NORMATIVE VALUES FOR PHYSICAL AND PSYCHOMOTOR CHARACTERISTICS IN CHILDREN AGED 4–7 IN TURKEY (SAKARYA)

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Aim. The study aims to determine the normative values of the physical and motor skills in children aged 4–7 living in Turkey (Sakarya) based on age and gender, and to compare these data with the WHO data and with the literature of selected other countries. **Materials and methods.** The sample consisted of 777 primary schoolchildren (383 girls and 394 boys) aged 4–7 years. They were students at the "Private Şahin Schools" in the Sakarya province of Turkey. The height, weight, Body Mass Index, Body Fat Percentage, Standing Broad Jump, Straight Arm Hang, Agility Shuttle Run 10×5 meters, Sit and Reach, Plate Tapping, Flamingo Balance Floor Test, Flamingo Balance, Coordination Test, Sit Up, 20 Meters Shuttle Run, and Maximum Oxygen Intake VO2max tests were included in this study. In computing the average, standard deviation, and percentile values of the physical and motor values of the study group, the SPSS 22 Program was employed (frequencies and percentiles). **Results.** The results of each test determined the averages and normative values according to age and gender, together with 20 % groups for the anthropometric and psychomotor parameters of 4–7-year-old girls and boys. Also, a comparison was made with WHO data and the literature data of other countries. **Conclusion.** The current research determined the norms in the main motor and anthropometric skills for ages 4 to 7 based on age and gender in children living in Turkey (Sakarya province). The main motor and anthropometric skills play an important and necessary role in the proper and comprehensive development of a child. In this study, it was observed that there was no significant difference between the genders in anthropometric, psychomotor and functional characteristics in children aged 4–7 years.

Keywords: Norm Values, Psycho-Motor Skills, Early Childhood, Turkey.

Introduction. The period in which various types of movements are best performed is between 4–7 years [12]. For that reason, it is necessary to follow up child development and improve the physical and motor skills of children in order to obtain psychomotor values of adequate, normal or high levels. The criteria or standards accepted officially are called norms [9, 28]. Normative data of physical and motor skills can be used for different reasons such as to obtain knowledge about children abilities, to describe them, to determine normative data, to compare, etc. The performance of a 5 year old girl whose long jump is measured and evaluated as 105 cm can be considered to be 'lower than the normal values' in Norway, however, the same performance can be considered to be 'higher than the normal values' in Turkey. Normative data help us to comment on health issues as well. For example, if a child has Maximum Oxygen consumption below the normal values, she/he may be considered to have a chronic disease. VO$_2$ is internationally recognized as the best single measure of children and youth aerobic fitness [1]. As can be seen, the determination of normative data for physical and motor characteristics such as body mass index, strength, endurance, flexibility, coordination, might be significant in anticipating the state of health of children regarding diseases such as high blood pressure, diabetes mellitus, cancer, obesity and cardiovascular diseases [10, 24]. Thus, it might be possible to diagnose them and eliminate the effects of these problems at early ages [7, 36]. Moreover, physical and motor normative data might be significant to determine what sports branches are suitable for children based on their abilities [3]. It is also important from the aspect of planning physical education and sport lessons and in projecting possible international comparative studies [17, 30].

In 1956, when the first comparison of motor skills between European and American children in European countries were conducted, physical and motor tests were used to follow up the state of health and to determine the children's abilities for the corresponding sports disciplines [17, 19].

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According to [6] there are more than 15 battery tests for the evaluation of physical and motor skills of children and several key components of physical fitness currently in use worldwide [6]. However, there are no countrywide studies conducted in Turkey on physical development and physical fitness in children.

In this study, the purpose was to determine the norm values of physical and motor skills in children aged between 4–7 years and living in Turkey (Sakarya) based on age and gender, and to compare these data with the World Health Organization data and the literature of other countries that were officially determined.

Methodology. The sample consisted of 777 primary school children (383 girls and 394 boys) aged 4–7 years. They were students at the "Private Şahin Schools" Sakarya province, Turkey.

The children were healthy, none showed chronic or acute physical, physiological, motor or mental abnormalities that could negatively affect physical activities and the testing process. The study was made in accordance with the school's principles and were approved by the parents.

The Test Battery, which was included in this study, has been used in many schools in Europe and other countries [18, 31]. The Height (L), Weight (W), Body Mass Index (BMI), Body Fat Percentage (BF %), Standing Broad Jump (SBJ), Straight Arm Hang (SAH), Agility Shuttle Run 10×5 meters (ASHR), Sit and Reach (SAR), Plate Tapping (PLT), Flamingo Balance Floor Test (FBFT), Flamingo Balance (FLB), Coordination Test (COOT), Sit Up (SUP), 20 Meters Shuttle Run (ESHR), and Maximum Oxygen Intake VO2max tests, which were included in various studies as EuroFit Test Battery, were also included in this study [18, 31].

Materials. In measuring students' body length, a Stadiometer with 1 cm sensitivity was used. In determining the Body Weight, Body Mass Index and Body Fat Percentage values, the TANITA Segmental Body Composition BC-545N analyzer was used. Sit-up test were assessed with repetition numbers. In FBT, PLT, SUP and ASHR tests, the HS45 10 Lap Memory QQ (Japan) chronometer was used. To determine the maximal oxygen consumption, the formula that computed the VO₂max was used together with the Endurance Shuttle Run Test developed by [21], which was employed for the age group of 16–18:
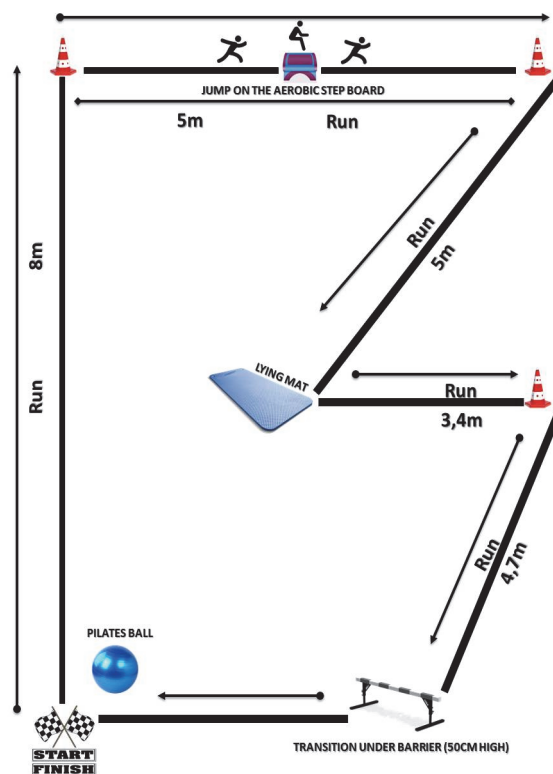
$$Y = 31.025 + 3.238X1 - 3.248X2 + 0.1536X1X2 \ [22].$$ To determine the coordination level, the following coordination path was used (Fig. 1).

Fig. 1. Coordination Parkour: the medicine ball (Avessa 25 cm, Pilates Ball) is held in the hand during the test process

The coordination test was created by the researcher, considering the inclusion of the motor skills involved in coordination (strength, speed, balance, agility etc.), psychological abilities (sense of movement, sense of sound, etc) and physical factors (body type, body functions etc). Characteristics that define the coordination ability are body functions, sense of space and location, sense of movement, motion smoothness, variation ability, motor adaptation and displacement, balance, versatility, flexibility, and rhythm [35].

Content of the coordination test:

Direction 1: Straight running in 8 meters and touching the cone.

Direction 2: Straight running, jumping on the aerobic steep box, running and touching the cone.

Direction 3: Running for 5 meters, lying on the floor, then running to the left direction for 3.40 meters, and then running to the right direction for 4.20 meters.

Direction 4: Transition under the barrier (height: 50 cm) and running to the finish with maximal speed.

Спортивная тренировка

In children of 4–5 years, the speed, number, and time of movement are computed and developed [40], therefore, the tests that measure psychomotor characteristics such as strength, agility, and balance can be applied at younger ages (4, 5 years). In this context, according to the research it is seen that 4–5 years old children can stand on one leg for 4–8 seconds and after 6 years old, they can stand on one leg for around 10 seconds [29]. In this study, the flamingo balance test on the floor was applied to the children from 4 years onwards, and the flamingo balance test were applied to children from 7 years and onwards. In addition, children aged 4–5 years can run, change direction and speed [29]. In our study, an agility test was applied to the children from 4 years and onwards.

The control, rhythm and coordination of movements begin to develop in the first phase of basic movements (4–5 years) [40]. Furthermore, children of this age can pick up an object from the ground while running [39]. Therefore, it is necessary to measure and evaluate the development of coordination from 4 years old. 5 year old children can wait around 10 seconds in a hanging position [29]. According to our study, the bent arm hang test with a straight arm was applied to 5-year-old children. As the hand preference is not certain from childhood to 4 years old children [37], in this study the plate tapping test was applied to 5-year-old children.

Data analysis. In computing the average, standard deviation, and percentile values of the physical and motor values of the study group, the SPSS 22 Program was employed (frequencies, percentiles). The scores below 20 % of the values were taken as "Very Low"; the scores in the 21–40 % range were taken as "Low"; the scores between the 41–60 % range were taken as "Normal"; the scores between the 61–80 % range were taken as "High", and the scores above 81 % were taken as "Very High". A 50 % slice (appropriate value for comparison) is also added to compare the result of this research with other data by other researchers.

Findings

Table 1 gives the averages and norm values for the anthropometric (H, W, BMI, BF %) parameters of 4–7 year-old girls and boys according to age and gender.

Table 2 gives the averages and norm values for the psychomotor (SBJ, SAH, ASHR, SAR, PLT, FBT, COOT, SUT, ESHR VO2max) parameters of 4–7 year-old girls and boys according to age and gender.

Table 1

Anthropometric Characteristics normative data for boys and girls between 4–7 years old

Age	M ± SD		Percentiles (%)									
			♀					♂				
	♀	♂	<20th	40th	50th*	60th	80th>	<20th	40th	50th*	60th	80th>
Height H (cm)												
4-4.12	106.5±5.51	107.6±5.06	102.1	105.5	107.0	107.5	109.7	102.8	106.3	107.7	108.5	112.0
5-5.12	114.0±4.88	116.1±5.26	110.2	113.0	114.5	116.0	118.5	111.8	115.0	116.0	117.0	120.0
6-6.12	121.8±4.51	121.9±5.29	118.0	120.0	121.5	122.5	125.5	118.0	121.0	122.0	123.5	126.0
7-7.12	127.4±6.04	128.7±6.07	121.0	125.5	127.0	129.0	133.0	123.5	127.0	128.2	130.0	134.0
Weight W (kg)												
4-4.12	20.0±5.51	19.5±2.66	17.2	18.7	18.9	19.6	24.4	17.0	18.7	19.5	19.8	21.7
5-5.12	21.8±3.44	22.7±3.14	18.4	20.4	21.2	22.3	25.3	20.2	21.8	22.2	23.3	25.3
6-6.12	25.2±4.17	25.4±4.30	21.6	23.6	24.6	25.4	28.1	21.9	23.6	25.0	25.7	28.7
7-7.12	27.8±4.95	29.5±7.06	23.6	25.6	26.8	27.7	33.0	23.8	26.2	27.8	29.0	34.3
Body Mass Index BMI (kg/m²)												
4-4.12	16.6±1.28	16.7±1.65	15.9	16.1	16.6	17.1	17.8	14.8	16.1	16.8	17.0	18.2
5-5.12	16.5±1.61	16.6±1.50	15.1	16.0	16.4	16.8	17.9	15.4	16.2	16.7	17.0	17.9
6-6.12	17.0±2.06	17.1±2.08	15.1	16.6	17.1	17.1	18.4	15.5	16.4	16.9	17.2	18.9
7-7.12	17.2±2.29	17.7±3.01	15.1	16.4	17.1	17.4	19.2	15.2	16.6	17.1	17.7	20.1
Body Fat Percentage BF% (%)												
5-5.12	24.9±5.92	22.6±2.99	22.1	23.5	23.7	24.3	26.7	20.0	22.1	23.2	23.7	24.5
6-6.12	24.9±4.07	22.6±4.06	21.6	23.3	23.7	24.6	28.4	19.7	20.8	21.8	22.7	25.3
7-7.12	24.5±3.90	23.0±5.24	20.9	23.0	23.7	24.9	28.1	18.4	20.6	21.9	23.7	27.5

♀: girl, ♂: boy; *Middle fifty; Height (H), Weight (W), Body Mass Index (BMI), Body Fat Percentage (BF%).

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Table 2

Psychomotor characteristics normative data for boys and girls between 4–7 years old

Age	M ± SD		Percentiles (%)									
			♀					♂				
	♀	♂	<20th	40th	50th*	60th	80th>	<20th	40th	50th*	60th	80th>
Standing Broad Jump Test SBJ (cm)												
4-4.12	71.8±14.5	73.5±10.05	56.3	68.1	74.0	76.4	86.5	65.6	73.0	74.5	76.0	82.4
5-5.12	85.8±14.4	92.3±14.2	72.6	84.7	88.0	91.6	96.9	80.6	90.0	94.7	96.0	105.0
6-6.12	93.9±16.1	98.7±16.8	77.7	92.0	94.7	96.5	107.3	86.0	95.8	96.5	102.0	112.8
7-7.12	101.7±14.9	108.4±19.5	91.0	97.7	101.0	105.0	112.4	94.0	103.8	108.2	113.4	127.5
Straight Arm Hang Test SAH (s)												
5-5.12	20.24±13.39	21.53±15.29	09.35	14.78	18.20	20.78	26.61	10.00	15.02	18.30	22.16	28.70
6-6.12	22.96±22.63	21.66±15.35	08.14	14.28	16.06	19.60	30.02	11.68	15.01	17.17	21.14	26.53
7-7.12	23.17±14.64	25.24±21.72	11.06	18.36	21.22	23.05	31.73	08.97	15.50	19.24	22.24	36.96
Agility Shuttle Run 10x5 Meters Test ASHR (s)												
4-4.12	31.20±3.01	31.38±2.27	27.97	30.16	31.10	32.23	34.15	29.40	30.41	31.20	31.89	33.11
5-5.12	29.49±2.48	28.05±3.93	27.83	28.54	29.00	29.61	31.43	26.06	27.97	27.98	28.48	30.69
6-6.12	28.26±2.02	27.88±1.97	26.38	27.81	28.00	28.42	30.21	26.04	27.46	27.97	28.02	29.47
7-7.12	26.99±2.42	26.35±1.86	25.38	26.28	26.67	27.09	27.97	24.70	25.98	26.36	26.86	27.97
Sit and Reach Test SAR (cm)												
4-4.12	25.9±4.16	22.5±4.28	21.8	24.1	26.0	27.9	30.2	19.0	21.3	21.5	23.0	25.9
5-5.12	24.3±5.82	20.8±5.21	19.2	23.0	24.5	26.5	30.0	16.0	21.0	21.3	21.9	26.0
6-6.12	24.0±6.29	18.6±6.03	18.4	22.4	24.0	26.0	30.0	14.0	17.0	19.0	21.0	23.05
7-7.12	22.5±6.70	17.4±6.20	16.0	21.2	23.0	24.8	28.5	12.0	16.0	17.2	19.7	22.1
Plate Tapping Test PLT (s)												
5-5.12	24.62±4.62	23.92±3.98	21.01	23.32	24.36	25.32	28.23	21.59	22.38	23.51	24.56	27.08
6-6.12	20.65±3.37	21.16±3.78	17.55	19.76	20.75	21.31	23.06	17.31	20.26	21.55	22.09	23.94
7-7.12	19.47±3.51	19.41±3.26	16.71	17.83	18.59	20.01	22.50	16.46	18.77	19.32	20.02	21.79
4-6 ages: Flamingo Balance Floor Test FBFT (fall) / 7 ages: Flamingo Balance Test FBT (fall)												
4-4.12	9.4±7.48	17.2±14.04	2.0	7.0	7.6	8.0	16.0	07.6	09.6	14.0	18.4	22.0
5-5.12	5.73±5.34	7.7±5.62	1.0	3.0	5.0	7.0	8.0	02.6	06.0	07.6	07.6	12.0
6-6.12	2.65±3.24	5.8±5.11	0.0	1.0	2.0	3.0	5.0	01.0	03.0	04.0	05.2	08.0
7-7.12	10.7±11.06	10.6±10.72	0.0	2.0	7.6	12.0	20.0	1.0	4.0	7.6	7.6	22.0
Coordination Test COOT (s)												
4-4.12	23.30±3.17	24.82±5.71	20.09	22.83	23.00	23.48	25.58	20.00	23.07	24.40	25.61	27.87
5-5.12	21.44±2.89	20.10±2.39	19.18	20.00	21.00	22.00	23.67	17.97	19.52	19.69	20.53	22.18
6-6.12	19.73±2.20	18.96±2.45	17.88	19.00	19.52	19.81	21.55	16.91	17.99	18.48	19.05	20.79
7-7.12	18.40±2.15	17.46±2.28	16.48	17.54	18.25	18.80	19.91	15.40	16.48	17.08	17.73	19.30
Sit Ups Test SUT (n/30s)												
6-6.12	9.4±3.46	9.3±3.47	07.0	10.4	10.4	10.4	11.0	08.0	10.4	10.4	10.4	11.0
7-7.12	11.5±4.61	11.1±3.96	09.0	11.0	12.0	12.6	15.0	08.0	10.4	11.5	12.0	14.0
20 Meters Shuttle Run Test ESHR (level/shuttle)												
5-5.12	2.0±0.44	1.9±0.31	1.7/7	2.1/8	2.1/8	2.2/9	2.3/10	1.6/6	2.1/8	2.1/8	2.1/8	2.3/10
6-6.12	2.2±0.14	2.2±0.33	2.2/9	2.2/9	2.3/10	2.3/10	2.4/11	2.2/9	2.2/9	2.3/10	2.3/10	2.4/11
7-7.12	2.4±0.33	2.8±0.71	2.2/9	2.4/11	2.4/11	2.5/12	2.6/13	2.2/9	2.4/11	2.5/12	2.7/14	3.4/19
Maximum Oxygen Intake VO^{2}max (ml/kg/min)												
5-5.12	48.31±6.12	49.40±4.01	45.82	47.43	47.93	47.93	48.99	46.8	47.2	50.8	50.8	50.8
6-6.12	48.10±3.39	48.14±5.98	46.55	48.97	48.97	48.99	49.00	46.1	47.1	47.1	48.9	48.9
7-7.12	46.43±4.79	47.54±3.53	45.24	45.24	46.18	47.11	47.11	45.2	47.1	47.1	47.2	49.2

♀: girl, ♂: boy; *Middle fifty; Standing Broad Jump (SBJ), Straight Arm Hang (SAH), Agility Shuttle Run 10×5 meters (ASHR), Sit and Reach (SAR), Plate Tapping (PLT), Flamingo Balance Floor Test (FBFT), Flamingo Balance (FLB), Coordination Test (COOT), Sit Up (SUP), 20 Meters Shuttle Run (ESHR), Maximum Oxygen Intake VO2max test.

Discussion

The current research determined the norms in the main motor and anthropometric skills for ages 4 to 7 based on age and gender in children living in Turkey (Sakarya province). In addition, the study start age for the application of the psychomotor and physical tests that measure strength, flexibility, endurance, coordination, agility, speed etc was determined.

The data obtained from this research, as well as in the literature [39], show that the anthropometric characteristics such as length, weight and body mass index increased, which was observed in 4 to 7 year old children.

While there was no increase or decrease of body fat percentage in males and females in parallel with age, similar results were found in other studies [5, 26].

The obtained data, which show the values of psychomotor and functional skills as in other studies in the literature [4, 16, 20], also show that there is an increase in the development of psychomotor skills such as strength, coordination speed, balance, stability, etc., in parallel with an increase in age. Sprint development improves between 5–7 years of age and the rapid progression of movement speed in the primary child period (6–9 years) [27]. In addition, it is known that motor skills including strength, flexibility, and endurance are affected by age and gender [27, 35]. Similar results were found in other research [20, 25]. Decreases in flexibility were observed in parallel with an increase in age. The most important hormone secreted from the pituitary gland during adolescence is the growth hormone, therefore flexibility decreases due to the high rate of physical development of children [39]. Maximum oxygen intake decreased parallel to age and body length as well. When the VO^2max values were examined in terms of age, it was found that there was an age-related decrease in both genders [33].

When the general gender data analysis was applied, it was observed that there was no significant difference between the genders in anthropometric, psychomotor and functional characteristics in children aged 4–7. Before entering puberty, the amount of female testosterone in males is higher than that of females [35]. When the development of strength is considered in terms of children, it does not differ between boys and girls until the age of 10–11 [40]. Similar results were found in preschool children [32]. Similar motor skills scores between boys and girls can also be found in other research [2, 22]. Korbecki's studies showed that gender did not determine children's locomotor skills in small age children [20].

When the anthropometric properties are examined by gender, it is observed that the girls' fat percentage is higher than that of the boys. These results were seen in other research [4, 11, 34, 39]. This could be because the amount of intramuscular fat in girls is thought to be more than in boys.

In addition, from the aspect of psychomotor characteristics it is worth to mention that the girls' flexibility proves to be higher than boys' results. Girls are more successful than boys in sports disciplines that require flexibility [7, 8, 39].

The current results were compared to the studies carried out by other researchers around the world. Thus, the anthropometric characteristics obtained for 4–7 year old children in Turkey (Sakarya province) were found to be higher than the anthropometric values (height, weight, body mass index) given by the World Health Organization (WHO) [38]. In addition, we noted that Portuguese and Brazilian pupils achieved higher results than those in our study in both subtests, whereas Brazilian pupils obtained better results in body mass index [16, 23].

Brazilian pupils achieved significantly better results in flexibility [5, 16]. Turkish girls achieved significantly better results than Brazilian children in the standing broad jump test but Brazilian boys achieved better results than Turkish boys [16]. In the same motor skills, Turkish girls and boys aged 6 and over achieved significantly better results than Brazilian children, but Brazilian girls and boys aged 7 years old achieved better results than Turkish boys [16]. It seems that the results may be affected by the examined pupils' country of origin.

As the results show, fundamental movement skills play an important and necessary role in the proper and comprehensive development of a child.

The Harter's competence motivation theory [15] supports that an individual's behavior is positively related to his or her motor skills competence MSC [13]. Tests such as the European Test of Physical Fitness 'Eurofit' [5, 14] for children aged five years and over are predominantly used to diagnose children's physical fitness and talent selection in sports. Peak VO_2 is internationally recognized as the best single measure of children and youth aerobic fitness [1].

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Conclusion

In the current research, the norms in the main motor and anthropometric skills for ages 4 to 7 based on age and gender in children living in Turkey (Sakarya province) were determined.

The determined normative data may be used in follow-up of the physical and psychomotor skills and development of children at the same age group, and can be used in the decision-making processes on physical and motoric status and weak and strong aspects of children – the children whose strengths are defined and directed to proper sporting fields. In this way, the normative data determined in this research will help in the selection of talents in sports. Very low values may be used to determine proper fitness targets, to follow-up long-term changes, to encourage positive behaviors about health and sport, and to determine whether there are serious health problems.

According to the current studies on normative data, it may be recommended to re-plan the Physical Education and Sport lesson program applied in Turkey for the motive of improving of anthropometric and psychomotor skills as force, endurance, coordination, agility, flexibility, balance etc., keeping in mind that the testing of motor skills increases the motivation of students to participate in physical activities.

In the addition to these, determining the normative values will also make contributions in comparing children in development periods living in Turkey with their peers living in other countries.

When the general gender data analysis was applied, it was observed that there was no significant difference between the genders in anthropometric, psychomotor and functional characteristics in children aged 4–8 years.

The main motor and anthropometric skills as length, body mass index, force, agility, coordination, etc., play an important and necessary role in the proper and comprehensive development of a child. Therefore, it is recommended that anthropometric and psychomotor skills of children should be measured and evaluated every year. In addition, it is suggested that specific activities or sports branches should be recommended individually for every child based on anthropometric and psychomotor skills.

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НОРМАТИВНЫЕ ПОКАЗАТЕЛИ ФИЗИЧЕСКИХ И ПСИХОМОТОРНЫХ НАВЫКОВ У ДЕТЕЙ В ВОЗРАСТЕ ОТ 4 ДО 7 ЛЕТ, ПРОЖИВАЮЩИХ В ТУРЦИИ (САКАРЬЯ)

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Цель. Настоящее исследование направлено на определение нормативных значений физических и двигательных навыков у детей в зависимости от возраста и пола на примере детей в возрасте 4–7 лет, проживающих в Турции (Сакарья). **Материалы и методы.** Выборка исследования состояла из 777 детей, посещающих дошкольные учреждения (383 девочки и 394 мальчика), в возрасте от 4 до 7 лет. Все учащиеся проходят обучение в частной школе провинции Сакарья в Турции. В целях исследования использовался следующий набор измерений и тестов: рост, вес, ИМТ, процент содержания жира в организме, прыжок в длину с места, вис на прямых руках, челночный бег 10 × 5 метров, горизонтальная складка, теппинг-тест (быстрота касания заданного изображения), упражнение фламинго, тест на координацию, поднятие туловища из положения лежа, челночный бег на 20 метров, максимальное потребление кислорода. Для определения средних значений, стандартного отклонения и перцентиля для исследуемых навыков было использовано программное обеспечение SPSS 22 (частоты и перцентили). **Результаты.** Результаты каждого тестирования позволили установить средние значения и нормативные показатели владения навыками в зависимости от возраста и пола, а также антропометрические и психомоторные показатели у детей в возрасте от 4 до 7 лет. Полученные данные сравнивались с данными ВОЗ, а также с данными из научной литературы некоторых стран. **Заключение.** Настоящее исследование позволило установить нормативные значения для основных двигательных навыков и антропометрических показателей у детей округа Сакарья (Турция) в возрасте от 4 до 7 лет в зависимости от пола и возраста. Основные двигательные навыки и антропометрические показатели играют определяющую роль в правильном развитии ребенка. Было установлено, что нет значимых отличий в антропометрических, психомоторных и функциональных характеристиках детей в возрасте от 4 до 7 лет в зависимости от пола.

Ключевые слова: нормативные показатели, психомоторные навыки, раннее детство, Турция.

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