

# DEVELOP STANDARDS TO ASSESS FITNESS LEVEL FOR MALE STUDENTS SPECIALIZED IN VOLLEYBALL AT PHU YEN UNIVERSITY UNDER THE CREDIT LEARNING SYSTEM

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## Abstract:

Through the use of common scientific research methods, the thesis has selected 7 tests to assess fitness level for male students specialized in volleyball, and based on that, build a score board and evaluation standards to assess the fitness level for male students specialized in volleyball at Phu Yen University under the credit system, with 5 levels of evaluation value:  $\geq 63$  points - good; from 49 to 62 points: fair; from 35 to 48 points: average; from 20-34 points: weak;  $< 19$  points: poor. This is one of the important bases, helping lecturers to accurately assess the quality and effectiveness of volleyball teaching for specialized students.

**Keywords:** Standards, fitness, volleyball, Phu Yen University.

## INTRODUCTION

The origin of Phu Yen University is Phu Yen Pedagogical College, with the aim of training the teachers in charge of teaching in schools today. Though it has added many other faculties, the school still prioritizes pedagogy, so this rate has not changed much. To accomplish this goal, the Faculty of Physical Education and National Defense Education of Phu Yen University is responsible for training teachers for high schools in Phu Yen province and nationwide, including Physical Education and Sports teachers. But for many reasons, the Physical Education teaching work of Phu Yen University is still limited ... Today, the university is adopting the program of credit training system under the provisions of Education and Training. However, there has not been any innovation in accordance with many subjects. In particular, there is the volleyball course for specialized students.

To improve further the quality of teaching volleyball to specialized students, the construction of standardized tests and evaluation to ensure accuracy, objectivity and science is very necessary. This will help faculty members

to accurately assess the fitness level of the students, and thereby reasonably adjust the amount of exercises and training, contributing to improving the teaching quality and effectiveness for these subjects.

## RESEARCH METHODS

The research process uses the following methods: Methods of analyzing and synthesizing documents; Interview method; Pedagogical observation method; Method of pedagogical examination; Method of Statistical mathematics.

## RESULTS AND DISCUSSION

First, the topic conduct selecting tests to assess the fitness level of male students specialized in volleyball at Phu Yen University under the credit system through the steps: Select by reference documents and pedagogical observation; Select through direct interviews with the faculty member, volleyball coaches at Phu Yen University; Select through extensive interviews with questionnaires; Choose through determining reliability and notification of the tests. On that basis, the topic chose 7 tests to assess the fitness level for male students specialized in volleyball at Phu Yen University (see Table 1).

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Next, with the aim to create a scientific basis for the construction of the score board separately in each academic year of the study subjects, the topic examine and compare the fitness level in volleyball of 20 first year and

second year male students through 7 selected tests (academic year 2017-2018). The results are presented in Table 1.

Table 1 shows that the results in all the tests illustrate  $t_{\text{calculate}} > t_{\text{control}}$  at the probability

**Table 1. Comparison of the volleyball fitness level of first year and second year male students at Phu Yen University**

| No. | Tests  | Results             |             |                      |             | t    | p     |
|-----|--|---------------------|-------------|----------------------|-------------|------|-------|
|     |  | First year (n = 10) |             | Second year (n = 10) |             |      |       |
|     |  | $\bar{x}$           | $\pm\delta$ | $\bar{x}$            | $\pm\delta$ |      |       |
| 1.  | Reach jump with momentum (cm)  | 280.57              | 11.85       | 290.51               | 11.99       | 2.86 | <0.05 |
| 2.  | High jump with momentum with 1 leg (cm)  | 224.67              | 10.52       | 233.94               | 10.34       | 2.23 | <0.05 |
| 3.  | Rope skipping for 2 minutes (times)  | 227.11              | 11.88       | 233.93               | 11.33       | 2.11 | <0.05 |
| 4.  | 9 - 3 - 6 - 3 - 9 running (s)  | 8.78                | 0.39        | 8.39                 | 0.37        | 2.61 | <0.05 |
| 5.  | Pine tree running (s)  | 25.61               | 1.38        | 24.39                | 1.32        | 2.12 | <0.05 |
| 6.  | Tumble forward combine with running with momentum, jump and throw ball with 2 hands over the net (s) | 22.17               | 1.18        | 21.02                | 1.05        | 2.89 | <0.05 |
| 7.  | Throw 1kg stuffed ball with 1 hand far away (m)  | 24.57               | 1.55        | 25.89                | 1.58        | 2.54 | <0.05 |

**Table 2. Score board to assess the fitness level for first year male students specialized in volleyball at Phu Yen University**

| Tests   | Score |       |       |       |       |       |       |       |       |       |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|   | 10    | 9     | 8     | 7     | 6     | 5     | 4     | 3     | 2     | 1     |
| 1. Reach jump with momentum (cm)  | 339.6 | 327.8 | 316   | 304.2 | 292.4 | 280.6 | 268.8 | 257   | 245.2 | 233.4 |
| 2. High jump with momentum with 1 leg (cm)  | 277.2 | 266.7 | 256.2 | 245.7 | 235.2 | 224.7 | 214.2 | 203.7 | 193.2 | 182.7 |
| 3. Rope skipping for 2 minutes (times)  | 286   | 274   | 263   | 251   | 239   | 227   | 215   | 204   | 192   | 180   |
| 4. 9 - 3 - 6 - 3 - 9 running (s)  | 6.83  | 7.2   | 7.61  | 8     | 8.39  | 8.78  | 9.17  | 9.56  | 9.95  | 10.3  |
| 5. Pine tree running (s)  | 18.7  | 20    | 21.5  | 22.9  | 24.2  | 25.61 | 27    | 28.4  | 29.8  | 31.1  |
| 6. Tumble forward combine with running with momentum, jump and throw ball with 2 hands over the net (s) | 16.3  | 17    | 18.6  | 19.8  | 21    | 22.17 | 23.4  | 24.5  | 25.7  | 26.9  |
| 7. Throw 1kg stuffed ball with 1 hand far away (m)  | 32.32 | 30.77 | 29.2  | 27.67 | 26.12 | 24.57 | 23    | 21.47 | 19.92 | 18.37 |

## ARTICLES

threshold of  $p < 0.05$ . Thus, we can confirm that the difference in the fitness levels of first year and second year male students have statistical means. Therefore, it is necessary to develop fitness level evaluation standards for research subjects in each academic year.

Based on the classification of 2 $\delta$  and C-level, the thesis built a score board (in the form of asymptotic) and standards for assessing the fitness level for first year and second year male students



**Students of Bac Ninh Sports University enjoy playing and practicing volleyball (photo by: upes1)**

**Table 3. Score board to assess the fitness level for second year male students specialized in volleyball at Phu Yen University**

| Tests   | Score |       |       |       |       |        |        |        |        |        |
|---|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|
|   | 10    | 9     | 8     | 7     | 6     | 5      | 4      | 3      | 2      | 1      |
| 1. Reach jump with momentum (cm)  | 350.5 | 338.5 | 326.5 | 314.5 | 302.5 | 290.5  | 278.5  | 266.5  | 254.5  | 242.5  |
| 2. High jump with momentum with 1 leg (cm)  | 285.6 | 275.3 | 265   | 254.6 | 244.3 | 233.97 | 223.64 | 213.31 | 202.98 | 192.65 |
| 3. Rope skipping for 2 minutes (times)  | 291   | 279   | 268   | 257   | 245   | 233.8  | 222.4  | 211    | 199.6  | 188.2  |
| 4. 9 - 3 - 6 - 3 - 9 running (s)  | 6.54  | 6.9   | 7.28  | 7.65  | 8.02  | 8.391  | 8.762  | 9.133  | 9.504  | 9.875  |
| 5. Pine tree running (s)  | 17.8  | 19    | 20.4  | 21.8  | 23.1  | 24.44  | 25.78  | 27.12  | 28.46  | 29.8   |
| 6. Tumble forward combine with running with momentum, jump and throw ball with 2 hands over the net (s) | 15.8  | 17    | 17.9  | 18.9  | 20    | 21.01  | 22.04  | 23.07  | 24.1   | 25.13  |
| 7. Throw 1kg stuffed ball with 1 hand far away (m)  | 33.79 | 32.21 | 30.6  | 29.05 | 27.47 | 25.884 | 24.304 | 22.724 | 21.144 | 19.564 |



A specialized volleyball class at Bac Ninh Sports University (photo by: upes1)

specialized in volleyball at Phu Yen University .Results are presented in tables 2, 3 and 4.

Based on Table 2 and 3, the topic construct standards to assess the fitness level of first year and second year male students specialized in volleyball at Phu Yen University. The results are presented in Table 4.

**Table 4. Standards to assess the fitness level of first year and second year male students specialized in volleyball at Phu Yen University**

| Classification | Score     |
|----------------|-----------|
| Good           | $\geq 63$ |
| Fair           | 49 – 62   |
| Average        | 35 – 48   |
| Weak           | 20-34     |
| Poor           | <19       |

Through the results in Table 4, it allows us to assess the fitness training level of first year and second year male students specialized in volleyball at Phu Yen University, and this is also one of the important bases to help faculty members to evaluate the process of teaching more realistically, thereby have suitable adjustments in the amount of exercises and training.

**CONCLUSION**

Based on the selected tests, the topic has built 2 classification score board and evaluation standards to assess the fitness level for male students specialized in volleyball at Phu Yen under the credit system, with 5 levels of evaluation: Good, fair, average, weak, and poor. It is one of the important bases that help teachers to assess accurately the quality and effectiveness of the volleyball teaching process for specialized students.

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