The Pre-Competition Psychological State of the Vovinam Army Team's Young Male Athletes

Nguyen Văn Hoa, Phung Xuan Dung & Nguyen Quang Vinh

ABSTRACT

Vovinam is a Vietnamese traditional martial art and was recognized as the official sport at SeaGames 22nd held in Viet Nam in 2003. In competition, besides technical skills, tactical strategies, and physical strength, the psychological state of the players in the pre- competition period can contribute to the players' achievements. Hence, the current study aims to explore the relationship between the pre-competition psychological state of Vovinam athletes and their achievements in a competition.

Keywords: psychological state, vovinam, young male athletes.

Classification: FOR CODE: 170199

Language: English

London Journals Press

LJP Copyright ID: 573333
Print ISSN: 2515-5784
Online ISSN: 2515-5792

London Journal of Research in Humanities and Social Sciences

Volume 21 | Issue 5 | Compilation 1.0

The Pre-Competition Psychological State of the Vovinam Army Team's Young Male Athletes

Nguyen Văn Hoa[α] Phung Xuan Dung[α] & Nguyen Quang Vinh[ρ]

ABSTRACT

Vovinam is a Vietnamese traditional martial art and was recognized as the official sport at SeaGames 22nd held in Viet Nam in 2003. In competition, besides technical skills, tactical strategies, and physical strength, the psychological state of the players in the pre-competition period can contribute to the players' achievements. Hence, the current study aims to explore the relationship between the pre-competition psychological state of Vovinam athletes and their achievements in a competition.

The present study researched on ten young male players of the army vovinam team in Ho Chi Minh City, Vietnam. To choose the appropriate tests for psychological check, a group of experts in the field, such as trainers and teachers in vovinam was recruited to give consultation via a questionnaire. As a result, the consultation group agreed on four tests employed to assess the psychological state in the pre-competttion stage of 10 young male athletes in Vovinam. The results show that those who held good psychological state gained better scores in the games. In the meantime, those who had the state of the hasty start or lost their attention held worse results. The research results helping the trainers adjust the training strategies to fix the psychological state of young male athletes of the army vovinam team before some games.

Keywords: psychological state, vovinam, young male athletes.

Author α: PhD. Nguyen Văn Hoa, Can Tho University. PhD. Phung Xuan Dung, Ha Noi University of Physical Education and Sports.
σ: Associate Prof, Ph.D Nguyen Quang Vinh, Ho Chi Minh City University of Physical Education and Sport.

I. INTRODUCTION

Vovinam or Viet Vo Dao is a martial art of Vietnamese people founded in 1936 by grandmaster Nguyen Loc. In recent years, this martial art has spread across the country and has been practiced in around 60 countries and territories with more than 2 million practitioners (Dung et al., 2016). In Viet Nam, the Army team is one of the strongest Vovinam teams formed and developed over 20 years. The team has shown its success and extensive development in Vovinam competitions; its athletes have shown their achievements not only in the armed forces but also have won noble medals in national and international competitions, making a great contribution to the development of this martial art in the country.

Getting a high rank in competitions puts players under pressure as they have the desire to win, responsibility to teammates, sometimes winning or losing is also associated with the player's future career. In sport competitions, the psychological responses of players in the pre-competition period may somehow affect their performance. Many players who have attained good playing techniques and tactical strategies in the training period face psychological problems. They cannot promote their physical strength, show limited performance in tactical skills during the game, which leads to low performance. Previous studies revealed that athletes with high pleasant emotion levels in the precompetition period seemed to be stable throughout the competition season (Males and Kerr, 1996). In other words, negative emotions may affect individuals' performance, and in sport competition, pre-competition anxiety has been proven its relationship with players' performance.

Knowing the key role of psychological responses in the pre-competition period, we conducted the

study "*The pre-competition psychological state of Vovinam army team's young male athletes*". The current study was conducted to examine the level of anxiety of the Vovinam young male athletes before a national competition in Vovinam and to explore the relationship between the young male athletes' precompetitive nervousness with their achievements in the national competition.

II. MATERIAL & METHODS

2.1 Participants

Ten male athletes aged 15-17 of the Vovinam army team in Ho Chi Minh city, Vietnam, were chosen as the convenient sample of the study. They have been trained for 5 to 6 years, and most of them have gained some achievements in different competitions.

The study also recruited 12 participants, who are four experts, five trainers, and three teachers of vovinam in Vietnam, to give consultation on the tests used to examine the anxiety level of the athletes.

2.2 Assessments

The research took place before the 18th National Youth Vovinam Championships 2020. A pulse check, the Finger Tapping Test, a test measuring state anxiety level proposed by Watchman A. & RISH D. and Spielberger test were employed in the study. The consultation group carefully selected. The researchers carefully observed the participant athletes during the pre-competition period. The researchers did the tests and the observations before three main draws of the Championship: quarter-final, semi-final, and final.

Assessment of the athletes' pulse

Take the athletes' pulse before the game and at the normal state, then compare the difference between the calculated pulses to know the level of precompetition anxiety. The scales used to compare are: from 33-40 times/minute: very high; from 25-32 times/minute: high, from 17-24 times/minute: average, from 10-16 times/minute: below average, Pulse <10: Normal.

Next, the Finger Tapping test was conducted twice: at the normal state and before the competition. The test aims to compare the total number of basic motor control at the normal state and before the game. According to Viatkin (1978), if the motor control increases from 0% to 5% or more show that the athletes are in the state of being ready to play; if it increases from 5% to 8%, it shows that the athletes are in a state of "hasty start": if it surges from 8% or more it is a sign that the athletes are in a state of "disinterested.

Then, a self-assessment test in the format of a questionnaire on emotional state and anxiety developed was conducted an hour before the game. The test was carried out before the three specific points of time mentioned earlier.

The emotional state has four-point scales: Calm – nervous, anxious, Energetic – tired, Excited – inhibited, Believe in yourself – Powerless.

Assessment of the level of anxiety by a test proposed by Spielberger

To assess the anxiety level of players in the pre-competition period, a questionnaire developed by *Spielberger* was used. The players' anxiety will be checked and classified into three levels: Low anxiety level, Average anxiety level, High anxiety level.

2.3 Data analysis

The data from the two questionnaires with the consultation group the tests were calculated by Chi-Square test. All the data of the research were calculated with the support of SPSS 22.0.

III. RESULTS

It is determining the tests to assess the psychological state before the competition of young male players of the army vovinam team.

The procedure to conduct the study included 2 steps:

Step 1: Reviewed some previous studies about assessing the pre-competition psychological state of domestic and foreign authors such as Tenenbaum, G., Eklund, R. C., & Kamata, A. (Eds.). (2012). Bam, P.D & Tri, D.B. (1999), Tuyet,

N.T. (2001), Hoang, D. (2001), Xem, L. (2002), Vinh, D. (2005), Vien, P.N. & Thanh, X.P. (2007); Nga, L.N. (2009). The results have been selected and synthesized 11 assessment tests. Based on the characteristics of vovinam and suitable to the actual situation in Vietnam, we took seven tests including: assessing pulse frequency, determining emotional state - Xan test, taking blood pressure, assessing anxiety level Spielberger, Self-Assessment test on Emotional State by Washman and Rish, Finger Tapping Test and Test to assess muscle sensation.

+ *Step 2:* a questionnaire of all seven chosen tests was sent to the consultation group of twelve people (four experts, five trainers, three vovinam teachers in Vietnam). A test-retest technique was employed to gain reliability then the results were calculated, and compared and presented in Table 1 below.

Table 1: The results of the questionnaires on the assessment tests with the consultation group

TEST		Time 1 n = 12		Time 2 n = 12		χ^2	Sig
		Agreement	%	Agreement	%		
1	assessment in the frequence of the pulse	11	91.67	10	83.33	3.18	0.07
2	determining emotional state – Xan test	8	66.67	7	58.33	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	11	91.67	3.18	0.07
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	8	66.67	9	75.00	1.68	0.20

The results in Table 1 show that all tests have Sig > 0.05, so there is a similarity between the two questionnaires. From the results, the study chose the tests that received 75% or more than that agreement. As a result, we finally chose four tests to assess anxiety levels of young male players of the army vovinam team, including evaluating pulse frequency, assessing anxiety level test proposed by Spielberger, Self-Assessment test on Emotional State by Washman and Rish, and Finger Tapping Test.

We are observing external symptoms of young male players of the army vovinam team in the pre-competition period.

We made the observations of the external psychological symptoms of the young male players of the army vovinam team. The results are displayed in Table 2 below.

Table 2: Results of observations of the external psychological symptoms of the athletes before the competition

Precompetitive responses	external psychological symptoms	Quarter-final	Semi-final	Final
Ready to play	A confident face, bright eyes flexible actions, not redundal action hands and facial expressions are normal facial signs are not variable	Player 1* Player 2* Player 3* Player 4* Player 5* Player 6* Player 7* Player 8*	Player1* Player 2* Player 3* Player 4* Player 5* Player 6* Player 7	Player1* Player2* Player 3 Player 4 Player 5
A hasty start	feeling stressed before the competition, mouth opening upwards anxious feeling, their hands and face look shaking Face turning red	Player 9*	Player 8 Player 9	Player 6
Disinterested	disinterested face, not cunning eyes, fast breathing awkward movement and lose motor skills A little nervous The facial expression has changed but not significantly	Player 10	-	-
Without distinction	A fresh face, unstable breathing awkward movement and lose control feeling nervous about something Face looks pale	-	-	-

** Good result in the competition*

The results of observation shown in table 2 can be described in detail as follows.

In the quarterfinals, there were eight players among ten players (accounting for 80%) ranked in readiness to play who all achieved high results; one player (accounting for 10%) was in the state of hasty start gaining the good score, and one player (accounting for 10%) was in the disinteresting mood who lost the competition.

In the semi-finals, there were seven players (77.78%) who were in a state of ready to play, but only six players achieved good results, and one player achieved bad results; two players (accounting for 22.22%) were in the hasty start who lost to the opponent.

In the final, there were five players (83.33%) in a state of ready to play, but only two players achieved good results, and three players (60.0%) achieved bad results; one player (accounting for 16.67%) was in a state of the hasty start who lost to the opponent.

Figure 1 below illustrates the results of the observations.

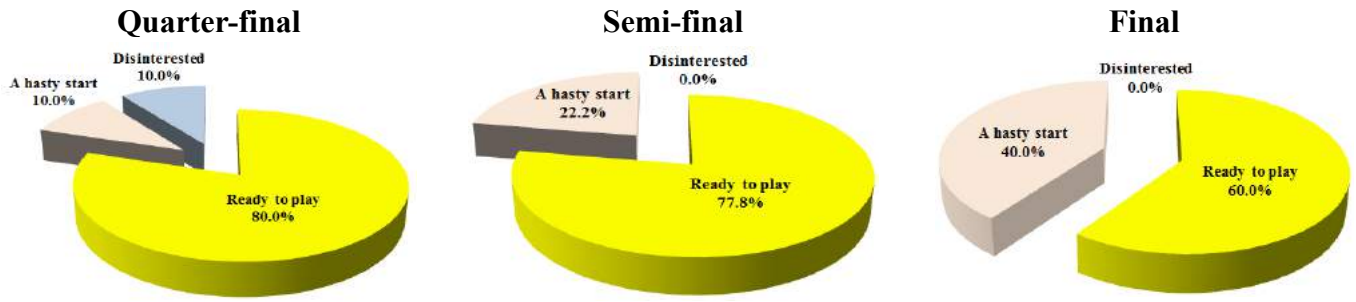

Figure 1: Illustration of the observation results on the facial expressions of vovinam young male players

The psychological state of the vovinam young male players was assessed by the tests identified from section 2.1, and presented in tables 3, 4, and 5 below.

Table 3: The results of pulse assessment and Finger Tapping Test on young male players of the army vovinam team

Ord	Players	pulse assessment (time/minute)						Tapping Test (% pulse in action)					
		Quarter final		Semi-final		Final		Quarter final		Semi-final		Final	
		(t/m)	Result	(t/m)	Result	(t/m)	Result	%	Result	%	Result	%	Result
1	Player 1	5	Nor	5	Nor	6	Nor	3.1	R	3.9	R	4.6	R
2	Player 2	6	Nor	5	Nor	8	Nor	3.8	R	4.3	R	4.8	R
3	Player 3	7	Nor	9	Nor	14	B/A	3.9	R	4.2	R	4.9	R
4	Player 4	9	Nor	9	Nor	15	B/A	4.2	R	4.3	R	4.8	R
5	Player 5	8	Nor	10	B/A	15	B/A	3.9	R	4.5	R	5.3	H/S
6	Player 6	7	Nor	9	Nor	14	B/A	4.6	R	4.7	R	6.8	H/S
7	Player 7	13	B/A	18	Ave	-	-	4.8	R	4.9	R	-	-
8	Player 8	15	B/A	19	Ave	-	-	4.7	R	5.4	H/S	-	-
9	Player 9	16	B/A	22	Ave	-	-	6.5	H/S	7.2	H/S	-	-
10	Player 10	21	Ave	-	-	-	-	8.6	Dis	-	-	-	-

** Note: Ord: Ordinal number; Nor: Normal, Below Average, Ave: Average; R: Ready to play, H/S: Hasty Start, Dis: Disinterested.*

As shown in table 3, the first and the second player held different pulses at a normal level and quarter-final, semi-final and final had a good result (Gold medal). The third, the fourth, the fifth and the sixth player had a difference in pulses at a normal level in the quarter-final but in semi-final only the fifth player's pulse was below average. These players also got good results in the games. In the final, all of these four players had pulses below average and did not gain good result (silver medal). Regarding to the seventh, the eighth and the ninth players, in the quarter-final, they had pulses below the average but played well. However, in the semi-final, these players who had pulses at average level played not good result (bronze medals). Finally, the tenth player's pulse was at the average level, who had bad result.

Compare the difference in frequency of the pulse of players through the quarter-final, semi-final, and final through Figure 2.

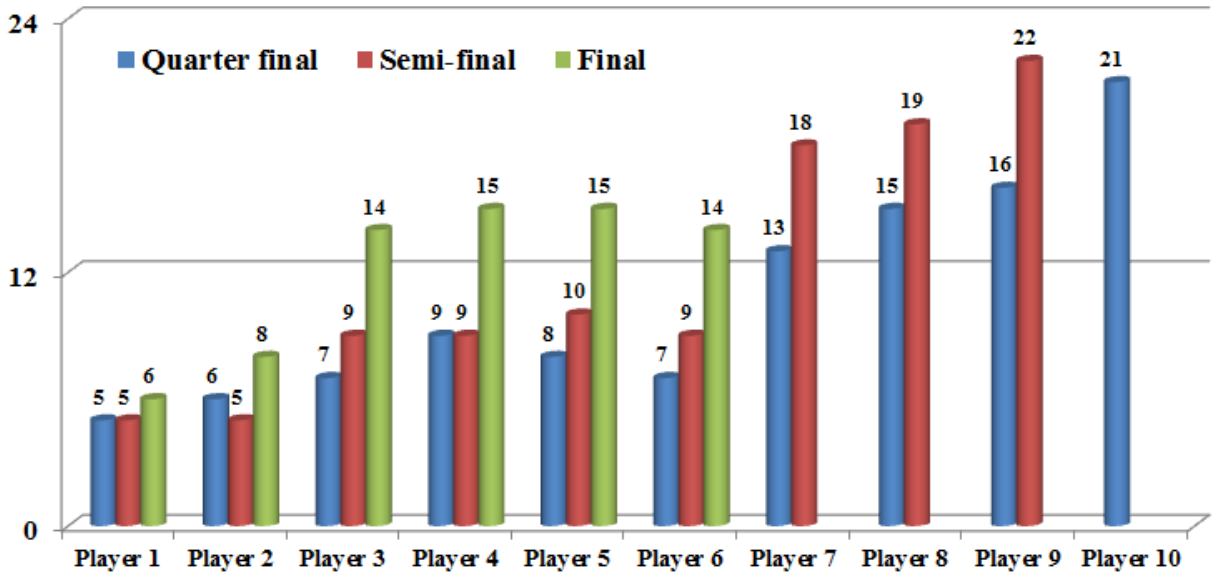

Figure 2: Comparison of the difference in frequency of the pulse player through the quarter-final, semi-final, and final

About percentage % action pulse of Tapping test

The first player and the second player were in ready mood in the quarter-final, semi-final, and final with good results (Gold Medal). Four players (number 3, number 4, number 5 and number 6) were in ready mood in the quarterfinal and semi-final, who had good results. In the final, the third player and the fourth player were in a state of ready to play meanwhile the fifth player and the sixth player were in the hasty start. All of these four players did gain the highest score. In the quarter-final, the seventh player and the eighth player were in the mood of being ready but the ninth player was in the hasty start state, and all of them had good results in this game. In the semi-final, the seventh player was in ready mood, but the eighth player and the ninth player were in the hasty start. As a result, these players did not get good result (bronze medal). Similarly, the tenth player, who was in apathy state, did not score well.

Compare the percentage of player' action pulse when realizing Tapping test through the quarter-final, semi-final, and final through Figure3.

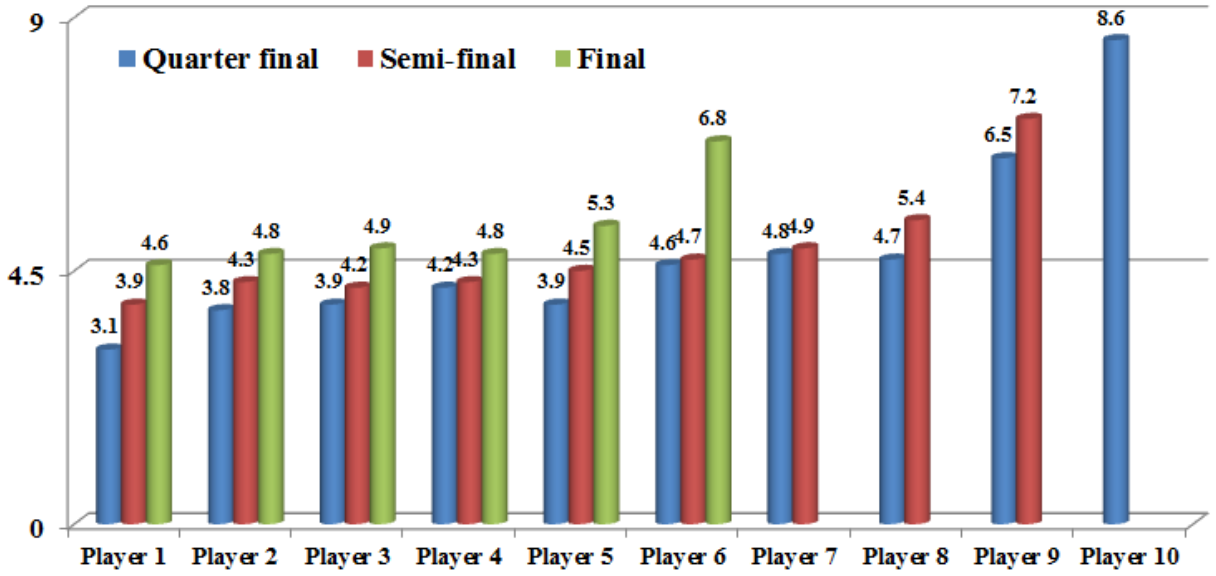

Figure 3: Comparison of % action pulse of players when realizing Tapping test through the quarter-final, semi-final, and final

Table 4: Results of the assessment of emotional state A.WASHMAN and D.RISH of male youth players of the Army vovinam team

No	players	A	B	C	D	∑	Results
1	Player 1	9	9	9	8	35	belief, full strength, feel healthy and enjoy life, very self-confident
2	Player 2	9	8	9	8	34	belief, full strength, feel healthy and enjoy life, very self-confident
3	Player 3	8	9	7	8	32	belief, full strength, feel healthy and enjoy life, very self-confident
4	Player 4	8	8	8	8	32	belief, full strength, feel healthy and enjoy life, very self-confident
5	Player 5	7	7	6	8	28	belief, full strength, inhibit and boring, very self-confident
6	Player 6	8	5	7	8	28	belief, a little tired, lazy, feel healthy and enjoy life, very self-confident
7	Player 7	6	7	5	8	26	a little nervous, full strength, inhibit and boring, very self-confident
8	Player 8	7	6	5	6	24	belief, a little tired, lazy, to feel a restricted knowledge and ability
9	Player 9	7	6	5	6	24	belief, a little tired, lazy, inhibit and boring, to feel a restricted knowledge and ability.

The data in Table 4 shows that four players (accounting for 20%), who were in the scale of trusting, full of strength, healthy feeling and life enjoyment, being very confident in themselves scored well. The fifth player was in the scale of being confident, full of strength, a bit inhibited and depressed, very confident in himself also had good result. Similarly, the sixth player was confident, little tired, a little lazy, to feel a health and to enjoy life, very confident in himself gained good performance. All the three rest players were a little nervous, full of strength, a bit inhibited and depressed, very confident in themselves did not have good scores in the game.

Table 5: The results of the assessment of anxiety level. SPIELBERGER of the young male players of the army vovinam team

No	Players	A	B	∑	Results
1	Player 1	10	19	29	Low level of anxiety
2	Player 2	12	15	27	Low level of anxiety
3	Player 3	16	13	29	Low level of anxiety
4	Player 4	13	15	28	Low level of anxiety
5	Player 5	14	15	29	Low level of anxiety
6	Player 6	11	23	34	Average level of anxiety
7	Player 7	12	20	32	Average level of anxiety
8	Player 8	18	29	47	High level of anxiety
9	Player 9	18	20	38	Average level of anxiety

The data in Table 5 shows that there were five players with low level of anxiety playing well in the game. Similarly, the sixth player with average level of anxiety also scored well in the game. The rest players with average and high level of anxiety did not get good results.

The result of the assessment shows that almost of the players who were in ready mood and had low difference in pulse, performed well in the games. Similarly, those who feel rather good, active, confident, strong, healthy, enjoyable, very confident in myself and had low level of anxiety played well. In contrast, those who did not have a mood like the above player did not score well in the games.

The current study indicates that there is a close correlation between the pre-competition psychological evaluation tests' results of the young male athletes of the army vovinam team and the game's results. Most of the players who were in apathy and hasty start did not play well. Those who were in ready mood had good results. However, in some exceptional cases, some players were in hasty start having high score. However, some were in ready mood playing well. It can be explained that in reality these players compete with the low proficient opponents or with the more proficient opponents. In other cases, they compete with opponents holding better or less emotional state.

IV. CONCLUSIONS

The results of this research allow the researchers can draw the following conclusions.

Firstly, there were four tests which could be employed to assess the psychological state before the games of young male players of the army vovinam team. The tests are checking pulse frequency, self-assessment of emotional state (based on A.WASHMAN and D.RISH), anxiety evaluation by TR. SPIELBERGER, and TAPPING TEST.

Secondly, the tests' results and the observations revealed that the pre-competion psychological state of young male players of the army vovinam team and their results in the games were correlated. Most of the players who were apathy and in hasty start did not have good performance. By contrast, those who were in the state of being ready to play got good results.

REFERENCES

1. Bam, P.D& Dao, B.T. (1999). *Sport psychology*. Sport Publishing House, Hanoi
2. Dung, V. Vy, B & My, P. (2016). The role of Vovinam in the life of Vietnamese people. *European Journal of Physical Education and Sport Science*, Vol.2, issue 2, 69-82
3. Gao F, Mei X, Chen AC (2015). Delayed finger tapping and cognitive responses in preterm-born male teenagers with mild spastic diplegia

4. Hoang, D. (2001). The psychological state of players in the competition, *Sports Science, Sport Institution, Ha Noi*
5. Le Nguyệt Nga et al. (2009). *An investigation of solutions to enhance psychological state for table tennis young players in Ho Chi Minh City*. Ho Chi Minh Science and Technology Department.
6. Males, J. R., & Kerr, J. H. (1996). Stress, emotion, and performance in elite slalom canoeists. *The Sport Psychologist*, 10(1), 17-36.
7. Moran, A. (2012). *Sport and Exercise Psychology: A Critical Introduction (2nd ed.)*. Routledge.https://doi.org/10.4324/9780203127650.
8. Tenenbaum, G., Eklund, R. C., & Kamata, A. (Eds.). (2012). *Measurement in sport and exercise psychology*. Human Kinetics.
9. Tuyet, N.T. (2000). Some psychological tests to evaluate the training levels of players. *Sports Science, Sport Institution, Ha Noi.*
10. Viatkin, B. A. (1978). Rol temperamenta v sportivnoi deiatelnosti [The role of temperament in sports activity]. *Sport Publishing House [in Vietnamese].*
11. Vien, P.N. & Thanh, P. X. (2007). *Curriculum on psychology in sports*. Sport Publishing House, Hanoi.
12. Vinh, D. (2014). *Psychology in Sports*. Curriculum in sports, Ho Chi Minh City University of Physical Education and Sports.

APPENDIX

No	Player	Full name	Weight	Record
1	Player 1	Phan Phi Long	57kg	Gold medal
2	Player 2	Lê Văn Nguyên	45kg	Gold medal
3	Player 3	Nguyễn Thanh Trọng	48kg	Silver medal
4	Player 4	Lương Tấn Chí	42kg	Silver medal
5	Player 5	Hoàng Ngọc Trọng Nguyên	51kg	Silver medal
6	Player 6	Nguyễn Trí Bằng	54kg	Silver medal
7	Player 7	Nguyễn Minh Lâm	64kg	Bronze medal
8	Player 8	Trần Gia Huy	60kg	Bronze medal
9	Player 9	Đặng Đăng Khoa	39kg	Bronze medal
10	Player 10	Nguyễn An Khang	68kg	Premilinary round

This page is intentionally left blank