



CURRENT SITUATION OF STUDENTS' PSYCHOLOGICAL STATE BEFORE PRACTICAL COURSES' FINAL EXAMS

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Abstract:

The article aimed to determine the factors influencing students' psychological state before the final exam of practical courses. The article used conventional scientific research methods in sports and physical training combined with psychological tests studied on fifty students at Ho Chi Minh City University of Physical Education and Sports (UPES). After reviewing related studies and consulting with experts, four tests were employed to assess the psychological state before the test of the research subjects. The results showed that students with a good psychological state to take the exam had good test results. Conversely, students with a feverish or lethargic state will have poor test results. The research results serve as the basis for proposing measures to adjust the psychological state before the exam, contributing to improving the learning results of students.

Keywords: psychological state, practical courses, final exam, students

1. Introduction

Psychology allows people to learn about how the body and mind work together. Knowing the psychological state of others helps people make the right decisions and avoid stressful situations, and also helps them manage time, set goals, and live positively. Capturing students' psychology helps teachers deliver knowledge more easily and effectively.

In recent years, it is more difficult for students majoring in physical education to get a good job, so they must have outstanding academic results which make students

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under psychological pressure. Good or bad psychology will greatly affect learning results, many students have good learning strategies, but they are anxious and psychologically unstable, so they cannot promote their fitness which plays an important role in practical courses. The completion and achievement of the practical exam depend on the psychological state of students. The adjustment and control of the psychological state can only be effective when the psychological state of that student is recognized.

The purpose of the article is to determine the factors influencing students' psychological state before the final exam of practical courses. The research results serve as the basis for proposing solutions to adjust the psychological state before the exam, contributing to improving the learning results of students.

2. Material & methods

The study was conducted at UPES with the participation of twelve lecturers and experts consulting the questionnaire and fifty undergraduates responding to the questionnaire.

Related studies, interviews with experts, questionnaires, neuropsychological function tests, pedagogical observation methods, and mathematical and statistical techniques were used to collect the data.

The study was carried out before the UPES final exam (December 2020 to January 2021). A test measuring anxiety level proposed by Watchman & RISH and Spielberger test were used one hour before the exam.

2.1 Assessing pulse frequency

The pulse before the final exam and at the normal time was checked to compare and contrast. The difference between the frequency of the pulse before the two different points of time as compared to measuring the difference in the level of emotional stress.

To identify the difference level, the scale was employed as follows. The pulse beats from 33-40 times/minute: very high; from 25-32 times/minute: high, from 17-24 times/minute: moderate, from 10-16 times/minute: below average, less than 10: normal.

2.2 Tapping test

The 10-second pen-and-paper hand movement test was conducted twice: once in the normal state to determine the basic motor rhythm and once before the final exam.

Evaluation method: Based on the study of Viatkin (1978) to compare the total number of basal motor rhythms and motor rhythms of the state to be evaluated. The scale for the comparison is: from 0% to 5% (showing the student is in an optimal state of readiness for the exam), from 5% to 8% (showing the student is in a "hasty start" state), more than 8% (showing the student "disinterested" state).

Self-assessment of emotional state tests of WASHMAN and RISH and assessment of anxiety of SPILBERGER were applied 1 hour before the final exam.

This is a method of determining the emotional state proposed by two American psychologists, WASHMAN and RISH, which is widely used to assess the emotional state

of athletes before training and competition by questionnaires. Four different levels of emotional state of the students before the practical courses' final exams were measured including anger, anxiety, dejection, excitement, and happiness.

3. Findings and discussion

The content validation of the psychological tests used in the study was employed. A questionnaire with seven test items was delivered to a group of reviewers including four experts, five professional trainers, and four lecturers in sports. The questionnaire with the tests was sent to them twice to check their agreement on the tests. The results were presented in Table 2.1 below.

Table 2.1: The results of the questionnaire validation with the consultation group

Test						χ^2	Sig
		Time 1 n = 12		Time 2 n = 12			
		Agreement	%	Agreement	%		
1	Assessment of the frequency of the pulse	11	91.67	11	91.67	0.00	1.00
2	Determining emotional state – Xan test	7	58.33	8	66.67	1.48	0.22
3	Taking blood pressure	7	58.33	7	58.33	0.00	1.00
4	Assessing the level of anxiety proposed by Spilberger	10	83.33	10	83.33	0.00	1.00
5	Self-assessment of emotional state of Washman and Rish	12	100.0	12	100.0	0.00	1.00
6	Finger taping test	11	91.67	10	83.33	3.18	0.07
7	Test to assess muscle sensation	9	75.00	9	75.00	0.00	1.00

The results in Table 2.1 show that there was no significant difference between the two times of consultancy with Sig > 0.05. The researchers decided to choose the tests with the agreement of over 75% of the respondents. As a result, the psychological tests selected to assess the psychological state of the students before the end of the practical courses included a pulse frequency check, self-assessment of emotional state, assessing the level of anxiety, and tapping test.

3.1 Observation of the external manifestation of the psychological state before the end of the practical course exam of the students at UPES

Before using the above tests to assess the psychological state of the students before the practical course exam, the observation of external manifestation was conducted. The result of the observation is presented in Table 2.2 below.

Table 2.2: Results of the external psychological symptoms of the students at UPES before the practical course exam

States	External psychological symptoms	Students are coded in numbers
Being ready	- Confident face, bright eyes - Smooth movements, no redundant movements - Normal hands and face movement - Unchanged facial expression	1, 2, 4, 5, 9, 12, 21, 23, 26, 28, 29, 30, 34, 36, 37, 41
Hasty start	- Tense face tense, lips gaping forward - The movement is always restless - Hands and face have a slight tremor - Face turns red	3, 7, 8, 10, 11, 13, 14, 15, 16, 17, 19, 20, 24, 25, 27, 31, 33, 35, 38, 39, 40, 42, 43, 43, 50
Lethargic state	- Indifferent facial expression, unsightly eyes, irregular rapid breathing - The movement is a bit clumsy and laborious slightly trembling expression - The face has changed but not significantly	6, 18, 22, 45, 47, 49
Unidentified	- Facial expressions: sometimes scared, sometimes normal - Embarrassed, laborious movements - Visible tremors - The face is sometimes pale, sometimes purple	0

The observed results in Table 2.2 show that there were 16 students in a state of readiness to take the exam (accounting for 32%), 28 students in a state of hasty start (accounting for 56%), 6 students in a lethargic state (accounting for 12%).

3.2 Evaluation of students' psychological state before practical courses' final exams of Ho Chi Minh City University of Education and Sports

Table 2.3: Results of students' pulse and tapping tests
Ho Chi Minh City University of Physical Education and Sports

No	Test	Number of students	%
1	Pulse (times/minute)		
	Pulse increased by 33-40 times/minute	00	00
	Pulse increased by 25-32 times/minute	06	12.0
	Pulse increased by 17-24 times/minute	10	20.0
	Pulse increased by 10-16 times/minute	18	36.0
	Pulse increased by under 10 times/minute	16	32.0
2	Tapping Test		
	Decreased 3% to 5%	16	32.0
	Decreased from 5% to 8%	26	56.0
	Decreased over 8%	06	12.0

The psychological state of the students of Ho Chi Minh City University of Physical Education and Sports before the final exam of practical courses was measured by using the tests indicated in Section 2.1; the results of over 50 students are presented in tables 2.3, 2.4, 2.5, and 2.6.

Table 2.3 indicates that:

a. Regarding the pulse difference (times/minute)

According to Do Vinh (2014) [5], the difference between the index "the state pulse" and "the regular pulse" which are to measure the level of emotional stress should be interpreted as follows:

- Pulse increased by 33-40 times/minute: extremely high, no students;
- Pulse increased by 25-32 times/minute: high; 6 students, accounting for 12%;
- Pulse increased by 17-24 times/minute: medium; 10 students, accounting for 20%;
- Pulse increased by 10-16 times/minute: below medium; 18 students, accounting for 36%;
- Pulse increased by under 10 times/minute: normal; 16 students, accounted for 32%.

b. Regarding tapping test

According to B.A. Viatkin (1978), the results should be interpreted as follows:

- Decreased 3% to 5%: the optimal state to be ready; 16 students, accounting for 32%;
- Decreased by from 5% to 8%: the state of eagerness or excitement; 28 students, accounting for 56%;
- Decreased by from 8% or more: the state of lethargy; 6 students, accounting for 12%.

Table 2.5: Results of emotional State A.WASHMAN and D.RISH of
Ho Chi Minh City University of Physical Education and Sports' students

No	Contents	Number of students	%
1	Feel confident, full of strength, and optimism	16	32.0
2	Feel pretty nervous, tired, lazy, inhibited, or depressed with low self-esteem	06	12.0
3	Feel confident but still nervous	28	56.0
	Total	50	100.0

According to the statistics in Table 2.5, it can be seen that 16 students claimed to feel utterly confident, accounting for 32%; 6 students to feel anxious and depressed, accounting for 12%; 28 students to feel confident yet nervous, accounting for 56%.

Table 2.6 reveals that there are 16 students with low anxiety (32% of the total; 6 students with extreme anxiety (12%); and 28 students with moderate anxiety (56%).

Table 2.6: Results of anxiety levels TR. SPILBERGER of
Ho Chi Minh City University of Physical Education and Sports' students

No	Content	Number of students	%
1	Low anxiety level	16	32.0
2	High anxiety level	06	12.0
3	Medium anxiety level	28	56.0
	Total	50	100.0

The results indicate that most students who are in good psychological condition for the exam have a pulse that fluctuated slightly between the normal state and the pre-exam state (over 10 times/minute and below 5%), along with a positive attitude, including confidence, a surplus of energy, and low levels of anxiety. Students who are apathetic and anxious, on the other hand, have high levels of anxiety as well as a high difference in heart rate between the pre-exam and the normal states (over 33 times/minute and below 8%), along with a moderate mood – feel pretty anxious, tired, lazy, inhibited and depressed. Additionally, students with a neutral psychological state for the exam have a mean pulse rate difference between normal and pre-exam states (10 – 32 times/minute and 5% - 8%); along with a moderate to good mood - Feel confident but still nervous, moderate levels of anxiety.

The above results also clearly present the close bond between the tests employed to evaluate UPES students' psychological states before the finish of the practical module.

According to the study presented above, 16 UPES students are reported to have a prepared psychological state before the final exam of the practical module, whereas 28 students suffer high levels of anxiety and 6 students feel apathy.

4. Conclusion

The results have allowed the authors to draw the following conclusions:

- 4 psychological tests have been identified before the end of the practical course for students of Ho Chi Minh City University of Physical Education and Sports, including the tests checking pulse frequency, self-assessment of emotional state (based on A.WASHMAN and D.RISH), anxiety evaluation by TR. SPIELBERGER, and TAPPING TEST.
- Observation results show that there are 16 students with a ready state (accounting for 32%), 28 students with a neutral state (accounting for 56%), and 6 students with a sluggish state (accounting for 12%).
- The actual psychological state of the students at Ho Chi Minh City University of Physical Education and Sports before their final practical module's exam is that 16 students have the optimal state of readiness, 28 students have a "hasty start" state, and 6 students have a disinterested and unready state.

Conflict of Interest Statement

The authors declare no conflicts of interest.

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