

## **GAMES OF MOVEMENT AND SPORTS AS A CORRECTION FORM OF RESTRAINT IN PSYCHICAL DEVELOPMENT (RPD)**

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**Keywords:** psycho-social adaptation; restraint in psychic development (handicap); physical training lesson; adequate educational content; pedagogic systems of physical culture, working ability, conduct behavior, psycho-motor training.

### **Abstract**

Retention in psychical development or mental deficiency is a global deficiency covering the entire personality of an individual: structure, organization, intellectual, affective, psychomotor, behavioral-adaptive development. Education is one of those issues whose analysis, despite facility appearances and common sense proves ultimately to be of great complexity. Reason for this should be sought in everyday life and the inevitability of its educational implication. Before having quite specific ideas and educational systems, people have practiced physical education and supported its influences.

Nowadays, especially in dynamic societies, with a high rate of social mobility, education is no longer a simply means of perpetuating the values of vertical "transmission": from parent to child, from past to present, from adult carriers values to the younger generation in the formation, but also the main instrument through which the society can consciously, traditional or discontinuous self improve, according to the ideals of human and social progress.

We witness, therefore, to the appearance of a new relationship between education and society. The society must pay greater attention to the education problems, to support financially the development of research in this field and apply their results in practice. In conclusion, on the educational science largely depends the aspiration to form a new man and a new society, according to social and human high ideals. In this connection, it is necessary to examine also the dynamic of restraint process in development.

## **Introduction**

The tackling of psychological peculiarities of students with RPD currently presents a serious problem and requires a continuous study. Many investigations of the field are devoted to the search of correction ways of this phenomenon in order to overcome children' restraint in psychological development and correctional remedies to overcome children' detention in psychical development (В.И.Любовский, 1981; В.В.Лебединский 1985, И.Ф.Марковская, 1982 ).

Although the achievements in the psychology field of children with RPD are multidimensional and provide certain conditions of children potential exploration, a lot of problems still remain in the shadow, beside scientific research (Е.С.Слепович, 1986; Р.Д.Тригер, 1989; Н.А.Цыпина,1984;).

Currently, it remains unaccomplished for instance the issue of psychomotoric developing of children with RPD, it is not definitively determined the peculiarities of psychomotricity and the link between the level of its development and working capacity of students, it lacks the physical education program regarding development differentiation of each component behavior in psychomotoric aspect that should contribute to the psychosocial adjustment of the given contingent.

This requires the following problem of fundamental theoretical and methodological research: designing of a complex system of psychomotor development to enhance and stabilize the working capacity of children with RPD. The ones exposed above had become the basic guideline for tackling this problem.

Tackling theory and practice of educational process on discipline "Physical Education" demonstrates that lack of curriculum for pupils with restraint in psychic development must be conceived on the basis of determining specific psychophysical development and psychomotor training of the concerned contingent and as well as the system of specific means of physical education content with appropriate pedagogical influences, aimed at increasing functional conjunctive capacity (psychomotor, psychophysical, psychological), they having a positive reflection on the level of psychosocial adaptation of the students affected by this phenomenon (RPD).

The results of documentation work analysis of teachers from schools, pedagogical observations (over the lessons), the replies to the sociological questionnaire (120 teachers, 416 students), measurements and tests of students in secondary schools (25 parameters: 416 students)

They allowed us to see that the main factors that negatively influence the efficiency of the instructive and educational process of physical education lessons are: lack of physical education curriculum for students with RPD, methodology of systematic use of appropriate training, neglecting the practical application of the principles systematization and continuity in the elaboration of the respective process and long-term strategy; poor alignment in practice methodology that ensures the concept "game" in the system of organized lessons as contests and competitions, becoming this way basis of educational activities intensification.

Following the theoretical approaches, analysis and generalization of advanced experience in the field, pedagogical observations, sociological survey, we established educational contents, methodology, organizational forms, practice regimes, assessment and self-evaluation of alternative programs that correspond to the psychophysical and psychomotor particularities, motivational structures of pupils with RPD, where didactic technology sights out the programming of training process in stages within the lessons system with progressive effect based on conceptual orientation "game".

In the program given were included 68 basic hours (provided in the curriculum) and 34 additional hours (sports and dynamic games), in total 102 hours. All the hours, as well the 68 basic hours, provided by the educational plan pointed instructional activities organized predominantly in the form of games in each substructure of the lesson. Basic experiment was conducted during the period of the education year 2000-2001 with 8 grades of Boarding School No. 2 (for children with restraint in psychic development, experiment group) and Gymnasium No. 3 (the witness group) municipality Chisinau.

At the initial and final phase of the experiment were done tests on the parameters that characterize the level of the somatic and functional development, psychomotor physical preparation, psychocognitive, emotional, regulative-volitional and intellectual sphere. Totally, students experiment group (19 people) and control group (19 people) were tested for 31 parameters.

The comparative analysis of the indices obtained within the initial tests, at the majority of parameters demonstrates the uniformity of control group and experiment, and in some cases the superiority of student witness group at the parameters: "waist", "pulse at rest", "test function" "Iarotki test", "30 m Running", "overall success", "maximum success at three objects", "memory", "attention", "theoretical knowledge",

"conduct". (tab.1-6) and exactly at those who are in close correlation with overall working capacity, the level of psihocognitive development processes, emotional and intellectual training ( $r = 0.44$  to  $0.77$ ;  $r = 0.77$  to  $0.9$ ), according to correlative statistical analysis carried out by us. The results obtained confirm that the use of the curriculum developed by us will contribute to the increasing of the educational discipline efficiency at the discipline "Physical education" in secondary school, which was substantially reflected in most of the experienced parameters at the students with RPD toward the witness group.

The comparative analysis of the indices (obtained at the final stage of the experiment), that emphasize of the somatic and functional development, demonstrates their superiority in the experimental group compared to the witness group at the following parameters: waist, body weight, vital pulmonary volume, pulse at rest, pulse after exercise, teping test, respiration rate, reflex measurement, functional restoration test after 20 genuflexions, Iarotchi test, step test at the signification limit  $p < 0.05$ ,  $p < 0.001$  (table 1).

Assessment of the overall physical development level and psychomotor training through comparative analysis of the statistical indicators at the investigated sample demonstrate superiority of the witness group compared to the experienced group at the following parameters: the shuttle running ( $3 \times 10$ ), long jump from standstill, traction, flexibility, 30 m running, lifting of the trunk from lying position to materiality limit  $p < 0.05$ ,  $p < 0.001$ , and at the 60m running parameters, the right hand dynamometry, left hand dynamometry, at spring long jump is not observed the truth difference where the threshold of significance is  $p > 0.05$  (table 2).

**Table 1. The dynamic of growth indices that characterize the level of functional and somatic development**

№	Studied Parameters	group	Initial phase			Final phase		
			X±m	t	P	x±m	t	P
1.	Waist (cm)	W	1,6±0,01	5,0	<0,001	1,61±0,01	2,0	≤0,05
		E	1,5±0,02			1,59±0,01		
2.	Weight(kg)	W	50,0±6,0	0,1	>0,05	53,3±0,02	7,2	<0,001
		E	48,5±6,6			51,5±0,15		
3.	vital pulmonary volume (cm)	W	3900,0±17,5	0,6	>0,05	4000,0±17,5	5,3	<0,001
		E	3890,0±0,7			3930,0±4,86		
4.	pulse at rest (b/min)	W	78,0±0,39	3,0	<0,05	76,0±0,4	2,4	<0,05
		E	75,0±0,44			73,0±0,17		
5.	Pulse after effort (b/min)	W	100,0±1,62	2,01	< 0,05	97,6±1,49	6,8	<0,05
		E	96,0±1,17			88,0±0,17		

6.	Respiration rest (number)	W E	18,0±0,31 17,0±0,17	1,4	>0,05	16,0±0,26 15,0±0,17	2,3	<0,05
7.	Reflex measurement (sec.)	W E	0,4±0,1 0,5±0,01	1,0	>0,05	0,2±0,1 0,3±0,1	2,0	<0,05
8.	Functional restoration test after 20 genuflections	W E	93,5±5,3 113,5±5,17	2,77	<0,05	110,9±3,47 93,6±5,3	2,2	<0,05
9.	Teping test-	W E	6,1±0,18 5,8±0,17	1,25	>0,05	7,5±0,09 6,8±0,08	5,8	<0,001
10.	Iarotki Test	W E	17,3±0,27 15,9±0,18	5,6	<0,001	24,5±0,71 21,5±0,87	2,6 7	<0,05
11.	Step test Harward indices	W E	59,0±0,71 60,0±0,66	1,03	>0,05	62,8±0,89 68,0±0,87	4,1 9	<0,001

**Table 2. Indexes that characterize the level of general physical development parameters and psychomotor training.**

№	Studied parameters	group	Initial phase			Final phase		
			x±m	t	P	x±m	t	P
1.	30m running	W E	5,2±0,01 5,1±0,05	2,0	<0,05	5,0±0,01 4,9±0,05	4,0	<0,001
2.	Shuttle running	W E	8,6±0,3 9,1±0,93	0,3 5	>0,05	8,3±0,3 8,4±0,07	2,01	<0,05
3.	Long jump from standstill (cm)	W E	1,75±0,02 1,75±0,19	0,5	>0,05	1,9±0,17 1,91±0,2	3,3	<0,05
4.	Traction (number)	W E	5,0±0,57 4,25±0,31	1,1	>0,05	7,0±0,6 9,0±0,42	2,8	<0,05
5.	lifting of the trunk from lying position	W E	22,0±2,7 22,7±3,9	0,1 2	>0,05	23,0±0,27 24,0±2,4	3,8	<0,001
6.	Flexibility	W E	7,0±5,94 2,5±1,98	0,7 3	>0,05	10,0±6,3 13,5±5,1	2,9	<0,05
7.	60 m running	W E	9,5±0,83 9,3±0,06	1,1 2	>0,05	9,4±0,03 9,0±0,06	1,4	>0,05
8.	Left hand dynamometry (kg)	W E	30,0±1,4 27,1±1,2	1,6	>0,05	32,1±1,4 29,2±1,1	1,7	>0,05
9.	Right hand dynamometry (kg)	W E	30,5±1,7 28,8±1,2	0,8 5	>0,05	32,5±1,7 31,9±1,0	0,3	>0,05
10.	Spring long jump (cm m)	W E	3,6±0,35 3,7±0,45	0,1 7	>0,05	3,79±0,18 3,9±0,54	0,14	>0,05

The comparative analysis of indices that confirm the development of cognitive processes, regulatory-volitional and intellectual training (final stage), demonstrates their superiority in the experimental group

compared to the witness group at the following parameters: memory and

Nr d/o	Studied parameters	group	Initial phase			Final phase		
			x±m	t	P	x±m	t	P
1.	Overall success at the Subjects (marks)	W E	7,4±0,2 5,8±0,05	8,0	<0,0 01	7,6±0,3 6,2±0,1	3,5	<0,05
2.	maximum success at three objects (marks)	W E	8,7±0,15 8,3±0,1	0,23	>0,0 5	8,8±0,2 8,6±0,51	0,4	>0,05
3.	minimum success at three objects (marks)	W E	6,1±0,1 5,3±0,15	4,14	<0,0 01	6,2±0,03 5,6±0,09	1,6	>0,05
4.	Excitedness CNS (number)	W E	8,0±0,35 8,7±0,2	3,18	<0,0 5	8,4±0,3 8,2±0,1	0,66	>0,05
5.	Theoretical Knowledge (marks)	W E	5,6±0,18 5,2±0,13	2,0	<0,0 5	6,6±0,13 6,0±0,13	1.03	>0,05

Cooper test, the materiality level  $p < 0,05$ ,  $p < 0.001$ , and homogeneity at the parameters: maximum success at three objects success, minimum success at three objects, theoretical knowledge, attention, behavior at  $p > 0.05$  (table 3).

*Table 3 Indexes that characterize the development of intellectual, cognitive, emotional, psychosocial, regulatory-volitional processes*

The analysis of sociometry indexes that were expressed demonstrates homogeneity of the groups, its average cohesion being: the control group 0.50; 0.56 experiment group (Table 4)

6.	Memory(unit.)	W E	5,3±0,1 5,4±0,9	0,11	>0,0 5	6,9±0,07 6,4±0,07	3,3	<0,05
7.	Attention (unit.)	W E	6,0±0,09 4,9±0,05	11,0	<0,0 01	6,5±0,09 6,0±0,13	1,19	>0,05
8.	Behavior (marks)	W E	7,5±0,3 6,0±0,3	3,57	<0,0 5	7,8±0,5 6,8±0,3	1,72	>0,05
10.	Cooper Test (m)	W E	1300,0±325, 0 819,0±93,4	1,32	>0,0 5	1360,0±133, 7 1412,0±182, 0	4,8	<0,00 1

**Table 4 The cohesion indexes of the group at the witness pupils class and the experiment one at the final stage: n = 19**

Content of the preferences and rejections	Initial phase		Final phase	
	WG	EG	WG	EG
TR total number of rejections	23	35	23	17
VR total value of rejections	27	52	27	17
TP total number of preferences	45	35	45	52
VP total value of preferences	83	35	83	60

From 0,41 to 0,60 – group with medium cohesion

$$CIGW = \frac{83 - 27}{83 + 27} = 0.50$$

$$CIGE = \frac{60 - 17}{60 + 17} = 0.56$$

Analyzing the results obtained at the static and dynamic affection to each class, we conclude the following: (Table 5):

**Table5.The indices of affectivity at the graders of the(E)and(W)class, initial and final**

Type of affectivity	Initial phase			Final phase			Difference in percents	
	E	W	difference	E	W	difference	E	W
Positive affectivity	52%	76%	24%	72%	78%	6%	20%	2%
Zero affectivity	35%	16%	19%	17%	15%	2%	18%	1%
Negative affectivity	13%	8%	5%	11%	7%	4%	2%	1%

The difference at the initial stage between the experiment and the witness groups: positive affectivity-24%, zero affectivity-19% , relations of rejecting negative affectivity-5%.

At the final stage the group experiment exhibit relations of friendship, appreciation, sympathy for students from the class- 72%.

(positive affectivity), mutually indifferent relations, 17% (zero affectivity), rejecting relationships-11% (negative affectivity).

The witness group manifest relations of friendship, sympathy, appreciation for pupils from the class 78% (positive affectivity), mutually indifference 15% (zero affectivity), rejection relationships-7% (negative affectivity). The difference at the final stage of the experiment between witness and experiment groups at the positive affection -6%-, zero affection -2%, and negative affectivity-4%.

### Conclusions

The pedagogic experiment has demonstrated the effectiveness of the curriculum analytic program and the methodology of its application. This is confirmed by the rising majority of the group indices of experienced parameters at the experiment group towards the witness group.

The pedagogic experiment has shown that the inclusion of the dynamic and sports games, exercises as stage races, contests and competitions in the context of thematic curriculum in our instructive-educational process, based on dynamic, kinematics and motivational factors, have streamlined the educational process through the variety of actions they contain, determining motivation and conduct behavior at students with RPD, increase of the morph-functional development, level of psycho-motor and intellectual training.

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## **JOCURILE DE MIȘCARE ȘI SPORTIVE CA FORMĂ DE CORECȚIE A REȚINERII ÎN DEZVOLTAREA PSIHICĂ (RDP)**

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**Cuvinte-cheie:** pedagogice, dezvoltare psiho-fizică, psihomotricitatea, handicapați

### **Rezumat**

Reținerea în dezvoltarea psihică sau deficiența mintală reprezintă o deficiență globală care vizează întreaga personalitate a individului: structură, organizare, dezvoltare intelectuală, afectivă, psihomotrică, comportamental-adaptativă. Educația este una dintre acele probleme a căror analiză, în ciuda aparițiilor de facilitare și simț comun, se dovedește până la urmă de o mare complexitate. Explicația acestui fapt trebuie căutată în viața cotidiană și în inevitabilitatea implicației ei educative. Înainte de a avea idei și sisteme educative bine determinate, oamenii au practicat educația fizică și au suportat influențele acesteia.

Actualmente, mai ales în societățile dinamice, cu o înaltă rată a mobilității sociale, educația nu mai este un simplu mijloc de perpetuare a valorilor de “transmisie” pe verticală: de la părinte la copil, de la trecut la prezent, de la adulți purtători de valori la tânără generație în formarea, ci și principalul instrument prin care societatea se poate autoinstrui în mod conștient, tradițional sau discontinuu, potrivit idealurilor de progres uman și social.

Asistăm, așadar, la apariția unei noi relații între educație și societate. Societatea trebuie să acorde o mai mare atenție problemelor educației, să sprijine material progresul cercetărilor în acest domeniu și să aplice în practică rezultatele lor. În concluzie, de știința educației depinde în mare măsură aspirația spre formarea unui om nou și a unei

societăți noi, potrivit unor idealuri sociale și umane înalte. În legătură cu aceasta, este necesar să examinăm, de asemenea, dinamica procesului de reținere în dezvoltare.