

## SKILLS DEVELOPMENT IN CHILDREN WITH SPECIAL NEEDS THROUGH MOTION GAMES

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**ABSTRACT. Introduction.** The game has a decisive role in the social, emotional, thinking, psychological development, being used as a method of knowing their own body in relation to things surrounding it. The specific **objectives** of this study are identifying and selecting the games for the children with special needs and their application in order to develop skills. **Material and methods.** The research was carried out on a group of six students with special education needs, students of the School Centre for Inclusive Education, Cluj-Napoca and was conducted during the period February 2016- May 2016. In selecting the games, we took into consideration the following criteria: content of the games that include movement skills, the subjects' physical capabilities of performing these games, the level of accessibility and comprehension. **Results.** Based on the support of motion games that were constantly performed, we could observe the improvement of hand skills for the six subjects of the study. **Conclusion.** In the study conducted on those six students, we are able to sustain the fact that most important and appropriate element, that in the same time has a remarkable impact in movement activities at children with special educational needs, is the game. As a conclusion of this study, we may safely state that motion games that have been adapted and applied were efficient in order to develop hand skills, students registering progress on several levels: sensory movement, social, creative, moral and even therapeutic, confirming the objectives of the study.

**Keywords:** motion games, skills, children with special needs

**REZUMAT. Dezvoltarea îndemânării la copiii cu nevoi speciale prin intermediul jocurilor de mișcare. Introducere.** Jocul are un rol determinant în dezvoltarea individului în plan social, emoțional, psihic și cognitiv, constituind o metodă de cunoaștere a propriului corp în raport cu lucrurile care îl înconjoară. **Obiectivele** specifice acestui studiu sunt: identificarea și selectarea unor jocuri aplicabile la copii cu nevoi speciale și aplicarea acestora în vederea dezvoltării îndemânării. **Material și metode.** Cercetarea a fost realizată pe un grup de 6 elevi cu cerințe educative speciale, elevi ai Centrului Școlar pentru Educație Incluzivă, Cluj-Napoca și s-a desfășurat în perioada februarie 2016-mai 2016. În selectarea jocurilor am avut următoarele criterii referitoare la conținutul jocurilor ce cuprind calitățile motrice

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respectiv îndemânarea, posibilitățile fizice ale subiecților de a le executa, accesibilitate și comprehensiune la nivelul textului. **Rezultate.** Cu ajutorul jocurilor de mișcare care au fost aplicate constant în cadrul cercetării, s-a putut observa îmbunătățirea îndemânării celor șase subiecți supuși studiului. **Concluzii.** În urma studiului efectuat asupra celor șase elevi, putem să susținem faptul că elementul cel mai adecvat, important și care totodată are și un impact remarcabil în desfășurarea activităților motrice la copiii cu cerințe educative speciale, îl constituie jocul. În urma acestui studiu, putem afirma că jocurile de mișcare adaptate și aplicate au fost eficiente în scopul dezvoltării îndemânării, elevii înregistrând progrese pe mai multe planuri: senzoriomotor, social, creativ, moral și chiar terapeutic, adeverind astfel obiectivele studiului.

**Cuvinte-cheie:** jocuri de mișcare, îndemânare, copii cu nevoi speciale

## Introduction

*The game* is both a way and a method of educational rehabilitation and integration (Marolicaru, Boros-Balint, and Macra-Oșorhean, 2011). It stimulates the sensory movement, intellectual, creative, self-consciousness and moral area, having a therapeutical and relaxing effect (Macra-Oșorhean, Ciocoi-Pop, and Petrus, 2011, pp. 174.). Therefore, „The game has a decisive role in the social, emotional, thinking, psychological development, being used as a method of knowing their own body in relation to things surrounding it.” (Macra-Oșorhean, Ciocoi-Pop, & Petruș, 2011, pag.174.)



**Figure 1.** Interdisciplinary aspects of the game (Macra-Oșorhean, Ciocoi-Pop, & Petruș, 2011, pag.175.)

It is good to know that the game is an important way of educating children with special educational needs. Games applied to children with special educational needs should be shaped based on their prophylactic or therapeutic needs. (Marolicaru, Boros-Balint, and Macra-Oșorhean, 2011).

*The motion game* as a way of physical activity complex, is a form of movement, which due to some features of shape, content and effects, can be used since infancy (Macra-Oșorhean, M.-D., Simon-Ugron, Á, & Illés, L., 2014).

Motion games applied to children with special educational requirements are effective both in achieving progress as well as in the development of motion skills in communication. Activities, including games of motion can be applied to other subjects, at any age. In the way that they record outstanding results, these may vary by increasing the complexity of the activities (Macra-Oșorhean, M.-D., Simon-Ugron, Á, & Illés, L., 2014).

A *skill* is "the ability of the body to perform acts and actions, especially in unusual and varied conditions, with maximum efficiency and minimum energy consumption from the performer" (Cârstea, 2000, pp. 67).

Forms of manifestation:

- *general skills* that are necessary to carry out all the movement acts and actions by people;
- *specific skills* which are characteristic of those who practice and require different sports branches;
- *skills in other movement qualities*: speed, strength and resistance (Cârstea, 2000, pp. 68).

Methodological procedures of development/education:

- performing movement acts and actions in similar conditions;
- performing movement acts and actions in complex conditions;
- performing movement acts and actions in variable conditions (Cârstea, 2000, pp. 69).

## **Objectives**

The specific objectives of this study are:

- identifying and selecting the games for the children with special needs;
- their application in order to develop skills.

## Material and methods

### *The studied group*

The research was carried out on a group of six students with special education needs, students of the School Centre for Inclusive Education, Cluj-Napoca and was conducted during the period February 2016- May 2016. The group involved consists of five boys and one girl, aged between 15 and 19 years.

**Table 1.** Presentation of the studied group

Name	Age	Sex	Provenience	Medical data
B.E.	16 years old	male	institutionalized	Mild mental impairment, dyslexia, dysgraphia, instrumental disorders, epilepsy under treatment, coordination disorders, divergent strabismus
A.D.	16 years old	male	institutionalized	Mild mental deficiency, infantile autism, dyslexia, dysgraphia, instrumental disorders, flat foot
M.G.	17 years old	female	institutionalized	Serious mental deficiency, atypical autism, retardation in movement
P.I.	18 years old	male	institutionalized	Epilepsy in history, dorsal kyphosis, mild mental impairment, polymorphic dyslalia, dyslexia-dysgraphia
G.P.	17 years old	male	institutionalized	Infantile autism, Tourette Syndrome, dyslexia, dyscalculia, instrumental disorders, extra weight hypotrophy
S.C.	19 years old	male	institutionalized	Infantile autism, syndrome of underdevelopment of language

### *Research methods*

Personal data of students have been extracted from files and from conversations with family members. The methods used, which have allowed us to collect data and information about subjects and later analysing and organizing according to objectives, were observation, interview, analysis of documents and case study.

### *Applied motion games*

After reading and thoroughly analysing a series of books collections regarding this domain, we selected motion games, these constituting the material that was the basis for this study. Some games have been selected to

be performed identical as given in the sources recorded, others processed, or adapted to the needs and particularities of specific pupils with special educational needs.

In selecting the games that we intended to use in this study, we applied the following criteria: the content of games that include movement skills, the physical possibilities of the subjects to execute them, the level of accessibility and comprehension (understanding the content and compliance with the rules of the game). In the following sections of this study, we aim at presenting a few of the movement games that have been used in our research:

a) *"The relay skill"*

Corrective values: development of skills, attention, speed, direction, controlling movements

Place of venue: the gym

Materials needed: chairs, jumper training

Organization and conduction of the game: the teams are arranged behind the starting line. At 10-15 m from the starting line will be put next to each team one chair having on it a jumper training. At the teacher's signal the first player in each team runs towards that chair, gets dressed with the blouse tracksuit and turns up in front of the start line, undresses the blouse, giving it to the next one. This second one puts the blouse on, runs towards the seat, puts the blouse on the chair and runs back handling the relay to the next player who continues the race in the same way. It wins the ultimate team whose player has passed the start line first.

Methodological indications:

- *a worn out tracksuit should be chosen;*
- *students' attention is drawn to the importance of letting width-wise in normal state (not have sleeves inside etc.).*

b) *"Pay attention to the ball"*

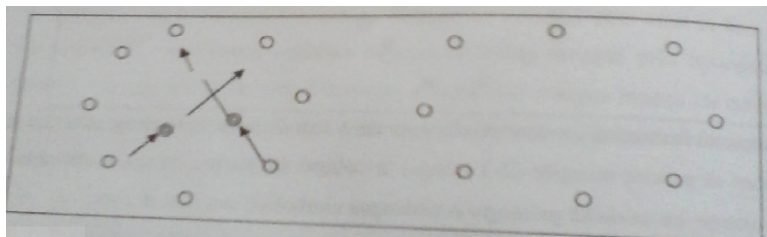
Corrective values: attention development, movement control, concentration capacity.

Place of venue: classroom, courtyard

Materials needed: balls

Organisation of the game: children will be organized in a circle, and the player who has the ball may pass at any of the players. Players who receive the ball must pass as quickly so as not to be surprised with another ball.

Players who at the same time receive a ball and are surprised with the previous ball in their hand, drop the ball or throw the ball wrong have 1 point penalty. The players with the fewest penalty points win the game.



**Figure 2.** The game "Pay attention to the ball"(Hanțiu I., 2002, pp. 10.)

*c) "The ball to the captain"*

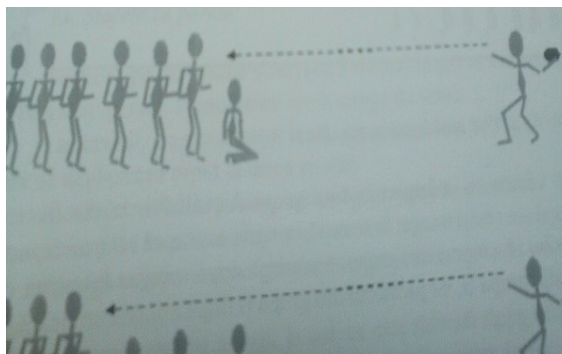
Corrective values: increasing the speed at movement execution, improving coordination, developing attention, the setting.

Place of venue: classroom, courtyard

Materials needed: balls

Organizing the game: students will be divided in two teams and each team choses a captain. The rest of the team will stay in front of a captain at a distance of 3-4 meters.

The captain will hit the ball and will get the ball from each player in turn. The team that finishes first passing the balls wins.



**Figure 3.** The game "The ball to the captain" (Hanțiu I., 2002, pp. 13)

*d) "Ball on the ground"*

Corrective values: development coordination.

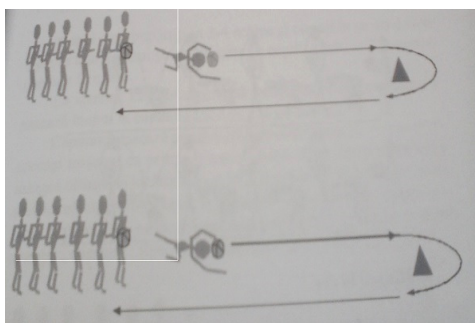
Place of venue: classroom

Materials needed: balls

Organization of the game: students are divided into two teams. The components of each team sit in one column from departure line, having in front of them a ball. At the signal of the leader of the game, the first players of each team start crawling, toppling the ball on the ground with the help of their head.

The subjects cover a distance of 4 to 8 m up to a landmark that bypass and return to the team, passing the ball to the next player, and they go at the back of their team.

The game continues until all components go through the route. The team that finishes first wins.



**Figure 4.** The game *'The ball on the ground'* (Hanțiu I., 2002, pp. 16)

## Results

The activity of the subjects involved in the present study was observed and monitored throughout the duration of the research. Regarding the application of motion games, these have been applied throughout the whole period of systematic study.

Each student had their own different evolution because each of them has a personal pace of development.

When organizing the activities there have been taken into account the differences between them and individual peculiarities and therefore, it has been used different treatment for each. There have been emphasized more the particularities related to psychomotor skills.

A very important aspect is that during the activities scientists tried to make available some alternatives which would constitute a way of developing a movement quality, more exactly, handskill.

Based upon the help of motion games, that were constantly applied, we could observe the improvement of hand skills for the six subjects of the study. Fulfilling and obeying the rules imposed by each game individually,

fighting until the end of the game, involving active and conscious activities, positive attitude and optimism, all of these issues have contributed to a greater appreciation of the group of students participating in this study. We believe that through activities developed with the subjects, we bring major changes not only in the domain of hand skills, but also at the level of psychomotor skills, for coordination and self-control.

*The received psychomotor results with B.E.* - In terms of movement skills the subject walks disorderly, with imbalances, runs erratically, throws the ball without having a corresponding trajectory.

*The received psychomotor results with A.D.* - When making movements we can notice a small deficit, fails to execute very good catching the ball. He/she makes quick movements, we can notice balance disorders.

*The received psychomotor results with M.G.* - He can throw accurately the ball and catches it, hits the ball on the ground, he manages to fulfill his tasks as correctly as he can and makes him great pleasure to participate in sports activities.

*The received psychomotor results with P.I.* - When he has to throw the ball he does it aggressively, throws without direction and powerfully; he picks and throws up some objects with little precision.

*The received psychomotor results with G.P.* - We can notice balance during walking and he runs in a chaotic manner. During the game with the ball, having a proper coordination of upper limbs he throws and grabs the ball precisely.

*The received psychomotor results with S.C.* - He has a good balance and manages to hang on his peaks and on his ankles. He has a good coordination, so accuracy at throwing and catching the ball. When it comes to running, he does not hesitate, but enjoys it and runs more than his teammates, proving a good resistance.

## **Conclusions**

In the study conducted on those six students, we are able to sustain the fact that most important and appropriate element, that in the same time has a remarkable impact in movement activities at children with special educational needs, is the game. Even though the game of motion is an activity performed happily by children, it does not have the ability to remove and eliminate the movement disabilities level exist, but may lead to their improvement, if applied seriously and consistently.



After applying the movement games over the studied group, we came to the following conclusion:

Subject B.E., because of his difficulties at movement level, experiences great effort in throwing and catching, space orientation, conducting exercises based on maintaining his body balance.

Even though at the beginning, subject A.D. refused to execute what has been asked of him, he momentarily focuses and plays the games with great pleasure.

The subject G.P. has good motion skills with a fast pace, he manages to execute quite well the games finishing the indicated task, right in time. The availability for activities, the involvement and attention level, the development of movement skills, the adapting capacity and confidence in their own forces, are aspects that contribute to the further development of independence, thereby facilitating the social integration.

At first, the subject S.C. used to throw the ball in an aggressive manner, giving the sensation that all the time he wants to hit his playing partners, now the subject throws the ball more carefully, coordinating his movement and managing to communicate with the other players.

At the beginning, subject M.G. refused to participate in the games but now he is pleased to be part of the game.

Subject P.I. is the student with whom we could finish any task, he is pleased to make sporting activities, especially when it comes to running, he does not hesitate proving a good resistance.

As a conclusion of this study, we can safely state that the motion games that have been adapted and applied were efficient in order to develop hand skills, students registering progress on several levels: sensory movement, social, creative, moral and even therapeutic, confirming the objectives of the study.

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