



9th INTERNATIONAL SCIENTIFIC CONFERENCE

"ANTHROPOLOGICAL AND TEO-ANTHROPOLOGICAL VIEWS ON PHYSICAL ACTIVITY"

**Efekti razvojne gimnastike na
motoričke sposobnosti učenika**

**Effect of developmental gymnastics on
motor abilities of students**

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Cilj ovog istraživanja bio je da se ispita efikasnost programa razvojne gimnastike na motoričke sposobnosti učenika osnovnoškolskog uzrasta.

Aim of this research was to test the effects of developmental gymnastics to motor abilities of students attending elementary school.



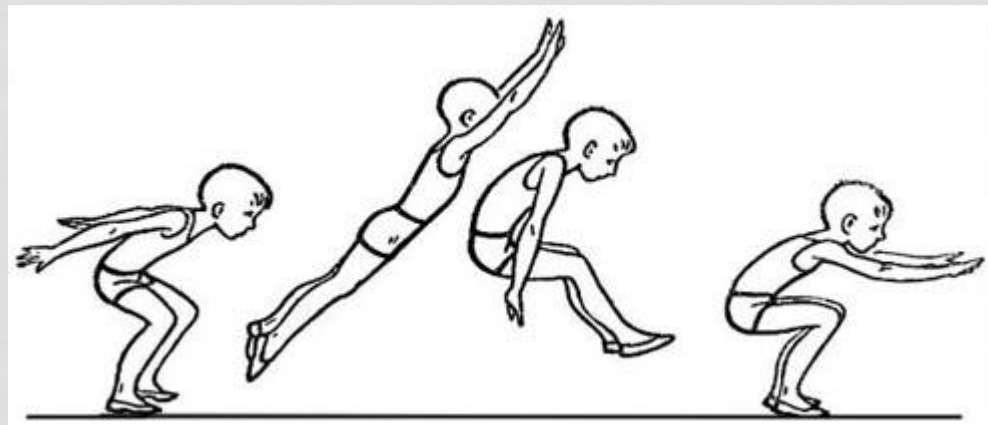
Uzorak je sačinjavalo 40 učenika osnovnih škola uzrasta 11-12 godina. 20 učenika sačinjavalo je eksperimentalnu grupu, ostalih 20 kontrolnu grupu.

Sample consisted of 40 elementary school students, aged 11-12. Experimental group consisted of 20 students and control group consisted of remaining 20 students.



- Motoričke sposobnosti su procjenjene sledećim testovima: skok iz čučnja, skok udalj, izdržaj u zgibu, podizanje trupa, sklekovi, sprint 30m, T-test, stisak šakom i testovi bacanja medicine.
- Eksperimentalna i kontrolna grupe su imale redovnu nastavu fizičkog vaspitanja dva puta nedeljno i po dva časa sekcije, a eksperimentalna grupa je sprovodila program razvojne gimnastike tokom 12 nedelja na časovima sekcije.

- Motor abilities were assessed using following tests: squat jump, long jump, bent-arm hang, sit-ups, push-ups, sprint 30m, T-test, hand grip, shuttle run 20m, and medicine ball throwing tests.
- Experimental and Control group had regular physical education classes twice a week and two classes of additional physical activity, with experimental group conducted a developmental gymnastics program during the 12 weeks.



Na inicijalnom mjerenju nije bilo statistički značajnih razlika između eksperimentalne i kontrolne grupe. Rezultatima je utvrđena statistički značajna razlika u korist eksperimentalne grupe na finalnom mjerenju u testovima: izdržaj u zgibu (.026), dizanje trupa (.002), sklekovi (.034), T test (.005), stisak šakom (.009), bacanje medicine preko glave naprijed (.046) i bacanje medicine iz ležanja (.042), na nivou $p < 0,05$.

At initial measurement there were no statistically significant differences between control and experimental group. The results showed a statistically significant difference in favor of the experimental group in the final measurement in the tests: bent-arm hang (.026), sit-ups (.002), push-ups (.034), T test (.005), hand grip (.009), overhead medicine ball throw forwards (.046) and medicine ball supine overhead throw (.042), at the level of $p < 0.05$.

Variable	INITIAL				FINAL			
	Mean E	Mean K	F	Sig.	Mean E	Mean K	F	Sig.
Squat jump	20.1	20.6	.068	.795	22.2	20.7	.931	.341
Long jump	156.8	158.8	.073	.789	167.1	161.0	.719	.402
Bent-arm hang	31.8	30.5	.122	.729	40.4	31.7	5.401	.026
Sit-ups	21.7	21.2	.156	.695	26.4	21.9	10.994	.002
Push-ups	14.0	11.7	.691	.411	18.3	12.0	4.824	.034
Sprint 30m	5.8	5.9	.544	.465	5.7	5.9	1.851	.182
T-test	15.6	15.8	.287	.595	14.3	15.7	8.978	.005
Handgrip	19.5	20.1	.282	.599	23.3	20.4	7.664	.009
MBT1	6.3	6.2	.189	.666	6.6	6.2	4.272	.046
MBT2	5.8	5.8	.000	.987	5.9	5.8	.475	.495
MBT3	4.5	4.5	.398	.532	4.7	4.6	4.433	.042



- Program razvojne gimnastike uz instrukcije kvalifikovanih stručnjaka može dovesti do značajnih poboljšanja u određenim motoričkim sposobnostima kod djece osnovnoškolskog uzrasta.

- The program of developmental gymnastics with the instructions of qualified experts can lead to significant improvements in motor abilities among primary school children.

