Evaluation of information processing model according to the learning and thinking patterns of volleyball practitioners in youth centers in Babel province

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Abstract:
In order to achieve the objectives objectively. It is substantial to have a comprehensive and standardized evaluation through which plans integrated to measure and evaluate the mathematical skills of all games, at different levels, and for both genders. Preparation, training, setting and monitoring levels through drawings and curves to knowledge progress and identify strengths and weaknesses. The research problem reflected in whether there is a real interest model of information processing according to the learning and thinking patterns of volleyball practitioners by those who build the curricula of training and education adopted in youth centers in the province of Babylon. The research community has been determined in the youth centers in Babel province by the 120 volleyball practitioners, a sample of that community (75 players) selected by random method. The researcher concluded that the sample achieved according to learning patterns and thinking pattern (integrated) better at the standard level and according to the percentages, the highest percentage was achieved in the good level of the same pattern (left and right). The sample categorized into (right and left) and (integrated) patterns.
Keywords: information processing model, learning and thinking patterns, volleyball.

1. Introduction:

Great mathematical achievements achieved through scientific planning and redouble efforts and modern methods to employ them in order to achieve in all events and sports. In order to achieve the objectives objectively, a comprehensive assessment is required and codifies the integrated plans to measure and evaluate the mathematical

skills of all games at different levels and for both genders. These plans must formulated in an orderly and accurate manner and conducting several measurements and tests on specific timetables and continuously throughout the learning, preparation and training periods. In addition, define levels and observe it through drawings and curves to view progress and identify strengths and weaknesses through the acquisition of ancillary data in achieving the objectives of training and special programs and increased motivation and excitement factor. This can be lead to make high and scientific planning for the process of learning and sports training.

The accuracy of the evaluation process depends on the exact scientific basis for tests and metrics that built through their data accurate information. In addition, having access to information, it can use to make decisions about the curriculum, and the volleyball is one of the team games consist of offensive and defensive skills. Its performance determined by the presence of the player in the position who must act right and be able to respond and make the right decision at the right time. In order for this to be achieved must stand on the elements of scientific player and work to convert the ability of the player and directed in obtaining information and isolation from external stimuli, in addition the possibility of analyzing them and translating them into kinetic commends is achieved through the apparent behavior to describe the motor performance. This concept requires from the player when processing information to use a certain method of processing and use a certain method in the way of learning and thinking and these linked to one or both halves of the brain. Therefore, attention given to knowledge of brain function, learning patterns and the prevailing and preferred brain text for educational curricula that assist in the performance of skills in conditions and situations similar to real play situations.

Hemispheres of the brain are identical in vital functions, each of which contains the areas of motor, sensory, visual, and auditory areas and these two halves have psychological and mental functions completely different from the functions of the other half. The left half of the brain called (the analyzer). It used in learning new skills, correcting mistakes and developing competition strategy and provides the player with step-by-step information as this information helps guide the human body. On the other hand, the right half called (Complement). It controls the way the player performs and interdependence of vocabulary Constituent of skill in a composite framework. The volleyball practitioners face a pattern of educational and training programs different from what they used to in the previous stage; they bear the responsibility of their learning largely, especially as the focus now on the importance of the interaction of the activity of the learner to be a positive initiative rather than a negative recipient. In addition, the information processing strategies they use to handle, acquire, store, and retrieve information may vary from those they used to use in the past. Especially, since there are two main aspects deal with volleyball practitioners are the theoretical side (plans and skills), the practical side, and the amount of interaction between them in order to develop the sports side and the level of a volleyball game. Variations between individuals in learning and thinking patterns are due to their dependence on one hemisphere of a brain to receive and process information and that the individual should involve both of those in the processing, storage, and retrieval of information. Several researchers have also investigated the link between the two halves of the brain and the construction of a training and educational curricula and the need for specialization to be associated with the prevailing brain pattern in people. For this, because of the importance of research lies in building standard levels of strategy for volleyball practitioners in order to process

information according to learning and thinking patterns. Here will be the following question to clarify the problem further?

Q: Is there a real interest in the processing of information according to the learning and thinking patterns of volleyball practitioners by those who build the curricula of training and education adopted in the youth centers of the province of Babylon?

1.1. Aim of research:

- ❖ Statistical description of the research variables (information processing model) enjoyed by volleyball practitioners in Babylon Youth Centers.
- ❖ Classification of the sample according to patterns of learning and thinking (Ayman, Acer, integrated).
- ❖ Building standard levels for evaluating the information-processing model according to the learning and thinking patterns of volleyball practitioners in Babylon Youth Centers.
- ❖ The researcher hypothesized that the sample members have different levels in the information-processing model according to the learning and thinking patterns.

2. Research Methodology and Field Procedures:

2.1. Research Methodology:

The researcher used the descriptive method in the survey method and correlative and normative studies to suit the nature of the problem.

2.2. Research community and sample:

Has been determined by the 120 volleyball from practitioners in the youth centers in Babel province by the research community, A sample of that community (75 players) selected by random method. Percentage (62.5%).

2.3. Field procedures for research:

2.3.1. Determine the tests to measure the variables studied:

2.3.1.1. Torrance Scale for Learning and Thinking Patterns (1):

After researching several scientific sources and studies that dealt with learning and thinking patterns by the author, has found several metrics through which to identify any half of the dominant brain and control thinking and decision-making. One of these is the Torrance Scale and colleagues' measurement of your learning and thinking patterns (Your Style of Learning and Thinking) to determine the learner's dependence on the right or left hemisphere of brain or both. The researcher used this measure of the urgent need to knowledge the patterns of learning and thinking and classify them in the light of the concept of hemispheres of the brain into different groups with patterns (right, left, and integrated).

2.3.1.2. Correction Method (Key Scale):

Torrance and his colleagues developed and prepared this scale, which consists of 38 sets of phrases. Each group contains three terms relating to (1) the right hemisphere and (2) to the left hemisphere and the phrase (3) related to the integration of the two halves. This metric applied after ensuring that the players understand their phrases and selecting the one that best describes the player.

2.3.1.3. Shammak scale for information processing:

The researcher has accessed many sources and scientific references, studies, and research for the purpose of finding a metric by which the amount of information is processed by the research sample, but The researcher has only found the Shammak scale to process information and translator into Arabic and used in a number of studies [(2), (3)]. The researcher obtained the original source of the scale (Schmeat, 1983) [(4)] and the translation was compared with the original text after the presentation of the paragraphs of the scale in the original language and the Arabic language (specialist

teacher) (*) in Arabic to ensure the correct translation. This measure consists of (62) paragraphs to determine the dimensions of information processing and operations characterized by players practicing volleyball classified into four sub-axes, namely:

- The axis of deep processing consists of (18) paragraphs related to how the player practicing information, classification, and analysis in order to absorb it deeply and accurately and then work on the evaluation and criticism.
- The axis of the systematic study consists of (32) paragraphs related to how the student organizes his time and effort during the study and preparation for exams and called Shammak (how to study).
- The axis of Maintain scientific facts and consists of (7) paragraphs related to the ability to store study information in the brain and retrieve effectively when needed.
- The axis of detailed and expanded processing consists of (14) paragraphs related to the ability of the student to expand the subject with its own additions and attempts to express scientific ideas in his own way and find practical applications directly to them.

The researcher then presented the four paragraphs of the metrics through a questionnaire form (Appendix 1) to a group of experts and specialists in the field of tests and measurement and the field of education and psychology (Appendix 2). To find out the suitability of the paragraphs of the scale for the practitioners of a volleyball game in youth centers and measure them for cognitive processes, which is the processing of information they have and the extent of retention in the original sense as originally stated. After collecting and unloading the forms, it found that experts agreed on the validity of the paragraphs to measure the amount of information processing for young volleyball practitioners in addition to its suitability for the research sample.

Schmeat Correction Method (Scale Switch):

The researcher adopted Shammak's method of correction according to the binary gradient of the response (it applies to) or (Does not apply to me). The author gave the positive paragraph that the students answer (weight (1)) and gives (zero if the answer does not apply to me). As for the negative paragraphs. The weight is inverse which give the paragraph that it should (apply to the weight of zero) and give the paragraph to which it answered (does not apply to (11)). Therefore, be the highest score for the scale (62) degrees and Annex (6) shows the paragraphs of the scale of the positive and negative axis the four.

2.4. The main experience:

The researcher conducted his main experiment on Saturday and Sunday, 2–3 / 2/2019 on the main research sample of (75) volleyball practitioners in the youth centers of Babylon province.

2.5. Statistical means

The researcher used the statistical bag spss using statistical

Statistical means (arithmetic mean, median, standard deviation, torsion coefficient, kurtosis, standard score, modified standard score).

3- Results, presented, analyzed, interpreted:

3-1 Statistical description of research variables (information processing) according to learning and thinking patterns:

In order to be able to study the reality of the sample in the information processing strategy according to learning patterns and thinking must display the most important data related to the description of what has been achieved for the sample in this variable. It is expressed in significant central values to distribute the values that the

sample members have obtained in the test to measure their information-processing model. In order to know these values, we highlight what stated in Table (1).

Table (1)

The statistical description shown in the variable of the information-processing model according to the learning and thinking patterns

Data processing According to learning and thinking patterns	The number	Arithmetic mean	Arithmetic median	standard deviation	Torsion coefficient	Kurtosis
Right	23	35.17	9.63	2	0.49	0.17
Left	37	36.02	8.05	1.32	0.88	0.44
Integrated	15	32.06	32	2.96	0.21	0.25

Observing Table (1) shows that the value of the torsion coefficient in the learning and thinking patterns (right pattern) is 0.49, (left pattern is 0.88 and (integrated pattern) is 0.21, thus verifying the moderate distribution of practitioners' scores by calculating the torsion coefficient. The value of kurtosis ranged from (0.17 to 0.44), respectively. All values were confined between (+ or - 1) in any way. This indicates that practicing players are characterized by moderation in the variable (information processing model).

3-2 Standard scores for the information processing model variable according to learning and thinking patterns.

What the researcher seeks in this research, is to know the levels that the sample of the research sample in the information processing model according to learning and thinking patterns, and here we would like to note that the sample was classified into three types of learning and thinking patterns are (Right, left and integrated) after using the researcher The percentage of practitioners who enjoy the pattern (Right) 30.66% of the total sample, the left (49.33%) and the integrated pattern was 20%.

In order for the researcher to obtain the standard scores, the researcher conducted a process of conversion of data that can not have any change in the standard levels only if these raw values are converted to standard scores, it is through those (scores) can interpret what was measured and assessed in an objective manner shown On a statistical basis consistent with the objectives of the study, it is also called T. scores.

• Eliminate fractions that may result from standard grades.

• Eliminate standard scores that may be negative

Thus, the standard tables of the research sample were constructed in order to translate the results of the information processing model according to the learning and thinking patterns. In the tables(1)confirm that the sample is distributed naturally through the torsion coefficient as well as obtaining the standard scores and standard scores modified for the tests in the tables (4,2,3).

Table (2)

Shows the scores and adjusted scores for practitioners in the information processing model according to learning and thinking patterns (right style)

Right pattern	Repetition	Standard score	Modified Standard
44	1	0.91583	59.16
45	1	1.01959	60.2

37	1	0.18948	51.89
42	1	0.7083	57.08
33	1	-.22557-	47.74
30	1	-.53686-	44.63
31	1	-.43310-	45.67
30	1	-.53686-	44.63
30	1	-.53686-	44.63
40	1	0.50077	55.01
41	1	0.60454	56.05
51	1	1.64217	66.42
49	1	1.43464	64.35
44	1	0.91583	59.16
30	1	-.53686-	44.63
30	1	-.53686-	44.63
43	1	0.81206	58.12
30	1	-.53686-	44.63
39	1	0.39701	53.97
21	1	-1.47074-	35.29
38	1	0.29324	52.93
15	1	-2.09332-	29.07
16	1	-1.98955-	30.1

Table (3)

Shows standardized scores and adjusted scores for practitioners in the information processing model according to learning and thinking patterns (left style)

Right pattern	Repetition	Standard score	Modified Standard	Right pattern	Repetition	Standard score	Modified Standard
18	1	2.23838-	27.62	34	1	-.25169	47.48
17	1	2.36255-	26.37	45	1	1.11416	61.14
20	1	1.99005-	30.1	38	1	0.24498	52.45
19	1	2.11421-	28.86	37	1	0.12081	51.21
30	1	-.74836-	42.52	36	1	-.00336-	49.97
29	1	-.87253-	41.27	35	1	-.12752-	48.72
31	1	-.62420-	43.76	38	1	0.24498	52.45
28	1	-.99670-	40.03	37	1	0.12081	51.21

48	1	1.48666	64.87	39	1	0.36915	53.69
46	1	1.23833	62.38	40	1	0.49332	54.93
45	1	1.11416	61.14	39	1	0.36915	53.69
48	1	1.48666	64.87	39	1	0.36915	53.69
40	1	0.49332	54.93	35	1	-.12752-	48.72
40	1	0.49332	54.93	37	1	0.12081	51.21
33	1	-.37586-	46.24	42	1	0.74165	57.42
29	1	-.87253-	41.27	44	1	0.98999	59.9
40	1	0.49332	54.93	45	1	1.11416	61.14
39	1	0.36915	53.69	40	1	0.49332	54.93
33	1	-.37586-	46.24				

Table (4)

Shows the scores and adjusted scores for practitioners in the information processing model according to learning and thinking patterns (integrated half)

Right pattern	Repetition	Standard score	Modified Standard
55	1	2.4966	74.97
44	1	1.16777	61.68
25	1	-1.12750-	38.73
32	1	-.28187-	47.18
33	1	-.16107-	48.39
30	1	-.52348-	44.77
32	1	-.28187-	47.18
35	1	0.08054	50.81
25	1	-1.12750-	38.73
47	1	1.53018	65.3
32	1	-.28187-	47.18
31	1	-.40268-	45.97
27	1	-.88589-	41.14
33	1	-.16107-	48.39
34	1	-.04027-	49.6

3-3 Present the results of the levels, extent and percentage achieved by practitioners of the data processing model according to learning and thinking patterns (right, left, integrated).

The researcher used the method of extracting the range through the program (spss) the highest value and the lowest value and depending on the number of levels provided by the researcher the program has selected four levels to be objective assessment process as shown in table (5,6,7).

Table (5)

Shows the levels, extent, number achieved, and percentage of practitioners of the information processing model according to learning and thinking patterns (right style)

Label the levels	*Rang*	*number achieved*	*percentage*
Very Good	40.00+	9	%39.13
Good	28.00 - 39.00	11	%47.82
Middle	16.00 - 27.00	2	%8.69
Weak	<=16.00	1	%4.34

Table (6)

Shows the levels, extent, number achieved, and percentage of practitioners of the information processing model according to learning and thinking patterns (left style)

Label the levels	*Rang*	*number achieved*	*percentage*
Very Good	37.68+	0	%0
Good	27.34 - 37.67	19	%51.35
Middle	18.00 - 27.33	14	%37.83
Weak	<= 17.00	4	%10.81

Table (6)

Shows the levels, extent, number achieved, and percentage of practitioners of the information processing model according to learning and thinking patterns (integrated mode)

Label the levels	*Rang*	*number achieved*	*percentage*
Very Good	34.34+	0	%0
Good	30.68 - 34.33	4	%26.66
Middle	28.00 - 30.67	6	%40
Weak	<= 27.00	5	%33.33

What reflected in the table above is the emergence of a difference in percentages between what the sample achieved according to the learning and thinking patterns (right) and the sample achieved according to the pattern (left) and the sample pursued according to the learning and thinking (integrated) patterns in the information-processing model in the single standard. The knowledge of learning patterns and thinking is very important is to help understand and work to Absorbs everything that affects the educational and training process and through which are selected. The appropriate tools and means to prepare and design units, both in contributing to the learning process in training and the development of plans and methods of treatment in the conditions of play and competition. The planning of any kind of curriculum or training plans requires the owner to adopt the accuracy and balance in its design during the development of the right training curricula. This lead to the achievement of aims, whether these aims physical, skill, psychological or mental[(5)].The game of volleyball contains offensive and defensive skills performed by the player from several centers and interact and recognize the variables and methods of treatment. This player requires finding logical ways of learning and training to suit the requirements of this game and to act and control the performance of skills. In

addition, the implementation of complex plans that require analytical mental functions help solve the problems affected by the player. It is the dominant part of the brain. That plays an important role in the behavior of individuals to process information and knowing the prevailing half of the brain helps to treat and learn individuals[(6)] .

4.Conclusions and Recommendations:

4-1**.** ***Conclusions:***

1- The sample was classified into patterns (Ayman, left and integrated).

2- The sample achieved according to learning and thinking patterns (left) pattern better in the standard level and according to the percentages achieved the highest percentage in the good level of the same pattern (right and integrated)

3 - The sample with the right pattern achieved a higher percentage in the very good standard level than the sample with the right pattern (left, integrated).

4 - The sample according to patterns of learning and thinking pattern (integrated) the highest percentage in the average standard

4-2. ***Recommendations:***

1 - the need to pay attention to such an important segment of society as the main tributary of educational institutions and reliable in building society.

2 - the need to conduct such studies periodically because of their importance in determining the reality of the situation to be able to strengthen the strengths and address weaknesses.

3 - Conducting research and studies to reveal the learning and thinking patterns of the emerging novice players to develop educational and training curricula.

Conducting other studies on other sporting events.

Appendix (1)
The Torrance Scale for Learning and Thinking Patterns

Dear player:

This test is concerned with measuring your preference for learning and thinking methods and it contains (38) set of phrases and each set of three phrases. You are required to read each group separately. Then click (√) in front of either of them and if the two apply to you click (X) in front of the phrase we note that there are no correct and wrong answers.

Thank you very much.

Player Name:
Center:
Category:

Torrance Scale Phrases

sequence	Sentences
1	1. ***I remember the faces well. ( )*** 2. ***I remember the names well. ( )*** 3. ***I remember the faces, names well. ( )***
2	1- ***Respond better to instructions and explanation illustrated by examples. ( )*** 2- ***Respond better to instructions and oral explanation. ( )*** 3- ***Respond better for both of these. ( )***

3	1- ***I express my feelings freely without shame. ( )*** 2- ***I can keep my feelings up in normal things. ()*** 3- ***I express my own feelings only to my close friends. ( )***
4	1- ***I like to laugh with my colleagues while doing practical experiments. ( )*** 2- ***Be disciplined during practical experiments. ( )*** 3- ***The two best methods are ex-work experiments. ( )***
5	1- ***The best subjects that deal with several work at the same time. ( )*** 2- ***The best subjects that deal with several work in each assignment separately. ()*** 3- The best subjects in the two previous styles. ( )
6	1- ***I love objective tests. ( )*** 2- ***I love the essay tests structural. ( )*** 3- ***I have two tests. ( )***
7	1. ***I can understand my colleagues when they talk to me by reference. ( )*** 2. ***It is difficult for me to understand sign language. ( )*** 3. ***Sometimes good at understanding the talk by reference. ( )***
8	1. ***I always have the ability to make a situation that my colleagues laugh at.*** 2. ***Rarely make a position laughed by my colleagues.*** 3. ***Sometimes I can make a position laughed by my colleagues and sometimes I cannot.***
9	1. ***The best practical subjects that depend on movement.*** 2. ***The best theoretical study materials that I enjoy to explain the teacher.*** 3. ***The best two types of subjects.***
10	1. ***I prefer to drink canned juices despite the damage of preservatives.*** 2. ***Make sure to eat fresh fruit to avoid preservatives.*** 3. ***There is no difference between eating fresh fruit and drinking canned juices.***
11	1. ***Be sure to solve problems cheerfully. ( )*** 2. ***I prefer to be serious in solving problems. ( )*** 3. ***I prefer to be serious in situations that require it. ( )***
12	1. ***My mental activity increases when I am among people. ( )*** 2. ***Increased mental activity when viewing landscapes more than my presence among people. ( )*** 3. ***Increases mental activity in both cases the same thing. ( )***
13	1. ***I prefer to make things that the teacher assigned me from the materials allocated to them.*** 2. ***I prefer to use environmental raw materials in making things assigned by the teacher*** 3. ***I prefer to make the work assigned by the teacher of raw materials available and available to me.***
14	1. ***I do not prefer to put a fixed table of study. ( )*** 2. ***I prefer to study everything I took in school. ( )*** 3. ***Equal to the two previous methods of study. ( )***
15	1. ***I like to solve math problems in a way different from the***

	solution of the teacher. ( ) 2. ***Better when solving math problems that committed to solve the teacher. ( )*** 3. ***Sometimes solve math problems in a way different from the solution of the teacher. ( )***
16	1. ***I think well when I lie on my back. ( )*** 2. ***Think well when I am sitting moderately. ( )*** 3. ***Think well, when I walk. ( )***
17	1. ***The best practical classes such as drawing and housekeeping. ( )*** 2. ***The best theoretical classes such as texts and history. ( )*** 3. ***The best types of quotas. ( )***
18	1. ***I tend to use guesswork when Iam unsure of the solution. ( )*** 2. ***Do not use guesswork when I doubt the solution. ( )*** 3. ***Sometimes used guessing in the solution. ( )***
19	1. ***I tend to express my feelings and ideas in an indirect way such as poetry and painting. ( )*** 2. ***I tend to express my feelings and ideas clearly. ( )*** 3. ***I have the same two ways of expressing my feelings. ( )***
20	1. ***Always acquired a quick understanding of mathematics, language and Arabic. ( )*** 2. ***Rarely gained the speed of understanding from the study of mathematics and the Arabic language. ( )*** 3. ***Sometimes acquired a speed of understanding from the study of mathematics and the Arabic language. ( )***
21	1. ***The best difficult problems. ( )*** 2. ***The best easy problems. ( )*** 3. ***I have two types of problems. ( )***
22	1. ***Best scientific subjects such as science and mathematics.*** 2. ***The best subjects that deal with emotions such as songs.*** 3. ***The best of all subjects.***
23	1. ***I can do many things at once. ( )*** 2. ***I can only focus in one work. ( )*** 3. ***I can do one or more work at a time. ( )***
24	1. ***I tend to learn topics that develop thinking and meditation. ()*** 2. ***I prefer to learn scientific facts that relate to any subject studied. ( )*** 3. ***I prefer the two previous methods of learning. ( )***
25	1. ***I tend to read new topics and benefit from them in life topics. ( )*** 2. ***I tend to analyze the topics that I study and identify the mistakes that exist. ( )*** 3. ***The better of the two previous methods of reading. ( )***
26	1. ***The best experimental way to solve the problems facing me. ( )*** 2. ***I prefer to analyze the problem to its elements in a logical way to reach the solution. ( )*** 3. ***I tend to solve problems in the two previous ways. ( )***
27	1. ***Learn better than explaining the teacher using teaching aids. ( )***

	2. ***Learn better than explain the oral teacher. ( )*** 3. ***There is no difference between the two types of explanation. ( )***
28	1. ***I have a skill in explaining the explanations through movement and representation. ( )*** 2. ***I have a skill in giving oral explanations. ( )*** 3. ***I have the ability to use the previous two methods. ( )***
29	1. ***Rely on the image and forms in remembering and thinking. ()*** 2. ***Rely on speech in remembering and thinking. ( )*** 3. ***I have equal reliance on speech, pictures and forms in remembering and thinking. ( )***
30	1. ***The best arrangement and organization of elements in the unfinished topics. ( )*** 2. ***The best analysis of topics to the elements. ( )*** 3. ***I have the same two previous. ( )***
31	1. ***Enjoy drawing and handicrafts. ( )*** 2. ***Enjoy reading and writing. ( )*** 3. ***I have the same two previous. ( )***
32	1. ***I can identify roads and directions even in new places. ( )*** 2. ***Get lost even in familiar places. ( )*** 3. ***I have a moderate skill in determining the methods and directions. ( )***
33	1. ***I tend to provide new solutions to the problem that guides me more than thinking about it. ( )*** 2. ***I tend to think about the problem facing me more than provide many solutions to it. ( )*** 3. ***I have equal thinking about the problem or find many solutions to it. ( )***
34	1. ***I prefer to be in crowded places full of noise. ( )*** 2. ***I prefer to be in quiet places where I can focus. ( )*** 3. ***Equal to the quiet and crowded places. ( )***
35	1. ***I have aesthetic interests such as drawing. ( )*** 2. ***I have practical concerns. ( )*** 3. ***I participate equally in previous activities. ( )***
36	1. ***The best work in the future in scientific fields such as medicine and engineering. ( )*** 2. ***The best work in the future in the humanitarian areas such as teaching. ( )*** 3. ***I cannot determine that now. ( )***
37	1. ***Better when studying a particular topic take a comprehensive idea about it. ( )*** 2. ***Best when studying a particular topic look for the main ideas of this topic. ( )*** 3. ***I prefer to get the general idea and then search for the main ideas of the topic. ( )***
38	1. ***I accept mentally everything I read and hear. ( )*** 2. ***I tend to search and wonder about everything I read and hear. ( )*** 3. ***I have the same two previous. ( )***

Appendix (2)
Scale of information processing for volleyball practitioners

Dear: Player

This questionnaire is a measure of information processing that tries to identify how you deal with materials and information. It consists of (62) paragraphs related to this area and in front of each paragraph two options for the response are (apply to - do not apply to). Each paragraph is required to be read carefully and accurately and answer by placing a tick (√) under the desired choice, and please answer each paragraph in a way that reflects the real deal and not as real as you wish or wish to have that deal.

Thank you very much

Player Name:
Center:
Category:

Seq.	Paragraph	Apply to	Do not apply to
1	I have difficulty dealing with questions that require comparing different concepts.		
2	I find it hard to come to conclusions.		
3	I have trouble organizing the information I remember.		
4	I find it hard to remember the subject during the exam I studied carefully.		
5	I find it difficult to answer questions that require a critical assessment.		
6	I answer well on. essay exams		
7	I often have difficulty expressing my thoughts in appropriate words.		
8	I have difficulty learning how to study for a particular subject.		
9	I find it difficult to plan my studies when I have a complicated subject.		
10	I get good grades on reporting.		
11	I often memorize material that I do not understand.		

12	I find it hard to notice the differences between seemingly similar ideas.		
13	I can usually decide the main meaning behind the movies I watch and the books I read.		
14	I think fast.		
15	Most of my teachers give their lectures very quickly.		
16	I can usually guess well if I do not know the correct answer to the. exam questions		
17	Neglect the differences between information from different sources.		
18	Read critically.		
19	Reduce as much information as possible for exam purposes.		
20	I have regular intervals to review my lessons weekly.		
21	I find it difficult to start studying and reading my courses.		
22	Review the course periodically.		
23	I keep a daily schedule for my school hours.		
24	Complete all my carefully scheduled assignments.		
25	I often write a summary of the article I read.		
26	I spend more time studying than most of my friends.		
27	Several notes to the course were prepared from several sources.		
28	I often read what more. gives me in class		
29	Often refer to multiple sources to understand the. Idea		
30	Summarize all the subjects you studied when approaching the end of the semester or school year.		
31	Increase my vocabulary by preparing lists of new terms.		
32	Use the dictionary (or dictionary) continuously		
33	Continue my studies of the material and mastered the learning.		
34	Draw shapes and clear simple diagrams to help me remember the subject.		
35	I always make an extraordinary effort to get all the details about the subject.		
36	Study by solving. practical exercises		
37	I have a steady place to study.		
38	I can easily find the texts in the textbooks when required.		
39	Always prefer to read the original article rather than the summary.		
40	Use the library frequently.		
41	Make a list of possible questions and answers when reading for exams.		

42	I answer well in examinations that require facts contained in the systematic book.		
43	I learn equations, names and dates very well.		
44	Answer well on tests that require definitions.		
45	My answer is good in exams that require completing the solution and missing information.		
46	I have difficulty remembering definitions.		
47	I can say that my memory is very weak.		
48	In the exams, memorize the article by heart as it is in the book or in the notebook.		
49	Constantly look for reasons beyond the facts.		
50	New concepts make me think of similar concepts.		
51	Through my studies, I try to reflect and think deeply about the topics I have read.		
52	I usually design my own ways to solve problems.		
53	After reading any subject, I reflect and think deeply about the topics I have read		
54	I learn new words and ideas to imagine a situation in which they can occur.		
55	When I learn a lesson from the material, I summarize it with my own style.		
56	I learn new concepts by expressing them in my own words.		
57	I always mentally review the topics I study during the day.		
58	When I study, I design a system to remember the subject.		
59	Link new words and ideas to the words and ideas I already know.		
60	Learn new ideas to compare them with similar ones.		
61	I turn facts into laws that I draw from my experience.		
62	When learning new concepts often put scientific applications.		

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