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Skill Performance Response to the Influence of Endurance Based Skill Training of Men Soccer Players

D. Nandagopal[1]* Dr. K. Murugavel[2]

[1] PhD, Research Scholar, Department of Physical Education, Bharathiar University, Coimbatore, India

[2] Professor & Head, Department of Physical Education, Bharathiar University, Coimbatore, India

Abstract – This study was designed to investigate the skill performance response to the influence of endurance based skill training of men soccer players. For the purpose of the research, 60 male inter-college soccer players from associated universities of Bharathiar University in Coimbatore were chosen. The subjects were divided into randomly to two equal classes (n=30). Group- I underwent endurance based skill training (SBST) and Group - II was acted as control group (CG). The training was performed 3 days a week (Monday, Wednesday and Friday) for the study community over a span of eight weeks. The control group was not be given any sort of training except their routine work. The skill performance dribbling was assessed by Sir Bobby Charlton Soccer School of Australia Test and the unit of measurement was in seconds and passing was assessed Test and calculation unit by Sir Bobby Charlton Soccer School of Australia. The data collected from the subjects was statistically analyzed with't' ratio to find out significant improvement if any at 0.05 level of confidence. The outcomes of the dribbling and passing dramatically increased by the impact of the stamina training with limits (diet, environment, lifestyle) and the preceding training the results of the present study agree with the findings of the studies carried out by numerous sport sciences experts.

Key Words: Endurance Based Skill Training, Football, Dribbling and Passing

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INTRODUCTION

Football, accepted as one of the most popular game in the world consisting of ball skills and body movements with deception, anticipation as well as physical fitness ability. In general terms, fitness of football players is often referred to as being made up of strength, speed, stamina and suppleness or flexibility **(Allen Wade, 1997).** Speed is the rate of a body movements, whether it is a runner's leg or a butter's arm. Speed is central to every sport and can be represented as a maximal speed, elastic strength and speed resistance as any of the following. Speed is influenced by the athlete's mobility, special strength, strength endurance and technique **(Doug Lentz and Jay Dawes, 2005).**

ENDURANCE TRAINING

The practise to improve stamina is endurance conditioning. The word endurance training usually applies to aerobic rather than anaerobic training. The need of stamina is mostly focused on the need for cardiovascular and basic muscle endurance, but the problem of stamina is far more complicated. Endurance can be classified into two categories: general stamina and particular stamina. Endurance in competition can be seen to be directly related to the implementation of skill and technique. A well-conditioned sportsman can be described as the sportsman who consistently and efficiently performs his/her technique with the least effort **(Michael Yessis 2008).**

The players sprint with the ball in this exercise. As the partial distance are reduced, they can be made more difficult by adding dribbling, ball-lifting (with the foot and the head), or simple passing and development of endurance with complex technical-tactical exercise **(ARPAD CSANADI 1965).**

A football player is said to have endurance if, throughout the full playing time of a game, he is able to use his technical and tactical knowledge, as well as his physical capabilities in performing movements effectively without any perceptible decline in performance. Endurance is one of the most important components of fitness.

The fundamental character of endurance is also underlined by the fact that when we speak of the other physical capabilities, such as speed, elasticity and strength, we li9k them all with endurance. „In

other words it is the capability, through which we can maintain speed, elasticity or the exertion of strength at nearly the same level for a prolonged period of time.

In connection with the physiological foundations of endurance we must also remember the organic (physical) and psychological components of this characteristic. Movements of varying strength and character performed over a prolonged period place a great strain on the internal organs of the body, primarily on the heart and the circulation. This strain is even greater in intensity in football playing, for here the movements, that is, the stimulations reach the heart, the lungs and other organs not periodically, but at a broken, pulsating rate. (It is a commonly known fact that the body more readily adapts itself to so-called cyclical movements, which repeat themselves in phases, as in running.)

Practically speaking the body is incapable of adapting itself to the movements of a sudden start, then to the sudden change in the speed of running, unless it possesses the necessary special endurance, or has the possibility to rest between these various strains. At such time the oxygen' requirements of the heart and the lungs increase. The metabolism intensifies. If these requirements cannot be met, performance declines, and in fact, certain pathological changes may follow.

Lack of endurance can even paralyze the activity of the muscles. If the circulatory organs cannot ensure the removal of products of fatigue caused by the partial strains and accumulated in the muscles, then the capacity of the muscles to contract, that is, their load-bearing ability, will be decreased. Moreover, the movement of the muscles may even become impossible, not to speak of the risk of torn muscles and similar dangers.

Of course, it would be incorrect to explain fatigue of the muscles purely on a chemical basis. Recent research has shown that muscle fatigue, beyond arising from an insufficient oxygen supply, also originates from the nervous system. For the removal of the products of fatigue the functioning of the nervous system is necessary. When the waste products accumulate in the muscles, much stronger stimulations need to be conveyed from the nerve centre to the limbs, and this results in more rapid exhaustion of the nerve centre.

Physical and nervous fatigue also have a psychological effect. The physically tired player is incapable of concentrating adequately. Yet he needs to be able to concentrate his attention on the play throughout the whole period of the match. Even a momentary lapse can have unpredictable consequences for the team.

Alongside, the negative effects, naturally, we must also point out the positive effects of the psychological factors. A player is often able to ignore the subjective feeling of temporary fatigue, but only if he possesses the necessary will-power and mental tenacity. We must also stress, however, that we may only rely on the positive role of the psychological factors if the other conditions for endurance are present.

Correct training (body exercises) and systematic education can ensure that the internal organs, the nervous system and the psychological factors are all in the correct condition for endurance. A characteristic of endurance is the fact that with proper, systematic training it can be increased endlessly. Another characteristic is the fact that through systematic training a high level of endurance can be maintained as the individual grows older. This is in direct contrast to speed or elasticity, which decline considerably after a time. **(ARPAD CSANADI 1965).**

METHODS

Experimental Approach to the Problem

We picked 60 male soccer players from associated colleges of Bharathiar University, Coimbatore, in order to tackle the hypothesis posed. The participants were randomly allocated to two equivalent classes, namely a preparation category focused on endurance capabilities (n=30) and a control group (n=30). For the eight-week testing span, the respective training was provided to the experimental community 3 days a week (alternate days). The monitoring group was not educated except its routine.

DESIGN

The calculated dribbling of ability output was assessed by the Australian Test Sir Bobby Charlton Soccer School and the unit tested was measured in seconds by the Australian Sir Bobby Charlton Soccer School test and the calculating unit scores. The baseline parameters were assessed after 8 weeks of endurance training.

Training programme

The training curriculum lasted 60 minutes a day for a session, 3 days a week for 8 weeks. Includes 10 minutes freezing, 40 minutes of resistance conditioning and 10 minutes warming. 5 percent of load rate was raised every two weeks of preparation from 55 percent to 80 percent of workload. Based on the amount of sets and loops, the volume of endurance-based exercise is recommended. The endurance-based skills instruction is the period for each activity and the cumulative amount of activities performed three days a week (Monday, Wednesday and Friday). The topics chosen were routinely

exercised on 3 other days (Tuesday, Thursday, and Saturday).

STATISTICAL ANALYSIS

The collected data on above said variables due to the influence of endurance based skill training on skill performance of men soccer players was statistically analyzed with 't' test to find out the significant Improvement between pre and posttest. In all cases the criterion for statistical significance was set at 0.05 level of confidence. (P < 0.05)

Table- I

Computation of T Ratio on Skill Performance of Men Soccer Players on Experimental Group and Control Group

GROUP	VARIABLE		Mean	N	Std. Deviation	Std. Error Mean	T ratio
Experimental Group	Dribbling	Pre test	14.04	30	2.26	0.41	3.38*
		Post test	14.03	30	2.26	0.41	
Control Group	Passing	Pre test	3.13	30	2.20	0.40	4.39*
		Post test	3.93	30	1.85	0.33	
Experimental Group	Dribbling	Pre test	14.04	30	2.26	0.41	1.75
		Post test	14.05	30	2.26	0.41	
Control Group	Passing	Pre test	3.00	30	2.27	0.41	1.43
		Post test	2.86	30	2.08	0.37	

*significant level 0.05 level (degree of freedom 2.045,1 and 29)

The table shows the mean calculation, normal variance and "t" ratio of the chosen results respectively the test community passing and dribbling. The dribbling 't' ratio was 3.38* and 1.75 respectively. The 't' transmitting ratio was 4.39* and 1.43 respectively. For the degrees of freedom 29 at 0.05 the necessary table value was 2.045. Since the t values obtained were greater than the table in the experimental community, statistically important, and t values were smaller than the table values in the controlling group, albeit statistically insignificant.

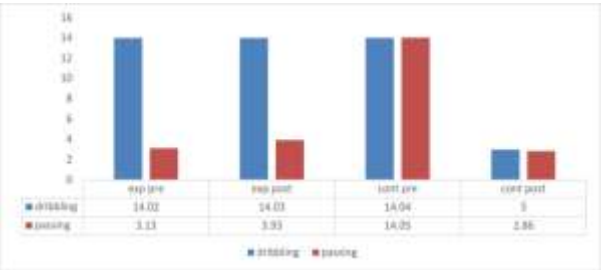

Figure- I

Bar Diagram Showing the Mean Value on Skill Performance of Men Soccer Players' Onexperimental Group and Control Group

DISCUSSION AND FINDINGS

The present study experimented the influence of 8 weeks endurance based skill training significantly improved the skill performance of men soccer players. The findings of this analysis found that endurance-based skill preparation is more efficacious than dribbling and throwing soccer players. The findings of the present analysis is close to the results of the researchers alluded to in this study. **Bate (1996)** A report on the capacity to sustain professional efficiency (i.e. skills) during soccer is deemed critical in evaluating the outcomes of successful facilities. **Bishop (2004)** determines the regeneration rate in football techniques during low to high intensity resistance activity. **Weston and Castagna (2010)** looked at the relationship between common stamina and match success in elite men's soccer players. **Athanasios Katis (2009)** analysed activity behaviour during two separate small-sided games and the impacts on a set of ground stamina and technique measures. Jason and Steven (2003 tested soccer-specific strength endurance improvements of 34 secondary soccer women during the entire year, either with or without sporadic, high-intensity workout protocols. **Karahan (2012)** has tested the impact of aerobic and anaerobic efficiency factors for female futsal players in skill-based high intensity interval training. **Dhanaraj (2014)** examined the impact of talent preparation on women footballers' chosen success variables. **Memarzadeh and Moghadasi (2014)** analysed the effects of PT on soccer players.

CONCLUSIONS

1. It was concluded that 8 weeks of endurance based skill training significantly improved the dribbling of men soccer players.

2. It was concluded that 8 weeks of endurance based skill training significantly improved the passing of men soccer players.

3. Further, it was conducted that eight weeks of endurance based skill training program was found to be most effective training protocol to bring out desirable changes over dribbling and passing of men soccer players.

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Corresponding Author

D. Nandagopal*

PhD, Research Scholar, Department of Physical Education, Bharathiar University, Coimbatore, India

nanduthamma@gmail.com