The effect of using exercising in specific distances on some indicators of attack performance in soccer

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Introduction and problem of the research:

Attack performance is one of the good tactical preparation outputs, hence it depends largely on the strategy of the individuals moving and integrated it in team performance of the team (Gerhand & Jorg, 1997, p.19).

Capacities of sport motor performance are divided into physical, coordinated and mixed capacities. These capacities are considered the broad base to reach good skilful performance (Hohmann et al., 2002, p.55).

The most important requirements of the tactical performance are perfecting the basic skills that are the most important methods of executing tactics of attack playing whether individually such as dribbling, feint, shooting, or collectively such as passing, receiving, free run and switching positions. Every tactic depends on one skill or more to execute it, so, perfecting and training skills in circumstances similar to what happens in matches is an important matter to succeed playing tactics (Gero Bisans & Gunar Gerish, 1998, p.204).

Athletes need continuous exercising daily on finishing attack with its different forms whether with far shooting or twisted shooting or individualizing and dribbling goalkeeper or heading the ball and otherwise, training is to finish attack in the beginning without defenders to concentrate on performance technical aspects, then the coach designs
exercises that are similar to real situations that offenders confront in matches. (Jim Lennox, 2004, 25).

The basis of soccer tactics is a player versus a player that happens much during matches. Soccer requires all athletes ability in the field to perform defense and attack duties. When your team possesses the ball, he becomes an offender, whereas the competitor is a defender. Any team surpasses in the situation of a player against a player usually wins the match because of the athlete ability to select the form of the right intervention from several available central forms during confronting a player against a player, and in a small time plays an important role in surpassing the competitor and possessing the ball, whereas when you surpass physically on the competitor, but you take a large number of wrong decisions, this may lead to your team loss the match (A. Luxbacher, 1991.62).

Soccer, as other sports, needs this type of programs to increase athletes ability to reach the best sport levels, achieve what is required from them perfectly, eliminate obstacles that may hinder them during training process, reduce injuries rate that they expose to it to reach a stage of harmony between athletes of the same team, it has also a great and efficient part to make junior athletes reach advanced levels through structuring their training loads and increase their ability to execute their exercises perfectly.

From previous mentioned, the researcher knows the exercising importance in specific distances and its high ability to improve performance level, develop attack performance of football juniors, where training in specific distances represents one of modern tendencies in training for its ability to improve the level of physical attributes, increase athlete attack ability on creating attack positions inside the court, increase his ability to reach his desired goal through verifying thinking methods, the presence of ideal performance of the team through collective tactical formations which the team forms with all his positions in order to reach attack positions and the ability to achieve team goals.

Hence, it is clear for us that the tactical preparation is the final product or the result in which what was achieved in all types of other preparations. Athletes move in attack continuously all over the match in a compound and overlapping form in purpose of scoring and winning the match. This requires a full conformity in their movements through good planning for these movements with their perfect and efficient execution.

The researchers see that using exercising in specific distances has a good effect on developing physical capacities of soccer juniors and rising the level of attack performance that requires high physical capacities such as speed, agility and flexibility to reach the best sport form of the offender. Training in the tactical specific distances is one of easy training method that qualify and return back to the body the ability of control particularly if it is used as a type of exercises in special physical preparation, as well as in attack performances. Also tactical rules, particularly recently received.
the attention of many scientists and some researchers, in spite that there are researches that were conducted in some games by using these rules in purpose of rising physical and skilful capacities that are considered a basic contributed factor to rise the level of performing multiple tactical skills that accord with the requirements of the specialized activity.

Through the researchers acquaintance of previous studies and researches, they didn't find, in the limit of their knowledge any studies that dealt with using exercising in specific distances to develop indicators of attack performance for soccer athletes that stimulate the researcher motivation to conduct this research.

**Goal of the research:**

The present research aims at designing a program by using exercising in specific distances as an orientation for developing some indicators of attack performance of soccer athletes through recognizing:

1- The effect of the suggested training program on reaching volume for soccer juniors.
2- The effect of the suggested training program on possession for soccer juniors.
3- The effect of the suggested training program on falling times in offside for soccer juniors.
4- The effect of the suggested training program on corner kicks for soccer juniors.
5- The effect of the suggested training program on the registered shots for soccer juniors.

**Hypotheses of the research:**

In the light of the research goal, the researcher hypothesizes the following:

1- There are statistically significant differences between the pre – post measurements for the group "under research " in indicators of attack performance for soccer juniors and on behalf of the post measurement.
2- The improvement percentage differs between the pre – post measurements for the group "under research " in indicators of attack performance for soccer juniors.

**Procedures of the research:**

**Method of the research:**

To achieve the research goals and ascertain it's hypotheses, the researcher used the experimental method, a pattern of experimental designs was used, that is the pre- post measurement for a single experimental group.

**Community and sample of the research:**

Community of the research includes juniors registered in Minia zone under (19 ) years. The two researchers selected the research sample purposively representing in Samalojot juniors club on 2019/2020 registered at Egyptian federation for soccer, where (6) team matches were analyzed with the competitive teams in the same department.

**Methods of collecting data:**
A form of analyzing indicators of attack performance:

The two researchers used the form of attack tactical analysis, since this form was previously presented on the experts and structures scientifically after conducting non -substantial modifications on this form and aims at obtaining some following indicators of attack tactical performance (reaching volume – possession – number of falling times in offside – numbers of corner kicks – the registered shots).

Apparatus and instruments:
- Three stopwatches
- Modern video camera of visual photographing
- A video to present matches, then analyze it.

The pilot study:

The two researchers conducted the pilot study by photographing a friendly match between two teams of Mattay youth center "under 19 years", and Minia club "under 19 years" on the sport playground of Minia, where this study aimed at ascertaining the safety of the apparatus used in photographing, as well as determining the appropriate photographing places, experimenting analysis form, then recognizing difficulties to overcome them. This study revealed the following findings: safety of the apparatus used in photographing, the success of video camera photographers in determining the appropriate place for photographing, safety of analysis form used to measure some indicators of attack tactical performance.

The scientific coefficients of the form for analyzing attack performance indicators

Firstly: the validity:

The analysis validity means the success of measurement method in providing information that are required to measure, that is, does measurement method measure what is suppose to measure? Does it provide us really with the required information? a set of experts were used to judge the extent of analysis form appropriateness in analysis process, where the researcher presented the form on a set of experts, then the two researcher conducted the necessary modifications based upon their observations and directions.

Secondly: consistency:

To calculate the form consistency, the method of consistent was used between judges who make the analysis, where the two researchers selected two judges of the same experience and they were trained on the form units and classes, then consistency was calculated between the researcher analysis and the two judges. Correlation coefficients were found between analyses. Values of correlation coefficients between judges in indicators of attack performance ranged between (0.96: 0.99) indicating the form consistency and it's validity for analysis.
The statistical treatment:
The following statistical treatments were used (correlation coefficient, arithmetical mean, Non parameter Wilcoxon test, the percentage of improvement).

Presenting and discussing the findings

Ascertaining the validity of the first hypothesis stating that:
There are statistically significant differences between the pre–post measurements for the group "under research" in indicators of attack performance of soccer juniors and on behalf of the post measurement.

Table (1)
Differences significance between means of the pre–post measurement in some indicators of attack tactical performance "under research" with non parameter Wilcoxon method (n=6)

<table>
<thead>
<tr>
<th>The variables</th>
<th>The pre measurement</th>
<th>The post measurement</th>
<th>(z) value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Arithmetical mean</td>
<td>Rank mean</td>
<td>Rank sum</td>
</tr>
<tr>
<td>Reaching volume</td>
<td>21.80</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Possession time</td>
<td>24.98</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Times of falling in offside</td>
<td>6.45</td>
<td>3.50</td>
<td>21.00</td>
</tr>
<tr>
<td>Numbers of corner kicks</td>
<td>4.60</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>The registered scores</td>
<td>1.60</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

* significance at level (0.05) ** Significance at level (0.01)

It is shown from table (1) the following:
-There are statistically significant differences between the pre–post measurements at level (0.05) for the indicators that are distinctive for attack performance and in the direction of the post measurement.

The researchers attribute this finding that exercising in specific distances led to improve several indicators of attack performance, since that this type of exercises develop good possession of the team, increase the ability to dispose the ball positively, so the efficiency of team reach volume to the goal increased and it's effectiveness, as well as the time of the team possession increases during constructing attacks, this also led to littleness of falling in offside. The organized attack led to the opponent use of the ball clearance far from the goal leading to the increase of corner kicks that give a large indicator of attack performance efficiency of the team, all this was poured in scoring shots through
tactical sentences by which athletes executed in the specific distances in which they exercised.

This is what Wofgang Heller study (1996) confirmed, where its findings indicated that repairing tactical faults such as ball running, switching positions and taking a place after passing for the juniors "the research sample" and Aleksandar Jankovic, et.al study (2012) where its findings indicated that there are statistically significant differences in numbers of the successful attacks between the teams that achieved different findings on behalf of the winning teams. The sum of running distance during the match on the level of the same team isn't related with the final score, in addition that the factors that contributed in achieving results were for the ball possession and total correct passes.

**Ascertaining the validity of the second hypothesis stating that:**
The percentage of the improvement differs between the pre–post measurements for the group "under research" in indicators of attack performance for soccer juniors.

**Table (2)**
The improvement ratio between the pre–post measurements in indicators of attack performance

<table>
<thead>
<tr>
<th>Improvement percentage</th>
<th>Mean of the post measurement</th>
<th>Mean of the pre measurement</th>
<th>The variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>30.28%</td>
<td>28.40</td>
<td>21.80</td>
<td>Reaching volume</td>
</tr>
<tr>
<td>19.62%</td>
<td>29.88</td>
<td>24.98</td>
<td>Possession time</td>
</tr>
<tr>
<td>61.24%</td>
<td>2.50</td>
<td>6.45</td>
<td>Times of falling in offside</td>
</tr>
<tr>
<td>78.26%</td>
<td>8.20</td>
<td>4.60</td>
<td>Numbers of corner kicks</td>
</tr>
<tr>
<td>93.75%</td>
<td>3.10</td>
<td>1.60</td>
<td>The registered scores</td>
</tr>
</tbody>
</table>

It is shown from table (2) the following:
The percentages of improvement between the pre–post measurements of the sample "under research" in indicators of attack performance for soccer juniors "under research" ranged between (19.62% : 93.75%) indicating the positivity of the suggested program in improving indicators of attack performance for the experimental research sample.

The researchers attribute this finding that exercising in specific distances led to improvement of attack performance level for juniors through movements and exercises that were performed and formed a distinctive tactical and attack aspect that increase their efficiency in reaching the
attack zone, as well as indicators of attack performance for the team as a whole.

This is what Saven Eiseman study (1996) confirmed where it's findings indicated that increasing the exercising dose gradually and systematically with making the exercising close from the match circumstances has a positive effect in developing tactical performance. Formulations of tactical and skilful exercising used in the training program led to develop attack tactical performance increasing attack effectiveness and opportunities of shooting.

Conclusions:
1- Positivity and effectiveness of exercising in specific distances led to improve indicators of attack performance for the experimental research sample.
2- There are statistically significant differences between the pre – post measurements for the group "under research" in indicators of attack performance for soccer juniors on behalf of the post measurement.
3- Increasing percentages of improvement in indicators of attack performance for soccer juniors indicating the positivity of the suggested program in improving indicators of attack performance for the experimental research sample.
References

The abstract

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The research aims at designing a program by using exercising in specific distances as an orientation for developing some indicators of attack performance of soccer athletes.

The two researchers used the experimental method by using a pattern of the experimental designs that is the pre – post measurement for a single experimental group. The research community includes juniors registered at Minia zone of soccer under 19 years old. The two researchers selected the research sample purposively representing in juniors of Samalout club on 2019/2020 registered in Egyptian federation for soccer, where (6) team matches were analyzed with their competitive teams in the same department.

To collect the research data, the two researchers used the form of attack tactical analysis, in purpose of obtaining some indicators of the next attack tactical performance (reaching volume – possession – offside times – numbers of corners kicks – the registered shots).

The most important findings are the positivism and effectiveness of exercising in specific distances on improving indicators of attack performance of the experimental research sample.

Keywords:
-Exercising in specific distances
-Indicators of attack performance

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