



## PHYSICAL CONDITION OF MALE STUDENTS AT VIETNAM NATIONAL UNIVERSITY OF HO CHI MINH CITY DORMITORY

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### **Abstract:**

The purpose of the study is to provide information about the current physical condition of 19-year-old male students of the Vietnam National University of Ho Chi Minh City (VNUHCMC) dormitory. The research used the methods of synthesizing sport-related documents, interviewing experts, applying pedagogical tests, and statistical analysis to determine appropriate physical fitness assessment tests. Afterward, the figures for the physical condition of male students at the VNUHCMC dormitory were compared with that of the average Vietnamese people, of Hanoi National University (HNU), University of Danang (UD), Can Tho University (CTU), and Ho Chi Minh City (HCMC) students at the same age and gender, and with the standard shown in Decision 53/2008/BGDDT of the Ministry of Education and Training. The results show that the “good” group accounts for 28.75%, the “acceptable” group for 23.19% and the “failed” group for 48.06%. It is notable that the agility, leg muscular strength, endurance, and motor skills of 19-year-old male students at the VNUHCMC dormitory are greater than the average physical fitness of Vietnamese people, as well as students of the same age and gender at HNU, UD, and CTU. Their endurance is also higher than that of male HCMC pupils of the same age, but their leg muscular strength and motor abilities are almost comparable.

**Keywords:** physical condition, male students, dormitory, Vietnam National University of Ho Chi Minh City

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## 1. Introduction

Man is the driving force of socialist construction, and the subject of all creation - material and cultural assets, a fair and humane society. For that reason, they are urged to be fully developed both intellectually and physically. Directive 17-CT/TW states: "Sports development is an important part of the Party and the State's socio-economic development policy for the enhancement of social human resources. It contributes to the improvement of fitness and a healthy lifestyle to enhance the general labor productivity" [6], [10].

With today's trend of integration, the Vietnamese government has devised a strategy to develop suitable sports under the current political and social situation. To be more specific, the socio-economic development strategy for 2011-2020 has defined "*enhancement of human resources, especially those of high quality*" as one of the main tactics [8]. Additionally, in the specific assessment of the overall physical development and fitness project of Vietnamese people in the period 2011-2030, the current quality of physical education in schools is confirmed to be under the standard. Specifically, the physical condition of college students does not meet the requirements for industrialization and modernization of the country [11].

Physical activity (PA) and a balanced diet are believed to have a major impact on human health (Concha-Cisternas et al., 2018) [4]. To foster it, engaging students in extracurricular activities seems to be the most popular approach today. Extracurricular activities are considered "*not a mandatory part of the school's curriculum*" [19], but they are highly crucial. According to Cole, Rubin, Feild, and Giles (2007), student participation in extracurricular activities is an important aspect of educational experiences [5]; Rubin, Bommer, and Baldwin (2002) also confirm that those activities are places where students can develop their interpersonal skills [15]. The survey of Rynes, Trank, Lawson, and Ilies (2003) on employers has also indicated that extracurricular activities are seen as a valuable opportunity to foster leadership and communication skills among students [16]. Barnett (2007) describes extracurricular activities under the perspective of "*... sports, academic clubs, student associations, and other special groups*" [2], while Fredricks and Eccles (2006) describe the activities as something "*Both scholars and youth development policymakers advocate the participation in a qualified extracurricular activity, such as sports clubs, is an effective use of students' leisure time...*" [9]. Bartkus, K. R., et al. (2012) have found the five most important characteristics of an extracurricular activity. It is carried out optionally and separately from theory classes, managed by the school, and not used to give grades or credits, so it is academic but also non-academic [3].

Organizing extracurricular activities for VNUHCMC students requires the organizer to have information about their current physical condition, as this is an important basis for practical training methods. For its significance, the researchers attempted to conduct a study on: "Physical condition of male students at Vietnam National University of Ho Chi Minh City dormitory".

The purpose of the study is to provide thorough information on the current physical condition of male students who are staying at VNUHCMC's dormitory.

## **2. Material & Methodology**

### **2.1 Participants**

A large number of university students at VNUHCMC's dormitory are involved in the study by using convenience sampling.

#### **2.1.1 Sample size**

The total number of students at VNUHCMC dormitory is 27,803 students, however, the number of those who agreed to be involved in the physical fitness test is 3,885 male students (13.97%) at the age of 19 (born in 2003) (the study time was September 2022).

They had a normal physical condition, neither disability nor illness, and they are also the ones who regularly participate in academic activities and physical education classes at VNUHCMC Center for Sport, Vietnam.

### **2.2 Methodology**

The research has utilized the conventional research methods in the sports field, as follows:

- A number of scientific papers and documents were synthesized to build a theoretical foundation and determine appropriate research methods for this study.
- Twelve national sports experts and physical education specialists were interviewed to determine physical fitness tests for the participants.
- Pedagogical testing was used to assess four selected physical fitness tests under Decision No. 53/2008/QD-BGDDT dated September 18, 2008, issued by the Ministry of Education and Training [7], including:
  - Agility assessment: 30m sprint (s)
  - Leg muscular strength assessment: Long jump (cm),
  - Motor skills assessment: 4x10m shuttle run (s),
  - Endurance assessment: 5-minute run (m).

Statistical analysis was applied to process the collected data. All of the data were calculated with the assistance of SPSS 22.0. The outcomes include mean (M), standard deviation (SD), Independent samples t-test, and coefficient of variation.

## **3. Results and Discussion**

### **3.1 Physical condition of male students at the VNUHCMC dormitory**

The physical condition of male students at the VNUHCMC dormitory was evaluated with the four tests including 30m sprint (s), long jump (cm), 4x10m shuttle run (s), and 5-minute run (m). The results are presented in Table 1.

**Table 1:** Physical condition of 19-year-old male students at the VNUHCMC dormitory (n = 3885)

No.	Tests	Statistical measures	$\bar{X}$	SD	Cv	$\epsilon$
1	30m sprint (s)		4.70	0.43	9.19	0.01
2	Long jump (cm)		227.86	19.37	8.50	0.01
3	4x10m shuttle run (s)		10.26	0.78	7.57	0.01
4	5-minute run (m)		984.97	124.08	12.60	0.01

Table 1 shows the coefficient of variation (CV), a statistical measure of the dispersion of data points around a mean, of three tests regarding 30m sprint tests (s), 4x10m shuttle run (s), and long jump (cm) is low ( $CV < 10\%$ ), which indicates that there are no drastic differences among the participants' fitness results. This reveals that the participants when performing the above three physical fitness tests are less likely to be affected by environmental factors, nutrition, daily routine, working or studying conditions, etc. At the same time, they are indicators measured by a scale with absolute "zero". Although the 5-minute run test (m) has a higher CV ( $10\% < CV < 20\%$ ), the representative of the sample means of the four tests are sufficient ( $\epsilon < 0.05$ ). This means that the results could be used to conduct further assessments.

### 3.2 Physical condition of male students at the VNUHCMC dormitory and Decision 53/2008/BGDDT

Assessment of the physical condition of 19-year-old male students at the VNUHCMC dormitory based on the standard given in Decision 53/2008/BGD&DT is presented in Table 2.

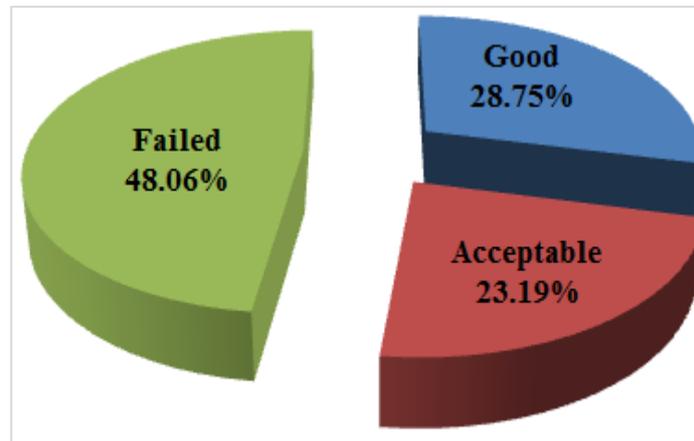
**Table 2:** Assessment of the physical condition of male students at the VNUHCMC dormitory based on Decision 53/2008/BGDDT (n = 3885)

		30m sprint (s)	Long jump (cm)	4x10m shuttle run (s)	5-minute run (m)	Students' physical condition
Standard	Good	< 4,70	> 225	< 11,75	> 1060	
	Acceptable	≤ 5,70	≥ 207	≤ 12,40	≥ 950	
Male students of VNUHCMC	Good	1997 students 51.40%	2035 students 52.38%	3707 students 95.42%	988 students 25.43%	1117 students 28.75%
	Acceptable	1824 students 46.95%	1292 students 33.26%	130 students 3.35%	1305 students 33.59%	901 students 23.19%
	Failed	64 students 1.65%	558 students 14.36%	48 students 1.24%	1592 students 40.98%	1867 students 48.06%

Table 2 shows the results of the physical fitness tests of 19-year-old male students at the VNUHCMC dormitory in accordance with Decision 53/2008/BGDDT. There were 1,117 students with good physical condition, accounting for 28.75%, 901 students with

acceptable level, accounting for 23.19%, and 1867 students with failed performance, accounting for 48.06%. For a more detailed look, the 30-meter sprint test had the highest “Acceptable” ratio of over 46% (1824 students). Moreover, the test with the most students performed well (3707 students - over 95%) was 4x10m shuttle run (s), while the test with the least students performing well (988 students – 25.43%) was a 5-minute run (m). Notably, the test that the most students failed was also the 5-minute run (m) with nearly 41% of the unsatisfactory performances (1592 students). In conclusion, the analysis indicates that the 19-year-old male students at the VNUHCMC dormitory are poor in endurance and leg muscular strength, but superior in agility and motor skills.

Figure 1 below illustrates the percentage of the physical condition results of 19-year-old male students at the VNUHCMC dormitory based on the standard given by the Ministry of Education and Training.



**Figure 1:** Percentage of the physical condition results of 19-year-old male students at the VNUHCMC dormitory based on the standard of the Ministry of Education and Training

### 3.3 Comparison of the physical condition of 19-year-old male students at the VNUHCMC dormitory and of average male Vietnamese people in 2001

The present state of any phenomenon should be subjectively evaluated by comparison with a standard or another object of the same type. Therefore, this study compared the current physical condition of 19-year-old male students at VNUHCMC dormitories with the average physical fitness of Vietnamese men of the same age in 2001 [18] and of students in HCMC (2010) [17], CTU (2017) [123], HNU (2019) [13], and UD (2021) [14]. During the comparison process, the authors applied the t-test to measure the dispersion between the average values according to the formula:

$$D = \frac{|\bar{X}_A - \bar{X}_B|}{\bar{X}_B} * 100$$

The results comparing the physical condition of 19-year-old male students at VNUHCMC dormitory with that of HCMC students (2010) and of the average Vietnamese people (2001) of the same age and gender are shown in Table 3.

**Table 3:** Comparison of the 19-year-old male physical condition of the students at VNUHCMC dormitory with that of HCMC students (2010) and average Vietnamese people (2001)

No.	Tests	VNUHCMC students		Average Vietnamese people (2001)		HCMC students		Sig <sub>1</sub>	Sig <sub>2</sub>
		$\bar{X}$	S	$\bar{X}$	D <sub>1</sub>	$\bar{X}$	D <sub>2</sub>		
1	30m sprint (s)	4.70	0.43	4.85	3.09	-	-	.001	-
2	Long jump (cm)	227.86	19.37	218.00	4.52	227.7	0.07	.001	.096
3	4x10m shuttle run (s)	10.26	0.78	10.59	3.12	10.23	0.29	.001	.068
4	5-minute run (m)	984.97	124.08	954.00	3.25	918.4	7.25	.001	.001

Table 3 shows that the physical condition of 19-year-old male students at the VNUHCMC dormitory is better than the average physical fitness of 19-year-old Vietnamese men (2001) in all four criteria of agility, leg muscular strength, motor skills, and endurance. The endurance of the VNUHCMC dormitory' students is also higher than that of 19-year-old male students in Ho Chi Minh City (2010), but their leg muscular strength and motor skills are equivalent.

The results comparing the physical condition of 19-year-old male students at VNUHCMC dormitory with that of HNU, UD, and CTU students of the same age and gender are shown in Table 4.

**Table 4:** Comparison of the physical condition of 19-year-old male students among VNUHCMC dormitory, HNU, UD, and CTU

No.	Tests	VNUHCMC		HNU		UD		CTU		Sig <sub>1</sub>	Sig <sub>2</sub>	Sig <sub>3</sub>
		$\bar{X}$	S	$\bar{X}$	D <sub>1</sub>	$\bar{X}$	D <sub>2</sub>	$\bar{X}$	D <sub>3</sub>			
1	30m sprint (s)	4.70	0.43	4.84	2.89	4.89	3.89	4.9	4.08	.001	.001	.001
2	Long jump (cm)	227.86	19.37	218.35	4.36	219.52	3.80	218.36	4.35	.001	.001	.001
3	4x10m shuttle run (s)	10.26	0.78	10.69	4.02	10.77	4.74	10.65	3.66	.001	.001	.001
4	5-minute run (m)	984.97	124.08	931.50	5.74	940.18	4.76	944.89	4.24	.001	.001	.001

Table 4 indicates that the students of the VNUHCMC dormitory have better agility, leg muscular strength, endurance, and motor skills than those of HNU, UD, and CTU.

#### 4. Conclusion

The current physical condition of 19-year-old male students at VNHCM dormitory based on the standards in Decision 53/2008/BGDDT is as follows: “Good” type accounting for 28.75%, “Acceptable” type for 23.19%, and “Failed” type for 48.06%. Moreover, the endurance and leg muscular strength of 19-year-old male students at the VNUHCMC dormitory are not impressive, but their agility and motor skills are superb.

It is also worth noting that the agility, leg muscular strength, endurance, and motor skills of 19-year-old male students at the VNUHCMC dormitory are better than the average physical fitness of Vietnamese people, and of HNU, UD, and CTU students of the same age and gender. Their endurance is also better than male HCMC students of the same age, but their leg muscular strength and motor skills are nearly equivalent.

#### Conflict of Interest Statement

The authors declare no conflicts of interest.

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#### References

- 1) The Central Committee of the Communist Party of Vietnam (2011), *Resolution No. 08- NQ/TW, December 1, 2011, on leg muscular strengthening the leadership of the Party, creating strong development in physical education, and sports by 2020.*
- 2) Barnett, L. (2007). “Winners” and “losers”: The effects of being allowed or denied entry into competitive extracurricular activities. *Journal of Leisure Research.* 39 316-341.
- 3) Bartkus, K. R., Nemelka, B., Nemelka, M., & Gardner, P. (2012). Clarifying the meaning of extracurricular activity: A literature review of definitions. *American Journal of Business Education (AJBE)*, 5(6), 693-704.
- 4) Concha-Cisternas, Y., Guzmán-Muñoz, E., Valdés-Badilla, P., Lira-Cea, C., Petermann, F., & Celis-Morales, C. (2018). Levels of physical activity and excess body weight in university students. *Revista Medica de Chile*, 146(8), 840-849. doi:10.4067/s0034-98872018000800840.

- 5) Cole, M.S., Rubin, R.S., Feild, H.S. & Giles, W.F. (2007). Recruiters' perceptions and use of applicant résumé information: Screening the recent graduate. *Applied Psychology: An International Review*, 56(2) 319-343.
- 6) The 9<sup>th</sup> Central Committee of the Communist Party of Vietnam (2002), "Directive No. 17-CT/TW dated October 23, 2002, on the development of Physical Education and Sports until 2010".
- 7) Ministry of Education and Training (2008), Decision No. 53/2008/QD-BGDĐT dated August 19, 2008, on the standard physical evaluation criteria for Vietnamese from which assessing the physical status of these students.
- 8) Government (2012), Resolution No. 10/2012/ND-CP of April 24, 2012, on the promulgation of the Government's action plan for implementation of the socio-economic development strategy 2011-2020.
- 9) Fredricks, J. A., & Eccles, J. S. (2006a). Is extracurricular participation associated with beneficial outcomes: Concurrent and longitudinal relations? *Developmental Psychology*, (42) 698–713.
- 10) Le Van Lam (2001), "Comprehensive human development in the period of industrialization and modernization", Sports Publishing House, Hanoi.
- 11) Prime Minister (2011), Decision 641/QĐ - TTg dated 26 April 2011, Project on the Development of Vietnamese People's Health and Fitness in the period from 2011 to 2030.
- 12) Nguyen Van Hoa (2016), "Improving the curriculum of elective sports for non-specialized students at Can Tho University", Doctoral Thesis in Educational Science, Sports University of Ho Chi Minh City.
- 13) Nguyen Viet Hoa (2019), "Measures to improve the effectiveness of learning activities in Physical Education subjects for students of Vietnam National University, Hanoi in the direction of active learning", Doctor of Science Thesis Education, Institute of Sports Science, Hanoi.
- 14) Vo Dinh Hop (2022), *Research on improving the quality of physical education in the University of Da Nang*, Doctoral Thesis in Educational Science, Institute of Sports Science, Hanoi.
- 15) Rubin, R.S., Bommer, W.H., & Baldwin, T.T. (2002). Using extracurricular activity as an indicator of interpersonal skill: Prudent evaluation or recruiting malpractice? *Human Resource Management*, (41) 441–454.
- 16) Rynes, S.L., Trank, C.Q., Lawson, A.M., & Ilies, R. (2003). Behavioral coursework in business education: Growing evidence of a legitimacy crisis. *Academy of Management Learning & Education*, (2) 269–283.
- 17) Nguyen Anh Tuan et al. (2010), "Research on building physical assessment standards for 19-22-year-old students in Ho Chi Minh City", Scientific research at the city level, Department of Science and Technology of Ho Chi Minh City.
- 18) Institute of Sports Science (2003), *Physical status of Vietnamese people from 6 to 20 years old (2001)*, Sports Publishing House, Hanoi.

19) The Free Dictionary. Available at:  
<http://www.thefreedictionary.com/extracurricular> (Accessed: 10 December 2023).

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