teachers

Abstract:

The aim of the study was to assess the state of physical education at various levels of school education and to compare the state of physical education in schools in rural and urban Podkarpackie Province. The study (questionnaire) included 1,807 physical education teachers working in schools in rural and urban areas in the region of Podkarpackie. In primary schools, teachers taught 36.76%, of which 11.55% are employed in urban schools, and 25.21% in rural areas. In secondary schools working every fifth respondent (11.33% in the city, and 11.11% in rural areas), while in secondary schools teaching 20.34%. Most physical education teachers working in schools in Podkarpacie are graduates of the Academy of Physical Education and the Higher School of Pedagogy. The study included schools of various sizes up to 100 students, from 100-300 students and more than 300 students. The analysis showed that the slightly better conditions for the implementation of mandatory physical education classes have city schools. In addition, it can be stated that most teachers complain about the conditions in the schools. Most of the institutions has at its disposal only the gym and playground outside. The biggest problem preventing the program of physical education in schools in rural and urban Podkarpacie is to combine classes, no base, lack of equipment and poor technical condition of equipment. Most teachers implement curriculum content with gymnastics, athletics, games and activities and team sports. The younger classes are very popular games and movement.

INTRODUCTION

Physical education (PE) is an integral part of physical culture. There are two processes involved in physical culture: both physical education itself, and physical upbringing. According to Grabowski the goal of PE is not to cause changes to the student's body, but to his or her behaviour [Grabowski 2003]. The whole process of PE should stimulate the physical development of children and young people, prepare them for participation in various forms of physical activity [Karolczak-Biernacka 2000], regulate disorders in their health and develop appropriate health habits [Grabowski 2001]. The main objective of health promotion is to improve the quality of life of society. Sensible nutrition, high levels of physical activity and regular participation in various forms of physical culture are the most important elements of a pro-health attitude [Gacek 2001]. Health-related education and working on improvements in physical fitness should be passed on and implemented by PE teachers from an early age, from the beginning of the first year of primary school. Implementation of these basic principles requires strongly-committed and highly-qualified teachers [Tatarczuk, Asienkiewicz 2001]. PE teachers should develop an interest in sport and health among

children and young people through their attitude, behaviour and approach to them [Urych 2011]. Teachers should strive to improve the physical fitness of their students. The effectiveness of the learning process is primarily affected by the credibility of teachers and their authority in the field [Kosiba 2001]. The teacher's task is to motivate students to act in the desired fashion [Muszkieta 2001]. The teacher should engage young people to participate consciously in PE [Raszewska 2005]. The all-round development of children and adolescents is gaining importance in society. A physically fit child is a confident child, who has self-esteem and is accepted by their peer group. In the modern world, acceptance is what young people are most keen to achieve.

According to Przewęda [1992] PE does not correspond to the actual developmental and health needs of children and teenagers. At school PE is not accorded proper status and is considered marginal, not only by students but also by teachers of other subjects. According to Jabłońska [1995] 31% of students surveyed treat sport and PE in purely physical terms and do not use the skills acquired in PE lessons in everyday life. A new, and reformed school system should aim not only to understand all a child's needs but also to implement them. At present the conditions under which PE teachers work are insufficient. Given the harsh conditions, and the lack of equipment and facilities a PE programme cannot be fully realised, and a serious lack of pupils' basic motor skills is being seen [Tatarczuk, Asienkiewicz 2001]. As has been pointed out by Cieszkowski the effect of this situation is to reduce the levels of physical fitness in children and adolescents in South East Poland [Cieszkowski 2001].

The effects of marginalising PE are already visible e.g.: the diseases of civilisation, obesity and the negative attitude of students to PE inherited from their parents [Skrzydło 2010]. The main objective of this paper is to compare the state of physical education in rural and urban schools in Podkarpacie Province.

In this study the following research questions were posed:

1. What technical support do rural and urban schools in Podkarpacie Province get, to implement mandatory PE classes?
2. What obstacles prevent the realization of the PE programmes in urban and rural schools in the Province?
3. What is the content of the programme implemented by PE teachers in rural and urban schools in Podkarpacie Province?
4. Do PE teachers provide their students with information on the benefits of a healthy lifestyle, and in what way?

MATERIAL AND METHODS

The study was conducted between February 2013 and June 2015 and involved 1,807 physical education teachers working in rural and urban schools in Podkarpacie Province. The study was conducted in all districts belonging to the Podkarpacie Province. 36.76% of the teachers worked in primary schools, 11.55% of whom were employed in urban schools, and 25.21% in rural areas. 20% of respondents (11.33% in urban, and 11.11% in rural areas) worked in middle schools, while 20.34% of teachers worked in secondary schools (16.03% in urban schools and 18.19% in rural schools).

Among all respondents, the majority of PE teachers were men (61.64%), 26.87% of them were employed in urban schools and 34.77% in rural schools, while women accounted for 38.36% of all employed PE teachers (15.92% in the city and 22.44% in rural areas).

The study included schools of various sizes: up to 100 students, from 100-300 students and more than 300 students.

A questionnaire was used in the study. The statistical analysis was carried out using Statistica 9. The results are expressed in numbers and in fraction rates. The statistical significance of differences was calculated using the chi-square test.

RESULTS

Tab. 1. Facilities in rural and urban schools in Podkarpace Province

Facilities	Types of areas	
	urban	rural
Sports hall	290	197
	16.05%	10.90%
School corridor	212	206
	11.73%	11.40%
Gym	635	682
	35.14%	37.74%
Substitute gym	263	287
	14.55%	15.88%
Swimming pool	161	58
	8.91%	3.21%
Outdoor playing field	533	768
	29.50%	42.50%
Green areas near the school	193	275
	10.68%	15.22%
Athletics track and field	270	302
	14.94%	16.71%
Total	773	1034
	42.78%	57.22%

Analysis of the data in this table shows that there is a gym in a third of both rural and urban schools in the Province. Sports halls are available to approximately 16% of schools in urban areas and one in ten schools in the countryside. It is worth noting that only about 9% of town schools) and about 3% of rural schools in Podkarpace Province have a swimming pool. Further analysis of the data shows no significant differences between rural and urban areas.

Tab. 2. Implementation of the PE programme in rural and urban schools in Podkarpace Province

Content of the physical education programme:	Types of areas	
	urban	rural
Gymnastics	768	1032
	42.50%	57.11%
Team sports	754	1025
	41.73%	56.72%
Athletics	764	1031
	42.28%	57.06%
Music and movement exercises	431	645
	23.85%	35.69%
Field athletics	612	886
	33.87%	49.03%
Activity games and play	736	1011
	40.73%	55.95%
Winter sports	365	524
	20.20%	29.00%
Swimming	313	187
	17.32%	10.35%
Others	69	52
	3.82%	2.88%
Total	773	1034
	42.78%	57.22%

On the basis of the figures in Table 2 teachers are implementing the gymnastics syllabus in around half of all rural schools in the Province (about 57%), team sports (about 57%), athletics (about 57%) and games and activities (approximately 56%). In urban schools in the Province about 40% of teachers implement a similar proportion of the curriculum. Swimming lessons are carried out by 20% of teachers in urban schools and by 10% in rural schools. About 20% of the respondents from urban schools also said that they organised winter sports in PE lessons while, in contrast around 30% of teachers from rural schools also did so.

Tab. 3. Recreational games offered in rural and urban schools in Podkarpacie Province

Recreational games	Types of areas	
	urban	rural
Palant	193	284
	10.68%	15.72%
Ringo	299	568
	16.55%	31.43%
Floor-ball	593	677
	32.82%	37.47%
Dodge-ball	601	891
	33.26%	49.31%
Chinese-ball	216	266
	11.95%	14.72%
Badminton	432	543
	23.91%	30.05%
Table tennis	691	909
	38.24%	50.30%
4-corner dodge-ball	187	317
	10.35%	17.54%
Does not apply	10	5
	0.55%	0.28%
Total	773	1034
	42.78%	57.22%

Analysis of the data contained in Table 4 shows no significant differences between town and country. Half of all teachers working in rural areas and about 38% in urban areas organise table tennis practice in their lessons. In rural schools, approximately 49% of teachers responded that that students played dodge-ball in PE. This game is also carried out by about 30% of teachers in town schools. In both rural and urban schools floor-ball is a popular game. It is taught by a third of urban teachers and about 37% of respondents at rural schools. In both rural and urban schools, the least popular games are *palant* and 4-corner dodge-ball.

The study showed that 1,716 teachers in both rural and urban schools in Podkarpacie Province (from 1,807 respondents) have some problems implementing the basic programmes. While analysing the problems that affect the quality and content of the lessons, the responses show that the biggest problem for about 30% of teachers from rural schools and for approximately 23% of those from urban schools is combined classes. The lack of both facilities and equipment is an issue for a quarter of teachers working in the countryside. For 18% of respondents from urban schools it is the lack of facilities, in addition to combined classes, is which creates a problem in implementing the syllabus. Further analysis showed no significant differences between town and countryside.

Tab. 4. Problems preventing the implementation of the PE programme in rural and urban schools in the Province.

Problems:	Types of areas	
	urban	rural
Combined classes	403	503
	23.48%	29.31%
Lack of facilities	296	422
	17.25%	24.59%
Lack of sanitary facilities	123	157
	7.17%	9.15%
Lack of equipment	216	385
	12.59%	22.44%
A small number of teaching hours	171	220
	9.97%	12.82%
Coeducational classes in groups	176	285
	10.26%	16.61%
Total	733	983
	42.72%	57.28 %

Tab. 5. Implementation of extracurricular sports activities in rural and urban schools in Podkarpace Province

Extracurricular sports activities	Types of areas		Total	P
	urban	rural		
Yes	738	917	1654	0,0001
	40,80%	50,69%	91,49%	
No	36	118	154	
	1,99%	6,52%	8,51%	
Total	774	1035	1809	
	42,79%	57,21%	100,00%	
Extracurricular sports activities Regularly	Types of areas		Total	P
	urban	rural		
1-5 hrs.	501	926	1427	0,0001
	27,89%	51,56%	79,45%	
6-10 hrs.	179	86	265	
	9,95%	4,79%	14,74%	
11-15 hrs.	44	13	57	
	2,44%	0,72%	3,16%	
16-20 hrs.	38	1	39	
	2,12%	0,06%	2,18%	
Pow. 20 hrs.	8	0	8	
	0,47%	0,00%	0,47%	
Total	770	1026	1796	
	42,87%	57,13%	100,00%	

The study showed that extra-curricular sports activities take place regularly at about half the schools in the countryside and about 40% of town schools. 50% of teachers working in the country, and a third teaching in town schools said they devoted between 1 and 5 hours per week to such activities. It is worth noting that none of the rural schools, and only about 0.5% of schools in urban areas spend more than 20 hours a week on extra-curricular sports activities. In a small number of schools in the Province extra-curricular sports activities are only offered occasionally. In both rural and urban schools about 2 hours a week are allocated to them. The recorded results showed statistical significance.

Tab. 6. The ways PE teachers present pro-health content in rural and urban schools in the Province.

Pro-health content	Types of areas	
	urban	rural
Separate lectures	422	584
	23.39%	32.37%
Small amounts of information during practical classes	633	813
	35.09%	45.07%
Educational films	132	266
	7.32%	14.75%
Publications and brochures	176	270
	9.76%	14.97%
I do not provide such content	14	21
	0.78%	1.16%
Total	771	1033
	42.74%	57.26%

While analysing how teachers provide their students with health content it is shown that there are no significant differences between the city and countryside. About 35% of the respondents from the city and about 45% from the countryside provide health content in the form of small amounts of information during practical classes. A third of teachers at rural schools and a fifth working in the city organize separate talks. A small number of teachers do not provide any information at all (about 1% of the teachers surveyed from both rural and urban schools).

Tab. 7. Answers to the question: Should PE lessons in junior classes be taught by teacher-specialists?

Teacher specialist	Types of areas		Jointly
	urban	rural	
Definitely yes	646	818	1464
	35.75%	45.27%	81.02%
Rather yes	101	205	306
	5.59%	11.34%	16.93%
No	26	11	37
	1.44%	0.61%	2.05%
Total	773	1034	1807
	42.78%	57.22%	100.00%

Analysis of the data contained in Table 7. shows that about 35% of urban teachers and about 45% of those working in the countryside believe that PE in classes I to III should be carried out by a specialist teacher. Around 1% of teachers at urban schools and 0.5% of those working in the countryside do not agree with that statement. The results showed statistical significance.

Tab. 8. The distribution of answers to the question: Should there be regular tests to assess the physical fitness of students undertaken by PE teachers?

Physical fitness tests	Types of areas		Jointly
	urban	rural	
No	85	105	190
	4.70%	5.81%	10.51%
Yes - regularly twice a year	485	560	1045
	26.84%	30.99%	57.83%
Yes - just once a year	203	369	572
	11.24%	20.42%	31.66%
Total	773	1034	1807
	42.78%	57.22%	100.00%

Analysing the data contained in the table shows that 25% of urban teachers and a third of rural teachers believe that tests evaluating students' physical fitness should be carried out twice a year. 10% of urban teachers and twice as many in rural schools believe that doing these tests once a year is adequate. Analysis of the data shows statistical significance.

Tab. 9. What is the attitude of teachers of other subjects in your school to the problems of physical education?

Attitude of teachers	Types of areas		Jointly
	urban	rural	
Decidedly negative	23	10	33
	1.27%	0.55%	1.83%
Rather negative	147	74	221
	8.14%	4.10%	12.23%
I have no opinion	234	269	503
	12.95%	14.89%	27.84%
Quite positive	330	552	882
	18.26%	30.55%	48.81%
Decidedly positive	39	129	168
	2.16%	7.14%	9.30%
Total	773	1034	1807
	42.78%	57.22%	100.00%

Analysis of PE teachers' views of the approach of teachers of other subjects to the problems of physical education shows that 20% of teachers in towns and a third in the country declared that teachers of other subjects have a quite positive attitude. Further analysis shows no significant differences between urban and rural areas. About 13% of urban teachers and about 15% from the countryside are unable to relate to this issue. About 1% of urban respondents and 0.5% from the countryside believe that teachers of other subjects have a decidedly negative attitude to the problems of physical education. After analysing the data statistical significance was found.

Tab.10. The distribution of answers to the question: What kind of organizational system is used to teach P E classes?

Organizational system	Types of areas	
	urban	rural
All hours in a class-lesson system	494 27.34%	639 35.36%
1-2 hours in a class-lesson system, others as elective but obligatory activities	279 15.64%	395 21.86%
Total	773 42.78%	1034 57.22%

Tab.11. The distribution of answers to the question: What kind of organizational system is used for elective activities?

Implementation of elective activities	Types of areas	
	urban	rural
In groups of mixed classes	120 17.83%	138 20.51%
In mixed-level groups	67 9.96%	51 7.58%
In an after-school system	59 8.77%	59 8.77%
System of lessons	159 23.63%	262 38.93%
In non-school system	14 2.08%	14 2.08%
Total	278 41.31%	395 58.69%

Analysis of the data in Table 10 shows that PE lessons are implemented as a class system in most schools in the region (about a quarter of urban schools and one in three rural schools). About 16% of teachers working in urban schools and a fifth of respondent teaching in a rural school declared that PE lessons are implemented using the following systems: 1-2 hours in a class system, other classes as elective but mandatory activities. Activities in the form of elective lessons are carried out in about 20% of urban and about 40% of rural schools in Podkarpacie Province (tab. 11). According to the teachers surveyed elective activities are also implemented in groups of mixed classes (according to about 18% of teachers from urban and about 21% from rural areas. Further analysis of the data showed no major differences between urban and rural areas (Tab. 11).

DISCUSSION

In summary it can be said that most schools in Podkarpacie Province are facing serious problems that hinder or prevent the implementation of the PE programme. Combined classes, the lack of facilities and the lack of equipment are the most frequently mentioned difficulties. Despite these difficulties, the teachers implement the program of physical education According to the NIK [Supreme Audit Office 2010] more than half of surveyed students have also called for the need to provide better sports equipment and facilities, because these have an impact on the attractiveness of lessons. The research carried out by the NIK also shows that in more than half of the surveyed schools in Poland the PE curriculum is inappropriate to the schools' infrastructure [2010] while facilities and sports equipment are in poor condition, which increases the risk of accidents [NIK 2012]. A similar situation prevails in Russia,

Ukraine and Belarus. School physical education has serious financial problems, which affect the quality of physical activities organised by schools [Paluch 2005a]. The quality of education has also deteriorated in Slovakia. In contrast to these countries, Czech schools have good conditions for practising sport and PE teachers have adequate preparation time [Paluch 2005b]. In about 12% of the audited institutions in Poland, PE lessons are conducted in hallways or halls adopted for this purpose, and they are often carried out in combined or coeducational groups [NIK 2010]. Teachers working in Podkarpackie Province schools are also experiencing the same difficulties.

The study showed that the majority of schools in Podkarpackie have access to a gym and outdoor playground. Few schools have facilities for athletics and access to green areas located near the school. Research carried out by Pańczyk [Pańczyk 1998] shows that physical education undertaken outdoors is characterized by a greater intensity. This form of teaching motivates children to spontaneous, extracurricular physical activities, and has a better impact on health. According to Pańczyk [Pańczyk 2002] such lessons are the hardest to organise and carry out. It can be assumed that PE teachers avoid this form of teaching due to the lack of proper facilities and the considerable amount of difficulty associated with organising it. A small number of the surveyed teachers working in Podkarpackie schools (91 out of 1,807 teachers) said that the sports facilities and the conditions are sufficient and have no impact on the quality and content of classes.

In most schools in the Province and in most schools in Poland [NIK 2012] PE lessons are held in a class-lesson system. Only 12 private schools established inter-class groups. A few teachers in Podkarpackie (about 15% of teachers at town and 20% at country schools) responded that their school had introduced elective though obligatory courses. According to the NIK [2012] about 44% of middle schools, about 15% of primary schools and only 2 secondary schools introduced elective classes: dancing, sports, health and an active form of tourism. In most schools in Podkarpackie optional courses are run under a system of mixed group lessons.

The study shows that most teachers implement the athletics, team sports, gymnastics and field athletics curriculum. Younger pupils like games and movement activities. One can assume that this is connected to access to school and sports facilities. In the NIK survey [2012] students responded that teachers usually organised team sports games and gymnastics. Other sports activities including: tennis, hockey, Nordic walking, rugby, judo, skating, aerobics, palant, dodge-ball and fitness are treated marginally. A similar trend can be seen in schools in Podkarpackie Region.

Almost all the teachers teaching in both rural and urban schools said that they equipped their students with health-related knowledge, usually in the form of short talks during practical lessons. About 15% of teachers from rural and about 7% from urban areas presented pro-health content in the form of educational films. Research carried out by Gacek [Gacek 2001] shows that the majority of PE teachers (71%) see the need to transfer health-related content to their pupils. They also see threats to the development of children and young people. According to Nowocień and Derbich [Nowocień, Derbich 2000] the activities of teachers in promoting health are poorly organised. About 55% of respondents used health education films, and about 25% provided health content during excursions and trips. According to Jabłońska [Jabłońska 1995] the information acquired during PE lessons is universal, but young people make only very little use of it. The reason for this lies in the medium used to convey the message. Students who are preoccupied with exercising do not pay attention to the information provided by the teachers.

According to the respondents PE lessons in junior classes should be carried out by a specialist teacher. Research conducted by Tatarczuk and Asienkiewicz [Tatarczuk, Asienkiewicz 2001] shows that, according to 20% of PE teachers the teaching programme is

too ambitious and its implementation requires strong commitment and high qualifications. According to the NIK [2010], in six primary schools they inspected, teachers in classes I-III, did not register the teaching of movement activities. It is worth mentioning that among 103 teachers of integrated education only one person had a master's degree in physical education, and only five were licensed to conduct corrective and compensatory gymnastics classes [NIK 2012].

Most PE teachers (about 91%) working in both rural and urban schools in Podkarpace Province responded that regular extra-curricular activities are usually held for between 1 and 5 hours per week. Research conducted by NIK [2010] shows that in 26% of the audited schools in Poland, extra-curricular activities were not carried out at all or only periodically (1 or 2 hours per week). According to the NIK report [2012] teachers pursued this obligation under the Teaching Charter Act. The activities usually involved: team sports games, dance, aerobics, fitness and field games.

CONCLUSIONS:

The studies and analyses conducted lead to the following conclusions:

1. The biggest problems preventing the implementation of the PE syllabus in schools in both rural and urban areas in Podkarpace Province involve combining classes, the lack of facilities and equipment.
2. 2) Urban schools in the Province have slightly better conditions than rural schools for the implementation of mandatory PE classes.
3. PE teachers usually provide the gymnastics, athletics, games, movement activities and team sports programme.
4. Other sports disciplines e.g.: floor-ball, ice skating, skiing are conducted by a small number of teachers.
5. Most of the teachers surveyed (about 81%) claim that physical education in the first classes should be carried out by a specialist teacher.

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