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Poziom sprawności motorycznej i umiejętności ruchowych przyszłych nauczycieli wczesnej edukacji

Streszczenie

Wstęp. Obowiązujące prawo polskie daje uprawnienia do prowadzenia zajęć wychowania fizycznego zarówno absolwentom studiów wychowania fizycznego, jak i wczesnej edukacji zintegrowanej. Powinnością nauczycieli pracujących z dziećmi jest przekazanie wiedzy, kształtowanie określonych umiejętności i postaw powiązanych z wzmacnianiem zdrowia uczniów. Nauczyciel wychowania fizycznego oddziałując na osobowość i ciało wychowanka, powinien jednocześnie stanowić dla niego wzór osobowy. Jest to jednoznaczne z odpowiednim poziomem sprawności motorycznej i umiejętności ruchowych nauczyciela, umożliwiającym w sposób swobodny i obrazowy pokazanie techniki wykonania ćwiczenia.

Cel. Celem pracy było zbadanie poziomu sprawności motorycznej i umiejętności ruchowych nauczycieli studiujących na studiach podyplomowych z zakresu wczesnej edukacji zintegrowanej.

Materiał i metody. W badaniach wzięły udział 82 czynne nauczycielki, którym polecono wykonanie 8 testów motorycznych i 12 ćwiczeń stosowanych w nauczaniu dzieci przedszkolnych i wczesnoszkolnych.

Wyniki. Przeprowadzone badania ujawniły występowanie przeciętnego i miernego poziomu sprawności motorycznej badanych kobiet. W 67% przypadków badane nie umiały zaprezentować podstawowych umiejętności ruchowych nauczanych wśród dzieci przedszkolnych i wczesnoszkolnych.

Wnioski. Zajęcia wychowania fizycznego z dziećmi przedszkolnymi i wczesnoszkolnymi powinni prowadzić najlepsi eksperci w tej dziedzinie. Niski poziom sprawności motorycznej i umiejętności ruchowych przyszłych nauczycieli wczesnej edukacji wskazują, że nie są odpowiednio przygotowani do pełnienia tej funkcji.

Słowa kluczowe: nauczyciele, sprawność ruchowa, umiejętności ruchowe.

The level of motor fitness and skills among future early-education teachers

Abstract

Introduction. The Polish law is giving the entitlement for conducting the physical education classes to both graduates of physical education, as well as the teachers of early education. The duty of teachers working with children is to provide knowledge, developing the skills and attitudes related to strengthening health of students. Physical education teacher by acting on the personality and the body of his pupils should also be a personality model for them. The teacher should have an appropriate level of the motor skills enabling to show the technique of performing the exercise.

Aim. The aim of this study was to examine the level of motor fitness and skills of teachers studying at postgraduate level in the field of integrated early education.

Material and methods. The study was performed in a group of 82 active teachers who instructed execution of 8 tests of motor skills and 12 exercises used in teaching kindergarten children and early education classes.

Results. The study showed the presence of the average and low-level motor skills in women. In 67% of the studied cases, women could not demonstrate basic motor skills to the children being taught by them.

Conclusions. Physical education classes for preschoolers and 1st-3rd graders should be conducted by experts in the field. Very low level of motor fitness and skills determined by the present study, it can be concluded that future early-education teachers are ill-prepared for carrying out such a responsible role.

Keywords: teachers, motor performance, motor fitness and skills.

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INTRODUCTION

In accordance with the applicable Polish law, the graduates of integrated early education become entitled to teach physical education in kindergarten and in 1-3 classes of primary school, as well as highly qualified graduates in physical education. Thus, they affect significantly the attitudes associated with physical and motor development of children.

The period of children aged 3 to 9 years is characterized by a great willingness to move and act, which is undoubtedly related to the phenomenon of self-stimulation [1]. After 6 years of age of children an exceptional increase in motor coordination is observed. On the other hand, when the child starts school, the normal anatomical and functional development of the body is manifested by increased motor skills in sports [2]. Gender differentiation in terms of physical and motor development is manifested increasingly with every passing year of study [3]. Regardless of these facts, 6-9 year-old children should be stimulated with appropriate dose of motion necessary for their normal development. Discontinued operations in this period may cause permanent, negative and irreversible effects on the optimal level of individual motor skills [4]. According to the National Association for Sport and Physical Education, schoolchildren should take a 60-minute daily dose of sports; also, continuous sitting for 60 minutes is not recommended [5].

Social need for healthy lifestyles increases the more as the larger and more frightening are the indicators of the level of children's health, linked also with the negative aspects of children's life [6,7]. In all societies of developed countries, the percentage of children with overweight and obesity is growing, so the issue of their activity and motor skills should be of interest not only researchers but also the Physical Education teachers. In particular, this issue should be of interest first of all to teachers dealing with the early education. The study confirms that the child brought up with caring for physical condition, isn't passive and physically neglected person in matured life [8,9].

The effects of kindergarten or school activity are dependent on many factors, among which the primary is the teachers' work. The main task of teachers is to provide knowledge, develop the skills and attitudes. The teachers direct the process of development of pupils at school, evaluate their progress and give the pattern to follow. Effectiveness of teaching in physical education will heavily depend on their pedagogical knowledge and experience gained while working. Physical Education teachers affect the personality and the body of pupil. Therefore, they should have the appropriate level of motor ability and motor skills, enabling them to demonstrate the technique or the execution of the exercises freely and vividly. The teachers' level of motor skills may be in such a case kind of weapon or Achilles' heel. This statement does not raise many objections, when assessing the competence of graduates of physical education. These students are characterized by higher than average level of motor ability and motor skills because of a specially developed curriculum. The situation of students of integrated early education, which are obtaining appropriate qualifications in the field of physical culture, needs checking and additional research. The specificity of program of these studies imposes no obligation to have an appropriate level of motor skills. The experience of future teachers is supported by only one subject – theory of the methodology of Physical Education and a very short period of practices in school or kindergarten. In the group of potential candidates in the field of early childhood education there are teachers who already worked with children and have qualifications in teaching other subjects.

Research on problems of children's motor skills has been performed worldwide [10-12]. Studies on motor performance of teachers are extremely rare, because teachers are reluctant to do this type of research [13].

Therefore, it is important for the children that the best specialists in the field of Physical Education work with them, and the fact that they have adequate (not necessarily outstanding) level of motor ability and motor skills. According to the authors, there should not be any discussion.

AIM

The aim of this study was to check the level of motor fitness and skills of teachers studying at postgraduate level in the field of integrated early education.

MATERIAL AND METHODS

The research on the level of motor fitness and motor skills was conducted in 2008 among 82 active teachers, seeking additional qualifications in the field of early childhood education. In the study group, 60 women were graduates of Pedagogy, 6 – Theology, Philology, English and Biology, 2 – Polish language and Mathematics. The average age of respondents was 27.9 years. Table 1 presents basic information about the study group of teachers participating in the motor tests.

In the study, we used a method of diagnostic survey using the technique of measuring the level of individual motor skills and questionnaire technique for assessing the level of motor skills of the surveyed teachers. For measurements of fitness we used Podstawski's test [14] consisting of the tests: standing long jump, skipping with the clapping of hands – 8 s, 4x10 m shuttle run, sit-ups – 30 seconds, backward throw of a medicine ball, flexed-arm hang, downward bending from standing position and Burpee test – 1 min.

Podstawski's Test Standards have been developed based on the results obtained by the physically inactive students at the University of Warmia and Mazury in Olsztyn at the age of 19-21 years. Students as well as teachers are the group of individuals fully developed anatomically and physiologically. Therefore the age as a factor was eliminated as supposedly had an impact on the results of the test. Furthermore, the vast majority of students and teachers came from the region of Warmia and Mazury, which is why the standards were considered the most accurate and reliable for this group.

The anonymous survey questionnaire was used.

The measurement of the level of motor fitness was carried out during classes of the methodology of Physical Education at the University of Warmia and Mazury in Olsztyn. There were classified 62 women in the study because 20 teachers (24.4%) applying for permission to teaching motor activities with children could not practice any physical exercise. The reason was their injury, illness and even permanent disability (certified by a doctor).

All participants of the experiment were thoroughly familiar with the instruction for execution of various fitness tests during the lectures on the methodology of Physical Education. Before the tests, they had had a 10-minute warm-up.

For statistical calculations we used the computer software Statistica PL.

RESULTS

Table 2 presents the results of the teachers surveyed in eight fitness tests. For each of the trials the mean, coefficient of variation and the results obtained on the basis of Podstawski Test standards are presented.

Based on classification standards, for all means from each test there was assigned a certain level of motor performance and the score, which is then summed. Five-step scale was used to assess the level of motor efficiency: a poor result (up to 320 points), weak (320-330 points), average (330-460 points), good (460-470 points) and very good (above 470 points).

Teachers received a good result only in an attempt – 4x10 m shuttle run, the average – skipping with clapping of hands, backward throw of medicine ball and flexed-arm hang. Most were poor results – standing long jump, sit-ups, downward bend from standing position and Burpee test. The results obtained in all motor tests classify the level of motor ability of teachers of early education as an average – 356 points. It should be noted that in the results of testing of 62 women did not include 20 women who could not (confirmed by a doctor) perform any physical activity and they were representing the lowest level of motor skills. These results showed that the overall level of physical fitness would be lower in this group.

In order to determine the level of motor skills of teachers, each of the women did a series of exercises, which are taught to children of preschool and primary school (Table 3). Among the data from Table 3, some are surprising and shocking. In eight cases, of twelve, more than half of women surveyed (57.3-87.8%) were not able to perform the exercises.

TABLE 1. Basic information about the study group of teachers participating in the motor test.

Age Groups (years)	N	Residence	N
< 24	16	Village	16
25-29	29	City below 20 thousand inhabitants	17
30-34	11	City 20-50 thousand residents	18
35-39	2	City 50-100 thousand inhabitants	4
>40	4	City above 100 thousand inhabitants	7
Total	62	Total	62

TABLE 2. The level of motor skills of teachers.

Tests N=62	X+SD (Min-Max)	p	Results	Points
Standing long jump (cm)	134.58±15.0 (91 – 171)	11.11	Weak	31
Skipping with clapping of hands – 8 s (number of claps)	24.08±3.7 (11-33)	15.36	Average	43
4x10 m shuttle run (s)	13.69±1.0 (11.78-16.07)	7.30	Good	66
Sit-ups – 30 s (number of sits)	14.78±4.5 (0-22)	30.44	Weak	35
Medicine ball backward throw (cm)	629±116.0 (320.0 – 890.0)	18.44	Average	50
Flexed-arm hang (s)	5.08±4.47 (0-18.9)	89.99	Average	44
Downward bend from standing position (cm)	10.83±7.1 (-14-23)	65.55	Weak	48
Burpee test – 1 min (number of cycles)	17.43±5.0 (0-25)	28.68	Weak	39

Key: x – mean, SD – standard deviation, p – coefficient of variation

DISCUSSION

Each year, thousands of teachers begin their work with children, including Physical Education teachers. Education of future teachers of Physical Education takes place in a systematic disintegration of this study. The skills in transferring knowledge by teachers are not sufficient, as evidenced by the low level of physical activity of children around the world. It should be pointed that the teacher is not able to use all the

TABLE 3. Assessment of motor skills of early education teachers.

Tests	Thet can do and able to do		Thet can not do and not know how to do	
	N	%	N	%
Any physical exercises	62	74.6	20	24.4
Forwards somersault	51	62.2	31	37.8
Backwards somersault	27	32.9	55	67.1
Exercises on all fours	71	86.6	11	13.4
The transition from the bench	70	85.4	12	14.6
Dribbling the ball with right hand	55	67.1	27	32.9
Dribbling the ball with left hand	43	52.4	39	47.6
Jumping rope	10	12.2	72	87.8
Hula-hip-hop	12	14.6	70	85.4
Hitting the ball the way the upper min. 10 times the height of 3 m	14	17.1	68	82.9
Hitting the ball the way the lower min.10 times the height of 3 m	10	12.2	72	87.8
Specifying the name and presenting five games for children	13	15.8	69	84.1
Specifying the name and presenting five exercises with ladders	35	42.7	47	57.3

possibilities in creating healthy attitudes, because children's parents have the most important role in this area.

Problems undertaken in this work – so important in the process of teaching – are too rarely discussed, nearly marginally. More attention than ever, should be paid to the problem of the results of physical education. The training will be effective when the potential recipient prepare for independent, focused attention for their fitness, active recreation, aesthetic appearance and immunity. Physical Education teacher should then have full qualifications in promoting physical culture among children. This same is said about teachers of Early Education.

This study started a broader observation that due to its high rank, should be continued and extended. It is important to examine a representative group of the area of the country.

In order to carry out deeper analysis of the problem, it is necessary to examine and compare the level of motor skills of children learned by the teachers of early education and fully qualified teachers of Physical Education courses. He authors think that it will be very interesting to compare the level of motor skills of teachers and students. In the small group of researchers of this problem some believe that the level of motor skills in Physical Education teacher has an influence on the quality of his work [15,16] while others do not [13].

CONCLUSIONS

1. Based on preliminary tests we found that out of 82 active teachers seeking additional qualifications in Physical Education, 62 teachers had an average level of motor performance, while 20 women – poor.
2. Women with a poor level of fitness were not practicing any physical activity due to permanent disability. Of the 13 exercises used (motor skills) in 7 cases, an average of over 78.91% of the women were unable to perform the exercises taught to preschool children.
3. In order to carry out deeper analysis on the level of motor ability and motor skills of teachers of integrated early education, it is necessary to increase the research group, and compare levels of motor efficiency and motor skills represented by the teachers and children.

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