

STUDY ON THE CHARACTERISTICS OF ATTENTION IN VOLLEYBALL

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Abstract

Objectives

Identifying /analyzing the characteristics of attention in volleyball and emphasizing their importance according to the tasks assigned to game positions.

Research methods

The analysis of the specialized literature, the pedagogical observation method, the psychological tests method, statistical-mathematical methods of interpreting the data, the graphical representation method.

Describing the subjects and the tests: The experimental research was conducted on the senior female athletes from the volleyball team of the Știința Bacău Club, during August 2007 - May 2008. The experiment group was made of 12 female volleyball players - at a senior training level - out of which 4 outside hitters, 3 middle hitters, 2 setters, 2 opposite hitters and 1 libero. The tests used in this research were: to determine the attention styles - the Attentional and Interpersonal Type Test (Nideffer, 1976), and to determine the distributive and concentrated attention - the Labyrinth and the ADS tests. (Distributive attention, signals).

Results

The results obtained after the research show a high level of attention in all players and a specificity of attention styles for certain positions.

Discussions and conclusions

Attention is an important psychological skill and is very necessary in volleyball. Of the quality of this psychological skill and of its mastery, specific to game positions, it depends a successful performance of volleyball game actions.

Keywords: volleyball, attention practices, characteristics

Introduction

Attention is the function of orientation and concentration of the psychological activity, selectively, on certain objects, phenomena, persons, or situations, with the purpose of perceiving and knowing them for a better organization of the behavior. (M.Epuran, 2008)

Since the volleyball environment is very dynamic, it is important for each player to have very good attention skills. The dynamic nature of open sports as volleyball athletes require a lot attention because many stimuli acting simultaneously in a very short time units. Since the relative motion begins, so clear visual perception deteriorates rapidly and the time to capture information related to teammates, ball, opponents and spatial parts decreases greatly. The focus on landmarks necessary to solve the task of playing is better, the higher quality opponents predict movement or direction of moving the ball, and such a decision is favored good game.

Attention - was identified by Nideffer,1976, quoted by J.C. Reeser and R. Bahr,2003, as having 4 styles:

- "Broad internal;
- Broad external;
- Narrow internal;
- Narrow external."

"The volleyball players generally use the broad external style to read, recognize and identify the game situations. They learn to broaden the focus (zoom out), such as when a central player in blocking trying to read and scan to identify potential opponents forwards, then narrows its focus outside the (zoom in) to accurately read and focus on a specific attacker (narrow external). When the central player mentally identify potential opportunities to block (internal focus), which allows selection of optimal motor program based on the possibilities they have each player. Finally occurs execution engine selected (contact with the ball) and the correct positioning of hands, which requires a concentration of attention (internal narrow). " (I.Ahrabi-Fard, S.Huddleston, 1991). The context it is important to note that volleyball players use to monitor everything going on volleyball all four styles of attention.

Volleyball players must learn to anticipate events in those circumstances, situations based on probability analysis of the situation and current conditions in comparison with experiences in such circumstances.

Those players who can properly extrapolate a game situation and its end is based on the preconditions are more likely to make, quickly organize an action plan immediately.

For example, the best defensive players can be distinguished and show they are able to quickly process visual information that identifies the game with or without blocking forwards nuisances, and based on these data, to anticipate where the ball will reach volleyball after attack and / or service, and to position themselves in the best position to make a good acquisition.

Some researchers have suggested the existence of optimal visual decoding strategies that can help the athletes in making decisions during the game by improving the attention focus. (F.Allard, J.L.Starkes, 1980; I.Ahrabi-Fard, S.Huddleston, 1991, J.L.Starkes et all. 1995)

Reserch hypothesis

The level of quality for the attention influences the success of game actions in volleyball and there is a relation between the attention style and the positions in volleyball.

Research methods and procedures (subject, methods applied test)

The methods we used during this research were: the analysis of the specialized literature, the pedagogical observation method, the psychological tests method, statistical-mathematical methods of interpreting the data, the graphical representation method.

The experimental research was conducted on the senior female athletes from the volleyball team of the Știința Bacău Club, during August 2007 - May 2008. The experiment group was made of 12 female volleyball players - at a senior training level - out of which 4 outside hitters, 3 middle hitters, 2 setters, 2 opposite hitters and 1 libero. The tests used in this research were:

to determine the attention styles - the Attentional and Interpersonal Type Test (Nideffer, 1976), and to determine the distributive and concentrated attention - the Labyrinth and the ADS tests. (Distributive attention, signals).

Following testing of attentional skills, we applied a program of mental training to improve their skills for a period of 6 months using exercises specific to volleyball and to the positions in which they were playing.

As players at this level have a piece of great tactical and technical knowledge and experienced competitive, being at a time of maximum expression of performance, specializing in post game was well learned, the experiment continued with the implementation of new working methodologies of the whole teams to improve quality of care styles and attentional skills in general.

Results, discussions, conclusions

The results obtained after the research show a high level of attention in all players and a specificity of attention styles for certain positions.

Attention is an important psychological skill and is very necessary in volleyball. Of the quality of this psychological skill and of its mastery, specific to game positions, depends a successful performance of volleyball game actions.

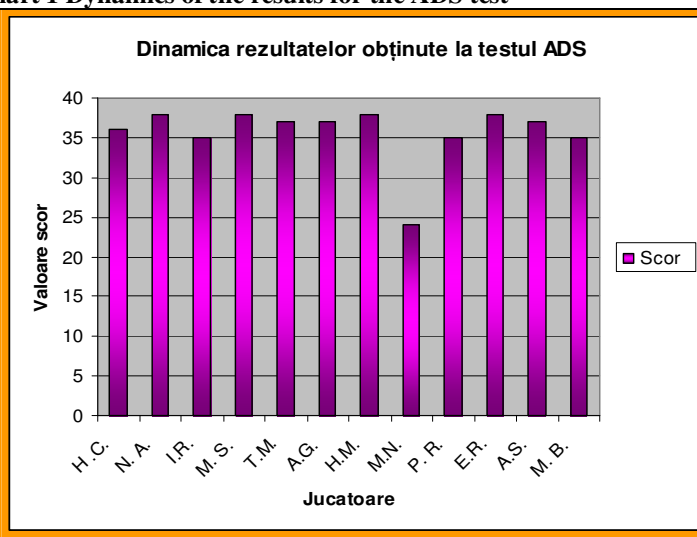
The results obtained after the attentional skills testing:

For the ADS test (distributive attention), the tested players obtained an average of 35.66 positive answers, and 4.34 negative answers of the total 40 test items. (Table 1)

Table 1 Results test ADS

No.	Name	ADS	
		+	-
1	H.C.	36	4
2	N.A.	38	2
3	I.R.	35	5
4	M.S.	38	2
5	T.M.	37	3
6	A.G.	37	3
7	H.M.	38	2
8	M.N.	24	16
9	P.R.	35	5
10	E.R.	38	2
11	A.S.	37	3
12	M.B.	35	5
	Average	35.66	4.34

Chart 1 Dynamics of the results for the ADS test



The analysis of these results shows that 11 players have a very good level of distributive attention with scores ranging from 35 to 40; one player has a score of

24, which indicates that we have an average distributive attention. (Chart 1)

At the Labyrinth test, the players obtained scores ranging from 23 and 19, with an average value of

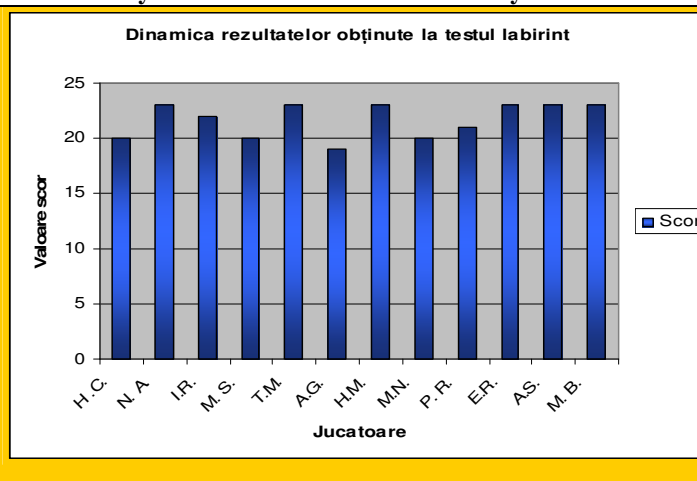
21.66. (Table 2) These values lead us to say that the concentrated attention for all of the tested players has a

good level. (Chart 2)

Table 2 Results test Labyrinth

No.	Name	Positive	Negative
1	H.C.	20	5
2	N.A.	23	2
3	I.R.	22	3
4	M.S.	20	5
5	T.M.	23	2
6	A.G.	19	6
7	H.M.	23	2
8	M.N.	20	5
9	P.R.	21	4
10	E.R.	23	2
11	A.S.	23	2
12	M.B.	23	2
Average		21.66	3.33

Chart 2 Dynamics of the results for the Labyrinth test

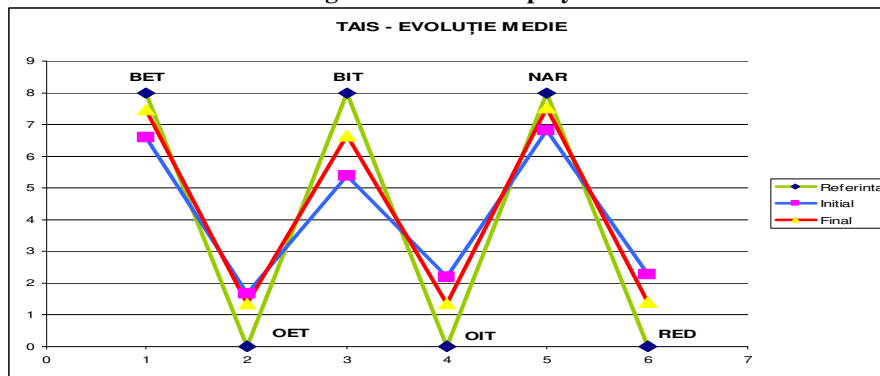


In the case of the Attentional and Interpersonal Type Test (Nideffer, 1976) we did a baseline test to diagnose which is the Players prior to the training program to improve attentional skills and a final test after 6 months.

in the application of our training programs for improving the style of care (Chart 3). Although some players (MB, AG, MN, PR) style alert level is not as ideal set of new graphics, is positive progress of players and that this feature can be enhanced by continuous and constant exercises.

After analyzing data centralization and TAIS, we can say that all Players have made obvious progress

Chart 3. The average evolution of all players at the TAIS test



After analyzing the final test results TAIS I noticed the following aspects of the values obtained from test and posts held by players.

OIT. In the case of the two players we can see a difference in quality for the attention style in favor of player AS, in comparison with NA. This is due, in our opinion, to a greater game experience as a main player of AS. (Chart 4)

Players from area 2 (Universal) the highest score achieved by the NAR the player HC and the lowest score by the same player in OIT. Both players recorded close scores at the BET, OET, BIT. (Chart 3)

Analyzing the common points of the Area 2 Coordinator and Players Universal stands out that they have similar large values in the following styles of attention NAR, BET and OET.

Players from area 2 (Coordinator) maximum scores are obtained by player AS at the BET, BIT and NAR, and the minimum by player NA at the BIT and

Chart 1

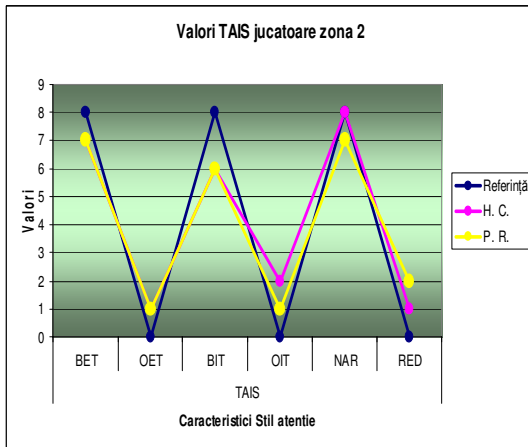
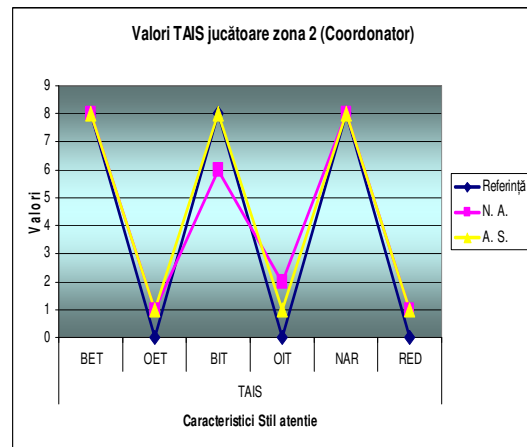


Chart 4



Players in the area 3 is seen the highest score obtained by player HM at the NAR and OIT and lowest values are obtained by player MB at the BIT and RED. For all players we can say that higher scores are for the style NAR and BET and lowest scores are for OIT and RED. We can also say that here also the largest player with competitive experience obtained the best scores on attention styles (Chart 5).

Players of area 4 Second to be noted that the indicator NAR maximum score was obtained for all the Players and also the highest score is obtained on OIT by player TM. The lowest values are obtained from OIT by player MS and at OET by player ER. Overall best values for all the players of area 4 are obtained for styles of attention BET, NAR and RED (Chart 6).

Chart 5

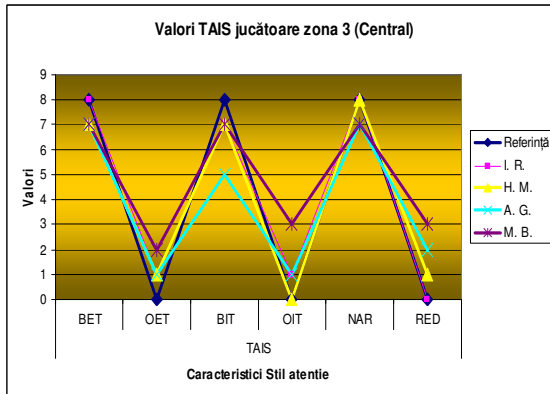
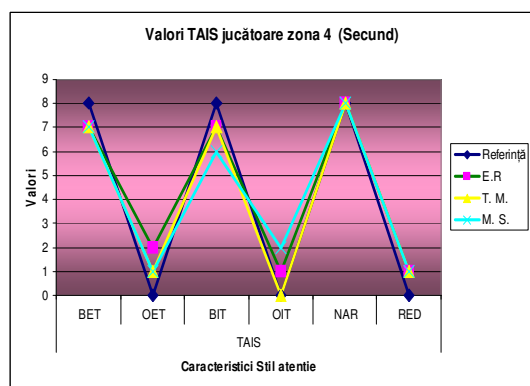
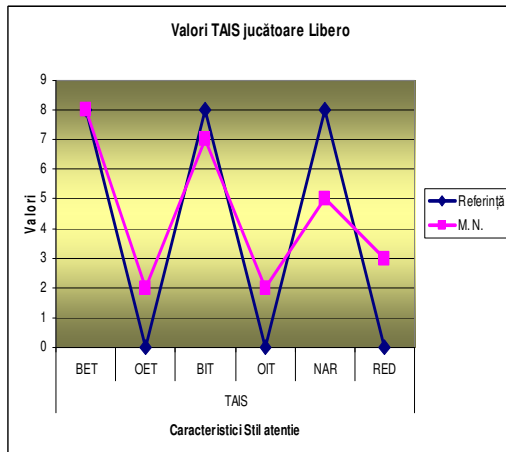


Chart 6



In the case of the Libero, we tested a position player on the high scores obtained BET attention to style and BIT and low NAR and RED. (Chart 7) (Chart 7)

Chart 7



After analyzing the final results obtained by all Players at the TAIS test, the following stand out in Chart 8:

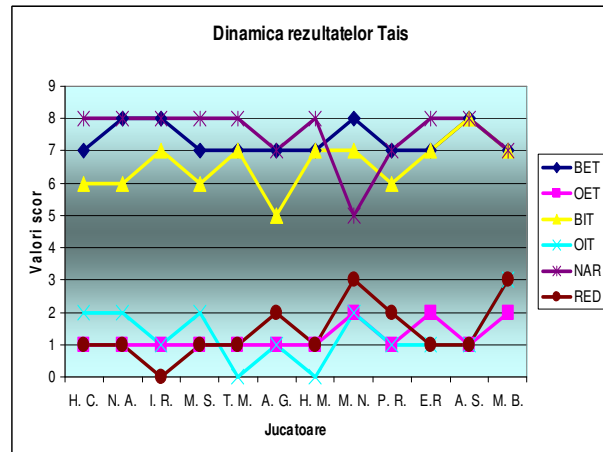
- For the NAR attention style were obtained maximum scores by 8 players, the Libero player obtaining the lowest score on this indicator.
- For the BET attention style were obtained maximum scores by 4 players including Libero player, all the rest players with high scores do not fall below margin of good values.
- For the BIT attention style one player (Coordinator) has obtained the maximum score, other players have achieved average scores, the lowest value being obtained by a player on the Central position.
- The RED attention style has produced a single maximum score by player IR on the Central position, two average scores obtained by players MB (Central) and MN (Libero) and high values obtained the other 9 players.
- For the OED attention style was not obtained maximum scores, but 9 players have achieved high scores.
- For the OIT attention style maximum scores were obtained by 2 players TM (Second) and HM (Central), these players are also the most experienced in the team. The other players have achieved high and average scores.

Conclusions:

Regarding the attention styles of volleyball players in relation to their positions, we draw the following conclusions:

- The Setter (area 2): presents high scores for the BET, BIT and NAR attention styles;
- The Middle hitter (area 3): presents high scores for the broad external BET and the narrow external;
- The Libero: presents high scores for the BET and BIT;
- The Outside hitter (area 4): presents high scores for the BET, RED and NAR attention styles;
- The Opposite hitter (area 2): presents high scores for the BET, BIT and NAR attention styles;

Chart 8



It is also noted that the higher values of skills of attention to all three tests applied are recorded by the players who have more experience in competitions.

Attention focus narrow external and large internal or narrow internal and narrow external, all actions necessary in the execution of the game, specifically tailored to each position and capacity to anticipate the need for a game opponent, the ball trajectory and timing with teammates are key factors involved the successful execution of the action game of volleyball.

The proposed training program, through concentration exercises, and demonstrated improved practice efficiency while maintaining focus on tasks for game competition and improving the prediction due to processing information during the game by focusing on essential evidence necessary to decide playing in time, thereby preventing loss of competition points at critical moments leading to greater efficiency and Players in tactical and technical components.

References

AHRABI-FARD, I., HUDDLESTON, S., 1991, *The attentional demands of volleyball, Coaching Volleyball Journal* 6

ALLARD, F., STARKES, J.,L., 1980, *Perception in sport: volleyball, Journal of sport psychology* 2,

BOMPA, T.O., 2003, *Performanța în jocurile sportive, Editura Ex Ponto, București*

CIOCAN, D., 2008, *Studiu constatatativ – abordare sociologică în vederea proiectării și programării cercetării privind determinarea capacității psihice în jocul de volei, Volumul Conferinței științifice internaționale: „Creativity and competition, european attributes of scientific and sporting manifestation”, Ed. Academica, Galați, pag 56-61*

CRESPO, M., REID M., QUINN A. 2006, *Tennis psychology: 200+ practical drills and the latest research , ITF ltd, Spain*

- EPURAN, M., 1996,** *Psihologia sportului de performanta. Reglarea si autoreglarea stărilor psihice la sportivi.* București, A.N.E.F.S.
- EPURAN, M. 2002** *Antrenament mental, Consecte, note, sinteză, SDP 453-454, București.*
- EPURAN, M., HOLDEVICI, I., TONIȚA, F., 2008** *Psihologia sportului de performanță : teorie și practică, ediția a 2-a, Editura FEFS, București*
- GOLU, M. 2007,** *Fundamentele psihologiei, ediția a V-a, Ed. Fundației România de mâine, București*
- GOULD, D., WEISS M., WEINBERG R. 1981,** *Psychological characteristics os successful and less successful Big Ten wrestlers.* *Journal of Sport Psychology,* 3
- JARVIS, M. 1999,** *Sport Psychology, Ed. Routledge,*
- KLUKA, D. 1997,** *Observational skills: qualitative analysis for competitive excellence, The Coach,* 3, 24-27
- LAGENKAMP, H., GASSE M. 200,** *Application of sports psychology to volleyball, in Handbook of sports medicine and science – Volleyball, Edit. Blackwell Publishing, 211*
- MILLER, R.J., 2005,** *The volleyball handbook, Human Kinetics*
- NETTLETON, B. 2001,** *Decision making in sport, Sports Coach, Vol. 24, no 2, Australian Sports Commission.*
- REESER, J. BAHR, R. 2003,** *Handbook of sports medicine and science – Volleyball, Edit. Blackwell Publishing*
- SMITH, D., BAR-ELI MICHAEL 2007** *Essential readings in sport and exercise psychology. Human Kinetics*
- STARKES ET ALL., 1995,** *A new technology and field test of advance cue usage in volleyball, Research Quarterly in Exercise and Sport 66 (2), 162-167*
- WEINBERG, R.S., GOULD D., 2007,** *Foundation of Sport Psychology, Human Kinetics, 2008.*