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Lateral domination and motor performance at preschool children in Tirana

Orges LICAJ¹, Anesti QELESHI^{2*}

^{1,2}Sports University of Tirana, Dep.of Education and Health Tirane/Albania; olicaj@ust.edu.al (O.L.) aqeleshi@ust.edu.al (A.Q.)

Abstract: The beneficial impact of physical activity on physical, social and cognitive health indicators is well-known in school-aged children [1]. So stop being paternalistic and become a place of education of children, and thus, as one of its actions to promote health [2]. Most of the time the children are inactive, predominantly SB, in all studies, with an MVPA around Week for 1 hour [3]. The aim of this study was to evaluate actual the level of physical activity of children during the period of stay in preschools and the records of the performance in the two selected groups left and right compared to the group with mixed predisposition. The methods of evaluation are: Flight light test for reaction time; For Balance Test used Leonardo GRFP Mechanography; Dardan Test; Pierre Vayer test. A literature search was conducted in databases Web of Science. Results: Four bibliographic databases were used to collect the data for our study. Crossref-20-PubMed-50-SearchAll-30.-DOAJ-30.Total-130 using the JabRef program as adaptive sources. Conclusion: There are no differences between two groups A and B at balance and flight light test, but at Dardan and Vayer test, group B shows better data that emphasized differences.

Keywords: Cognitive and Social, Lateralization Individual Issues, Physical Activity, Preschool.

1. Introduction

Children in preschool age should be encouraged to practice fun activities, games, exploring various physical and emotional experiences and environments, such as play and activities, including several actions, including; run, swim, jump, play, think, draw up plans, in insurance and supervised environments [4].

Most of the time the children are inactive, predominantly SB, in all studies, with an MVPA around Week for 1 hour [3].

In 2008, was published a systematic review of the physical activity of children of 2-6 years old, as well as meeting the guidelines for physical activity 60 min/day [5].

So stop being paternalistic and become a place of education of children, and thus, as one of its actions to promote health $\lceil 2 \rceil$.

By body side understand that chosen body capacity that has one half of the body more capable than the other (right or left).

It is the direct consequence of the dominance of the cortical hemisphere. In humans, one cerebral hemisphere unfolds the dominant role of one and the subdominant role of the other.

In the dominant hemisphere, the functions of language, reading and writing are concentrated, while in the subdominant hemisphere, tonality presides.

In Monkeys, function both hemispheres: because of this, they have no development of either language or reading. anthropomorphic, those that are closer to humans, present a symmetry as a structure and in writing.

Thus we can say that the flood of humanity passes through the process of sides.

An individual is biased when he uses his eye, hand and leg in the same plane of the body: for an individual to be right-handed, he must have a dominant right eye, a dominant right hand, a dominant right leg and vice versa.

Methodological Procedures Regarding literature reviews, 4 bibliography databases were used as suitable sources for literature review using the program JabRef,

Nr of Articles selected by: JAB/REF Program.			
Crossref	20		
PubMed	50		
SearchAll	30		
DOAJ	30		
Total	130		

N

Table 1.

Diverse methods were used for the realization of this study.

The method of literature research, observation, conversation, comparison and synthesis.

The method of the experiment by means of tests between two groups A 32 and B 48

Measurements will be performed for 80 preschool children randomized selected 5-6 years old

- Objective measurements will be carried out according to the Pierre Vayer test(Educazione Psicomotoria nell'Eta prescolastica)..
- For Physical Activity evaluation $\lceil 6 \rceil$ consisting of 10 mini tests on physical activity and health) Library of Congress Catalog Card Number 82060780, p: 2.6-1 on Leg comparison, Wall Squat Negative chin up, Negative push up, Trunk curl, Breath holding, Thigh stretch, Back arch, Skin fold pinch, Arm comparisons
- For Balance Test we have used Leonardo GRFP Mechanography Measurement Report- Test balance Semi tangent
- Flight light test for reaction time- American cognitive apparatus for sensor perceptive • coordination in the University lab

1.1. The Theoretical Issues That Will Be Addressed

Psycho-physical education conditions Lets clarify with caution and step by step the issue

Accelerometry data suggest that preschoolers' average sedentary, moderate-to-vigorous, and total physical activity levels in home-based childcare ranged from 39.5 to 49.6, 1.8 to 9.7, and 10.4 to 33.8 min/hr, respectively. Outdoor playtime appears to be inconsistent in home-based childcare. Meanwhile physical activity among preschoolers attending home-based childcare appears to be relatively low and widely varied. Sedentary time has received less attention in home-based childcare settings. Future research examining activity levels in this unique environment is warranted $\lceil 7 \rceil$.

It presents the most efficient means of preventing disorders and limits the risk of a failure at school by assuming the dependence of normal intelligence. It is an educational tool that strengthens the possibility to accept a sports practice without the risk of compromising the equilibrium of the subject, avoiding the damage of a premature specialization, with essential aspects of a problem that affects children at that age in which the foundations of what the child's future will be are laid.

Physical education and sports play a certain and important role in the physical and mental development of children at certain stages of development and why not, even determining.

In the meantime It seems that it takes at least twice that amount to the positive effects above bone mineralization $\lceil 8 \rceil$.

Through this education, children are given all the opportunities to discover and know themselves, to continuously develop their motor skills inextricably linked to their childhood world, to their talents, predispositions and entertaining potential, valid for the present and the future, forging, at the same time, their personality.

Levels of physical activity and sedentary time among young children have been widely examined [8] and discussed in the literature [9].

Being born as a creature of nature, but with the many confrontations in social life, he potentially turns into a social being where education understood in all aspects plays a special role for this. In this framework, physical education and sports have their weight.

In examining this environment, a large Canadian-based study of preschoolers (n=297) found that in comparison to those attending full-day kindergarten and home-based childcare, young children enrolled incentre-based care spent the most time being sedentary at41.62 mins/hr [10].

Through active participation, the child will develop the basic concept of sport as a single and integrated being where he is and should be the protagonist of his own education. Someone calls this education a weapon that, no matter how small, is effective in fighting vices such as alcohol, drugs, prostitution and other temptations that today's youth are going through.

In an effort to improve the activity levels of young children, the childcare environment may be a worth while setting to intervene – many children are enrolled in these programs and spend a large proportion of their time therein [11].

Winning the competition is not everything, it is only one thing , because to impose on children, to make their victory so important, you have actually weakened their autonomy, their internal motivation, their sense of self. Physical activity and sports present, perhaps, the largest space in which people are involved, simply because of the fact of the satisfaction of the activity.

Very interesting study shows that the problem o preschool activity is complex and In contrast, portable waterslides and outdoor rocking equipment were negatively associated with the level of physical activity of children [12].

When you are free, you do what you want; children can often play with ball, tug of war, etc. and parents, when they are not working, are involved in sports, in activities such as skiing, swimming or following local matches on the ground or through television. The "price" for such activities are the spontaneous feelings and thoughts that accompany them.

Studies show also information about the childcare environment and children's physical activity [13].

For a general unbalanced development of the child a complete development of motor skills must be guaranteed, both in the expressive and the transitory plan. The behavior of the individual in the sports activity, as well as his behavior in general, is complex and dynamic.

An aggravating factor is that parents think that children are highly active in preschool, and so offer fewer opportunities for active behavior in other environments, reducing the level of physical activity of children over day [14].

1.2. Physical Education and Sports for Children

That physical education and sports for children is indisputable, this has been proven and is proven by scientific achievements, even reaching as far as physical education and sports for children to categorize it as a separate branch of sport, unlike adults, i.e. an independent branch of sports science and the sports system.

So stop being paternalistic and become a place of education of children, and thus, as one of its actions to promote health [2].

Motor education of 3-6 year old children, a psychokinetic education

Motor education of 3-6 year old children cannot be other than psychokinetic education, that is, with the aim of the global formation of the child from all perspectives: motor, affective, cognitive and social.

In 2008, was published a systematic review of the physical activity of children of 2–6 years old, as well as meeting the guidelines for physical activity 60 min/day [5].

And so, we can talk about basic motor education, because it must guarantee the child the most complete adaptation in different forms of learning: social (relationships in life), sports (multivalent motor readiness aimed at the beginnings of the future practice sports. The author concludes that the LPA, measured by objective methods, within the preschools were low, with high performance sedentary [15].

In order for the individual to accept from a normal life, to a complete personality structure, he will have to ensure a normal evolution of psychomotor functions.

In order to understand these attitudes that do not belong exclusively to the physical sphere or the psychic sphere, but to the psycho-physical interactions, at that level when any division between the body and the mind is deeply arbitrary.

Lastly, numerous articles in this review did not report participants' TPA within their results, and though it could be calculated when adequate information was provided, reporting TPA values are important given the target outlined by current international movement guidelines [16].

The 24-Hour Movement Guidelines recommend participation in at least 180 minutes of physical activity per day for children aged 1-4, including 60 minutes of energetic play (moderate-to vigorous-physical activity [MVPA]) for those 3-4 years [17].

Other reported in their study that preschoolers incentre-based childcare (n=71) only spent 1.58 mins/hr in MVPA

If it is not operated in a relaxed and calm climate, where the teacher does not stabilize effective communication with the children, cases of contraction and closure can be observed in which nothing can be built. This depends on the attitude of the teacher.

Mazzucca, et al. [18] reported that children engaged in 55 minutes of MVPA per childcare day, and that physical activity levels varied between indoor and outdoor activities.

In addition to these factors, the daily physical activity recommendations for preschool children are 60 minutes/day [19].

This education aims to contribute to the creation of a better, peaceful world, to preserve human dignity. In addition to these positive values, if the purpose of this education tends towards selfish goals, then participation in it will have negative consequences, creating a state of false superiority over others.

At 5 years of age, like our study children should engage in 60 minutes of MVPA each day, and limit recreational screen-viewing to 120 min/per day [17].

The rules of physical activity are rules of the democratic activity of living, where our goal as physical educators is not to create the strong, to train the lion, but to educate with the rules of society, of the state for a better future.

Most of the time the children are inactive, predominantly SB, in all studies, with an MVPA around Week for 1 hour [3].

2. Results and Discussions

2.1. Flight Light reaction of two groups A and B

Table 2.

Tag ID	Light no	Split time	Response time	Step
1	3	2656	926	1
2	2	5401	956	2
3	3	7934	688	3
4	2	10518	788	4
5	3	13018	634	5
6	2	15548	710	6
7	3	18293	950	7
8	2	20970	690	8
9	3	23456	730	9
10	2	25876	610	10
11	3	28466	800	11
12	2	30981	730	12
13	3	33416	590	13
14	2	36449	664	14
15	3	39239	1036	15
16	2	41620	548	16
17	3	44173	678	17
18	2	46635	636	18
19	3	49193	702	19
20	2	52243	1146	20
21	2	2562	800	1
22	3	5057	678	2
23	2	7688	772	3
24	3	10245	750	4
25	2	12882	794	5
26	3	15439	696	6
27	2	18124	894	7
28	3	21695	1746	8
29	2	24269	752	9
30	3	26786	654	10
31	3	0	2370	11
32	3	34098	1316	12
STDEV		14836.65	363.8676148	
Average		22654.06	857.3125	

Table 3.Group B with 48 participants.

Tag ID	Light no	Split time	Response time	Step
1	3	2426	682	1
2	2	5037	764	2
3	3	10508	3700	3
4	2	13191	790	4
5	3	15727	712	5
6	3	0	1226	6
7	3	24559	4092	7
8	2	27434	1052	8
9	3	29920	652	9
10	2	32551	756	10
11	3	35068	756	11
12	2	37782	924	12
13	3	40437	872	13
14	2	42964	654	14
15	3	0	5000	15
16	2	53189	1648	16
17	3	55608	656	17
18	2	58224	852	18
19	3	60677	662	19
20	2	63370	850	20
21	3	2323	598	1
22	2	4815	684	2
23	3	7165	558	3
24	2	9716	710	4
25	3	12094	474	5
26	2	14492	592	6
27	3	16981	678	7
28	2	19475	654	8
29	3	23048	1750	9
30	2	25628	798	10
31	3	28126	690	11
32	2	30762	862	12
33	3	33125	586	13
34	2	35649	680	14
35	3	38188	710	15
36	2	40669	680	16
37	3	43512	1006	17
38	2	46250	914	18
39	3	48893	722	19
40	2	51520	842	20
41	2	36622	746	13
42	2	0	3668	14
43	2	44902	1064	15
14	3	47613	886	16
45	2	50541	1088	17
46	3	53122	772	18
47	2	55748	844	19
48	3	0	5000	20
STDEV		19146.203	1115.859796	
Average		29784.396	1178.25	

Table 4. Group A with	n 32 participant.			
Tag ID	Body Mass	Std. Ellipse Area	rel. Pathlength	don
1	16.4	4.15	41.18	
2	16.6	7.72	45	
0	1.0	00 F 1	110.70	

2.2. For Balance Test we have Leonardo GRFP Mechanography Measurement Report

Tag ID	Body Mass	Std. Ellipse Area	rel. Pathlength	dominant Freq.
1	16.4	4.15	41.18	0.4
2	16.6	7.72	45	0.4
	18	22.51	118.79	0.4
4	16.8	6.23	60.35	0.5
3 4 5 6 7	19.4	5.86	36.73	0.4
6	19.8	11.2	59.48	0.6
	19.2	13.17	75.85	0.4
8	19.9	20.27	218.53	0.7
9	23.4	2.41	32.97	0.4
10	23.7	5.17	30.42	0.4
11	22.9	5.53	57.91	0.4
12	22.5	11.13	64.84	0.2
13	18.3	5.32	37.81	0.4
14	18.4	8.39	46.03	0.4
15	18.9	3.89	44.25	0.8
16	18.5	34.11	143.95	0.2
17	18.4	1.46	31.51	0.8
18	18.9	3.01	40.4	0.8
19	18.2	5.47	51.2	0.6
20	18.3	5.47	60.21	0.2
21	25.7	4.88	31.76	0.6
22	25.6	2.88	33.5	0.6
23	25.9	27.68	143.97	0.6
24	25.1	89.12	161.63	0.6
25	19.5	1.78	26.16	0.6
26	19.6	7.63	37.03	0.6
27	19.8	7.52	63.75	0.6
28	19.1	25.55	101.28	0.2
29	17.3	1.56	31.73	0.4
30	17.6	6.84	38.33	0.4
31	17.9	5.97	61.85	0.4
32	17.2	93.15	146.79	0.4
STDEV	2.836627	21.73712	47.48179	
Average	19.9	14.28219	67.97469	

Table 5.
Group B with 48 participant.

Tag ID	Body Mass kg	Std. Ellipse Area cm2	rel. Pathlength mm/s	dominant Freq. hz
1	21.8	2.62	36.7	0.4
2	21.5	2.69	40.25	1
3	21	8	89.19	0.6
4	20.8	13.98	72.58	0.3
5	22.7	15.69	27.1	0.8
6	22.3	1.83	29.89	0.6
7	22.6	3.29	51.56	1.2
8	21.9	7.2	58.02	0.2
9	17.3	3.95	33.69	0.4
10	17.4	4.48	56.62	0.4
11	17.9	13.31	80.32	0.4
12	17.2	13.64	68.84	0.2
13	22.6	2.41	29.04	0.6
14	22.9	6.49	52.43	0.6
15	22.1	5.62	62.68	0.4
16	22.8	22.3	87.3	0.2
17	22.7	4.25	41.31	0.6
18	22.8	18.32	93.55	0.6
19	22.9	10.16	87.42	0.2
20	22.1	29.24	115.02	0.2
21	20	9.8	35.61	0.8
22	20.4	10.94	46.95	0.4
23	20.6	2.54	39.09	0.8
24	20.7	16.98	85.88	0.2
25	21.4	3.31	31.74	0.4
26	221.5	0.57	23.77	0.6
27	21.7	4.96	39.37	0.4
28	21.9	5.7	52.09	0.4
29	20.6	0.85	26.26	0.4
30	20.8	3.06	34.39	0.4
31	20.1	4.56	70.9	0.4
32	20.2	17.17	82	0.4
33	16.6	8.53	39.24	0.4
34	16.8	4.82	38.12	0.4
35	16.9	30.95	135.54	0.4
36	16.5	7.01	48.5	0.4
37	27.8	6.5	37.03	0.4
38	27.6	5.8	57.73	0.4
39	27.3	7.12	42.41	0.4
40	27.4	11.79	69.69	0.2
41	22.1	1.76	29.89	0.4
42	22.3	4.07	51.67	0.4
43	22.5	1.89	37.65	0.4
44	22.6	4.82	45.39	0.4
45	21.1	3.49	35.22	0.4
46	21.3	26.04	133.35	0.4
47	21.4	14.25	74.87	0.4
48	21.6	7.04	70.26	0.4
STDEV	29.00468506	7.342877643	27.01711	
Average	25.5625	8.662291667	56.83583	

1. Dardan 10 tests (table 6-15). for two groups A and B

1. Leg comparison

2. Wall Squat

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- 3. Negative chin up,
- 4. Negative push up)
- 5. Trunk curl
- 6. Breath holding
- 7. Thigh stretch,
- 8. Back arch
- 9. Skin fold pinch
- 10. Arm comparisons

Table 6.

General Tables. Leg comparison Test 1.

			Α	В
Less than	< = 3,1 mm -	10 points	24%	23%
between	3,1 mm- 6,3 mm	8 points	26	25
between	6,3 mm – 9,3 mm –	6 points	25	26
between	9,3 mm – 12,7 mm .	4 points	12	13
between	12,7mm- 15,5 mm	2 points	11	12
More than	> = 15,5 mm	0 points	2	1

Table 7.

General Tables. Test 2 Wall Squat.

		Α	В
More than 60 sec	10 points	34~%	40 %
$50 - 59 \sec$	8 points	36	10
40 - 49 sec	6 points	5	25
$30 - 39 \sec$	4 points	8	12
$20 - 29 \sec$	2 points	11	12
Less than 19 sec	0 points	4	1

Table 8.

General Tables. Test 3 Negative chin up.

		Α	В
More than 60 se c	10 points	10%	18%
50 – 59 sec	8 points	20	22
40 - 49 sec	6 points	25	25
30 – 39 sec	4 points	12	12
20 – 29sec	2 points	12	10
Less than 19 sec	0 points	21	13

Table 9.

General Tables. Test 4 Negative push up.

		Α	В
More than 60 se c	10 points	29%	25%
$50 - 59 \sec$	8 points	21	26
40 - 49 sec	6 points	21	26
30 – 39 sec	4 points	11	11
20 – 29 sec	2 points	17	10
Less than 19 sec	= 0 points	1	3

Table 10.

General Tables Test 5, Trunk curl.

		Α	В
More than 60 se c	10 points	28%	34%
$50 - 59 \sec$	8 points	22	16
40 - 49 sec	6 points	25	35
30 – 39 sec	4 points	12	2
20 – 29 sec	2 points	7	11
Less than 19 sec	0 points	6	2

Table 11.

General Tables. Test 6, Breath holding.

		Α	В
More than 30 se c	10 points	25%	26%
$25 - 29 \sec$	8 points	26	46
20 - 24 sec	6 points	25	5
15 – 19 sec	4 points	11	10
10 – 14 sec	2 points	8	11
Less than 9 sec	0 points	5	2

Table 12.

General Tables. Test 7 Thigh stretch.

		Α	В
More than $25 \text{ cm} =$	10 points	14 %	25~%
between 20—22,5 cm =	8 points	26	15
between 1517,5 cm =	6 points	25	25
between 10- 12,5 cm =	4 points	12	15
Between 5-7,5 cm $=$	2 points	11	19
Less than $2,5 \text{ cm} =$	0 points	12	1

Table 13.

General tables. Test 8 Back arch.

		Α	В
More than $45 \text{ cm} =$	10 points	24 %	23~%
Between 40- 42,5 cm =	8 points	26	27
Between 35- 37,5 cm =	6 points	25	5
Between 30- 32,5 cm =	4 points	4	12
Between 25- 27,5 cm =	2 points	11	11
Between 22,5 cm =	0 points	10	2 2

Table 14.

General Table . Test 9 Skin fold pinch.

		Α	В
Less than $1,5 \text{ cm} =$	10 points	23%	24%
2,5 cm =	8 points	27	26
3 cm =	6 points	25	25
3,7 cm =	4 points	2	4
4 cm =	2 points	11	11
More than 4 cm	0 points	12	10

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Table 15.
General Tables. Test 10 Arm comparisons.

		Α	В
More than $3,7 \text{ cm} =$	10 points	24%	24%
3 cm =	8 points	26	26
2,5 cm =	6 points	5	15
1,8 cm =	4 points	12	12
1,3 cm =	2 points	11	21
Less than $1,3 \text{ cm} =$	0 points	22	2

2.3. Test Pierre Vayer - A Simple Evaluation Between Two Groups

Table 1	6.	
Group A	Mix Lateral	domination.

Gr A. Voi	Hand-eye coordination	Dynamic coordination	Postural coordination	Coordination of the body.	Perceptual organization	Observation of laterality.	Spatial evaluation	Time estimation
ID	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6	Test 7	Test 8
1	sufficient 1	insufficient 0	sec 9	point 20	insufice0	Right 1/Left 2/Mix 3	insufice0	sufficient 1
2	1	1	8	18	1	1	1	1
3	1	1	9	19	1		1	1
4	1	1	10	18	0	1	1	1
5	1	1	9	18	1	2	1	1
6	0	0	11	19	0		0	0
7	0	0	12	20	1	2	0	0
8	1	1	13	18	1	1	0	1
9	1	1	9	19	1	2	1	0
10	1	1	8	19	0	3	1	1
11	1	1	8	18	1	2	1	0
12	1	1	8	20	1	1	1	1
13	0	1	9	20	1	2	0	0
14	0	1	9	20	1	1	1	1
15	0	1	11	20	1	1	0	0
16	1	0	12	18	0	3	1	0
17	1	1	13	18	0	3	0	0
18	1	1	12	19	1	3	1	0
19		1	9	20	0	1	0	1
20	1	1	8	18	1	2	1	1
21	1	1	8	19	0	2	0	1
22	1	1	8	19	1	3	0	1
23	1	1	9	20	1	3	0	1
24	1	1	10	20	1	3	1	1
25	1	0	11	19	0	2	1	0
26	0	0	12	18	0	2	1	0
27	0	0	13	20	1	2	1	0
28	1	1	11	20	1	2	0	0
29	1	1	10	18	0	3	0	0
30	1	1	10	19	0	3	0	0
31	1	1	13	19	0	3	0	0
32	1	1	9	20	1	3	0	1

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Table17.Group B: Left or Right Lateral domination.

Gr B.	Hand-eye	Dynamic	Postural	Coordination of	Perceptual	Observation of		Time
Voi	coordination	coordination	coordination	the body.	organization	laterality.	evaluation	estimation
ID	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6	Test 7	Test 8
1	sufficient 1	insufficient 0	sec 9	point 20	insufice0	Right 1/Left 2/Mix 3	insufice0	sufficient 1
2	0	0	9	20	0	1	0	0
3	1	1	9	19	1	2	1	0
4	0	0	8	18	0	3	1	0
5	1	1	9	20	0	1	0	1
6	0	0	9	19	0	1	1	1
7	0	0	12	20	1	2	0	0
8	1	1	8	18	1	1	1	1
9	1	0	9	20	1	2	1	0
10	1	1	8	19	1	1	0	1
11	1	1	9	18	1	3	1	1
12	1	1	8	20	0	1	1	1
13	1	1	9	20	1	3	0	0
14	0	0	8	19	0	1	0	0
15	1	1	11	20	1	1	0	0
16	1	0	12	18	0	1	0	0
17	1	1	10	19	1	3	0	1
18	0	1	12	19	1	1	1	0
19		1	8	20	1	1	1	1
20	1	1	8	19	1	1	1	1
21	0	1	8	19	1	2	1	1
22	1	1	9	19	1	3	0	0
23	1	1	9	19	0	1	1	1
24	1	1	10	20	1	3	1	1
25	1	0	11	18	0	1	0	1
26	0	1	10	18	0	1	1	0
27	1	1	13	20	1	3	0	0
28	1	1	11	19	0	3	0	1
29	1	1	10	18	0	3	1	0
30	1	0	10	19	0	2	0	1
31	1	1	13	20	0	3	1	0
32	0	1	10	20	0	3	0	0
33	1	0	9	20	1	2	1	1
34	1	1	9	19	1	2	1	1
35	0	1	10	18	1	2	0	0
36	1	0	8	19	1	2	1	1

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37	1	0	8	18	0	2	1	1
38	1	0	10	19	1	3	0	1
39	1	1	10	18	1	2	1	0
40	1	0	11	19	1	3	0	1
41	1	1	9	20	1	3	1	1
42	1	1	9	20	1	3	1	1
43	1	1	13	18	0	2	1	1
44	1	1	8	18	1	2	1	1
45	1	0	8	18	0	2	1	1
46	1	0	9	19	0	2	1	1
47	1	0	10	18	1	2	1	1
48	1	0	11	20	1	1	1	1

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Table 18.Summary of Vayer test data.

Test Pierre Vayer	Group A Mix Lateral.dom	Group B Left or Right Lateral.dom
1. Hand-eye coordination	42.5 %	57.5%
2. Dynamic coordination	43.6%	56.4%
3. Postural coordination	41.2%	58.8 %
4. Coordination of the body.	35.4%	64.6%
5. Perceptual organization	44.9%	55.1%
6. Observation of laterality.	34.5%	65.5%
7. Spatial evaluation	50.5 %	49.5%
8. Time estimation.	42.6%	57.4%
Average	41.90 %	58.10%

• From average database group B Left or Right Lateral domination are little bit better than group A Mix Lateral domination especially at Dardan Test its very clear that there is a difference at ten tests in favour of group B(specially to the 10 points category).

Table 19.

Summary of 10 Points Category for Group A&B at Dardan Test. Table 19.

Α	В
20%	26%
34%	40%
12%	28%
20%	28%
28%	34%
30%	35%
20%	21%
14%	25%
25%	26%
23%	24%
Average of 10 points 23%	29%

At Vayer Test we have still emphasized differences

Average Group A:41.90 % Average Group B:58.10%

• At balance test and flight light test from average data we do not have much diffrences between two groups.

• Average Group A: 67.97469 Average Group B:56.83583

At flight light test;

Average A :22654.06 Average B: 29784.396

3. Discussion

It is the direct consequence of the dominance of the cortical hemisphere. In humans, one cerebral hemisphere unfolds the dominant role of one and the subdominant role of the other.

In the dominant hemisphere, the functions of language, reading and writing are concentrated, while in the subdominant hemisphere, tonality presides.

We can say that the flood of humanity passes through the process of sides.

An individual when he uses the eye, hand and leg in the same side of the body or for an individual to be right-handed, he must have a dominant right eye, a dominant right hand, a dominant right leg and vice versa.

It is necessary to give the child the opportunity to deal with motor problems by favoring the use of more automated numbers, making him find the answer himself, thus stimulating his creativity, imagination and ideas, the methodology of used is the experimental one. There is no need to provide the child with prefabricated motor responses of the educator as is often seen in traditional physical education, but leaving all the necessary freedom until he himself, through trial and error and a series of personal adaptations can be chosen the problem. Too often in fact the child is forced with codified motor responses thus sacrificing the function of active adaptation.

A student must use the eye, hand and foot on the same side of the body: if an individual is righthanded, he must have a dominant right eye, a dominant right hand, a dominant right leg and vice versa. At the level of learning to read and write is of fundamental importance the homogeneity of the automation of the eye and the hand lying in the same part of the body. If this is not verified it is possible to have cases of more or less severe disorders; concerns can range from squinting, difficulty concentrating to difficulty understanding what you read, etc.

From the point of view of motor activity, in 90% of this activity a lateral efficiency is assumed. The exercises that favor the dominance of the sides are from the psychomotor point of view: hand-eye coordination, games and free activity, general dynamic coordination.

For a general balanced development of the child, a complete development of motor skills must be guaranteed, both in the expressive and transitory plan.

4. Conclusion

- We found interesting data evidence for children of both groups that spek themself in positive association of physical activity with motor and cognitive development
- From average database group B Left or Right Lateral domination are little bit better than group A Mix Lateral domination (especially at Dardan and Vayer test).
- Briefly analyzing the characteristics of these functions and their importance, which for us contains the basis for a regular development of the child.
- These functions are closely related to the function of the central nervous system.
- We must emphasize that as long as psychomotor functions can be developed optimally, the interaction-affective aspect must be constantly present.
- We mean the relationship that stabilizes between the teacher and the child himself.
- Physical education sport today is no longer a profession, but a mission, a philosophy, which, along with the development of physical skills, also pursues intellectual achievement for a balanced human being, that is, to train the individual on both sides: physical and intellectual, in a harmonious character.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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