

## Effects of Motor and Social Skills on Preschool Children

Elton Bano\*, Edison Ikonomi, Arben Bozaxhiu, Kristian Andrea, Jorida Çobaj

Sports University Tirana, Albania

DOI: [10.36348/jaspe.2021.v04i05.004](https://doi.org/10.36348/jaspe.2021.v04i05.004)

Received: 02.04.2021 | Accepted: 11.05.2021 | Published: 14.05.2021

\*Corresponding author: Elton Bano

### Abstract

That physical education and sports for children is indisputable, this has been proven and proven by scientific achievements, they even say that, to categorize physical education and sports for children as a separate branch of sports, unlike adults, ie a branch of independent of sports science and sports system. In addition of traditional methods of education and their possibilities to realize them in practice this study aims to attract attention of educators in the new models of social education adjusting this with preschool children interests. For the realization of our study, have selected 80 children from four Tirana's preschools city, that seems to be the bigger city, center of economic, social, administrative, culture, academic, industrial, medial of Albania, with purpose to have a big representation of all social-economics layers. The children are separated in two equal groups. Collected data, in begin, middle and in the end of tests and questionnaires were under a statistical processing by IBM SPSS package, version number 22. T- test is used to see if there are significant changes between control and experiment group skills along the tests phases. Based on results, significant changes between genders in experiment groups first phases questionnaire. Through this study we think to offer some rational solutions with movement and social character, using a variety tools that gymnastic contains accompanied by some educational and entertainment methods.

**Keyword:** Motor and Social Skills, Sports for Children, Mobile Education, Social Skills.

**Copyright © 2021 The Author(s):** This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

## INTRODUCTION

Without any discussion, physical education and sports represent the biggest and most important social phenomenon of our time. This phenomenon extends to four parameters:

- Philosophy of evaluation.
- Regular fair play.
- Maintaining health.
- Participation of as many children as possible, as the future of society [1].

Basic for educators, specialists and trainers should be the selection of talent, which is not easy, where the chance to meet subjects with successful destination is rare, only 5% [2]. It is clear that natural skills make the training process shorter but, without a doubt, the result of a correct training dose can make even an individual successful, who apparently has no special predisposition, especially nowadays, where the training load in children it has increased a lot [3].

Lowering the age limit for those who start exercising is, already, a reality accepted by the latest observations and which makes it necessary to review

existing theories of children's participation in racing sports. Of course, this is a consequence of the faster natural development course that belongs to this new generation, which in contrast to the past has improved anthropometric and physiological parameters in all functional systems, which determine motor activity [4].

These observations have shown that today's children are about 2 years ahead of children of the same age, a century ago, reflecting on the lowering of the age limit and appreciating this branch of education as an autonomous branch of sport, called sport for children.

### Children's sports include three well-known areas that need to be considered

- ✓ Specifics of physical development.
- ✓ Designing a training program.
- ✓ Educational and psychological direction [5].

The variety and change of individual characteristics, given at a given time and individual maturity is not only the result of biological growth, but also dependent on the environment in which the child lives. A child who practices swimming, gymnastics or any kind of sport will never become a true champion, or

be worthily represented, if he has not practiced other special sports in his social environment [6].

We must emphasize that every development of the child is always unique and that can never be compared or repeated under any circumstances, we do not have the same development process even in the case of twins. Every child grows and develops in different forms of rules, as a unique and special personality where this development consists of four elements that are:

1. Maturity.
2. Socialization.
3. Lesson.
4. Self-orientation [4].

#### **Maturity extends to psychosomatics, harmonious and functional development including the following aspects**

- a) Body development.
- b) Development of the neuromuscular system.
- c) Development of the cardiorespiratory system.
- d) Function of endocrine glands [6, 7].

The implementation of a sports education program should follow the development of these four systems. No organism that is in the developmental stage can show an accomplished performance if the vital functions do not have the necessary development [7].

In total, development processes always function uniformly and the division into four elements is only theoretical. Also, the application of educational elements in physical education and sports considers the human being as a whole. In the same line of thought, exercise adapts to the processes of biological development in such a way as to have a positive impact on the normal development of children [8]. Without a doubt physical education should be called as a dynamic and vital phase of any education program and in fact has more potential for the development of the child in this education. The tasks given serve for a high quality of physical education by learning experiences on purpose accelerate the progress that children are capable of, including psychomotor progress, cognitive and affective learning [9].

The mission of education is to accelerate the development of the child who achieves individual satisfaction as a responsibility, as a civic contribution, and then physical education, well organized by the teacher, can play an important contribution to this goal. In today's democratic society this it means serving all children, children with disabilities, the backward, the advanced, the talented, and the so-called normal. The long-term goal is to show the possibility that as many children as possible can reach their highest potentials [10].

Physical education is a stage of general education that contributes to the overall growth and

development of the child primarily through the choice of motor experience and physical activity. The general purpose of education and physical education are the same, greater opportunities for the development of each individual and education for democratic responsibility as a citizen [11].

Physical education should summarize both the variety and the amount of human motor performance. It should be related to physical satisfaction and enthusiasm, which are the basis for a balanced life by introducing a team work laboratory to achieve the goal. Essentially, the process of physical education with children is a field of professionals, dedicated to teachers of physical education [12].

It is necessary to give the child the opportunity to face motor problems by favoring the operation of more automated numbers, making him find the answer himself, thus stimulating his creativity, imagination and ideas. The methodology used is experimental. There is no need to equip the child with the educator pre-engineered motor responses as is often seen in traditional physical education, but leaving all the necessary freedom until the problem itself can be solved through trial and error and a series of personal adjustments. Very often in fact the child is forced with codified motor responses thus sacrificing the active adaptation function [13].

A child should use the eye, hand and foot on one and the same arm of the body, if an individual is right-handed, he should have the dominant right eye, dominant right hand, dominant right foot and vice versa. At the level of learning to read and write, the homogeneity of the automation of the eye and the hand lying on the same part of the body is of fundamental importance. If this is not verified it is possible to have cases of more or less severe disorders, concerns can range from stuttering, a difficulty concentrating to difficulty understanding what you read, etc. [14].

From the point of view of motor activity, 90% of this activity is assumed to be a lateral efficiency. 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 [15].

#### **Consequences brought about by localized abnormalities in every single psychomotor function**

- Active adaptation function: Lack of imagination, creativity, readiness and liveliness, poverty of the motor repertoire with reinforced mechanical gestures, stereotyped motor automation, lack of plasticity to motor responses accompanied by great difficulty for each new adaptation.
- Dominance of the bodily side: Lack of functions of a dominant eye, dominant hand, dominant foot. Cross-dominance between eye and hand with

problems in school such as literacy, stuttering more or less in pronunciation, lack of concentration, severe motor difficulties in all those situations in which the pronounced use of the side of the body is foreseen.

- Body scheme: Deficiencies at the conscious body level and self-concept. Improper use of the body, difficulty controlling the motor, arrhythmia, incoordination, clumsiness. Perceptual difficulties at the level of space and time. Lack of dominance of the motor body both in general gestures and the fine is achieved in rejection of the body itself.
- Space-temporal organization: Deficiencies at the level of space-temporal orientation with difficulty in perceiving distance, speed, and trajectory. Problems in understanding reading and writing, incoordination, inhibition.
- Through a basic activity there is a development of the most typical physical-motor qualities such as: strength, speed, dexterity, elasticity, endurance, related to neuro-vegetative functions: circulation, respiration and digestion [16].

## HYPOTHESIS

- Expected significant benefits in children social skills aspect which are included in this experimental program.
- Including the characteristics of biological age and the perception form of the experimental program there are no many significant statistical changes in the social skills between genders.

## OBJECT OF STUDY

This study object was the impacts supervision of gymnastic program to improve the social skills in preschool children.

## THE PURPOSE OF THE STUDY

The purpose of the study is to test the efficiency of this social model-education through a gymnastic program for preschool children.

## THE AIM OF STUDY

In addition of traditional methods of education and their possibilities to realize them in practice this study aims to attract attention of educators in the new models of social education adjusting this with preschool children interests. Parent sensitization in physical activities role like an important factor in the children development. Inclusion of authorities aims responsible that gymnastic may be an integral part of preschool education system.

## METHODOLOGY

For the realization of our study, have selected 80 children from four Tirana's preschools city, that seems to be the bigger city, center of economic, social, administrative, culture, academic, industrial, medial of Albania, with purpose to have a big representation of all social-economics layers. The children are separated in two equal groups, 40 EG and 40 CG.

In the experiment group will be implemented the education program with basic gymnastics elements, which will last twelve weeks, twice a week for an hour.

Gymnastic program is construed in a specific way to adjust from age 4 to 6. Children which will be part of this program will have the possibilities to practice with different gymnastics elements, games and social skills. They will have always the same leader and the same persons which will keep their data bases. For any change, in the end of twelve weeks program, data will recollect. Control group, will follow a free program by using preschool infrastructure under educators supervision.

Recognize in details social ability, allows to define which is clear more and efficiently methodology in skills evaluation for this age. In contemporary literature about the social abilities control are defined a diversity control models which are very believable. To do the right tests choice we aren't based just on contemporary study of experiment age that we are examining, but we are based also on some essential, important, believable, validity and objective criteria.

Based on methodological criteria for test selection, we have select PKBS (Merrell) which is adapted for preschool children behavior for which we think that have done a very good evaluation.

In this study dependent variables are social skills while the independent variables are the participation in the gymnastic program and gender.

Collected data, in begin, middle and in the end of tests and questionnaires were under a statistical processing by IBM SPSS package, version number 22. T-test is used to see if there are significant changes between control and experiment group skills along the tests phases. This test is used also to see the differences between dependent and independent variables. F-criteria is used to tell the importance of dependent and independent variables relation. Pearson's Product-Moment coefficients is used to evaluate all the relations between dependent variables.

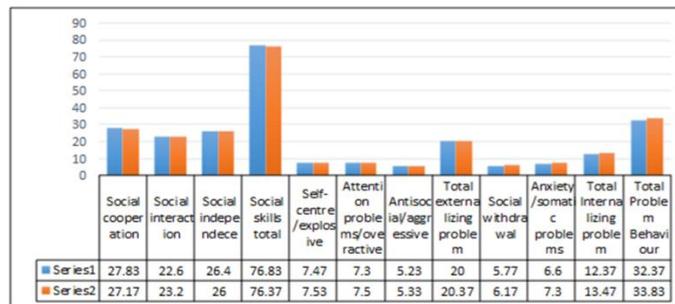
**RESULTS**

**Table-1: Difference social ability in experimental group (40 children)**

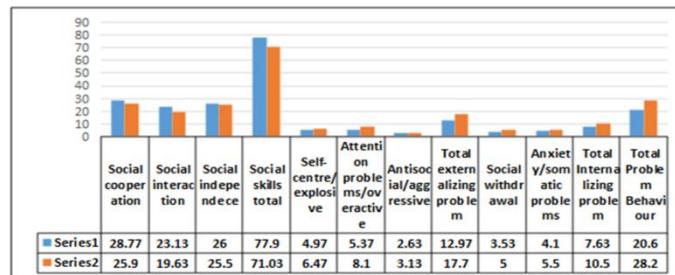
Social Ability	First Phase		Second Phase		T-test	p
	Mean %	St/d	Mean%	St/d		
Social cooperation	28.77	2.94	25.90	3.41	9.73	0.00
Social interaction	23.13	3.10	19.63	4.11	9.22	0.00
Social indepedece	26.00	2.29	25.50	2.64	2.72	0.01
Social skills total	77.90	7.90	71.03	9.21	13.31	0.00
Self-centre/explosive	4.97	2.99	6.47	2.70	-12.04	0.00
Attention problems/overactive	5.37	3.79	8.10	3.67	-15.85	0.00
Antisocial/aggressive	2.63	2.74	3.13	2.60	-2.92	0.01
Total externalizing problem	12.97	9.35	17.70	8.81	-12.35	0.00
Social withdrawal	3.53	2.58	5.00	3.24	-6.89	0.00
Anxiety/somatic problems	4.10	1.79	5.50	2.58	-6.28	0.00
Total internalizing problem	7.63	4.15	10.50	5.65	-7.01	0.00
Total problem behaviour	20.60	12.81	28.20	13.73	-10.67	0.00

**Table-2: Difference social ability in control group (40 children)**

Social Ability	First Phase		Second Phase		T-test	p
	Mean%	St/d	Mean%	St/d		
Social cooperation	27.83	4.58	27.17	3.93	1.62	0.12
Social interaction	22.60	3.36	23.20	3.62	-2.83	0.01
Social indepedece	26.40	2.57	26.00	2.82	2.35	0.03
Social skills total	76.83	9.27	76.37	8.97	0.98	0.34
Self-centre /explosive	7.47	5.70	7.53	4.16	-0.09	0.93
Attention problems/overactive	7.30	4.37	7.50	3.59	-0.44	0.67
Antisocial/aggressive	5.23	6.11	5.33	6.00	-0.90	0.38
Total externalizing problem	20.00	15.44	20.37	13.02	-0.33	0.74
Social withdrawal	5.77	5.35	6.17	5.12	-1.75	0.09
Anxiety/somatic problems	6.60	4.67	7.30	4.21	-1.91	0.07
Total internalizing problem	12.37	9.92	13.47	9.24	-1.86	0.07
Total problem behaviour	32.37	25.06	33.83	21.98	-0.95	0.35



**Fig-1: Difference in experimental group (40 children)**



**Fig-2: Difference in control group (40 children)**

## DISCUSSIONS

Achieved results from informative statistical processing (IBM SPSS , 22 -th version) for measured data in each subject, we confirm again the hypothesis at the beginning of this study that movement activity modeling in this age in function of education and movement develop skills is in the right way.

In case of the achieved results from subjects in which gymnastic program with simple elements was applied for 12 weeks, the changes are significant. Based on statistical processing results in the table number 1, 2 it seems a difference between first and second phases result in all tests of experiment group, while in the control group just in interaction and independence social.

Before the program implementation, as per control and experiment children group, the results of behavior degree questionnaire did not have any significant statistical change.

In the end of twelve weeks program, there are significant differences between groups in all their indicators. In social behavior indicators results seems a growing up trend and a trend that comes down in children social problems in the experiment group indicators.

In the control group have changes in results of social behavior and social problems, which are not presented in final result. In the first phases test (before of gymnastic program intervention) the results of control group subjects are better in social interaction, social intervention and social independence, while experiment groups results are better in social problems indicators (lower points).

al skills indicators of experiment group seems an improvement of results, while positive or negative changes in control group are inconsiderable to influence in final result. This is reflected in results of t-test between both groups.

It seems significant changes in all behavior indicators between first and second phase questionnaire in both genders (boys and girls). There is a considerable improvement in the second phase results, which are reflected in significant statistical changes between both genders.

The girls had an improvement in all social behavior indicators, while boys had an improvement in behavior problems indicators. Girls were appreciated better than boys in all behavior degrees. Except in social attraction and anxiety boys had a better evaluation.

The intervention program with gymnastic elements has affected in boys behavior. Statistical processing results, showed that evaluation of social

problems indicators had a significant decrease of subjects in risk. Also in this subjects were evidenced better evaluations for social behavior indicators.

## CONCLUSIONS

- Through this study we think to offer some rational solutions with movement and social character, using a variety tools that gymnastic contains accompanied by some educational and entertainment methods.
- Results evidenced significant statistical improvements of experiment groups in social skills indicators.
- Results evidenced significant statistical improvements of experiment groups in reducing problematic behaviors.
- Intervention program with gymnastic elements has affected also in boys behavior.

Results of statistical processing showed that there was a significant decrease in evaluation of social problems indicators of subjects in risk. Also in these subjects were evidenced good evaluations on social behavior indicators.

## Conflict of interest

Authors declare that they have no conflict of interest

## ACKNOWLEDGMENTS

We wish to thank all children, educators, parents, who helped and participated in our study.

## REFERENCE

1. Bredekamp, S., & Copple, C. (1997). Developmentally appropriate practice in early childhood programs. Washington, DC: National Association for the Education of Young Children.
2. Hartas, D. (2006). Dyslexia in the Early Years: A Practical Guide to Teaching and Learning. Taylor & Francis, P. 8.
3. Duncan, J., McLeod, P., & Phillips, L.H. (2005). Measuring the mind: speed, control, and age. Oxford University Press. 125.
4. Kostić, R., Miletić, Đ., Jocić, D., & Uzunović, S. (2003). The influence of dance structures on the motor abilities of preschool children. Facta Universitatis, Series Physical Education and Sport, 1(9), 83-90.
5. Gallahue, D., & Ozmun, J. (2006). Understanding motor development, Infants, children, Adolescents, Adults. (6th ed.) McGraw-Hill. 248 -270.
6. Zachopoulou E., Liukkonen J., Pickup I., & Tsangaridou N. Eds. (2010). Early Steps Physical Education Curriculum: Theory and Practice for Children under 8 Champaign, IL: Human Kinetics.
7. Boulinguez, P., & Barthélémy, S. (2000). Influence of the movement parameter to be controlled on manual. Brain and Cognition, 44;(3). 653-661.

8. Hay DF, Payne A, Chadwick A.( 2004) Peer relations in childhood. *J. Child Psychol Psychiatry.* 45; 84–108. [PubMed]
9. Bar-Or, O., & Rowland, T. (2004). *Pediatric exercise medicine: from physiologic principles to health.* Champaign, IL : Human Kinetics. P. 35.
10. Alpert, B., Field, T., Goldstein, S., & Perry, S. (1990). Aerobics enhances cardiovascular fitness and agility in preschoolers. *Health Psychol*, 9, 48–56.
11. Johnston, J., & Nahmad-Williams, L. (2009). *Early childhood studies.* New York : Pearson Longman.
12. Harrell, J., Pearce, P., Markland, E., Wilson, K., Bradley, C., & McMurray, R. (2003). Assessing physical activity in adolescents: common activities of children in 6<sup>th</sup> -8<sup>th</sup> grades. *J Am Acad Nurse Prac*,15, 170–178.
13. Beunen, G., & Thomis, M. (2000). Muscular strength development in children and adolescents *Pediatric Exercise Science*, 12, 174-197.
14. Gorus, E., De Raedt, R., Lambert, M., Lemper, J., & Mets, T. (2008). Reaction times and performance variability in normal aging, mild cognitive impairment. *Journal of Geriatric Psychiatry and Neurology*, 21(3), 204-219.
15. Everke, J. (2009). *Die CoMIK-Studie Cognition and motor activity in Kindergarten. Entwicklung und Evaluation eines Bewegungsförderungs programms zur Verbesserung motorischer undkognitiver Fähigkeiten bei Kindergartenkindern.*P. 256-258.
16. Karai, T. (2005). *Developmental psychology* 1, Tiranë, 45-51.