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The effect of complex exercises (psychological - skill) on psychological endurance and accuracy of the skill of overwhelming volleyball beating among Baghdad club players for the season 2023/2024.

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ABSTRACT

The importance of compound exercises in shortening the effort and time and commensurate with the requirements of the skill, where the researcher found his problem in the lack of special exercises that integrate the psychological and skill aspects, the aim of this research is to prepare compound exercises (psychological - skill) and know their impact on psychological endurance and accuracy of the skill of overwhelming beating volleyball, the areas of research were in the spatial field. Al-Sinaa Sports Club Hall (Baghdad), the temporal field (from 5/1/2024 to 3/2/2024), and the human field. Players of the Industry Sports Club volleyball, and the researcher concluded the existence of a positive effect of compound exercises (psychological - skill) psychological endurance and accuracy of the skill of beating overwhelming volleyball, and recommended the researcher the need to use these compound exercises and conduct future studies on samples and other skills and other psychological requirements .

Keywords:

- compound exercises,
psychological endurance,
crushing beating.

1- Definition of the research.

1-1 Research Introduction and Importance:

Sports is one of the widest fields that specialists and researchers resort to conduct their research and studies, and the game of volleyball is characterized by many variables and therefore needs more studies, the player faces during the performance a lot of stimuli, which leads to being affected by high psychological pressure during his advanced performance of the skill, which requires him to deal with it and that variables such as the method of implementing the skill and its timing and the need for various abilities has a significant impact on its performance, and the need for the skill of overwhelming beating More than other volleyball skills for these variables has been prepared this skill of the highest level of performance, which led to the need for players to complex exercises take into account different aspects psychological and skill.

1-2 Search problem:

The performance of the skill of overwhelming beating has evolved significantly because it contributes to gaining points directly The researcher has noted that there is a clear weakness in the installation of exercises for the skill of beating the overwhelming where we find that the majority of the exercises performed are taking into account the skill side only without linking them to any other variable, especially the psychological aspect, as their performance under high pressure requires training under the same pressures that are present during the competition, but we miss them during the exercises Therefore, the researcher resorted to studying this problem and trying to develop a solution to it by preparing a set of compound exercises .

1-3 Research Objectives:

1. Preparing complex exercises (psychological - skill) and for psychological endurance and accuracy of the skill of beating overwhelming volleyball.
2. Identify the differences between the pre- and post-tests of the research group for psychological endurance and the accuracy of the skill of overwhelming beating .

1-4 Research hypotheses:

There are statistically significant differences between the pre- and post-tests of the research group for psychological endurance and accuracy of the skill of overwhelming beating.

1-5 Research Areas:

1-5-1 human field: players of the industrial sports volleyball club.

1-5-2 Time Range: from 5/1/2024 to 3/2/2024.

1.5.3 Spatial area: Hall of the Industrial Sports Club (Baghdad)

6- Definition of terms:

Psychological endurance: It is one of the psychological variables that concern the individual's relationship with the environment in which he lives, so they vary in the

extent of their ability to withstand the pressures they are exposed to and adapt to them and according to their characteristics and the nature of the pressures they face. (حریم، 1997)

2- Research methodology and field procedures.

2.1 Research Methodology:

The researcher used the experimental method by designing one group with pre- and post-tests to suit the nature of the problem and how to solve it.

2.2 Research community and sample:

The research community was chosen and they are the players of the clubs of Baghdad province and the number (4 clubs) and the industry club was chosen in a deliberate way in order to facilitate communication with them and the stability of their training in time and space, and their percentage was (25%) of the original community. The number of players (14 players) and the players who do not perform the skill of overwhelming beating and their number (two players) - libero - and thus the number (12), including two players with the design of one group with pre- and post-tests.

2-3 Means, devices and tools used in research.

2.3.1 Means used in research:

- Arab and foreign references.
- International Internet.
- accessory (1) Psychological endurance measurement form.
- accessory (2) Overwhelming Multiplication Test.

2.3.2 Tools used in research:

- Volleyballs (20) type mikasa.
- Legal volleyball court.
- Training funnel (10) plastic in one color.
- Plastic training ladder with fabric strips and a length of 5 m
- Different training signs in a variety of colors.
- Colorful collars and jumping barriers of different heights.
- Different papers and pens to fill out the forms for the psychological endurance scale.

2.3.3 Devices used in research.

- Electronic stopwatch (smart times) / Japanese-made.
- Scale for measuring weight type (JAU GEN) / Chinese-made .
- A manual computer type (Lenovo) for statistical and data processors.

2.4 Research procedures

2.4.1 Tests and measures used in research :

To measure psychological endurance, the researcher used the modified scale for psychological endurance (Appendix 1), which was adopted by the majority of studies dedicated to measuring psychological endurance in the sports aspects ... and (حیش، 2010) Use Finder also Test for measuring (Accuracy Overwhelming beating skill and Qatari) (Appendix 2) To evaluate the performance of

Overwhelming beating It is one of the approved tests in the game of volleyball.(1997، حسانين و عبد المنعم)

2.4.2 Exploratory experiment.

The researcher performed the exploratory experiment on Thursday (3/1/2024) on five players, who are from the same research community (Police Club players) and are not from the research sample, and it aimed to identify the conditions associated with the pre- and post-tests, optimal preparation for them, and repair expected work errors .

2.4.3 Pre-tests.

The researcher conducted the pre-tests on Wednesday (3/1/2016) in the hall of the Sports Industry Club, which included a psychological endurance test and a test to measure the accuracy of the skill of overwhelming beating.

2.4.4 Main experience.

The researcher was able, with the advice of specialists, to identify some cases of psychological endurance exposed to the player during his performance of the skill of overwhelming beating, the researcher prepared a set of special exercises linking certain movements and steps performed by the player before performing the overwhelming beating to reach the higher physical pressures that lead to an increase in the psychological load that accompanies the player's performance after the high effort, as the poor performance during the performance of the last attempts raises the state of despair of the success of the attempt because of the high psychological endurance that he suffers from The player, and included certain movements on the training ladder and moving hoops, as well as multi-height training cones and barriers to jump changing colors, heights and directions, and then the researcher took a period of (15) minutes of the time of the full training unit and at a rate of four training units per week and for a period of (4) week, any full month, so the full number of training units becomes (16) units The exercises prepared were applied to the research group after performing the full warm-up of the body (end of the preparatory part) up to the special warm-up using balls and before performing the usual attack on the net to ensure that the player is in a tired physical condition and reaches a state of fatigue, and as a natural result of conducting complex exercises prepared by the researcher in the training period from 5/1/2024 to 1/2/2024.

2.4.5 Post-tests.

The researcher conducted the post-tests* on (3/2/2024), after the players completed the training period allocated using complex exercises under the supervision of the researcher, and tried as much as possible to create conditions close to the conditions for the application of the pre-tests, in terms of tools, place and the assistant work team in the tests, in order to avoid the occurrence of situational variables on the post-tests.

2.4.5 Statistical means.

The researcher used the appropriate statistical means to extract his research data, which are: -

(Arithmetic mean - standard deviation - law (t-test) of the associated samples).

3- Presenting, analyzing and discussing the results.

3-1 Present , analyze and discuss the results of the pre- and post-tests of the psychological endurance test of the research group.

The researcher relied on previous studies, which developed a neutrality zone between the high and low levels of the psychological endurance scale by adding the value of the standard deviation that was among the members of the research sample to the value of the theoretical mean to get the upper degree of the neutrality area (middle), while he got the lower degree of this area by subtracting the value of the standard deviation from the theoretical mean, All that exceeds the score in the scale above these limits indicates the high level, while the degree that is below these limits indicates the low level, as the lowest score that can be obtained for the scale is (16) and the highest score is (48).

Table (1) shows the arithmetic mean and standard deviation to measure the psychological tolerance levels of the pre-test of the research group

Sample members	Upper level limits	Midplane border	Low level limits	Theoretical medium	Standard deviation	Arithmetic mean	Variables
medium	29.55 - 48	21.78- 29.55	16 – 21.78	29	3.18	25.22	Psychological endurance

From Table (1), we note that the members of the research sample enjoyed an average degree of psychological endurance in the sports field and the researcher attributes the reason to the players' possession of an average amount of varying psychological endurance as a result of their participation in matches without prior planning for this aspect, which made them unable to face tired and difficult situations.

Table (2) shows the arithmetic mean and standard deviation to measure the psychological endurance levels of the post-test of the research group

Sample members	Upper level limits	Midplane border	Low level limits	Theoretical medium	Standard deviation	Arithmetic mean	Variables
High	34.55 - 48	25.98 – 34.55	16 – 25.98	30	4.21	35.42	Psychological endurance

From Table (2), we note that the members of the research sample enjoyed a high degree of psychological endurance in the sports field and the researcher attributes the reason to the players' performance of complex exercises, which the researcher prepared well and continuously and according to what has been prepared for the purpose of their participation in the matches in advance and organized for this aspect, which made them able to face different sports situations.

Table (3) shows the arithmetic mean, standard deviation, calculated T value and significant differences to measure psychological endurance levels for the pre- and post-tests of the research group

Significance level	Value(v) Tabular	Value(v) Calculated	on	Going to	Results auditions
Moral	2.23	2.445	3.18	25.22	Tribal
			4.21	35.42	Post
Under degree of freedom (12-1=11) and error probability 0.05					

And we note in the table (3) Using the law of (t) For the associated samples, it was a value (t) Calculated (2.445) It is greater than the value of (t) Adult tabular (2.23) Under degree of freedom (11) and at a level of significance (0.05) This indicates that there are significant differences between the two tests and in favor of the post-test and attributes the researcher the significance of the differences to the compound exercises prepared similarly to the competition where Compound exercises are those exercises that are close and similar to the cases of competition in the matches to be subject to the law of the game and is complementary to the physical, skill and psychological preparation and is defined as "exercises that contain the main part of which on a variety of exercises" and compound exercises are the best way to develop the form of training during the period of preparation and competitions for many forms of sports "and that their impact is effective and complete compared to other means of training, thus maintaining good coherence between the components of training and development and need effectiveness Volleyball for many of these exercises as a result of the interconnected implementation of skills and refers to (نعمان و صالح ، 1967) (الخياط و محمد، 2001) Moral Psychological endurance to Well prepared and implemented.

3-2 Presentation of the results of the pre- and post-tests to test the skill of overwhelming beating of the research group, analysis and discussion.

Table (2) shows the arithmetic mean, standard deviation and value (T) calculated for the accuracy test of the skill of individual overwhelming multiplication for the pre- and post-tests and for the control and experimental groups .

Significance level	Value(v) Tabular	Value(v) Calculated	on	Going to	Results auditions
Moral	2.23	5.398	0.574	2.388	Tribal
			0.455	3.111	Post
Under degree of freedom (12-1=11) and error probability 0.05					

Attributes the researcher Differences between the pre- and post-tests of Group of Research To Compound Exercises for Abilities (Psychological –Skill) , since the repetition of performance Exercises and various positions and cases led to be As a result of the players' performance of the skill well and Automatically And without feeling the psychological and physical pressure This led to the development of performance "The excessive repetition of any work will reduce the need for attention and concentration as well as lead to the withdrawal of information from

memory. And the performance of the skill in a good skill and physical manner " (خيون، 2002).

The researcher also attributes the superiority of the group Research in the post-test To the changes that happened to the players as a result of sudden changes and short time In compound exercises And harmony with motor structures which must act quickly and thus improve performance, " that athletic performance is characterized by an increase in its rate of speed, especially for open skills, where the need for more Efforts To follow rapid variables in performance, as well as performance is of a variable nature that is not fixed and difficult to predict more often than not It is very much related to the physical and psychological aspect (راتب، 1997) .

4 . Conclusions and recommendations:

4.1 Conclusions:

1. The validity of the exercises prepared by the researcher in the development and development of the research aspects of the research.
2. There is a positive effect of compound exercises in the development of psychological endurance in the research group.
3. There is a positive effect of compound exercises in developing the accuracy of the overwhelming beating skill of the research group .

4.2 Recommendations:

1. Choosing training, psychological and skill aspects to prepare other complex exercises.
2. Adoption of complex exercises in the training of high-level clubs .
3. Conducting similar studies using other compound exercises and different volleyball skills.

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Appendix (1) shows the psychological endurance scale

Paragraph	t
<p>If your parents refuse to choose the type of sport you like and want to practice, you</p> <p>Consider the reasons for their refusal</p> <p>Quietly convince them of your choice</p> <p>You show your anger towards them</p>	1
<p>If you and a group of your friends decide to do a recreational game and you are very excited about it but they postponed the date of the game, then you</p> <p>Accept the situation calmly</p> <p>You feel bad</p> <p>revolt against them</p>	2
<p>If you're watching an important game and suddenly your TV stops playing because of a malfunction, you</p> <p>Trying to practice a hobby</p> <p>You feel bored</p> <p>You feel a lot of pain and get upset</p>	3
<p>When you're hungry and know that the end of the training will be late, you</p> <p>She endures hunger until the end of training</p> <p>You feel uncomfortable and you seem resentful</p> <p>You get upset and blame others for being late</p>	4
<p>If you want to call someone and the coach stops you, you</p> <p>She faces his ban quietly and tries to find out the insult</p> <p>You get nervous without showing that</p> <p>You protest and refuse to prevent it for you</p>	5

<p>If you need to buy sportswear for an important match, but the financial damage did not allow it, then you</p> <p>Wait until your financial circumstances improve</p> <p>You feel pain</p> <p>You get nervous and get excited</p>	6
<p>When you face arbitrary situations and you are unable to solve them you</p> <p>You keep thinking until you reach a solution</p> <p>Evade the solution and the arbitration status</p> <p>You ask the coach about solving it</p>	7
<p>If you have an exam the next day, and when you wanted to review your notebooks and found out that one of your family members messed with it, then you</p> <p>Trying to solve the issue calmly</p> <p>You get annoyed by the situation</p> <p>You revolt and get very angry</p>	8
<p>If you are busy making a plan for the match assigned by the coach and someone interferes in your work, you</p> <p>Continue your work quietly and don't care about it</p> <p>You feel uncomfortable with his intervention</p> <p>revolt and prevent him from interfering o</p>	9
<p>If you're going to an important match, and if a speeding car pollutes your clothes with dirty water, you</p> <p>Trying to calmly address the situation</p> <p>Complain to yourself</p> <p>She utters sharp words</p>	10
<p>If you are training for an important and urgent match and there is noise near you, then you</p> <p>You keep practicing and don't care</p>	11

It continues despite your feeling of unease Revolt and leave training	
If you expect a reward for your excellence in athletic performance and you did not get it for some reason , then you You try to get it without emotion after that She resents and tries to find another way to get her. You feel pain and you complain	12
If you are on a date with a friend to practice and you are late, you Wait for him for as long as possible She gets annoyed and tries to wait for a few minutes You get nervous and agitated and don't wait for him at all	13
If you lose a dear teammate , you You feel sad and accept the reality You hurt a lot with yourself You get excited and collapse	14
If you are attacked during a game by the opposing team, you will be Trying to face the situation calmly You feel scared You get upset and you panic	15
If you feel severe pain in your abdomen early in the game, you Trying to endure the pain until the end of the game You get troubled and ask others for help Require your transfer to the hospital	16

Appendix (2) Diagonal and rectal overwhelming multiplication test.

Test Name — **Accuracy of Straight and Diagonal Overwhelming Multiplication⁽¹⁾ :-**

- **Purpose of the test:** to measure the accuracy of overwhelming multiplication in the linear (rectilinear) and diagonal direction.
- **Tools:** 30 volleyballs, volleyball court, two mattresses placed as shown in Figure (3) away from the side lines (5 cm).

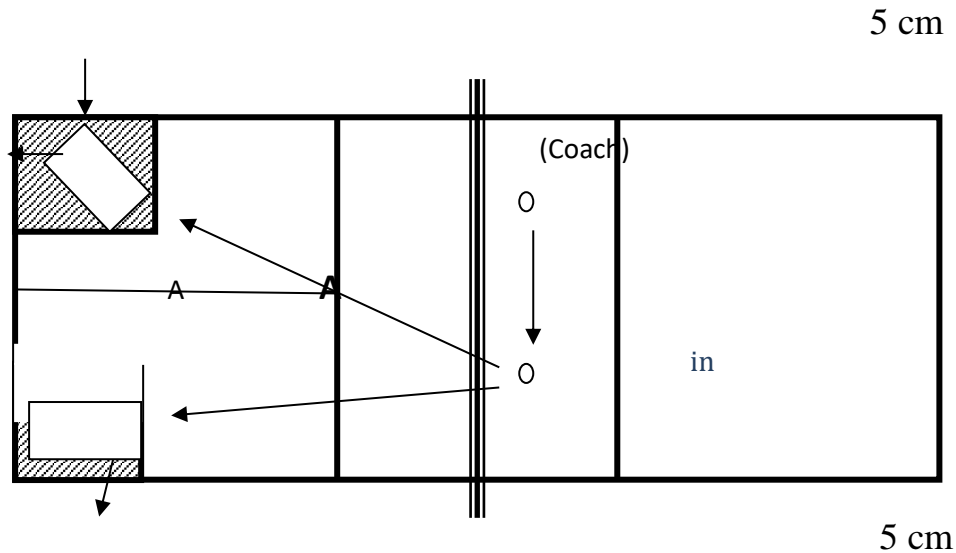


Figure (3)

Straight and diagonal crushing multiplication accuracy test

- **Performance specifications:** multiplication from the center (4), is prepared by (the trainer) from the center (3) and the tester to perform (15 strokes) overwhelming towards the diagonal direction any rank in the position (5) and (15 strokes) other overwhelming towards the straight direction (rank located in the center (1)).
- **Sign up:**
 - 4 points for each correct crushing blow in which the ball falls on the mattress.
 - 3 points for each correct crushing blow in which the ball falls into the planned area.
 - Two points for each correct crushing blow in which the ball falls in area A or B.