

SOME MENTAL VARIABLES AND THEIR RELATIONSHIP TO THE COMPETITIVE BEHAVIOR AND MOTIVATION OF ATHLETIC ACHIEVEMENT FOR SENIOR PLAYERS OF SABER

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Abstract

The practice of fencing, whether during training or competition exposes the player to a lot of those circumstances and situations of different psychological attitudes, which are often accompanied by excitement and emotion, especially in the course of the competition, as sporting competitions linked with the changed emotional situations that characterized by its intensity to change attitudes of victory and defeat from moment to the other within the athletic competition and thus athletic competition requires that the player should have some mental features to be enable to control his behavior and his actions as the athlete achievement requires the need for a swordsman to use his maximum physical , skilled , tactical, mental abilities to reach to the best possible level. The research problem lies in that most coaches overlook the psychological aspect and focus on the physical and skilled aspects of the game to reach to the best levels on despite scientific studies that benefit and constructed psychological aspects

The study aimed to identify some of the mental variables of the senior saber players. And to identify the relationship between some mental variables and the competitive behavior of the senior players of saber.

The most important results are the presence of significant correlation between some mental variables and the competitive behavior of the senior players of saber. And the presence of a significant correlation between some mental variables and motivation of athletic achievement for senior players of saber

KEYWORDS: The behavior. Competition. Motivation. Mental. Fencing.

1. INTRODUCTION

The studies and researched that specialist in the field of sports are still searching and interested in preparation of the player for competition from all the physical and technical skills and tactical aspects as well as the psychological aspect which enters in the integrated preparation for all players particularly those in the upper levels, and since the athletic activity exposes the player in general to the positions of many psychological pressures vary in their severity and their impact on the player from one activity to another, especially when the practice turn out to competition, and the two do not differ in that the practice of fencing whether during training or competition exposes the player to a lot of those circumstances and situations of different psychological attitudes often that are accompanied by excitement and emotion, especially in the course of the competition as athletic competitions linked with the changed emotional situations that characterized by their intensity to change the situations of win and the defeat from moment to another within a single athletic competition and thus the athletic competition requires that the player should have some mental features to be enable to control his behavior and his actions, as athlete achievement requires the need of a swordsman to use his maximum physical , skilled and tactical and mental abilities to reach to the best possible level .and for the importance of mental variables in all sports, including fencing and in line with the progress of this sport in the Arab and international championships was the importance of this study to identify some of the mental variables and their relationship with the competitive achievement and the athletic motivation for the senior players of saber .The research problem lies in that most of the coaches in the field of fencing does not give importance in the training modules by using mental capabilities of fencing in the implementation of performance and this is what is reflected in the level of the player in the competitions and not getting advanced positions and his ideas are limited, and the goal of search: -

1. To identify some of the mental variables of the senior players of saber
2. To identify the relationship between some mental variables and competitive behavior of the senior players of saber.
3. Identify the relationship between some mental variables and motivation of achievement for the senior players of saber.

While the research hypotheses were: -

1. There is correlation with statistically significant differences between some mental variables and the competitive behavior of the senior players of saber.
2. There is correlation with statistically significant differences between some mental variables and achievement of the senior players of saber.

2. MATERIAL AND METHODS

One of the things that should be followed during selection of the sample that should represent the original community by real and honest representation so the sample of the research represented in the form of players of Iraqi clubs of fencing of the seniors by using saber weapon and participants in Iraq championships in Maysan province for the year 2014-2015, the research sample has reached (43) players representing the percentage (79.62%) of the total community and totaling (54) player, the selection of the research sample was done by the international way style, the researcher excluded for the national team players that totaling (6) players, and rule out also (5) players for the exploratory experience and the sample homogenous as they are of the same class of seniors .

Mental tests used in the search: Borden test - (focused attention) :(Ahmed Mohamed Khater and others .1996: 532)

- **The purpose of the test:** is a measure of the concentration of attention.

- **Tools:** Dispersion optical and audio device -scale paper of attention - stopwatch- pen.

- **Test specifications:** When you give the start signal, the device will operate and gives a flash of light every 5 seconds with exciting voice at a rate of one stroke per second (60) beats in a minute that the device is placed on one meter away from the tester and in the level of his view.

- **Conditions:** during hearing the word (stop), a sign placed beside the written off numbers at the time the device is turned off automatically.

- **Registration and calculating the results:** The following significances was extracted:

U1 means the net productivity of the work when measuring severity of attention in the quiet situation.

U2 means the net productivity when measuring the severity of attention in the case of dramatic situations.

Significance of concentration = the difference between the two cases.

Attention concentration $B = U1-U2$

Test of (Raven) of the sequential matrices to measure intelligence) translation by Fakhri Al-Dabbagh, 1983: 34)

the idea of this test is based on perception that the relations between the range of formats, and this test includes (60) matrix distributed on five sections (a, b, c, d, e) and each part consists of the (12) matrix for each of them a separate part by asking the tested one to choose a form between (6 or 8) forms that be appropriate to put him in the allotted place in the matrix or the original group may consists of (9) forms and there are actually (8) forms available while the ninth one is non-existent, and the tested one is requested to study the eight existing forms chains in any way he pleases both lengthwise or width and then draw the relationship existing between them and then move to the second set of forms that contain (6) forms and choose the appropriate form including the one that is consistent with the original group. And that these groups ranging in difficulty so that the group in section (e) require a high degree of intelligence to choose the correct and appropriate format that is consistent with the original group, The custom test time is one hour.

Registration and calculating the results: The test results of the sequential matrices were arranged in a simplified manner, so that the final score can be putted with the help of the answer key on the format answer of the test , as calculated for each correct answer only one degree which is the highest score of the test (60) degrees.

Reaction speed test (1) (Mohamed Sobhi Hassanein, 1995: 188)

The purpose of the test: measuring the reaction time.

Tools: an electronic device for measuring the reaction speed, chair.

Device components: the device consists of two boxes , the first one consists of the operating and the control key on the top of the box as there is a counter (electronically) to measure the time it takes for tester to respond to stimuli and this box restricted from the tester which do the test while the second box which consists of three lights (red, green, yellow) and the two boxes linked together with wire ends with the study which is used to stop the stopwatch after the emergence of stimuli by clicking on them.

Specifications of Performance: the player sitting on the chair and puts his hand on the study of the device and ask him to press on the study, during emergence of the desired signal begins the work of the electronic watch and the tester click on the study, when the signal disappears, the stopwatch stops (counter) and so recorded the reaction time that is taken.

Conditions:

- Each tester has three attempts.
- Giving adequate opportunity to the tester to do the test of the device before conducting direct measurement.

Registration: Registration for the tester the best of the three attempts (the attempt with the least time).

That the extent of the stability of this test is (0.871) and objective (0.984).

Psychological scales used in the research: Scale of competitive behavior :(Mohammad Hassan Allawi 1998: p. 43)

The two courses of Harris (Harris 1984) built competitive behavior questionnaire to identify the competitive behavior of the athletic player who needs to care, guidance and training on mental skills, and includes in its initial image (50) sentences that should be answered by the player on a three-scale gradient (always - sometimes - never) , "Mohammad Hassan Allawi," quoted the scale and converted it to Arabic and abbreviated it to (20) phrases and a statistical transections were founded finding the use of Cronbach's alpha stability which amounted to(0.78).

In order to extract the total score of the scale, the degrees that obtained by each player in his answers for all the paragraphs of the scale were collected, as a higher degree of the scale (60) and a lower (20) with an degree of neutrality the sum of the degrees of scale of appreciation (1-2-3) and divided on (3) and multiply them in the number of paragraphs and thus the degree of neutrality will be (40) degree.

Scale of motivation achievement: (Muhannad Abd Al- Hassan 2004: 36).

the scale includes (40), 12 statements for the field of the motive of ability , 15 statements for the field of motive of success achievement , 13 statements for the field of motivation of avoiding failure and the scales ensure five alternatives (very large degree - a large degree - a medium degree - a small degrees - very small degrees) and Wils found the truth of the scale by using logical honesty and for finding stability , alpha coefficient was used on a sample of athletes have reached (764) male athlete and (253) female athlete and was reached to the following transactions : 76% for field of ability , 0.78% for the field of motivation of success achievement , 0.76% for the field of motivation of avoiding failure .

"Mohammad Hassan Allawi" has Arabized the scale and applying it to the Egyptian environment and was limited on two dimensions : motivation of success achievement and motivation of avoiding failure , and the scale paragraphs amounted to (20) paragraph and the scale included paragraphs of success achievement namely (2-4-6-8-10 -12-14-16-18-20) are all positive except sentences (04.08.14) are negative .The highest degree reached to (100) and a lower (20) with the degree of neutrality of the sum of the degrees of scale appreciation (1-2-3-4-5) and divided on (5) and multiply them in the number of paragraphs so the degree of neutrality is (60) degree.

The scientific basis of the tests that used in the research: The researcher aimed to adopt the scientific bases in the tests for the purpose of determining the validity of these tests selected over any validity and reliability and objectivity.

Test sincerity: Test sincerity means that the test measure what is putted to test, by other means this test measures the function that claims to be measured and does not measure something else instead of it or in addition to it." (Abdullah Abd Al- Rahman 1999: 154) .The researcher found the coefficient of tests sincerity through the use of self-honesty coefficient which is "sincerity of experimental grades of the tool for the real grades after correcting them from the effects of guessing and thus become true grades of tool is the balance or the self-test, which is attributed to him sincerity performance (Layla Al- Sayed Farahat 2001: 143), according to what is shown in Table (1).

Table 1: shows the stability coefficient and the coefficient of self-sincerity and the degree of freedom of the tests used in the research

Rank	Tests	Coefficient of stability	Coefficient of self-sincerity
1	Intelligence test	0.82	0.90
2	Test (Borden Anfimof) to measure the concentration of attention	0.91	0.95
3	Test of reaction speed	0.94	0.96
4	Test to measure the competitive behavior	0.97	0.98
5	Test to measure motivation of the athletic achievement	0.85	0.92

* Tabular value (0.81) at the level of significance (0.50) and the degree of freedom (4).

Fastness of test: means "if a test was conducted on a same then this test is re-tested on the same sample and under the same conditions, the results that appeared in the first time are the same that appeared in the second time : Mustafa Hussein Bahi 1999: 5). The researcher has been used to find the coefficient of stability method of test and re-test as it is one of the most suitable methods for testing the stability, the first test was conducted at 20.09.2014 and the same test repeated again after 5 days in 09/24/2014 on the same sample that consisting of 6 players. then the researcher used the simple correlation coefficient (Ieperson) to see the stability of the tests and after discovering in the table about the significance of correlation coefficients found that the calculated value for each test is greater than the tabular value that amounted to (0.81) and the degree of freedom of 4, and this confirms that the test has a high degree of stability. Table 7 shows the stability coefficient and the coefficient of self-sincerity and the degree of freedom of the tests used in the search.

3,5,2 objectivity of the test: the objectivity means "clarity of instruction in terms of testing management and giving a degree which gives the same results no matter with the correctors "(Thuqan Obaidat 1988: 159) because the tests that were used in the research is far from self-determination and bias as they are clear and easy to understand by the members of the sample and based on clear

measurement tools, because the results of the tests are recorded in units of (time / sec, degree / specific time, degree), which made the researcher prepared the tests that used in the search of a high objectivity .

3. RESULTS

Table 2: shows the arithmetic means and standard deviations of the research variables

Rank	The variables	The statistical values		Unit of measurement
		M	SD	
1	Intelligence	38.90	2.68	Degree
2	Concentration of attention	81.54	14.08	Degree
3	Reaction speed	0.375	0.094	Degree
4	The competitive behavior	41.80	2.46	Degree
5	Motivation of the athletic achievement	65.46	5.21	Degree

Table 3: Shows the calculated and tabular correlation coefficient values and the level of significance between mental variables and scale of competitive behavior

Rank	Variables	The competitive behavior	Value of the tabulated correlation	Level of significance
1	Intelligence	0.703*	0.304	Significant
2	Concentration of attention	0.398*	0.304	Significant
3	Reaction speed	0.370*	0.304	Significant

*with degree of freedom (41) and level of significance (0.05)

Table 4: Shows the calculated and tabular correlation coefficient values and the level of significance between mental variables and scale of the athletic motivation achievement

Rank	variables	Athletic motivation achievement	The value of the tabulated correlation	Level of significance
1	Intelligence	0.441*	0.304	Significant
2	Concentration of attention	0.822*	0.304	Significant
3	Reaction speed	0.330*	0.304	Significant

* With the degree of freedom (41) and the level of significance (0.05)

4. DISCUSSION

Through what has been presented in the tables (2,3,4) note that there is significant correlation between some mental variables (intelligence- concentration of attention – reaction speed) and the competitive behavior of the senior players of saber, and researcher attributed the cause of the moral relationship to the level of mental abilities owned by senior fencing players by the epee weapon through experience and what is reflected by the fencing exercises to develop the mental side of the players being from the sports that develop the mental capacity, and this was confirmed by (Ashraf Mohammed Ali and others .2002: 115), the higher the player's experience and expanded his knowledge and information and his ability to act more accurate and larger in using it in the future and his performance become quick and easy, and his intelligence develops (1) and also the researcher sees whenever the trainer was able to coach attention with the mental aspect of the use of exercise and their performance and replication in the training modules well lead to the development of the ability of the players to use their physical abilities and motor , tactical and psychological skills and their psychological and mental readiness to suit with the requirements of the appropriate competitive behavior .

And also the existence of a significant correlation between some mental variables (intelligence – concentration of attention – reaction speed) and measurement of athletic motivation achievement of the senior players of saber , and the researcher attributes the cause of this correlation to the level of mental abilities of the players , which reversed on the level of measurement of athletic motivation achievement clearly where the performance in the sport of fencing requires high intelligence to take the most appropriate and fastest decisions, and the speed of decision making depends on the swordsman information and previous experience gained during the training, and this was confirmed by (Mahmoud Abd Al-Fattah, 1995: 27) : the successful implementation of the tactical and skilled duties of the player depends on the level that reached by his mental abilities through competition and continuous training and undoubtedly that the greater the knowledge and mental abilities of swordsman which are well-prepared it was easy for making the right decision and proper disposition for each variable during the bout, and this is referred to by (Essam Abd Al-Khalek, 1990: 229) that the successful factors in the implementation of plans of playing depends on increasing the factors the information and mental capabilities of swordsman and appropriate disposition of the various tactical situations that facing him during the bout .

5. CONCLUSION

1. The sample of the research (senior players of saber) characterized by a good level for some mental variables

2. The presence of a significant correlation between some mental variables and competitive behavior of the senior players of saber
3. Existence of a significant correlation between some mental variables and the athletic motivation achievement for senior players of saber

6. REFERENCES

1. Ahmed Mohamed Khater and others 1996: Measurement in the field of sports, edition 4, Cairo, modern house of books
2. Ashraf Mohammed Ali and others 2002: Effect of mental training program at the level of the capabilities of innovative thinking and tactical acting for beginners of football, research published in the Journal of the Science of Assiut and Arts Education, No. 14, vol. 1, Faculty of Physical Education, Assiut University
3. G. C. Ravn (translation by Fakhri Al-Dabbagh) 1983: sequential matrices, Mosul, House of books for printing.
4. Touqan Obaidat 1988: The concept of scientific research, his tools, his methods, Oman, Dar Al-Fikr Al-Arabi for Publishing and Distribution
5. Abdullah Abd Al- Rahman and others 1999: Introduction to methods of scientific researchs in Physical Education and Human Sciences, 2nd edition, Kuwait, for the publication and distribution Al-Falah library
6. Essam Abd Al-Khalek, 1990: athletic training - theories - Applications: Alexandria, Faculty of Physical Education
7. Laila Al-Sayed Farhat, 2001: The measurement and testing in Physical Education, edition 1 , Cairo, center of books for publishing
8. Mohammad Hassan Allawi 1998: The Encyclopedia of psychological tests for athletes, edition 1, Cairo, book publishing center
9. Mohamed Sobhi Hassanein 1995: the correction and measurement in the Faculty of Physical Education and Sports, Volume 1, edition 3, Cairo, Dar AL-Fikr Al- Arabi
10. Mahmoud Abd Al-Fattah Adnan 1995: The psychology of physical education and sports, edition 1, Cairo, Dar Al Fikr Al-Arabi
11. Mustafa Hussein Bahi 1999: The Scientific transactions between theory and practice - stability - honesty - objectivity - standards, Cairo, center of books for publishing
12. Muhannad Abd Al- Hassan Alkhozai 2004: construction of a scale to fill the mental energy of the players in the clubs of the excellent degree in Iraq, Master thesis, Baghdad University, Faculty of Physical Education.

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