



SELECTING MEASURES TO ENHANCE THE QUALITY OF PHYSICAL EDUCATION FOR NON-INTENSIVE TRAINING STUDENTS OF HA TINH UNIVERSITY, VIETNAM

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Abstract:

This article is the result of a study of the situation of physical education work at Ha Tinh University. On that basis, having selected some measures to contribute to enhancing the quality of teaching physical education for students of Ha Tinh University, thereby improving the efficiency of physical education at the university.

Keywords: physical education, measure, enhance, Ha Tinh University

1. Introduction

In the socio-economic development strategy of the country under the socialist orientation, human health is valuable. Currently, the universities-colleges have a tendency to expand in size and diversify types of training. With the current strong growth in the number of students, the issue of ensuring the quality of education, including physical education, is a big challenge.

Ha Tinh University over 10 years of construction and growth, the university has been asserting the position and size of training. In addition, the university also focus all its attention on the physical education of students. Especially improving the quality of physical education for students, helping them achieve the best mental and health condition to complete the course at the university as well as the future working process. Therefore, based on analyzing the meaning and importance of improving the quality of physical education for students, we research the topic: "Selecting measures to enhance the quality of physical education for non-intensive training students of Ha Tinh University".

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2. Material and Methods

During the research process, the topic uses the following research methods: method of analyzing and synthesizing documents; method of interview, seminar; pedagogical observation method; sociological investigation method; experimental method of pedagogy; statistical mathematical methods.

3. Results and Discussion

The topic has selected the 4 followings solutions:

- Measure 1: Enhance the qualifications of lecturers;
- Measure 2: Promote the development of facilities, training grounds and equipment for physical training and sports;
- Measure 3: Raising awareness of students about the role, position and effect of physical education in the university;
- Measure 4: Enhancing extracurricular activities and tournaments.

3.1. Organizing application and evaluating the efficiency of measures

After selecting four solutions, the topic applied the 4 above solutions synchronously and consistently. The period of time to organize application of measures in 10 months (equivalent to 1 year of study) divided into 2 semesters at Ha Tinh University.

3.1.1. Measures to enhance the qualifications of the teaching staff

With the attention of the leaders of university leaders and the ministry leaders, the number of physical education lecturers has been improved both in quantity and quality, which is a very good result in raising the qualifications of physical education lecturers that have not been done before. This is clearly shown in Table 1.

Table 1: Teaching staff of physical education at Ha Tinh University at the present (year 2015)

No.	Degree	No	Seniority work (year)			Note
			< 5	5 - 10	> 10	
1	Bachelor	13	9	1	3	5 lecturers in postgraduate
2	Master	0	0	0	0	
3	Doctor	0	0	0	0	
4	Major lecturer	0	0	0	0	

3.1.2. Measures to promote the development of facilities, training ground, physical training and sports equipment

Table 2: The number of physical training and sports facilities before and after implementing the measures

No.	Name of training ground, tools	Before implementing the measures		After implementing the measures	
		2012	2013	2014	2015
1	Football pitch	2	2	4	7
2	Volleyball court	5	5	7	7
3	Basketball court	0	0	2	2
4	Badminton yard	4	4	5	6
5	Multifunctional gym	1	1	2	2
6	100m running track	1	1	4	4
7	1500m running track	1	1	4	4
8	Long-jump hole	2	3	3	4
9	High-jump equipment (set)	1	1	2	2
10	Weightlifting pitch	1	1	1	1
11	Double beams	3	4	5	5
12	Crossbeam with both ends high and low	2	4	5	5
13	Ladder	0	0	4	4

The survey showed that compared to previous years, the number of playgrounds has increased significantly, the number of football fields has increased sharply from only 2 regular grass fields, so far there are 7 football pitches in which there are 5 artificial grass, volleyball courts, etc. The number of other teaching and learning equipment for the subject is fully met. Annually, the school gives additional supplies to buy equipment when the subject requires it, although currently, the school has 3 facilities, new facilities are initially being put into use, the construction of the school is giving priority to other categories more. According to the data of students' questionnaires about the training ground and gymnastics equipment after implementing the solutions, up to 141/242 students accounted for 58.26% of the current thought that the training ground and equipment of the university were good and 101/242 students account for 41.74% is sufficient, there is no student who thinks is lacking. Acquiring this is a great effort of the teaching staff, leaders of the Subject and especially the attention of the administrators on the physical education work in the school.

3.1.3. Solutions to raise students' awareness about the role, position and effect of physical education in the university

In order to evaluate the results of applied solutions to improve the effectiveness of physical education for students of Ha Tinh University, the topic interviewed students in the university about the importance of the subject of physical education and students' interest in learning physical education after applying the solutions, the results are presented in Table 3.

Table 3: Results of interviewing perceptions of students
 about the subject of physical education after the experiment

No.	The content of the interview	Interview result	
		n = 242	%
1	Aware of the importance of physical education?		
	Important with the development of the body	239	98,76
	Not important	0	0
	Unclear	3	1,24
2	Opinion about the interest in learning physical education?		
	Interested	234	96,69
	Not interested	8	3,31

The results of Table 3 show the recognition of the position, the effect of physical education on improving the health of students and the interest in learning Physical Education of students. The change compared with the previous experiments was very clear, before the experiment was only 86.18%, with proper recognition of physical education, 10.16% of students are not aware of the importance of physical education subjects and 3.66% of students are not aware of subjects properly, only 83.33% of students were interested in physical education, 16.67% were still not interested in the subject. After the experiment, there were 239/242 students (accounting for 98.76%), who rightly acknowledged Physical Education and 234 students (accounting for 96.69%) were interested in studying Physical Education, only 1.24% of students were not aware of the importance of Physical Education subjects and 3.31% of students were not interested in Physical Education subjects.

3.2. Measures to enhance extracurricular activities and tournaments

3.2.1. Developing clubs, sports teams

With the advice of the Physical Education subject and the consensus and leadership of the administrators, the faculties of some models of sports clubs have been established and implemented specifically, voluntary sports teams are formed and often run. The results are presented in Table 4.

Table 4: The number of clubs and sports teams participating in extracurricular training

No.	Clubs, teams, sports groups	Quantity	
		Before the experiments	After the experiments
1	Martial Arts Club	0	1
2	Volleyball Club	0	1
3	7-person soccer team	4	16
4	Badminton team	8	22
5	Soccer team	1	2
6	Basketball team	0	4
7	Group of double beams	16	22
8	Group of crossbars with both ends high and low	22	42
Total		45	110

The table above shows that before the experiments, there were no clubs, only teams, groups but with negligible numbers in all sports, after the experiment, there were two clubs that are ruined in an organized manner named Martial Arts Club and Volleyball Club, with dozens of teams and groups participating in extracurricular physical training.

3.2.2. Organizing the tournaments

With the agreement of the administrators, the Physical Education Subject has cooperated with mass organizations and in the school to organize physical training and sports activities. Since then, the tournaments of teachers and students, students increased significantly in most courses, classes, and clubs, with a variety of competition content, many forms together with external tournaments of the university. It has contributed to building a movement of physical training and sports throughout the university, thereby improving the healthy cultural and sports life in the university. The results are presented in Table 5.

Table 5: The number of sport tournaments inside and outside the university

No.	Tournaments	The number of tournaments	
		Before the experiments	After the experiments
1	Friendly tournaments between classes	3	6
2	Friendly tournaments between the school years	2	4
3	Friendly tournaments between the clubs and teams	0	2
4	Traditional tournament	1	2
5	Provincial tournament	2	4
6	Friendly tournament outside the University	3	6

The table above shows that before the experiment, the number of prizes from big to small was 11, after the fact the number increased to 24, although this is the number of large-scale awards and many small-scale prizes, the number increases greatly, which proves that the extracurricular movement of students has increased significantly after the implementation of solutions, this contributes to enhancing the movement of physical training and sports of students of Ha Tinh University.

3.3. General experimental results

3.3.1. Physical strength indicators

In order to verify the efficiency of the selected measures, we have tested both groups of students before and after the experiment by testing: hand squeeze forces, crunches, long-jump, running 30m with a high start, running shuttle 4x10m, running 5 minutes depending on capacity. Then we have compared the results between the groups with the standard of physical training as prescribed by the Ministry of Education and Training (Decision on the evaluation and grading of students' physical strength, số 53/2008/QĐ-BGDĐT Sep. 18, 2008). Test results are presented in Table 6 to Table 9.

Table 6: Results of physical strength test of male the verified group and the experimental group before the experiments

Serial	Test	The verified group (n=33)		The experimental group (n=36)		Comparison	
		\bar{X}	$\pm S$	\bar{X}	$\pm S$	t	P
1	Preferred hand squeeze forces	60,33	8,34	59,14	6,95	0,64	>0,05
2	Crunches	20,9	3,56	20,53	3,38	0,45	>0,05
3	Long-jump	222,18	15,13	221,14	16,38	0,36	>0,05
4	Running 30m with a high start (s)	4,77	0,12	4,76	0,13	0,34	>0,05
5	Running shuttle 4x10m (s)	10,45	0,48	10,49	0,48	-0,35	>0,05
6	Running for 5 minutes at your own pace (m)	1023,64	102,19	1018,89	90,01	0,2	>0,05

Table 7: Results of physical strength test of female the verified group and the experimental group before the experiments

No.	Test	The verified group (n=35)		The experimental group (n=35)		Comparison	
		\bar{X}	$\pm S$	\bar{X}	$\pm S$	t	p
1	Preferred hand squeeze forces	28,2	6,85	28,43	6,85	-0,14	>0,05
2	Crunches	12,86	2,77	13,37	3,57	-0,67	>0,05
3	Long-jump	151,91	8,52	151,31	10,7	0,26	>0,05
4	Running 30m with a high start (s)	6,55	0,44	6,53	0,43	0,19	>0,05
5	Running shuttle 4x10m (s)	12,45	0,49	12,3	0,61	1,14	>0,05
6	Running for 5 minutes at your own pace (m)	730,57	65,12	704,57	74,18	1,56	>0,05

Through the analysis of results from Table 6 and Table 7, results of pre-empirical physical assessment tests of both male and female students in both verified and experimental groups did not show statistically significant differences (tính < bảng at the probability threshold $p > 0,05$). Thus, the level of the physical strength of the verified and experimental groups at the time before the experiment was similar.

After deploying the above 4 measures for 10 months, the topic conducted the physical strengths test of the study objects through specified tests. The results are shown in Table 8 and Table 9.

Table 8: Results of physical strength test of male verified group and experimental group after the experiments

No.	Test	The verified group (n=33)		The experimental group (n=36)		Comparison	
		\bar{X}	$\pm S$	\bar{X}	$\pm S$	t	P
1	Preferred hand squeeze forces	61,06	8,25	68,31	8,58	-3,58	$p < 0,05$
2	Crunches	21,15	3,45	23,86	2,07	-3,91	$p < 0,05$
3	Long-jump	223,67	9,39	233,03	12,67	-3,21	$p < 0,05$

4	Running 30m with a high start (s)	4,74	0,11	4,44	0,2	7,98	p<0,05
5	Running shuttle 4x10m (s)	10,4	0,46	10,14	0,47	2,33	p<0,05
6	Running for 5 minutes at your own pace (m)	1035,76	135,83	1091,94	117,2	-2,38	p<0,05

Table 9: Results of physical strength test of female verified group and experimental group after the experiments

No.	Test	The verified group (n=35)		The experimental group (n=35)		Comparison	
		\bar{X}	$\pm S$	\bar{X}	$\pm S$	t	P
1	Preferred hand squeeze forces	29,31	7,94	35,43	13,06	-2,37	p<0,05
2	Crunches	13,34	2,75	15,14	3,37	-2,45	p<0,05
3	Long-jump	152,06	8,85	157,26	9,16	-2,41	p<0,05
4	Running 30m with a high start (s)	6,45	0,44	6,13	0,42	3,11	p<0,05
5	Running shuttle 4x10m (s)	12,37	0,56	11,85	0,58	3,79	p<0,05
6	Running for 5 minutes at your own pace (m)	746,94	76,22	790,57	82,96	-2,29	p<0,05

The data in Table 8 and Table 9 show that the results of the assessments of the physical strength test of both male and female students in the experimental group increased to show a statistically significant difference in the probability threshold $P<0,05$. In other words, the level of physical strength at the end of the experiment of the experimental group was much higher than the verified group. This allows effective confirmation of measures in enhancing physical fitness for students.

3.4. Evaluation results on general physical strength

The topic also considered and evaluated the results of general physical training of the experimental group and the verified group before and after the experiments. The results are presented in Table 10 and Table 11.

Table 10: Results of evaluating general physical strength of the verified group and the experimental group before the experiments

No.	Group	Good (%)	Average (%)	Poor (%)
1	Verification (n = 68, of which 33 men and 35 women)	41,16	47,3	10,54
2	Experiment (n = 71, of which 36 men and 35 women)	53,52	38,73	7,75

Through Table 10 and Table 11, the verified group students' learning and self-improvement training according to the above physical strength tests are limited. This is

reflected in the verified group, the “good” index has significantly decreased from 41.16% to 37.74%, and the “average” index and the “poor” index increase.

Table 11: Results of evaluating general physical strength of the verified group and the experimental group after the experiments

No.	Group	Good (%)	Average (%)	Poor (%)
1	Verification (n = 68, trong đó 33 nam và 35 nữ)	37,74	48,53	13,73
2	Experiment (n = 71, trong đó 36 nam và 35 nữ)	55,64	38,26	6,1

In the experimental group, the “good” index has increased from 53,52% to 55,64%, the “average” index decreased slightly, and the “poor” index descended from 7.75% to 6.1%. This also confirms the efficiency of the measures that the topic has selected.

3.5. The growth rhythm

To see more clearly the effect of the measures in enhancing the physical strength, the topic compares the growth level of the physical strength between the two groups, the verified group and the experimental group. The results are presented in Table 12.

Table 12: The growth level of the physical strength of verified and experimental groups after the experiments

No.	Test	Sex	The verified group (33 men; 35 women)			The experimental group (36 men; 35 women)		
			Before the experiment \bar{x}	After the experiment \bar{x}	W (%)	Before the experiment \bar{x}	After the experiment \bar{x}	W (%)
1	Preferred hand squeeze forces	Male	60,33	61,06	1,2	59,14	68,31	14,39
		Female	28,2	29,31	3,86	28,43	35,43	21,92
2	Crunches	Male	20,91	21,15	1,14	20,53	23,86	15
		Female	12,86	13,34	3,66	13,37	15,14	12,42
3	Long-jump	Male	222,18	223,67	0,67	221,14	233,03	5,24
		Female	151,91	152,06	0,1	151,31	157,26	3,86
4	Running 30m with a high start (s)	Male	4,77	4,74	-0,63	4,76	4,44	-6,96
		Female	6,55	6,45	-1,54	6,53	6,13	-6,32
5	Running shuttle 4x10m (s)	Male	10,45	10,4	-0,48	10,49	10,14	-3,39
		Female	12,45	12,37	-0,64	12,3	11,85	-3,73
6	Running for 5 minutes at your own pace (m)	Male	1023,64	1035,8	1,18	1018,9	1091,94	6,92
		Female	730,57	746,94	2,22	704,57	790,57	11,5

Through the results in Table 12, the growth rhythm of the physical strength factors of the experimental group was much higher than that of the verified group. The growth rhythm of the physical strength factors of the verified group ranged from -0.64% to 3.86%, while in the experimental group, the results were from -06.96% to 21.92%. This shows that the

solutions that the topic has chosen to apply in practice Ha Tinh University have brought high efficiency.

To assess more accurately and visually the growth rate of the control and experimental groups, the topic is clearly shown in the chart from 1 to 2 later.

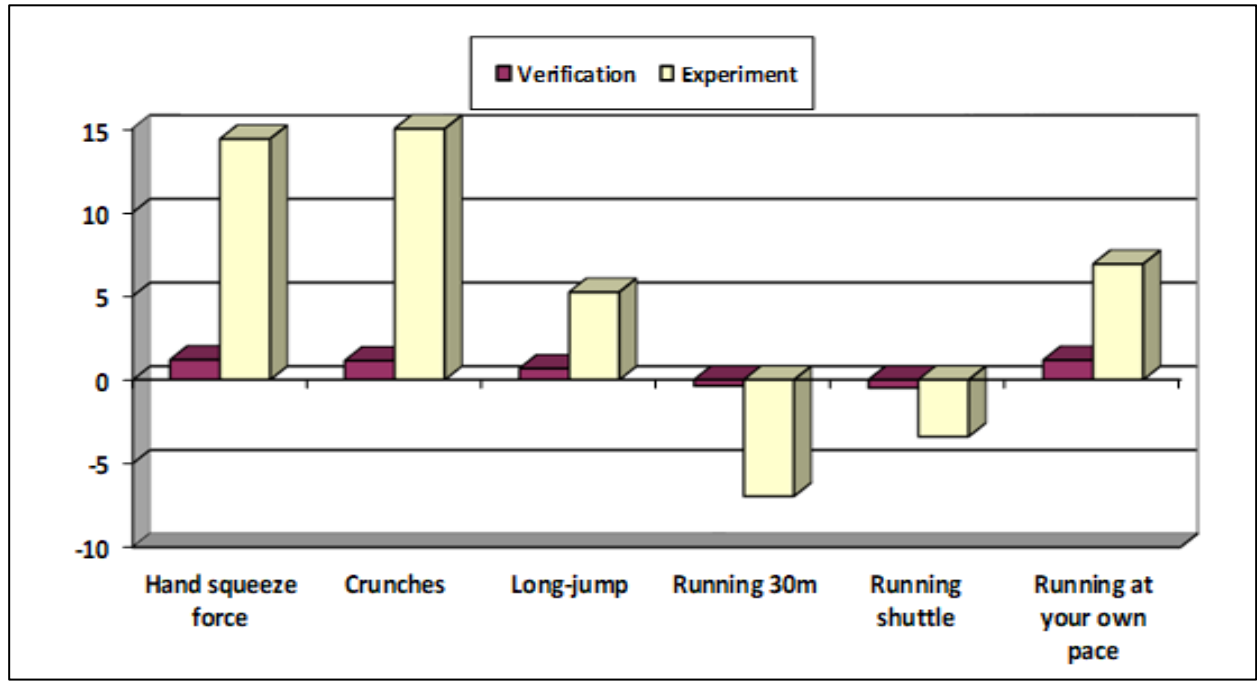


Chart 1: The growth rhythm of the physical strength of males after the experiments

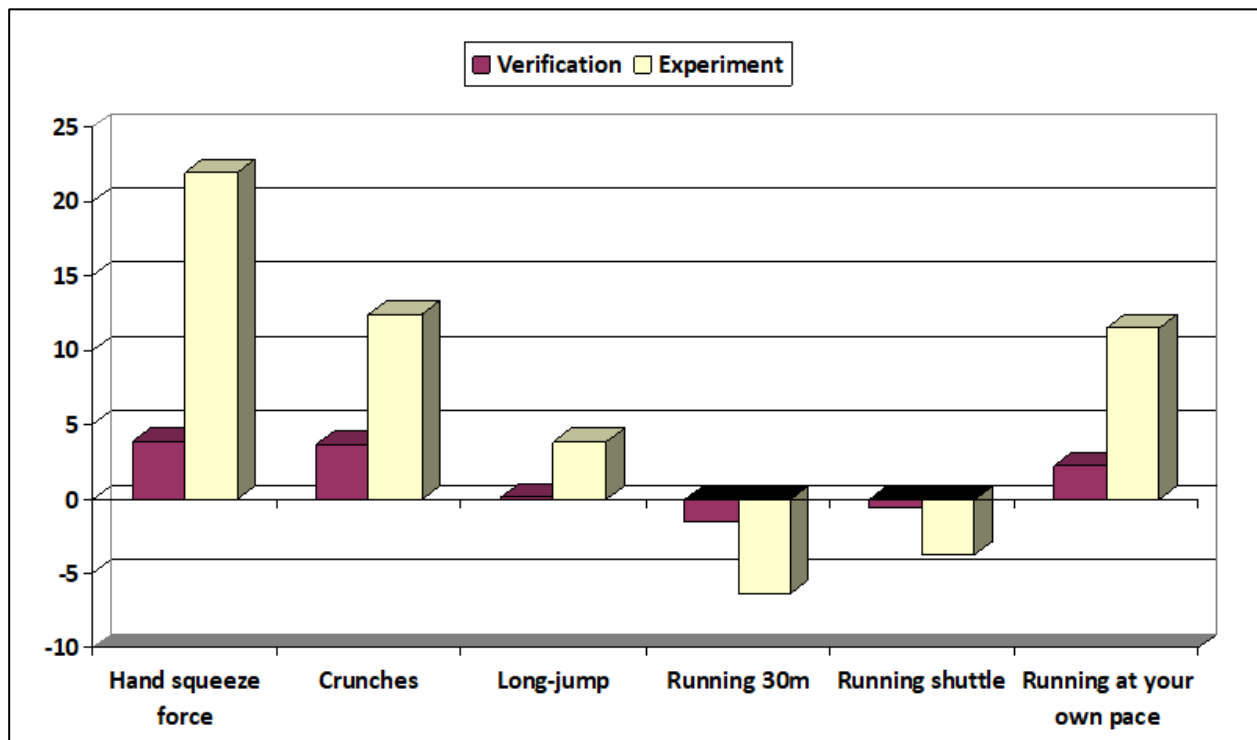


Chart 2: The growth rhythm of the physical strength of females after the experiments

Thus, from Chart 1 and Chart 2 above, it is clear that the growth rhythm of the experimental group is much larger than that of the verified group, it can be seen that the measures to improve the efficiency of physical education quality for students that the project has chosen after 10 months of the experiment have confirmed the high effect in improving the efficiency of physical education for students of Ha Tinh University.

3.6. Learning results of the verified group and experimental group after the experiment

The topic also considers and evaluates the results of physical education learning of experimental and verified groups after the experiment, the results are presented in Table 13.

Table 13. The results of learning physical education subjects in the verified and experimental groups after experiment

Group	The results of learning			
	Excellent, Good (Rate %)	Pretty (Rate %)	Medium (Rate %)	Weak, Poor (Rate %)
Verification (n = 68)	11,03	26,47	59,56	2,94
Experiment (n = 71)	22,54	19,01	58,45	0

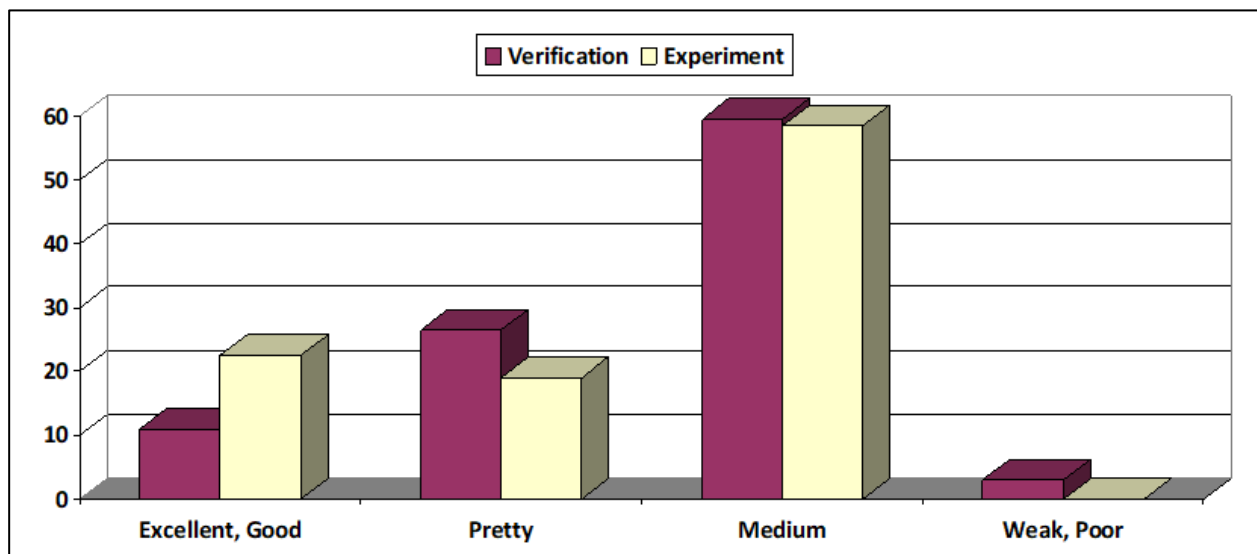


Chart 3: Learning results of the verified group and experimental group after the experiment

The results in Table 13 and Chart 3 show that the results of learning physical education that meet the requirements of the experimental group also have a higher rate than the verified group. Specifically, after the verified group having 11.03% achieved excellent and good, 26.47% achieved pretty level, 59.56 % achieved medium level and 2.94% failed. Meanwhile in the experimental group, 22.54% were excellent and good,

19.01 % were pretty, medium type 58.45%. Especially in the experimental group, no students did not achieve academic results.

4. Conclusion

The research process has selected 4 measures to enhance the quality of physical education for students of Ha Tinh University. The experimental process of the topic also shows that the development level of the physical strength of students is significantly improved. This is the most important basis to confirm the efficiency of the physical education in the university after applying the above measures.

Conflict of Interest Statement

The authors declare no conflicts of interest.

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