EFFECT OF VISUAL TRAINING BY MEANS OF AIDS IN DEVELOPING THE ACCURACY OF PERFORMING THE SNIPING SKILL FROM THE FULCRUM POSITION FOR EMPLOYEES OF THE FEDERAL POLICE FORCES COMMAND

Ahmed Wateed Mazyed¹, Mazin Hadi Kzar², Ali Atiyah Dakheel³
¹¹,³ College of Physical Education and Sports Sciences, University of Babylon
²Physical Education and Sport Sciences Department, Al-Mustaqlab University College,
51001 Hillah, Babil, Iraq
ahmed.shdr@student.uobabylon.edu.iq; mazin_kzar@mustaqbal-college.edu.iq; phy.ali.atea@uobabylon.edu.iq;

ABSTRACT

The study aimed to know the effect of visual exercises with aids in developing the accuracy of the performance of the sniping skill from the focus of the employees of the federal police forces. Performance of the sniping skill and after all tribal tests resulting on the research sample, and to analyze the data from the test, the statistical bag (SPSS) twentieth edition was used, and in light of the results of the current research, and the Subsequent explanations, the following conclusions came: The most important of which are: its visual exercises An effective role in the development of the members of the experimental group over the members of the control group in all tests. The members of the security forces (the control group) achieved a remarkable development in the post-tests of all the tests. A percentage of the differences between the members of the group appeared, as the experimental group showed a remarkable development from the members of the control group, after which the researcher took a set of recommendations, including: the need to introduce visual exercises and auxiliary tools to training camps Distrust for all members of the security forces, Emphasis on the use of tools previously manufactured by researchers in the military training field, The need to conduct periodic tests on the Vienna system for all members of the security forces. The need to conduct other studies concerned with physical and psychological aspects on the same sample or other samples on the military side.

Key words: effect, visual exercises, aids, sniping, federal police forces

I. INTRODUCTION

There are many educational methods and methods used in preparing the appropriate exercises, as they are based on sound scientific foundations during which the individual can learn the motor skills required of him, and these exercises are related to visual exercises, which are one of the techniques Presented in the sports field, as visual abilities play an important role in these exercises. The skill is evident from its speed and effectiveness, and that those abilities can be developed by designing visual programs well, as they are of great importance in the learner's access to the state of visual conditioning that has a direct impact on understanding and perceiving information correctly and making the appropriate decision in the performance of a movement. Including perception, which is the higher mental process that contributes to reaching the meanings and connotations of things, individuals and situations that the individual deals with by organizing, interpreting and formulating sensory stimuli related to them in meaningful faculties (concepts), and in shooting. The importance of sensory-kinesthetic perception is clearly visible to the affiliates, which It has to do with decision-making and achieving the tasks that they must perform, as perceptual-kinesthetic perception is one of the most important elements in the success The learner and his The ability to control the course and events of the mission, because it leads the learner to make a decision clearly as the decision affects the final result of the performance and given the large number of motor duties performed by the employee during the shooting field or in the battle, so it requires him to learn and train in order to be fully aware of the most important movements and motor duties required of him, hence the importance of research in preparing
visual exercises with tools and means to assist in mental abilities and performing the skill of sniping from the brook for members of the security forces.

Research problem: Many of us consider shooting in the field or battle easy and any individual can be affiliated, but experience proves the opposite, as the individual who is affiliated (the sniper) must have mental abilities, through the researcher's work in the field of the Ministry of Interior Note that there is a clear discrepancy between the affiliates due to the lack of adoption of visual exercises during the educational units with the lack of introduction of tools or aids with them, which leads to a weakness in the skill abilities, as well as the large number of affiliates in the educational unit, as the sense of sight plays an important and fundamental role in the process of performing the motor duties of the affiliate, through which he can know his position in relation to the target and others and determine the type of movements that he can perform and thus be able to make a decision, because the ability to make decisions and sound performance is based on a good vision.

Research objectives: Knowing the effect of visual exercises by means of aids in developing the accuracy of performance of the sniping skill from the focus of the employees of the federal police forces.

Research hypothesis: Visual exercises with auxiliary means have a significant effect in developing the accuracy of performing the sniping skill from the focus of the Federal Police.


II. METHODOLOGY

Research Methodology: The researcher used the experimental method by designing two equal groups, experimental and control, with pre and post tests for its suitability and the nature of the problem to be solved, as shown in Scheme (1).

Striped (1) Show experimental design

Research community and sample: The researcher identified the research community with members of the security forces and the federal police, as the number of members in the security forces was (150) members, and they were divided into two control groups, numbering (12) members, and the other experimental group, numbering (12) members by random method (lot) and thus the ratio The percentage of the sample (16%). Sample herself Selected the From The Employees Of The Federal Police the Forces the Command: Indication Of The Material Capabilities Of Equipment Specialized Rooms And Throwing Tools. Ensuring the availability of the sample to perform the tests used in the research, obtaining approval from the higher authorities in training and tests
Homogeneity of the research sample: Before starting to implement exercises similar to playing prepared by the researcher, and in order to adjust the variables that may affect the accuracy of the research results, the researcher resorted to verifying the homogeneity of the research sample in the variables related to morphological measurements (length, mass, chronological age) As shown in Table (1).

Table (1) shows the homogeneity of the research sample in the variables (length, mass, age)

<table>
<thead>
<tr>
<th>Variables</th>
<th>measuring unit</th>
<th>Arithmetic mean</th>
<th>standard deviation</th>
<th>mode</th>
<th>torsion modulus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>cm</td>
<td>173.88</td>
<td>2.11</td>
<td>173</td>
<td>0.23</td>
</tr>
<tr>
<td>Mass</td>
<td>kg</td>
<td>79.88</td>
<td>3.12</td>
<td>80</td>
<td>0.42</td>
</tr>
<tr>
<td>Chronological age</td>
<td>Year</td>
<td>34.12</td>
<td>1.01</td>
<td>35</td>
<td>0.90</td>
</tr>
</tbody>
</table>

The results of Table (1) show that the values of the scenes coefficient were limited to (±1), which indicates the homogeneity of the research sample in these variables, i.e. the moderation of their normal distribution.

Equality of the two research groups: In order to ensure equal opportunities in the learning process and in order to start a single initiation line in the application of the main experimental procedures, the researcher conducted equalization for the variables investigated as shown in Table (2).

Table (2) shows the arithmetic means, standard deviations and (t) values calculated in the tribal tests between the two experimental and control groups.

<table>
<thead>
<tr>
<th>the exams</th>
<th>measuring unit</th>
<th>Experimental</th>
<th>control</th>
<th>Values (t) calculated</th>
<th>Values sig</th>
<th>Indication type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sniping skill accuracy</td>
<td>Degree</td>
<td>50</td>
<td>54</td>
<td>0.56</td>
<td>0.22</td>
<td>insignificant</td>
</tr>
</tbody>
</table>

Values (t(tabular)2.07(at a degree of freedom)22) and level of significance (0.05)

The results showed that the values of (sig) in all the variables investigated (accuracy of sniping skill) are higher than the significance level (0.05), which indicates that there are no significant differences in the tribal tests between the experimental and control groups, which indicates their equality in these tests.

Research means: Arab and foreign sources, Tests and measurements, Observation, Questionnaire. Personal interviews (see appendix)

Tools and devices used in the research: legal throwing targets (2), balance platform, vertical column, balls of different sizes, (2) fixed pivot columns, (1) electronic calculator, (3) transparent glasses, wooden poles with a height of 2m (4), laser target designation (15), special clothes for the security forces, (30) official sniper rifle

Field research procedures: testing the accuracy of the performance of the sniping skill from the focus

Test name: Aiming accuracy test, sniping skill from pivoting ( Ghosoun , 2004)

Purpose of the test: To measure the level of accuracy of shooting and sniping skill from the pivot.

Test tools

- Air rifle (30)
- Targets drawn with numbered circles (0-10)
- Way of performing
The shooter stands on the scoring line facing the fixed target.

The shooter carries the air rifle and performs all the technical requirements required for performance, committed to the correct and balanced position in terms of technique.

The shooter shoots at the target and then shoots at the center of the target.

Test recording

Each shooter is given (10) shots he throws at the target from a distance of (30) m on one (1) card to be used in succession and at a rate of (10) shots on each card, as the scores are calculated by means of the holes in the target, the closer the shot is to the center of the target The target indicates the accuracy of the shooting, as the best shot is (10) points, which are called the center of the target and its lowest value is zero.

The exploratory experiment: The conducted a reconnaissance experiment for the period from 12/25/2020 to 4/1/2021 on a sample of the research community (members of the security forces), which numbered (10) members carrying the specifications of the same research sample, for the purpose of identifying the most important points that he needs The researcher in the main experiment and its objectives: to test the tools used in the research (balance device, pivot device, vertical column), the validity of the tests for the sample. Find out how long it takes for each test.

III. MAIN RESEARCH PROCEDURES:

Tribal tests: The researcher conducted the tribal tests for the control and experimental groups on Wednesday, Thursday, 19-20/1/2021 at nine in the morning in the shooting range of the security forces, with the help of the auxiliary work team. As for the mental tests, they were held at the University of Babylon, College of Basic Education, on Thursday at nine in the morning.

Visual exercises with auxiliary tools: The researcher a set of visual exercises (the first objective of the reviewing a large number of sources and references, research prepared personal interviews, as well as the tools designed by the researcher (Noor Ajam)) and making some changes to the previously used tools. The researcher designed exercises according to the tools used for the purpose of developing mental abilities and performing the sniping skill, as shown below.

Research tools:

Implementation of the main experiment: The researcher adopted the curriculum prepared by the Ministry for the control group, while the experimental group gave it visual exercises in the main part of the training unit only. After dividing the sample into two groups, each group applied the following:

1. The control group: they followed the curriculum prepared by the ministry without giving them visual exercises with auxiliary tools.

2. Experimental group: This group followed the introduction of visual exercises with auxiliary tools in the main section of the educational unit only, but the training time was different between the two groups and the vocabulary was as follows :

   • The total duration of the visual exercises with the auxiliary tools (the number of training units) is (5) weeks.

   • The number of training units is two training units per week.

   • The time of visual exercises (20 minutes), the main section only.

   • (3 -1) Visual exercises were given during one educational unit.

Post-tests: After the implementation of all educational units, the researcher conducted the post-tests for the control and experimental groups on Wednesday and Thursday, 3-4/3/2021 at nine in the morning in the external throwing
field. As for the mental tests, they were at the University of Babylon, College of Basic Education, on Thursday, in the same conditions, tribal tests.

Results

Presentation and analysis of the results of the research variables for the control and experimental groups: Presentation of the results of tests of some mental abilities (the field of vision, focus, divided attention) and the skill of sniping from the focus of the security forces members of the control and experimental groups and their analysis

*Presenting the results of the tests of some mental abilities in the field of vision, concentration, divided attention) and the skill of sniping from the focus of the security forces personnel (for the group

![Chart](image)

*Chart (1) shows the comparison of arithmetic means and standard deviations between the pre and post tests for the variables under study for the control group.

Chart (1) shows the presence of discrepancies and differences in the values of the arithmetic means of the tribal and dimensional (sniping skill) tests of the control group, as well as the presence of variation and differences in the values of the standard deviations of the tribal and post tests, while the (sig) values come between the tribal and post tests for all variables. From the significance level of (0.05) at the significance level, which indicates the existence of significant differences between the pre and post tests and in favor of the posttest?

3. Presenting the results of the sniping skill from the focus of the security forces personnel (for the experimental group and its analysis
Chart (2) shows the comparison of arithmetic means and standard deviations between the pre and post tests for the variables under study for the experimental group.

Chart (2) shows that there are variations and differences in the values of the arithmetic means of the tests (area of vision, focus, divided attention, accuracy of sniping skill) before and after the experimental group, in addition to the presence of variation and differences in the values of the standard deviations of the tests before and after, while the values of (sig) between the tribal and post tests for all variables of the significance level of (0.05) at the level of significance, which indicates the existence of significant differences between the tribal and post tests in favor of the post.

4. Presenting the results of the dimensional differences between the control and experimental groups in the tests of some mental abilities, the skill of sniping from the focus of the members of the security forces.

Chart (3) shows the comparison of arithmetic means and standard deviations between the post-tests of the variables under study for the control and experimental group.

Chart (3) shows that there are variations and differences in the values of the arithmetic circles of the sniping skill test from the focus of the post-security forces personnel between the control and experimental groups, as well as
the presence of variation and Differences in the values of the standard deviations of the post-tests, while the (sig) values come between the control and experimental groups. In the tests and the dimensionality of the variables, all of them are less than the significance level (0.05), which indicates that there are significant differences between the control and experimental groups in the post tests in favor of the experimental group, and for the tests of all research variables.

Presentation of the results of the percentage of development (the coefficient of variation) for the tests of some mental abilities tests (the field of vision, concentration, divided attention) and the skill of sniping from the focus of the security forces members of the control and experimental groups and their analysis

IV. DISCUSSION OF THE RESULTS

Through the results presented in Tables (6,7), it was found that there are significant differences between the tribal and remote tests and for the control and experimental groups in tests in the post tests of some mental abilities (the field of vision, concentration, divided attention) and the skill of sniping from the focus of the security forces personnel For the control and experimental groups and in favor of the post-tests, the researcher attributes the reason for these differences for the control group to the way the teachers followed according to the curriculum prepared by the group of officers, which had an impact on the development, as this group practiced the exercises in a sequential manner in addition to the many repetitions carried out by the learners of this group, as “repetition leads us to learn according to the theory that says that the successful response is the most frequent and recent response.” (Sayed, 1983) In addition to the educational method used, they were familiar with the educational units, which led to an increase in their attention in implementing the vocabulary of the educational units and their parts. And applying the exercises well, as well as learning and developing any motor sport skill, there must be suitable conditions for it that leads to better learning. The availability of educational or training devices and tools will help the learner to acquire cognitive and motor skills, and master them faster, in addition to increasing the learner's motivation towards the learning process. As for the experimental group that applied visual exercises supported by auxiliary tools to its members as well, significant differences appeared between the pre and post tests. In favor of the post tests in mental abilities tests as well as the skill of sniping from the focus, and the researcher attributes the reason for these differences to the effect of the visual exercises with auxiliary tools that pushed the learners of the experimental group to better performance, so the diversity of visual exercises with auxiliary tools during the educational units made the learners of the experimental group in a state of readiness To apply the correct throw towards the target, the training programs adopted and trained by the affiliates carry with it a lot of exercises that develop accuracy by developing all mental processes, so the development of these processes is reflected in the kinetic accuracy, it helps the athlete to carry out motor control over complex tasks and quickly get used to the change and change of external stimuli, and this was confirmed by Kurt Mein that motor accuracy is the ability to solve motor tasks quickly and efficiently, and this ability is important for different sports. In light of the results of Table (7), it was found that there were significant differences in the post-tests between the control and experimental groups in mental abilities tests, as well as the skill of sniping from the focus and in favor of the experimental group, and the researcher attributes the reason for this to the effectiveness of the visual exercises prepared with auxiliary tools, as well as the auxiliary training tools which the researcher used in his research and on this basis, the researcher synthesized a set of visual exercises using previously manufactured tools for the purpose of developing mental abilities and this is positively reflected on the skill of sniping from the focus. The exercises similar to playing are of great importance, especially in continuous shooting, and where these exercises are performed in the form of games are similar to what happens in battle conditions, but these exercises are not without a goal, but rather the coach sets them to achieve one of the goals, including (skillful, psychological, mental, and mental goals). (Thamer, 1999), and through the results presented in Table (8), which show the presence of percentage development percentages in the dimensional tests of some mental abilities and the accuracy of the sniping skill from the focus between the control and experimental research groups and better for the experimental group, and the researcher attributes the difference in attributing the development of the experimental group to visual exercises similar to the real reality, as well as other auxiliary tools, as it provided the opportunity for each affiliate to train the while linking it to the appropriate position in order to develop the accuracy of shooting, which is the most important matter for transferring the state of the exercises and applying them in real battle situations, as well as the fact that these complex exercises and an important series of Exercises allowed the development of the members' abilities and skills through direct practical experiences and in a positive manner, which led to encouraging them to think and research in collecting information and then making decisions. The researcher also attributes the results of the educational units' impact to the effective use of auxiliary tools, especially the wooden beams on which the goals are installed, as they diagnose weak performance points and identify errors and
underlying causes, as it leads to a clear impact in determining the performance indicator of the shooter and the percentage of stability each time, which led to give the trainer indicators Necessary to make the appropriate adjustments to the educational units and put corrective exercises on it according to the needs of the individuals and correct the motor path for them, as whenever the dispersion of the response in a certain direction was an indication of an error in the implementation of the motor program and then treated by setting the appropriate exercises, all of this led to the development of the group members Experimental in addition to the explanation and clarification and a sense of movement and guide shooters on how to use the correct technique. The diversity of these aids will lead to an increase in the ability of shooters to perform optimally according to the two measures of error, which had a major role in the accuracy of the shooters' performance and a clear indication of the amount of error and its stability each time, which helped the trainer in giving appropriate adjustments to the educational unit.

V. CONCLUSIONS

Through the presented results of the tests, their analysis and discussion, the researcher was able to reach the following conclusions:

1. Visual exercises with auxiliary tools have proven their role in developing some mental abilities and the accuracy of the sniping skill from the focus of the Federal Police personnel.
2. Visual exercises have an effective role in the development of the experimental group members over the control group members in all tests.
3. The members of the security forces (the control group) achieved a remarkable development in the post-tests of all the tests.
4. A percentage of the differences appeared between the members of the group, as the experimental group showed a remarkable development from the members of the control group

Recommendations

In light of the research findings, the researcher made a number of recommendations, including:

1. The necessity of introducing visual training and auxiliary tools to training camps for all security forces personnel.
2. Emphasis on the use of tools previously manufactured by researchers in the military training field.
3. The necessity of periodic tests on the VINA for all those affiliated with the security forces.
4. The necessity of physical and other studies concerned with the same sample and other samples on the military side

REFERENCES

8. Karina Cooke Khader Nasir: The effect of the cognitive skills and creativity program in developing creative thinking according to the levels of intelligence and achievement among primary school students, PhD thesis, College of Education Ibn Rushd, University of Baghdad, 2003.
11. Muhammad Atef Al- Abhar and Muhammad Saad Abdullah: Physical fitness, its components, its development and its measurement, Cairo, Dar Al- Ihsan, 1984.
EDUCATIONAL UNITS

<table>
<thead>
<tr>
<th>educational unit</th>
<th>day and date</th>
<th>Teaching unit time</th>
<th>educational goal</th>
<th>Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>first</td>
<td>Saturday 23/1/2021</td>
<td>20 minutes</td>
<td>stand right</td>
<td>outdoor arena</td>
</tr>
</tbody>
</table>

12 sniper weapons - 12 colored wooden bars - 12 colored cones

<table>
<thead>
<tr>
<th>Section</th>
<th>total time</th>
<th>workouts</th>
<th>Repetition</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main/ Application</td>
<td>20 minutes</td>
<td>Carrying a weapon and standing on the manufactured platform with an emphasis on correct standing and performing a live throw *</td>
<td>4</td>
<td>Every 3 repetition of live fire</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Putting colored wooden poles at a distance of 30 m and asking the member to throw according to the desired color **</td>
<td>5</td>
<td>Focus on shooting on the color requested by the coach, each repetition 1 live fire</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Colored cones are placed at different heights and the shooter is asked to use the binoculars and specify the color ***</td>
<td>4</td>
<td>Focus on colors</td>
</tr>
</tbody>
</table>

The duration of the performance is 8 minutes, each attempt is 2 minutes, and the rest time is to correct mistakes.

**The performance period is 5 minutes, each attempt is 1 minute, and the rest time is to correct mistakes and the performance of the other colleague.

***The duration of the performance to determine the color is 1 minute, with feedback given after each repetition for 3 minutes.