

Effect of the seven-cycle learning strategy (7E'S)) on mental motivation and learning technical performance for discus throw for female students

Asst. Prof. Dr. Rami Abdulameer Hassoon ⁽¹⁾ , Lec. Ruqayah Hamzah Knawi ⁽²⁾ , Asst. Prof. Dr. Thuraya Goad Mohain Hasan al safe ⁽³⁾

^{(1), (2), (3)} Faculty of Physical Education and Sports Sciences/ University of Kerbala, Iraq.
rami.a@uokerbala.edu.iq , rokieh.h@uokerbala.edu.iq , thoria.j@uokerbala.edu.iq

Abstract

The importance of the research is manifested in the use of the seven-cycle learning strategy (7E"s) and knowing its impact on mental motivation and learning the technical performance of discus throw for female students.

The research aims to identify the effect of the strategy of the seven-year learning cycle (7E'S) on mental motivation and learning the technical performance of the effectiveness of discus throwing for female students, as well as identifying the preference for the effect between the control and experimental research groups on mental motivation and learning the technical performance of discus throwing for female students in the post tests. .

The research hypotheses are manifested that there are statistically significant differences between the tribal and remote tests of the two control and experimental groups in mental motivation and learning technical performance for discus throwing for female students and in favor of the post tests. There are also statistically significant differences in the post tests between the control and experimental groups in mental motivation and learning technical performance. For throwing the discus for the female students and for the benefit of the experimental group.

The researchers used the experimental method with two equal groups (control and experimental) due to its suitability to the nature and objectives of this study.

The research community was determined by the students of the second stage in the College of Physical Education and Sports Sciences - University of Karbala, which numbered (52) students. The research sample was chosen randomly from the original research community, and by lottery method, with a number of (30) students, who were divided into two equal groups, with a value of (15) a student for each group, thus, the percentage of the research sample is (57.69%), which is an appropriate percentage to truly and honestly represent the research community.

Among the most important conclusions reached by the researchers is that the method used and the strategy used had a positive effect on mental motivation and learning the artistic performance of the effectiveness of discus throwing for female students. And the strategy of the seven-year learning cycle used was more positive than the method used in mental motivation and learning technical performance for discus throwing for female students.

The most important recommendations reached by the researchers were to emphasize the use of the seven-cycle learning strategy in mental motivation and learning the technical performance of discus throwing for female students, and the need to pay attention to the introduction of the strategy of the seven-cycle learning cycle in learning the rest of athletics activities in particular, and sports skills in general and in different age groups.

Introduction:

Individual games are characterized by their different levels and the multiplicity of their practice and purposes, as the continuous interest in progress and achieving the highest levels of sports achievement, whether using mathematical and applied sciences, or scientific means and modern teaching methods in order to solve the problems facing the learner in achieving the best technical performance or the best level.

The professor of physical education needs to use modern strategies in the kinetic aspect, especially the strategy of the modern seven-course learning cycle, as it was applied in the theoretical aspect previously, and here the teacher's creativity appears in investing this method in learning kinetic skills in various games, including athletics.

Athletics activities are one of the practical lessons that are included in the curriculum of the faculties of physical education, which is characterized by the multiplicity of its activities, including the discus throw, which requires the use of modern strategies to keep pace with the development taking place in the world, in addition to that effectiveness, the physical education lesson is included in the theoretical side courses, which requires the student to acquire knowledge of that subject. The achievement is the final outcome of the learning processes that we want to reach, as the process of achievement must include the best that can be performed by the student so that he is able to complete work that requires effort and skill to perform, the learner must first know and practice secondly, that is, practice is a realistic translation of the knowledge and understanding that the learner has acquired in his field of specialization, which gives him the ability to analyze, explain and link in order to make the appropriate decision to solve situations to confront him in a scientific manner based on broad and focused thinking to choose the correct response.

As well as addressing an important psychological aspect that helps in the process of solving problems and pushes the learner towards learning in a more dynamic way, which is the variable (mental motivation), as it is considered one of the important things that fall within the general system of the student and that helps her in the learning process for this event.

Hence the importance of the research in using the strategy of the seven learning cycle (7E"s) and knowing its impact on mental motivation and learning the technical performance of discus throw for female students.

Research problem:

By observing the researchers' teaching of athletics to second-year students in the College of Physical Education and Sports Sciences / University of Kerbala, the researchers believe the lack of use of modern teaching strategies that are used to learn sports activities and skills in general and the

Effect of the seven-cycle learning strategy (7E'S)) on mental motivation and learning technical performance for discus throw for female students

effectiveness of discus throw in particular, as the methods that depend on recitation from the teacher and listening from the student are often used, as well as the absence of a strong link between the theoretical and applied aspects in the implementation of educational units, which led to a weakness in the pairing between theoretical and applied aspects. Therefore, the researchers found the necessity of introducing the theoretical aspect into the educational unit and giving it the same importance as the practical aspect in order for the student to build a mental conception (theoretical cognitive) that he can benefit from to bring out the applied aspect in a scientific manner.

Therefore, the researchers decided to study the effect of the modern seven-cycle learning strategy (7E's) on mental motivation and learning the technical performance of discus throw for female students. Perhaps it contributes directly to the development of an important psychological aspect, which is mental motivation, as well as learning the technical performance of the discus throw for students.

Research objectives:

- Identify on the effect of the seven-cycle learning strategy (7E'S) on mental motivation and learning technical performance for discus throwing for female students.
- Identifying the effect preference between the control and experimental groups in mental motivation and learning the technical performance of the effectiveness of discus throwing for female students in the post tests.

Research hypothesis:

- There are statistically significant differences between the tribal and remote tests of the control and experimental groups in mental motivation and learning technical performance for the effectiveness of discus throwing for female students and in favor of the post tests.
- There are statistically significant differences in the post tests between the control and experimental groups in mental motivation and learning technical performance for the effectiveness of discus throwing for female students and in favor of the experimental group.

Research fields:

The human field: Female students of the first stage in the College of Physical Education and Sports Sciences / University of Kerbala for the academic year (2019-2020).

Time field: from 5/11/2019 to 5/3/2020.

Spatial field: The outdoor stadium for athletics activities in the College of Physical Education and Sports Sciences - University of Kerbala.

Define the terms:

Seven-cycle learning strategy: An educational constructivist strategy consisting of seven procedural steps that the math and science teacher used with the students in the classroom in order for the

student to build his scientific knowledge on the one hand and develop scientific concepts and skills on the other hand. (Zaytoun, 2007, pg. 455)

Mental motivation: It is a state that qualifies its owner to achieve serious innovations, and there are several ways to stimulate this state that push its owner to solve the problems presented in different ways, which sometimes seem illogical, as the traditional methods of solving problems are not the only ones to solve them, and the (creative) motivation corresponds to mental inertia, which indicates that the current methods of solving things are the best way, or perhaps the only way. (Abu Riash, and Hussain, 2007, pp. 462-463)

Research methodology and field procedures:

Research Methodology:

The researchers used the experimental design in the style of equivalent groups, because it searches for the cause, and how it occurs, as it is defined as what the researcher introduces of a change in reality, and this is an intentional change.

Community and sample research:

Community: The research community was determined by the students of the second stage in the College of Physical Education and Sports Sciences - University of Kerbala, which numbered (52) students.

The research sample: The research sample was chosen randomly from the original research community, by lottery method, and the number of (30) students, they were divided into two equal groups, with (15) students for each group, and thus the percentage of the research sample is (57.69%), which is an appropriate proportion To truly and honestly represent the research community. As shown in Table (1).

Table (1) Show the characterization of the sample:

N	Group	The number of female students in each group	Teaching method used by each group
1	Experimental	15	Seven Learning Cycle Strategy
2	Control	15	The teaching style followed
3	Total sample	30	

The homogeneity of the sample and the equivalence of the two research groups:

Sample homogeneity: The researchers resorted to verifying the homogeneity of the research sample in the following variables (length , weight) as shown in Table (2).

Table (2) shows the means, standard deviations, mode and skewness for the purpose of homogeneity of the research sample:

Variables	Unit of	Mean	Std. deviation	Mode	Skew ness
-----------	---------	------	----------------	------	-----------

Effect of the seven-cycle learning strategy (7E'S)) on mental motivation and learning technical performance for discus throw for female students

	measure				
Age	Year	20.43	1.09	21	0.52-
Length	Cm	172.11	1.54	171	0.72
Weight	Kg	67.27	0.87	67	0.31

Table (2) shows that all the skewness coefficients for the individuals of the research sample are within ± 1 , which indicates the homogeneity of the sample.

Equivalence of the two research groups:

Table (3) shows the means, standard deviations, and the calculated and tabulated (t) value between the two research groups.

Variables	Unit of measure	Control group		Experimental group		T value	Sig type
		Mean	Std. deviation	Mean	Std. deviation		
Mental motivation	Degree						Non sig
Discus throw event	Degree	3.82	0.35	4.05	0.56	1.05	Non sig

It is evident from Table (3) that the calculated (t) values are less than their tabular value of (2.05) at the significance level (0.05) and below the degree of freedom (28), which means that there are no significant differences between the two research groups in mental motivation and learning the technical performance of the effectiveness of throwing The disc is for female students, which indicates that the two groups are equal in the tests under discussion..

Means, devices and tools used in the research:

Research Methods: The researchers used the following research methods:

- Arab and foreign sources and references.
- Personal interviews.
- Mental motivation scale.
- Note.

Tools and devices used:

- A legal field for Discus throwing.
- Women's legal Discus throwing (8).
- Metal tape measure to measure length.
- Whistle.
- Colored chalk.
- Manual scientific calculator of the type (Sharp).

- Medical scale to measure weight.

Determine the research variables under study:

Determining the mental motivation scale: (Taher, 2018)

The Mental Motivation Scale was used as a research tool, which was prepared by researcher Muhammad Abdel Moneim Taher (1) - University of Diyala (2018), and applied to the Iraqi environment, Appendix (1), and the scale consists of (34) items, which the tested learner answers according to Four alternatives (always, often, sometimes, rarely), and grades are given from (4-1) respectively for positive items, and (1-4) for negative items, noting that most of the items are positive except for items (3, 7, 12, 13, 24, 28) they are negative paragraphs.

The highest score that the respondent can obtain is (136) degrees, and the lowest score is (34), and the high degree indicates an increase in the intensity of mental motivation among learners, and a low degree indicates a lack of mental motivation.

In order to ensure the validity of the paragraphs in measuring what they were prepared to measure, the scale was presented to a number of experts and specialists in Appendix (2), and after collecting the answers of the experts to extract the percentage of agreement, the percentage reached (100%) on the suitability of the scale to the research sample.

Determining the discus throwing test:

After examining the researcher on several special sources in measuring the technical performance of the discus throw event, as the researcher did not find a better than depicting the artistic performance of the students, and he was exposed to a group of assessors as an accurate measure of the level of their technical performance for this event.

As the technical performance of the two research groups was photographed (and they were given two attempts for each student) and they were presented to a group of assessors (*) in the field of athletics to evaluate the technical performance of this activity under discussion.

Experimental experiment:

The reconnaissance experiment was conducted on Tuesday, 12/11/2019, and this experiment aimed to find out the following:

- The method of using the tools and devices of measurement and tests.
- Organizing the sequence of tests to facilitate the transition from one test to another to save time and effort.
- Finding scientific coefficients for tests.

Effect of the seven-cycle learning strategy (7E'S)) on mental motivation and learning technical performance for discus throw for female students

Scientific Transactions for Tests:

Validity of the tests: To verify the validity of the tests, the researchers resorted to using the content validity by presenting the scale items to a group of experts and specialists to show the validity of the scale items.

Reliability: “One of the ways to determine the reliability coefficient is the method of re-application to the same individuals twice or more under similar conditions as much as possible.” On this basis, the researchers applied the tests and then re-applied them to the members of the exploratory research sample with a time difference of (7) days. They are under research (0.88, 0.86), which indicates that the tests under investigation have high stability coefficients.

Main experiment:

Pre-test :

The tribal tests of the research sample were conducted on Tuesday 3/12/2019, after the implementation of two initial educational units, which included an explanation of the technical performance of the effectiveness of discus throwing after using the ideal live model in displaying the skill. And then the research sample applied this skill during the two introductory educational units, and at the end of the second educational unit, the pre-tests for mental motivation and the technical performance test for the effectiveness of discus throw for female students were conducted.

Curriculum Vocabulary:

- The curriculum took (6) weeks.
- The number of educational units (1) educational unit per week.
- The total number of educational units for the preparation skill is (6) educational units.
- The teaching unit time is (90) minutes.
- The researchers applied the vocabulary of the educational curriculum according to the strategy of the seven-year learning cycle.

After reviewing many sources, studies and scientific references, and based on personal interviews and the researchers' experience and their benefit from the results of the exploratory experiment that was conducted, as well as reviewing some studies and research, the researchers developed the educational units for the seven-cycle learning strategy for the experimental group, which included (seven stages) and in a manner appropriate to the topic the research sample is divided into (6) educational units. The researchers have benefited from personal interviews with the experts, who gave us many observations about the formulation of educational units and confirmed that these units are suitable for the strategy of the Seven Learning Course (7E's).

The researchers took these notes and made some modifications, especially for the exercises used within the educational units. As the educational units for this event start according to the stages of the seven-cycle learning strategy, namely:

Stage (excitement): This stage is done in the main part of the lesson in the educational part, and the time of this stage is (5) minutes. This stage aims to motivate the students and arouse their curiosity and interest in the topic of learning or the concept through questions or a video clip is shown by a data-distorted screen displaying a clip of the student performing the artistic performance To the effectiveness of throwing the disc and provoke their tendencies by asking questions about what was seen.

Exploration stage: This stage is done in the main part of the lesson in the educational part, and the time of this stage is (5) minutes. This stage aims to satisfy the curiosity and curiosity of the students. The teacher asks the students to sit in a square with a side missing to explain the effectiveness. Then, illustrations are shown for each of its stages and the role of The teacher at this stage is to explain the steps through illustrations and to encourage the students and direct them to work closely while noting the students' questions and listening to them.

Interpretation stage: This stage is done in the main part of the lesson in the practical part, and the time of this stage is (10) minutes. After the teacher has presented the technical performance of the discus throw event and an adequate explanation of the activity, the students are divided into a square minus the side of the performance of the exercises, to apply the skill and the role of the teacher in This stage is to provide the students with real-time feedback when they perform the stages and to clarify the common mistakes they have about the effectiveness.

Expansion stage: This stage is done in the main part of the lesson in the practical part and the time of this stage is (12) minutes. This stage aims to apply several exercises to teach this activity by linking the stages and giving more repetitions of the exercise to increase understanding of the effectiveness, and the role of the teacher is to encourage the students to apply Technical performance of the event and trying to expand it in new situations.

Extension stage: This stage is done in the main part of the lesson in the practical part, and the time for this stage is (12) minutes. This stage aims to clarify the relationship between the concept and other new concepts. Clarify the relationship between previous activities such as the javelin throwing activity, because the two are considered as throwing activities. The role of the teacher in this stage Searching for any means in connecting the previous skill with the new skill and asking some interesting questions to help the students see the relationship between the previous concept and the current concept.

Exchange stage: This stage is done in the main part of the lesson in the practical part and the time for this stage is (12) minutes. This stage aims to exchange ideas or experiences between the teacher and the students. An opportunity is provided individually or collectively for the student to publish the outcome of his efforts and the results of the information he has reached about learning this event. To implement this skill, where the students are divided into cooperative groups of three or four and roles are exchanged among them, the role of the teacher is to link information about the concept or topic with other concepts and encourage them to participate and cooperate through the exchange of experiences.

Effect of the seven-cycle learning strategy (7E'S)) on mental motivation and learning technical performance for discus throw for female students

Test and Exam Phase: This stage is done in the main part of the lesson in the practical part. The time for this stage is (9) minutes. This stage aims to evaluate and test the students' understanding of the concept of effectiveness that has been learned and is evaluated by the teacher in case of incorrect performance. The teacher asks the students to retry the wrong attempt, and the role of At this stage, the teacher evaluates the performance of the students by observing their full performance of the skill.

As for the control group, it used the educational curriculum used in the college by the subject teacher, with an educational unit from each week, the time of each unit is (90) minutes.

Post-test:

After completing (6) educational units over a period of (6) weeks to learn the technical performance of the discus throw event for the female students, and with one educational unit per week, the post tests were conducted for the experimental and control groups, and under the same conditions as the pre-tests for this event, and the post tests were conducted on Tuesday corresponding to 14/1/2020.

Statistical means:

- Percentage.
- Mean.
- Std. Deviation.
- Mode.
- Skew ness.
- T test.

Presentation, analysis and discussion of results

Presenting and analyzing the results of the pre and post-tests of mental motivation and technical performance of discus throw for the control group:

Table (4) shows the means, standard deviations, and the calculated and tabulated (t) value of the control group for mental motivation and technical performance of the discus throw.

Variables	Unit of measure	Pre-test		Post-test		T value	Sig type
		Mean	Std. deviation	Mean	Std. deviation		
Mental motivation	Degree	69.250	5.43	78.31	4.67	5.29	sig
Discus throw event	Degree	4.05	0.56	6.24	0.47	4.22	sig

Table (4) shows that the calculated (t) values were greater than their tabular value of (2.14) at the level of significance (0.05) and below the degree of freedom (14), which indicates the existence

of significant differences between the pre and post-tests of the control group in tests of mental motivation and technical performance. For discus throwing and for the benefit of post-tests.

Presenting and analyzing the results of the pre and post-tests of mental motivation and technical performance of the effectiveness of discus throw for the experimental group:

Table (5) shows the arithmetic means, standard deviations, and the calculated and tabulated (t) value of the experimental group for mental motivation and technical performance of the discus throw effectiveness.

Variables	Unit of measure	Pre-test		Post-test		T value	Sig type
		Mean	Std. deviation	Mean	Std. deviation		
Mental motivation	Degree	68.437	4.61	89.125	3.93	18.64	sig
Discus throw event	Degree	3.82	0.35	7.68	0.94	4.94	sig

Table (5) shows that the calculated (t) values were greater than their tabular value of (2.14) at the level of significance (0.05) and below the degree of freedom (14), which indicates the existence of significant differences between the pre and post-tests of the experimental group in tests of mental motivation and technical performance For the effectiveness of discus throwing and for the benefit of posttests.

Presenting and analyzing the results of the post-tests of mental motivation and technical performance of the effectiveness of discus throw for the control and experimental groups:

Table (6) shows the arithmetic means, standard deviations, and the calculated and tabulated (t) value between the two research groups in the post-tests.

Variables	Unit of measure	Experimental group		Control group		T value	Sig type
		Mean	Std. deviation	Mean	Std. deviation		
Mental motivation	Degree	89.125	3.93	78.312	4.67	7.08	sig
Discus throw event	Degree	7.68	0.94	6.24	0.47	5.13	sig

Table (6) shows that the calculated (t) values were greater than their tabular value of (2.05) at the significance level (0.05) and below the degree of freedom (28), which indicates the existence of significant differences between the control and experimental research groups in the post-tests in mental motivation and performance tests. Technical performance of the discus throw and for the benefit of the experimental group.

Discussing the results:

Table (4) shows that there are significant statistically significant differences between the tribal and remote tests for the control group (to which the followed method was applied) to develop mental motivation and learn the technical performance of the effectiveness of discus throwing for female students in favor of the post tests. The researchers attribute this development that occurred to the members of the control group in the post-test to the appropriate method practiced by the professor in teaching as well as the fruitful cooperation shown by the students with the professor of the subject and the commitment that the students showed and not to be absent, in addition to the enthusiasm shown by the students in the practical side of the unit Educational in addition to the process of repetition and practice by exercising during the educational units, and this was confirmed by (Mosston, 1981, P.4) that (the basic rule and the basic condition or requirement in learning motor skills, which shows clear progress in learning is the interest in increasing the number and diversity of attempts of exercises).

pointed out that (the more repetition of the skill, the more automatic it becomes, the tension decreases, and the movement becomes more perfect and more efficient) . (Amin, 1997, pg. 97)

As for Table (5), it shows that there are significant statistically significant differences between the tribal and remote tests of the experimental group, and the researchers attribute this difference to the use of the members of this group to a modern teaching strategy (the 7E's learning cycle strategy) and to the safety of the educational units and their containing of selected exercises that are not similar with the control group is different and the exercises are chosen scientifically and with correct and consistent repetitions that are consistent with the level and ability of the sample members and are based on the correct practice. Learning complex and even simple skills . (Sabr and others, 2005, p. 56)

Table (6) shows that there is a statistically significant difference at the level of significance (0.05) for the two groups in the post-test and in favor of the experimental. and positive through the stages of the strategy work included in each educational unit which includes the stage (excitement, exploration, interpretation, expansion, exchange, extension, evaluation), as these stages helped to employ many and varied exercises that suit each stage of the strategy's work.

The excitement stage helped to increase the students' inclinations and desire to learn through the interesting questions and drew the students' attention to the event. In the exploration stage, illustrative pictures of the performance stages were presented, as well as a correct performance model by the subject teacher, and thus helped satisfy their curiosity. In the interpretation stage, the researchers were able to employ exercises commensurate with the stages of performance of motor skills in its three sections (preparatory, main and final) and give more repetitions. In the expansion stage, the transition was made in this stage from easy to difficult by using more difficult exercises than the previous stage. In the extension stage, exercises related to a previous skill were used. At this stage, the researchers were able to link two skills during the lesson, and this was one of the important reasons in the development process (through Linking a new concept to a previous concept and recalling it). As for the exchange stage, it is one of the important stages in the curriculum and the strategy work, by dividing the students to cooperative groups and exchange their roles so that learning here is not limited to one stage only, but rather the student has more than one role during the

lesson, and in the evaluation or exam stage, they had a clear impact on the extent of their comprehension and understanding of the technical performance of the skill through the test set by the teacher for this stage.

As the researchers attribute this development to their use of auxiliary means (data distortion - pictograms) during the process of implementing the educational units, which helped increase female learners' inquiries and encourage them to ask questions and mutual dialogue to collect information and make extensive use of building a good kinetic perception of the skill to be learned, and also helped the students to speed up Understanding and Perception "The way of displaying and using illustrations supports learners to think and urge them to solve the problem through experimentation in motor activities" (Abdel Moneim, 2009. p. 319) . In contrast to the control group, which relied in its teaching on the subject teacher in terms of explanation and practical application without the help of the auxiliary means followed by the experimental group, as "the methods and methods of teaching are of great importance in the educational process and that these methods and methods affect the speed of learning" . (Al-Talib, 1976, p. 41)

Conclusions and recommendations:

Conclusions:

- 1- The method followed and the strategy used had a positive effect on mental motivation and learning the technical performance of the discus throw event for the female students.
- 2- The seven-cycle learning strategy used was more positive than the method used in mental motivation and learning technical performance for the effectiveness of discus throwing for female students.

Recommendations:

- 1- Emphasis on the use of the seven-cycle learning strategy in mental motivation and learning the technical performance of the effectiveness of discus throw for female students.
- 2- The need to pay attention to the introduction of the strategy of the seven-year learning cycle in learning the rest of the athletics activities in particular and the skills of sports games in general and in the different age groups

References:

1. Sabr and others. (2005). The foundations of learning and teaching and its applications in football, Baghdad, Iraq.
2. Zaitoun, Ayesh. (2007). Structural Theory and Strategies for Teaching Science, 1st Edition, Dar Al-Shorouk for Publishing and Distribution, Amman,.
3. Abu Riash and Hussein. (2007). Educational Psychology (for the university student and the practicing teacher), 1st edition, Dar Al Masirah for Publishing, Distribution and Printing, Amman, Jordan.
4. Amin, Essam. (1997). The Biology of Swimming, Dar Al-Kutub, Cairo, Egypt.

Effect of the seven-cycle learning strategy (7E'S)) on mental motivation and learning technical performance for discus throw for female students

5. Abdel Moneim, Medhat. (2009).The effect of the constructivist learning model on the performance level of the skills of teaching units for students of the Education Division. Scientific Journal. Faculty of Physical Education and Sports - Helwan University. Issue (58).
6. Taher, Muhammad. (2018). Building a mental motivation scale and its contribution to cognitive achievement and some basic volleyball skills for students, (PhD thesis). College of Physical Education and Sports Sciences, University of Diyala.
7. Al-Talib, Nizar. (1976).Principles of Mathematical Psychology, , Al-Shaab Press, Baghdad, Iraq.
8. Mosston Muska. (1981). Teaching Pysical Education . carles E. Merril , publishing company, Ohio.

Appendix (1)
Mental Motivation Scale

N	Paragraphs	Always	Often	Sometimes	Rarely
1	I am good at movements that require speed of performance in learning				
2	I like to socialize with sporty people				
3	I feel shy when speaking in front of a group of athletes				
4	I'm lucky to be as handsome as I am				
5	Meeting new sports people is a great pleasure for me, which I always look forward to				
6	I have more confidence in myself than many people I know				
7	Many find my physical appearance unattractive				
8	Be ahead of the teacher when he offers a solution to a problem				
9	Have the ability to solve the problem presented to us by the teacher				
10	I like to help my colleagues to reach the optimal solution				
11	My concern for my colleagues makes them treat me politely and respectfully				
12	My love for my colleagues keeps me from helping them				
13	It bothers me that I am not on the same mental or intellectual level as others				
14	I make appropriate plans to solve problems				
15	I have the ability to model multiple problems				
16	My friends consult me to solve their own problems				
17	I want to share with others to find new solutions				
18	I find it interesting to understand complex issues				
19	I find that I am different from my friends in my abilities				
20	I find the Internet to be a useful tool for searching for information about the game				
21	I can't wait to know more information about the discus event				

Goad Mohain Hasan al safe

22	Pay attention to all the ideas that the teacher gives about the effectiveness of discus				
23	I like to learn the most important rules of the game				
24	Sometimes I don't respond to the teacher's ideas				
25	I would love to learn effective play strategies				
26	I focus on the skills that interest me in the discus event				
27	I focus on alternative solutions when faced with a problem				
28	I find it difficult to focus when applying complex skills				
29	I like to get the correct performance of the skill				
30	I rely on myself to implement the effectiveness				
31	I'm quick to connect the discus stages together				
32	I will do everything the teacher asks of me				
33	I prefer to learn the skill on time				
34	I'd rather learn new things for myself about discus throwing action				