Effect of Training Models according to Exercises in Development of some Special Physical Capabilities and Accuracy in Performance of Basic Skills in Football

A.M.D. Adnan Fidoos Omer, M. D. Nasr Khalid, Abdul Razzak, Marwan Abdul Latif Abul Jabbar

College of Physical Education
University of Anbar, Iraq

Summary of the Research

Presence of weakness and decline in level in some particular physical abilities as well as decline in accuracy in performance skills for the research sample and shown from slow moment and excessive handling or situation of recession and failure to achieve most targets.

Abstract:

The study explanation of training models according to exercises of sports in training program and learning about effects of those models upon variables of research under consideration. As for research hypothesis, there were variance of statistical significance in trial results before or after between research control and experiment groups and, so presence of significant statistical variance between post-trials between control and experiment groups and valid for group under experiment, and research methodology used in research sample were; 20 players representing club (Ararat) taken as experimental group and 20 players representing club (Shaklawa) as control group. The most important conclusions which drawn by researchers that the models of training according to exercises of game used in research brought development in some specific physical abilities and accuracy in performance of basic skills used in the research, as for recommendations adoption of training model according to exercises of games at particular preparation stage and method of training is natural and repetitive nature in the training program for trainers.

Introduction and Importance of research

That all modern scientific theories associated with science of sports training emphasized on importance of science of training mathematically excellent research elements of sports and access to the players at the levels of sports, reaching of player to the excellent form so that he can perform superbly in the competition and practice and consistently, this performance may continue possibly for long time and it is done through reliance on basics practical principles in practice of sports training, so sports trainer in research should keep continue practice with best scientific means seriously for the development of performance in game and in particular physical and skill wise, because it has a positive & dynamic effect on planning, psychological and mental aspects of player. That recent and quick developments in the area of sports training found the need to find variety of exercises and development and of which exercises of game and which considered effective for performance and one which provides solution over field for all problems which are faced by team during match as it was those exercises foster positiveness level of players whenever approach mood of real competition and which contribute to developments of physical aspects and mastery in basic skills and planning.
aspects, so trainers depend over it during training practice, because of their effect effective and athletic in solving problems which appear during practice of training.

That efforts are made in area of sports training, results of teaching and different studies achieved development in game of football despite the problems appeared in the training practice or while performing and which requires scientific solution through filed follow-up and through experience of researchers in area of football without any decline there with clear and tangible level of some physical aspects, than negativity in accuracy of performance of some basic skills of football and this decline as a result of decline in coordination and interconnected level between physical and skills aspects where football needs performance of movements accurately and quickly in different trends of high level in coordinated motion.

Object of research:
- Number of groups from training models used in sports exercises in training program.
- To learn effect of training model according to sports exercises on some special physical abilities and accuracy in performance of basic skills of football.

Hypothesis of research
- There are significant statistical differences between pre and post trails for my group in research theoretically and practically and in favour of post trails.
- There are significant statistical differences in post trail results between control and experimental group and in favour of post trails for experimental group.

Scope of research:
1-1-5 Human Scope: Players of Ararat Club and Players of Shaqlawa Riyadhi.
3-1-5 Time Scope: For period starting 25/6/2016 and ending at 29/10/2016.
3-1-5 Place Scope: Playground of Ararat Sports Club.

Theoretical Chapter:

Exercises of Sports
It is one of the important means which works for development of physical, skill and planning performance for players and necessary for winning of any football team as well as desirable and interesting for players, if nervousness is removed and excitement increased of players I have which helps them to adapt conditions of real competition and often what used at preparation stage in particular and this is what confirmed (Thamer Mohsin and Mauqaf Majeed Al Moula 199) “that exercises of sports, which makes kicking occur in the adaptation of match but this exercises not without target and trainer puts it to achieve goal from goals and such as (physical target – planning – psychological and mental target). (23:4) See (Amrallah Ahmed Al-Basati 1998) “that this method contributes in development of physical, skill and planning elements during the course of various games and essentially the primary elements in the form of different sports activity through giving functions (conditions) in the direction intended to be achieved while match is on and in different shapes with obligation of rules and principles of particular activity and gradual change is made in load through control of duties, conditions, space and time of game and this way is effective and not boring for
lot of positions and stances and good trainer is one, who can organize game with conditions and duties contributory in research limit that required to achieve’’ (2.95) See (Hanfi Mahmood Mukhtar 1978) that the trainer should take following into consideration while giving exercises.

- Do not be difficult to understand and comprehend and no need for long explanation.
- To be available on the side of cheerleader
- Be consistent with physical and mental capabilities of players.
- To be available at the time of competition individually and with the team.
- Do not neglect periods of rest (5:178)

While seeing (Thamar Mohsin and Wasiq Naji 1975) that exercises are the most important exercises in development of football for below reasons:

- That exercises are similar to the competitive environment of real play or close to it.
- All team players can apply it.

3 – 3 Evenness of two research groups in variables:

<table>
<thead>
<tr>
<th>Variables</th>
<th>Control groups</th>
<th>Experimental group</th>
<th>Calculated</th>
<th>Table</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stretching power of lower limbs</td>
<td>46.2 3.3</td>
<td>46.4 3.5</td>
<td>0.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stretching speed</td>
<td>37.1 0.95</td>
<td>36.8 0.65</td>
<td>1.5</td>
<td>20.2</td>
<td>Not significant</td>
</tr>
<tr>
<td>Goals</td>
<td>11.7 1.8</td>
<td>11.1 2.5</td>
<td>0.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short passes</td>
<td>14.2 1</td>
<td>14.50 0.80</td>
<td>1.9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3-4 Devices and tools and means to collect information:-
3-4-1 Devices and tools used in the research:

- Football Playground
- 20 Nos. of Football as per rules
- 15 persons
- Movable football goal posts as per rules
- Whistle
- Ribbon to raise goal post
- Stop watch
- Terraces 2 Nos.
- Measuring tape
- Suspension ball

3 – 4 – 2 Resources to collect information
- References of Arabic and foreigner
- Trails used in research
- Remarks and experimentation
- Electronic information network (internet)

3 – 5 Trails used in the research:-
(Annexure 3)
- repeated jumping trail for suspended ball (to measure stretching power of lower limbs)
- Trail of backward running (180 meters) to measure stretching speed of lower limbs.
- Test of goal from hard balls in six allotment. (to measure accuracy of goal kicking).
- Pass the ball rolling on ground on a divided platform (to measure short passing)

- Scientific foundations of trails:

Table (2): Coefficients between validity and endurance and objectivity for trails in research sample:

<table>
<thead>
<tr>
<th>T</th>
<th>Trails</th>
<th>Validity</th>
<th>Endurance</th>
<th>Objectivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Stretching power of lower limbs</td>
<td>0.85</td>
<td>0.93</td>
<td>0.97</td>
</tr>
<tr>
<td>2</td>
<td>Stretching speed</td>
<td>0.93</td>
<td>0.96</td>
<td>0.95</td>
</tr>
<tr>
<td>3</td>
<td>Short aims</td>
<td>0.82</td>
<td>0.80</td>
<td>0.91</td>
</tr>
<tr>
<td>4</td>
<td>Short passes</td>
<td>0.80</td>
<td>0.93</td>
<td>0.95</td>
</tr>
</tbody>
</table>

3 – 6 Experimental exploration

Experimental exploration is done with the help of team work assistance of research sample

The goal was to experiment:

1 – Limitation of lower limit for performance of training model used in

Research

2 – Limitation of number of training models used in training unit.

3 - Limitation of time which each model takes from models in training unit.

4 - Limitation of number of repetitions and training models in targeted time in unit.
Table (3): Shows pulse rate after warm-up and after performance for training model used:

<table>
<thead>
<tr>
<th>T</th>
<th>Range of exercise</th>
<th>Pulse rate after warm-up</th>
<th>Lower limit of performance</th>
<th>Pulse rate after (3) minutes</th>
<th>Pulse rate after (5) minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(1-4)</td>
<td>11-120 beats/min</td>
<td>12.5 min</td>
<td>190 beats/min</td>
<td>163 beats/min</td>
</tr>
<tr>
<td>2</td>
<td>(5-8)</td>
<td>115-120 beats/min</td>
<td>8 min</td>
<td>185 beats/min</td>
<td>128 beats/min</td>
</tr>
<tr>
<td>3</td>
<td>(9-12)</td>
<td>125-130 beats/min</td>
<td>12.5 min</td>
<td>187 beats/min</td>
<td>169 beats/min</td>
</tr>
<tr>
<td>4</td>
<td>(13-16)</td>
<td>120-125 beats/min</td>
<td>8 min</td>
<td>182 beats/min</td>
<td>130 beats/min</td>
</tr>
</tbody>
</table>

Procedure of field research:

Pre Trials:-

Pre – Trials has been done for research sample on date: 27-28/8/2016 at 5:30 on the playgrounds of Ararat Club and Shaqlawa Sports Club and special conditions set for trails in terms of location and time and team work assistance in order to achieve same conditions as the place for post-trails procedure for research sample.

Execution of exercises in training program:-

Training models in training program of research sample done through training units and in particular days and timings for them, if number of training units of research sample to be executed reaches (16) training units by (4) units in week formed as (1-3) each week and between weeks and arrangement of training cycles medium where two cycles of training with period of full cycle 14 days, where period of training unit (120 minutes) as for major part target reaches (85 minutes) and targeting part from this portion (50 minutes) to be applied to training model and in particular stage of preparation, 80-100% intense method of training used repeatedly they are what distinguishes training models used in research, they lead to and in limited conditions as well excluded and different time and space and has reached:

Table (4): Shown is the daily, weekly and monthly and total rate for exercises used in training program

<table>
<thead>
<tr>
<th>Weekly</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
<th>Fourth</th>
<th>Rate of rate of first cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>80%</td>
<td>83%</td>
<td>84%</td>
<td>81%</td>
<td>82%</td>
</tr>
<tr>
<td>Second</td>
<td>85%</td>
<td>84%</td>
<td>90%</td>
<td>86%</td>
<td>86.5%</td>
</tr>
<tr>
<td>Third</td>
<td>92%</td>
<td>94%</td>
<td>97%</td>
<td>93%</td>
<td>94%</td>
</tr>
<tr>
<td>Fourth</td>
<td>90%</td>
<td>93%</td>
<td>94%</td>
<td>91%</td>
<td>92%</td>
</tr>
<tr>
<td>Weekly intensity of rate of first cycle</td>
<td>First</td>
<td>84.25%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Second</td>
<td>93%</td>
</tr>
</tbody>
</table>

Post Trails

Post-Trails has been done for control and experimental research sample with variable of research after determination and fixing of all conditions in terms of location and time and material and team work assistance of daily 29-30/9/2016 by team work assistance.
Table (5): Shows arithmetic mean, Standard Deviation, variance of arithmetic means and its standard deviations and value (T) calculated and tabled from the pre and post-trails with variables in research of my control group.

<table>
<thead>
<tr>
<th>Trails</th>
<th>Measuring units</th>
<th>Pre - Trails</th>
<th>Post - Trails</th>
<th>variance of Arithmetic Means</th>
<th>Variance of Standard Deviation</th>
<th>Value (T)</th>
<th>significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stretching power of lower limb</td>
<td>S E</td>
<td>46.12 2.5</td>
<td>48.3 3.06</td>
<td>1.2</td>
<td>1.5</td>
<td>3.6</td>
<td>significant</td>
</tr>
<tr>
<td>Speed of stretching</td>
<td>Seconds</td>
<td>31.1 2.7</td>
<td>32.1 0.75</td>
<td>1</td>
<td>1.95</td>
<td>2.2</td>
<td>significant</td>
</tr>
<tr>
<td>Accuracy of goal making</td>
<td>Degree</td>
<td>12.6 2.5</td>
<td>13.2 1.13</td>
<td>0.6</td>
<td>1.23</td>
<td>2.7</td>
<td>Significant</td>
</tr>
<tr>
<td>Accuracy of short passing</td>
<td>Degree</td>
<td>21.3 1.3</td>
<td>22 2.30</td>
<td>0.6</td>
<td>1</td>
<td>2.8</td>
<td>significant</td>
</tr>
</tbody>
</table>

Value(T) opposite degree of delivery (19) and below level and significance 2.09 = (0.05)

Table (6): Shows arithmetic mean, Standard Deviation, variance of arithmetic means and its standard deviations and value (T) calculated and tabled from the pre and post-trails with variables in research of experimental group.

<table>
<thead>
<tr>
<th>Trails</th>
<th>Measuring units</th>
<th>Pre - Trails</th>
<th>Post - Trails</th>
<th>Variance of Arithmetic Means</th>
<th>Variance of Standard Deviation</th>
<th>Value (T)</th>
<th>significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stretching power of lower limb</td>
<td>S E</td>
<td>49.4 2.3</td>
<td>50.1 1.5</td>
<td>0.7</td>
<td>0.8</td>
<td>3.8</td>
<td>significant</td>
</tr>
<tr>
<td>Speed of stretching</td>
<td>Seconds</td>
<td>31.1 1.7</td>
<td>32.1 0.75</td>
<td>1</td>
<td>0.95</td>
<td>5.2</td>
<td>significant</td>
</tr>
<tr>
<td>Accuracy of goal making</td>
<td>Degree</td>
<td>31.1 2.5</td>
<td>14.6 1.5</td>
<td>1.5</td>
<td>0.8</td>
<td>4.5</td>
<td>Significant</td>
</tr>
<tr>
<td>Accuracy of short passing</td>
<td>Degree</td>
<td>22.6 3.3</td>
<td>24 2.5</td>
<td>1.4</td>
<td>0.8</td>
<td>7.7</td>
<td>significant</td>
</tr>
</tbody>
</table>
Value(T) opposite degree of delivery (19) and below level and significance 2.09 = (0.05)

Table (7): Shows arithmetic mean, Standard Deviation, variance of arithmetic means and value (T) calculated and tabled between the pre and post-trails with variables in research of control and experimental group.

<table>
<thead>
<tr>
<th>Trails</th>
<th>Measuring units</th>
<th>Control Group</th>
<th>Experimental Group</th>
<th>Value (T) calculated</th>
<th>significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>S</td>
<td>E</td>
<td>S</td>
<td>E</td>
</tr>
<tr>
<td>Stretching power of lower limb</td>
<td>No.</td>
<td>48.3</td>
<td>2.5</td>
<td>50.1</td>
<td>1.5</td>
</tr>
<tr>
<td>Speed of stretching</td>
<td>Seconds</td>
<td>31.1</td>
<td>0.75</td>
<td>32.1</td>
<td>1</td>
</tr>
<tr>
<td>Accuracy of goal making</td>
<td>Degree</td>
<td>12.5</td>
<td>1.3</td>
<td>14.6</td>
<td>1.5</td>
</tr>
<tr>
<td>Accuracy of short passing</td>
<td>Degree</td>
<td>22</td>
<td>2.3</td>
<td>24</td>
<td>2.5</td>
</tr>
</tbody>
</table>

After peruse at results through tables (5, 6, 7) it is clear to us that pre and post-trails for control and experimental groups are significant and in favour of variables of post trails for experimental group of research sample and which is used in training models according to exercises of play resulting in development of some special physical abilities levels and accuracy in performance of basic skills and attribute the researchers reasons for such development of training models which has been carefully reported and which resembles completely with what occurred in matches as well as they are comprehensive and diverse models for different situations which may be faced by player in the course of matches and it is agreed by all (Mohammed Kashak and Amrallah Al Basati 2000) “the nature of play during matches of football enforced directly upon players subject to change and diversity using training models and intense and diverse training forms for different skills”.

That the physical development of player whether it is associated with special physical abilities to improve performance leading to development of areas of skills and planning and this is what confirmed (Adham Saleh 2007). “the development of special physical aspect by activity and in scientific terms calculated from the effects directly on development of all associated aspects in activity”.

So the number of players facing situations in competitions through up gradation in level of skill from where speed and accuracy in performance and this is what confirmed (Qasim Lazam 2009). He said “That training using different training models gives effective method in development of capability of correct performance after training of that skill where more accuracy and speed in
performance and for all categories of ages because of both effect effectiveness in physical, skill, planning and psychological development of player most modern football schools resort to it in the world” (138:7). And it is linked to exercises of physical fitness at training of accurate performance of basic skills in eloquence of conditions and situations similar to atmosphere of match leading to progress with accurate performance of player’s skills and it is what agreed to pointed by him (Salam Albalaasi) on that “training of basic skills must be under conditions similar to progress of match” (80.6) while he sees (Maufaq Al Haiti) “That use of training model according to exercises of play by basic means and ways are more effective in research of good performance and access to development of physical aspects linked with activity and so fixing and mastery of basic skills remain in similar circumstances and close to atmosphere of match” (57.9).

And see (Yousuf Lazam Kamash 1999) “That purpose of training used in play is fixing of accurate performance of player for use of basic skill in match and link with it, by learning and application of planning of play with action on development of physical qualities and special abilities so performance is added to the development of kinetic compatibility of player and same time gives training to player on requirements and focus on his duties and that can lead to the presence of positive or negative defender”. (125:10)

So, can be divided into special exercises for a group, limited to players with abilities to select space, time and conditions to perform exercise, so it is a training form possible through association of components of different training circumstances and accelerate in development of physical, skill, planning aspects and requirements of match.

And through what mentioned above it is clear that importance of research to use exercises mostly develop and effect in fixing and mastering physical and skill aspects to achieve purpose of training procedure, keeping pace with scientific development achieved in play.

Conclusions and recommendations:

Shown results by use of training model according to exercises of play and repeated training battery clearly develops in variables of research for research sample under experiment where:-

- Training model used according to exercises of game contributed in development of performance of basic skills with accuracy used for research sample experimented.
- Effects of training model according to exercises of game used in particular preparation stage in progress for physical and skill variables of research.
- Training model according to exercises of game contributes in propagation of co-operation spirit and competition and seriousness and impulsiveness among players, which was reflected positive on results achieved.

Recommendations:

- Depend on training models according to exercises of games in training program and in particular preparatory stage
- Focus to contain training models used according to exercises of games in training form be made similar to requirement of performance to great extent during matches.
- procedure of repeated training be used for different training models
in development of physical, skill, planning and other aspects for players of football.

**Model for Training Model**

**Week : Second**

**Target of Training Model**

**Team : Ararat Club**

<table>
<thead>
<tr>
<th>Sections of training unit</th>
<th>Targeted time for unit</th>
<th>Exercise used</th>
<th>No. of repetitions</th>
<th>Time to perform exercises</th>
<th>Rest between repetitions</th>
<th>No. of assemblies</th>
<th>Rest between assemblies</th>
<th>Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main section</td>
<td>50 min.</td>
<td>12</td>
<td>2</td>
<td>7.5</td>
<td>4 min</td>
<td>1</td>
<td>5 min</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>50 min</td>
<td>2</td>
<td>2</td>
<td>8.5</td>
<td>4 min</td>
<td>1</td>
<td>5 min</td>
<td>87%</td>
</tr>
</tbody>
</table>

**Training Model in Training Program**

**Exercise (10)**

**Target of Exercise** : Development of some particular physical abilities and Passing and goal making skills

**Playground & Material** : Rectangular playground with dimensions (40 m x 30 m), football, goal posts as per rules, Number of players and participants : 10 players.

**Time of performance** : 12.5 minutes

Conditions of performance : play of teams with each team comprising of five players, important conditions of this exercise, the attacking team should make (5) passes among team members before performing process of goal making and condition being goal must be made inside penalty area.

**Exercise (11)**

Same exercise as previous but with changed conditions.

**Target of exercise** : Development of some particular physical abilities and Passing and goal making skills

**Playground and Material** : Rectangular playground with dimensions (40 m x 30 m), football, goal posts as per rules, Number of players and participants : 10 players.

**Time of performance** : 12.5 minutes

Conditions of performance : play of teams with each team comprising of five players, important conditions of this exercise, the each attacking team
should make (5) passes among team members before performing process of goal making and condition being goal must be made inside penalty area in one shot.

REFERENCES:

1. Adham Saleh : Effect of control at the time of continuation of burden and repetition of physical exercises by way of training cycles in number of physical and skill variables of football for youngsters, Masters letter, University of Mosul, College of sports Training, 2007.


