

# STUDY ON THE GENERAL PHYSICAL DEVELOPMENT GAMES FOR MALE STUDENTS IN GRADE 7 OF LUONG HOA SECONDARY SCHOOL CHAU THANH DISTRICT, TRA VINH PROVINCE

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## Abstract:

Through the pedagogical test, the team identified the physical status of 7th grade students, Luong Hoa Secondary School in Chau Thanh District, Tra Vinh Province. Then, through interviews and pedagogical experiments, the topic has selected and proved the effectiveness of 20 sports games in improving physical strength for students in grade 7 in Luong Hoa Secondary School, Chau Thanh District, Tra Vinh Province.

**Keywords:** Physical education, motor games, Luong Hoa junior high school

## INTRODUCTION

Currently the education program in secondary schools is limited in content and form and amount of movement. Hence, improving the curriculum to get motor exercises to make the content become more diverse and richer, improve the quality of learning in accordance with the physical development of children is important and urgent. Therefore, the research team chose the topic: "Research on some sports games to develop general physical strength for male students in grade 7 of Luong Hoa Secondary School, Chau Thanh District, Tra Vinh Province".

## RESEARCH METHODS

During the research process, the following

research methods are used: Methods of analyzing and synthesizing documents; Methods of interview, seminar; Pedagogical observation method; Method of pedagogical examination; Statistical mathematical methods.

## RESULTS AND DISCUSSION

### 1. The general physical condition of male students in grade 7, Luong Hoa Secondary School, Chau Thanh district, Tra Vinh province

To assess the general physical condition of male students in Grade 7 Secondary School Luong Hoa Secondary School in Chau Thanh District, Tra Vinh Province, the team conducted a physical fitness test of students with 04/06 test as prescribed of the Ministry of Education and Training. The results are presented in Table 1.

**Table 1. Statistical parameters of the physical assessment tests for students of Luong Hoa, Chau Thanh and Tra Vinh Secondary Schools (n = 80)**

No	Test	$\bar{x}$	S	C <sub>v</sub>	$\epsilon$
1	Force of hand squeezing (KG)	21.96	4.03	18.35	0.04
2	Lying flat and abdominal crunch in 30 seconds (times)	17.38	3.14	18.09	0.04
3	Long jump (cm)	174.91	12.77	7.30	0.02
4	30m running XPC (giây)	5.44	0.54	9.84	0.02
5	Running 4 x 10m (giây)	11.18	0.64	5.76	0.01
6	Running in 5 mins (m)	839.25	121.68	14.50	0.03

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The data in Table 1 shows;

Variable coefficient (CV): high uniformity tests (CV <10%): 30m running XPC, long jump and running 4x10m; tests with average homogeneity (10% <CV <20%): lie on your stomach for 30 seconds, squeeze your hand, run for 5 minutes depending on your strength and run 30m XPC

Although the variability varies among individuals in the sample population, some quite

large indicators as above but all the average values of the sample are sufficiently representative ( $\leq 0.05$ ) to be able to base on which to conduct further analysis and evaluation.

Based on the test results, the team conducted a classification of students' physical strength according to the standards set by the MOET. The results are presented in Table 2.

**Table 2. Physical strength status of 12-year-old male student in Luong Hoa Secondary School, Chau Thanh, Tra Vinh (n = 80)**

Level	Long jump (cm)		Running 30m XPC (giây)		Running 4x10m (giây)		5 mins running (m)		Physical strength	
	m <sub>i</sub>	%	m <sub>i</sub>	%	m <sub>i</sub>	%	m <sub>i</sub>	%	m <sub>i</sub>	%
Good	26	32.50	43	53.75	74	92.50	10	12.50	16	20.00
Pass	41	51.25	34	42.50	6	7.50	26	32.50	19	23.75
Fail	13	16.25	3	3.75	0	0.00	44	55.00	45	56.25

The results obtained in Table 2 show that the percentage of students with test results achieved or higher in each test is high, except for the test 5 minutes running, it depends on strength, but overall assessment of the physical strength of the students, only 43.75% of the students pass, while 56.25% of the students did not meet the physical standards.

**2. Selection of sports development games for boys in grade 7 Luong Hoa Secondary School, Chau Thanh District, Tra Vinh Province**

To select general sports development games for male students in grade 7 of Luong Hoa Secondary School, Chau Thanh District, Tra Vinh Province, the research team conducted research materials and professional books on sports activities for elementary students to identify games that have the effect of physical development for elementary students. To ensure objectivity, the research team interviewed experts, coaches, teachers, lecturers, and gymnastics and gymnastics people in Tra Vinh province. Two interviews in 2 month, the same way of evaluating, the same content and the same audience interviewing coaches, junior high and high school teachers, educators in Tra Vinh Province regarding to the level of using sports games shown in Table 3.

From interview results, the research team selected games with the total number of votes > 80% of the total votes in both interviews. According to the above principle, the team has selected 20 motor games named in Table 3.

**3. Applying and evaluating the effectiveness of physical development games for male students in grade 7 of Luong Hoa Secondary School, Chau Thanh District, Tra Vinh Province**

In order to evaluate the effectiveness of the standard of physical development that the topic has chosen, the project conducts an experimental process for a period of 1 year, 2 periods per week. Experimental process was conducted on 2 groups parallelly:

Control group: 33 male students in grades 7/1, 7/2 and 7/3 in normal study;

Experimental group: 47 male students in grades 7/4, 7/5 and 7/6 practicing in experimental program.

The training conditions for both groups are the same, both groups have instructors (similar teacher qualifications).

+ Before the experiment:

Carry out the performance test of the test subjects to assess the physical strength of the research object, then calculate the average value ( $\bar{x}$ ), standard deviation ( $\delta$ ) and compare the

**Table 3. Interview results of physical development games for students in grade 7 of Luong Hoa Secondary School**

No.	Game	1 <sup>st</sup> time (n = 20)		2 <sup>nd</sup> time (n = 20)		$\chi^2$	P
		Approval	Ratio %	Approval	Ratio %		
1.	Run fast by numbers	17	85	18	90	0.23	> 0.05
2.	Run in a circle	18	90	18	90	0.00	> 0.05
3.	Volleyball with six players	19	95	19	95	0.00	> 0.05
4.	Move fast, jump fast	17	85	18	90	0.23	> 0.05
5.	Give credit sticks	18	90	17	85	0.23	> 0.05
6.	The dangerous road	18	90	18	90	0.00	> 0.05
7.	Hitching flag	20	100	20	100	0.00	> 0.05
8.	Transfer objects	17	85	17	85	0.00	> 0.05
9.	Cat & mouse game	20	100	20	100	0.00	> 0.05
10.	Using a net to catch fish	18	90	18	90	0.00	> 0.05
11.	Growing buds, flowers	19	95	19	95	0.00	> 0.05
12.	Relay Crawling crabs	18	90	17	85	0.23	> 0.05
13.	People linked with each others and run to the destination	17	85	18	90	0.23	> 0.05
14.	Lifting one person	17	85	17	85	0.00	> 0.05
15.	Surfing jump	18	90	18	90	0.00	> 0.05
16.	Rabbit jumps	17	85	18	90	0.23	> 0.05
17.	Jump in box	19	95	19	95	0.00	> 0.05
18.	Chanting while sawing wood	18	80	18	90	0.00	> 0.05
19.	Pass and catch the ball relay	20	100	20	100	0.00	> 0.05
20.	Running and putting item in a basket relay	18	90	18	90	0.00	> 0.05

**Table 4. Comparison of the average value of the physical strength test group of the control group and the experimental group before experiment**

Test	$\bar{X}_{\text{control group}}$	$\delta$	$\bar{X}_{\text{experimental group}}$	$\delta$	d	t	P
Force of squeezing hands (KG)	21.97	4.50	21.95	5.71	0.02	0.01	>0.05
Lying flat and stomach crunch in 30s (times)	17.45	3.38	17.27	2.77	0.17	0.25	>0.05
Long jump (cm)	175.55	11.48	174.00	14.36	1.55	0.52	>0.05
Running 30m XPC (s)	5.41	0.49	5.49	0.59	0.08	0.63	>0.05
Running 4 x 10m (s)	11.19	0.72	11.18	0.51	0.01	0.09	>0.05
Running in 5mins (m)	841.02	119.50	836.73	124.68	4.29	0.15	>0.05

average value of the experimental groups. The pre-empirical control obtained the results in Table 4 as follows:

Data in Table 4 shows:

The average value of the achievement of tests to evaluate the effectiveness of physical development games at physical education time between the experimental group and the control group did not differ ( $t_{\text{calculated}} < t_{\text{table}} = 1,990$ ), at

probability threshold  $P > 0.05$ . In other words, the performance of all tests to evaluate the effectiveness of physical development games at the physical education time of the experimental group and the control group before the experiment were similar, not different in the initial level.

+ After experiment:

**Table 5. Comparison of average values of fitness evaluation tests of control group and experimental groups**

Test	$\bar{X}_{\text{control group}}$	$\delta$	$\bar{X}_{\text{experimental group}}$	$\delta$	d	t	P
Force of squeezing hands (KG)	24.96	4.40	22.79	5.44	2.17	1.96	>0.05
Lying flat and stomach crunch in 30s (time)	20.79	2.60	19.24	2.76	1.54	2.52	<0.05
Long jump (cm)	189.15	11.95	181.82	13.81	7.33	2.47	<0.05
Running 30m XPC (s)	5.16	0.51	5.38	0.59	0.22	2.00	<0.05
Running 4 x 10m (s)	10.85	0.64	11.09	0.51	0.24	2.02	<0.05
Running in 5mins (m)	882.26	119.54	858.94	125.54	23.32	0.83	>0.05

The data in Table 5 shows:

The average value of the achievement of the tests to evaluate the effectiveness of physical development games at the physical education session between the experimental group was better than the control group in the supine position and stomach crunch test for 30 seconds (times), Long jump (cm), Running 4 x 10m (seconds) and run 30m XPC (seconds) for  $t_{\text{calculation}} > t_{05} = 1,990$ ,  $P < 0.05$ . However, the average values of achievement in the two hand squeezing forces (KG) and 5 minutes running (m) between the experimental and control groups were similar because the  $t_{\text{calculated}} < t_{05} = 1,990$ ,  $P > 0.05$ .

The data in Table 6 after the experiment shows that the test results of the 2 groups after the experiment increased, the difference of test results before and after the experiment of both groups were significant at the threshold of probability  $P < 0.05$ . However, the achievement growth rate of the experimental group was higher than that of the control group in all tests. The average growth rate of experimental group reached 8.68%, while the control group represented only 4.22%.

**CONCLUSION**

The physical strength results show that the students in Luong Hoa Secondary School, Chau Thanh District, Tra Vinh Province are still weak, only 43.75% of the students have the physical strength as prescribed by the Ministry of Education and Training.

By appropriate scientific research methods, the team selected 20 games. The experimental process has proved the effectiveness of the sports games selected by the team in improving the physical strength for grade 7 students, Luong Hoa Secondary School, Chau Thanh District, Tra Vinh Province.

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**Table 6. Growth rate of physical strength tests of male students in experimental and control groups after experiment**

No	Test	Before		After		W (%)	t	P
		$\bar{x}$	$\delta$	$\bar{x}$	$\delta$			
<b>II</b>	<b>Experimental group (n = 47)</b>							
1.	Hand squeezing force (KG)	21.97	4.50	24.96	4.40	13.34	13.09	<0.05
2.	Lying and stomach crunch in 30s ( times)	17.45	3.38	20.79	2.60	18.54	18.18	<0.05
3.	Long jump (cm)	175.55	11.48	189.15	11.95	7.47	20.98	<0.05
4.	Running 30m XPC (giây)	5.41	0.49	5.16	0.51	4.78	13.16	<0.05
5.	Running 4 x 10m (giây)	11.19	0.72	10.85	0.64	3.08	16.85	<0.05
6.	Running in 5 mins (m)	841.02	119.50	882.26	119.54	4.87	34.00	<0.05
	<b>W</b>					8.68		
<b>II</b>	<b>Control Group (n = 33)</b>							
1.	Hand squeezing force (KG)	21.95	5.71	22.79	5.44	4.37	4.14	<0.05
2.	Lying and stomach crunch in 30s ( times)	17.27	2.77	19.24	2.76	11.08	37.72	<0.05
3.	Long jump (cm)	174.00	14.36	181.82	13.81	4.44	11.07	<0.05
4.	Running 30m XPC (giây)	5.49	0.59	5.38	0.59	1.97	8.82	<0.05
5.	Running 4 x 10m (giây)	11.18	0.51	11.09	0.51	0.80	9.57	<0.05
6.	Running in 5 mins (m)	836.73	124.68	858.94	125.54	2.66	24.33	<0.05
	<b>W</b>					4.22		

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