

Łosień Tomasz, Mędrak Anna, Plaskacz Paweł, Bajerska Izabela, Reut Magdalena, Dragon Emilia, Polko Martyna, Cebula Aleksandra. Physical activity of children aged 1-4. Journal of Education, Health and Sport. 2018;8(6): 406-411. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1432917>
<http://ojs.ukw.edu.pl/index.php/johs/article/view/6076>

The journal has had 7 points in Ministry of Science and Higher Education parametric evaluation. Part B item 1223 (26.01.2017).
1223 Journal of Education, Health and Sport eISSN 2391-8306 7

© The Authors 2018;

This article is published with open access at Licensee Open Journal Systems of Kazimierz Wielki University in Bydgoszcz, Poland

Open Access. This article is distributed under the terms of the Creative Commons Attribution Noncommercial License which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited. This is an open access article licensed under the terms of the Creative Commons Attribution Non Commercial License

(<http://creativecommons.org/licenses/by-nc/4.0/>) which permits unrestricted, non commercial use, distribution and reproduction in any medium, provided the work is properly cited. This is an open access article licensed under the terms of the Creative Commons Attribution Non Commercial License (<http://creativecommons.org/licenses/by-nc/4.0/>) which permits unrestricted, non commercial use, distribution and reproduction in any medium, provided the work is properly cited.

The authors declare that there is no conflict of interests regarding the publication of this paper.

Received: 15.06.2018. Revised: 20.06.2018. Accepted: 30.06.2018.

Physical activity of children aged 1-4

Tomasz Łosień¹, Anna Mędrak², Paweł Plaskacz³, Izabela Bajerska³,
Magdalena Reut², Emilia Dragon², Martyna Polko², Aleksandra Cebula⁴

¹ Zakład Rehabilitacji Leczniczej, Katedra Fizjoterapii, Wydział Nauk o Zdrowiu
w Katowicach, Śląski Uniwersytet Medyczny w Katowicach

² Koło Naukowe przy Zakładzie Rehabilitacji Leczniczej, Wydział Nauk o Zdrowiu w Katowicach, Śląski
Uniwersytet Medyczny w Katowicach

³ Oddział Rehabilitacji Neurologicznej, GCZD, SPSK nr 6 w Katowicach

⁴ Gabinet Masażu i Rehabilitacji

Key words: physical activity, children, diet

Abstract

Introduction: Physical activity plays an important role in the child's development process. The most exposed to the consequences of hypokinesia are children in the period of intensive growth. Movement games during the youngest years have a significant impact on later life, especially on the occurrence of faulty posture or speed of acquiring new motor skills. In the literature, there are reports showing increasing obesity rates among children not only in Poland, but also across the world. It is estimated that this is related to the modern "style" of raising children and the early introduction of electronic toys, tablets, mobile phones and television in order to compensate for the small amount of time devoted to children. **The aim of the study:** 1) Do parents encourage children to take physical activities? 2) How often do parents spend time with their child in the open air? 3) Is the common creation of games often used in the process of raising a child? 4) Do parents take physical activity with their children? **Material and methods:** 62 people took part in the study and an original questionnaire consisting of 26 questions was used. The questions included, among other things, the age of the child and parents, the child's physical activity, diet and how they are spending free time at home. **Results and conclusions:** 72.6% of respondents encourage their children to take regular physical activity. Over half of the respondents said that every day they spend more than an hour with their child in the open air, only 21% create educational games together with their child. Over 72% of children actively participate in the physical activity with parents.

INTRODUCTION

Physical activity plays an important role in the child's development process. The child's mental and motor development in infancy and early childhood is closely connected. Proper development of physical activity is not possible without a proper cognitive development of the child. It is the movement that is an essential developmental stimulus that activates many physiological processes, but also immune and adaptive processes occurring in the child's body (Marchewka, Jungiewicz, 2008). Regular physical activity from an early age helps to achieve a number of features necessary in adult life such as: responsibility, discipline, persistence, but also emotional balance, resistance to stress, the ability to adapt to changing conditions (Saska-Dymnicka 2011).

Physical activity has been divided into four basic functions that must be fulfilled in the life of every human being. The first function is stimulation, which activates organism for the proper development of the bone-joint, muscular, respiratory, circulatory, immune and nervous systems. The second function is adaptation, or the ability to adapt to the changing conditions. The third is a compensation function, that is balancing beneficial and unfavorable stimuli affecting the body. The fourth is a corrective function, known as the therapeutic one, is used with children with postural defects and muscular disorders (Chalcarz et al.2008, Pitucha, Matera 2013).

Movement games in the youngest years of life have a significant impact on later life, among others occurrence of faulty posture or speed of acquiring new motor skills. In the literature, there are reports of increasing obesity rates in children not only in Poland, but also in around world (Barańska, Gajewska 2009; Górecki et al. 2009; Gruszczyńska et al. 2015). It is estimated that this is related to the modern "style" of raising children, the early introduction of electronic toys, tablets, mobile phones and television to compensate for the small amount of time devoted to children.

THE AIM OF THE STUDY

The aim of this study is to answer the following questions:

- 1) Do parents encourage children to take physical activities?
- 2) How often do parents spend time with their child in the open air?
- 3) Is the common creation of games often used in the process of raising a child?
- 4) Do parents take physical activity with their children?

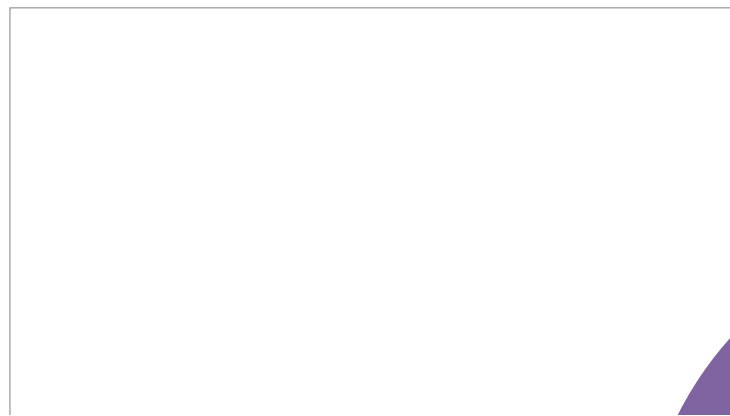
MATERIAL AND METHODS

62 respondents aged 18 to 43 participated in the study. They were parents of children aged 1 to 4 years. Author's questionnaire consisting of 27 questions was used. The questions concerned, among others, physical activity of the child, physical activity of parents, time spent on play and watching television, parents' involvement in the child's physical activity and child's diet. In two questions, the modified Likert scale was used. Statistical analysis consisted in the implementation of descriptive statistics.

RESULTS

The first stage of statistical analysis was the performance of descriptive statistics on age. The average age of children was $x = 2.4$. Details in figure 1.

Table 1. Child's age



40.3% were girls, 59.7% were boys.

The next stage of the statistical analysis was the performance of descriptive statistics on the age of parents, broken down by gender. Table 1 presents detailed results regarding the age of mothers, while table 2 shows the age of fathers.

Table 1. The age of mother (n = 62)

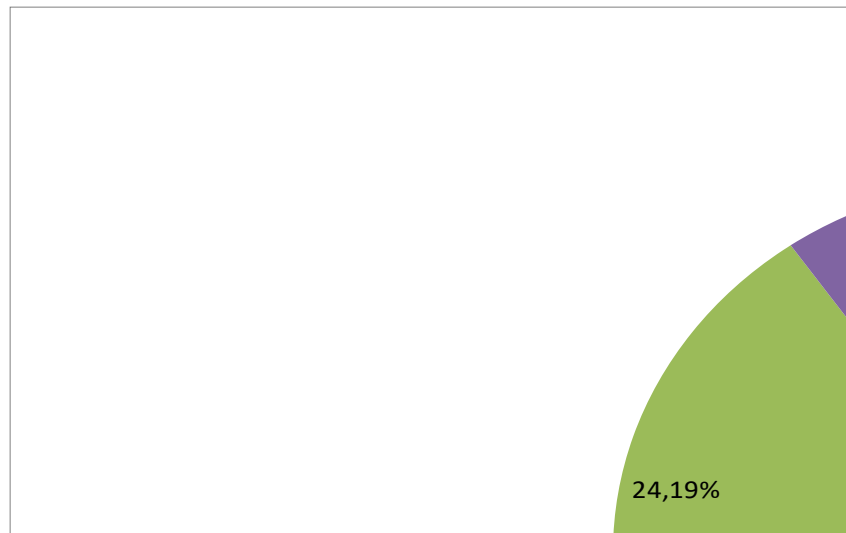
	n	x	Min	max	sd
Age	62	29,59	18	38	4,54

Table 2. The age of fathers (n=62)

	n	x	Min	max	sd
Age	62	32,16	22	43	4,49

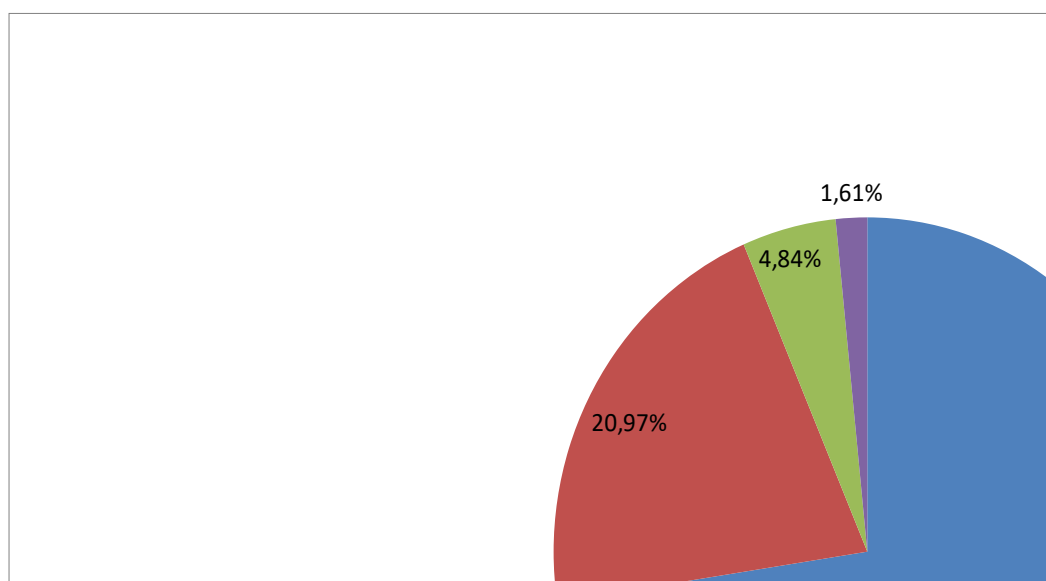
72.6% of parents surveyed encourage their child to take regular physical activity. Over half of respondents (58.1%) stated that they spend over an hour with their child in the open air. Detailed data are provided in Figure 2.

Figure 2. Spending free time outdoors



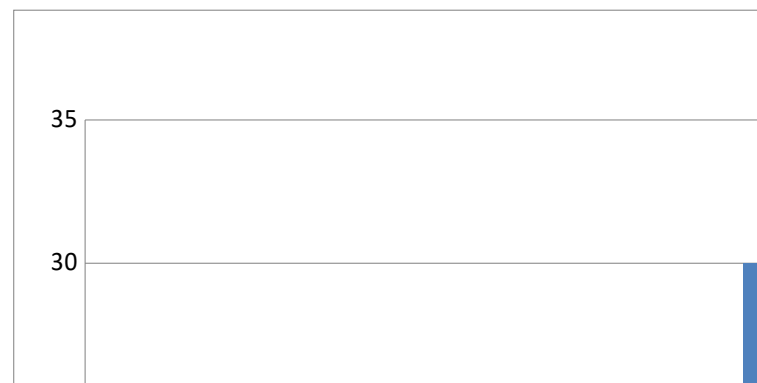
72.6% of respondents to the question: whether according to you should the child be introduced from an early age, physical activity was definitely answered yes, one respondent probably did not answer. Detailed data are provided in Figure 3.

Figure 3. Do you think that children should be given physical activity from an early age?



17.7% of parents surveyed declare frequent creation of educational games together with the child, 48.4% of respondents sporadically, and 33.9% of respondents do not create educational games with their children. Detailed data are provided in Figure 4.

Figure 4. Do you create educational games together with your child?



72.6%, ie 45 questioned people answered the question: does the child participate in your physical activity answer yes. The most common physical activities include cycling with a child (31.8%), followed by swimming (27.3%) and mountain trips (9.1%).

DISCUSSION

Children aged 1-4 are characterized by the most dynamic rate of motor development. The younger the child the greater the need for movement. This hyperactivity conditioned by, among others, immaturity of the nervous system, stimulates and supports the development of small and large motility (Pitucha, Matera 2013; Zimna-Walendzik 2009).

Physical activity affects not only the muscles, but also the mind and psyche. The movement provides the experience of time, the scheme of one's own body, space, eye-and-hand coordination, and promotes the assimilation of social norms. According to Saska-Dymicka, "sport is a forge of character", which shapes perseverance, responsibility, reliability, a sense of respect for rules and rights (Saska-Dymicka 2011).

Among respondents, more than 70% declare their child to be regularly scheduled to be physically active. A frequent response was the daily walks and exits on the playground, as well as bicycle trips. 72% of respondents include their children in their own physical activity.

The research shows that young parents see the need to implement physical activity from an early age. Often many of them modify and adapt their activity to the needs of their child, so that he/she could participate in it.

Over the last 5 years, a significant change in the attitude of parents towards the child's physical activity has been observed. There is also an increased awareness that movement is the best prevention of 21st century diseases such as obesity, diabetes, and postural defects.

BIBLIOGRAPHY

1. Barańska E., Gajewska E., Estimation of the physical efficacy in children with overweight and obesity, *Nowiny Lekarskie* 2009, 78, 3–4, 182–185
2. Chalcarz, W, Merkiel, S., Pach D., Lasak Ż., Charakterystyka aktywności fizycznej poznańskich dzieci w wieku przedszkolnym, *Polish Journal of Sports Medicine / Medycyna Sportowa* . 2008, Vol. 24 Issue 5, 318-329
3. Górecki A., Kiwerski J., Kowalski I., Marczyński W., Nowotny J., Rybicka M., Jarosz U., Suwalska M., Szelachowska-Kluza W., Profilaktyka wad postawy u dzieci i młodzieży w środowisku nauczana i wychowania, *Polish Annals of Medicine / Rocznik Medyczny* . 2009, Vol. 16 Issue 1, 168-177
4. Gruszczyńska M., Bąk-Sosnowska M., Plinta R., Health-related behaviors as an essential part of human life activities. Attitude of Poles towards their own health, *Hygeia Public Health* 2015, 50(4): 558-565
5. Marchewka A., Jungiewicz M., Aktywność fizyczna w młodości a jakość życia w starszym wieku, *Gerontologia Polska* tom 16, nr 2, 127–130
6. Pitucha A., Metera A., Charakterystyka nawyków żywieniowych i aktywności fizycznej dziecka w wieku wczesnoszkolnym w Górze Puławskiej, *Zeszyty Naukowe WSSP Tom 17-2013*, 67-85
7. Saska-Dymnicka J., Sport młodzieżowy kuźnią charakteru i postaw prospołecznych, *Zeszyty Naukowe Uniwersytetu Szczecińskiego* Nr 689 2011, 115-125
8. Zimna-Walendzik E., Kolmaga A., Tafalska E., Styl życia- aktywność fizyczna, preferencje żywieniowe dzieci kończących szkołę podstawową, *Żywność. Nauka. Technologia. Jakość* 2009, 4 (65), 195-203