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# Physical and Psychological Response to the Influence of Game Specific Field Training with Mental Practice Strategy of Footballers

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### ABSTRACT

In order to evaluate the real facts the detective made a challenge to examine the impact of six weeks game specific field training with mental practice strategy of physiological variables of school level football players. Their aged of the subject ranged from 14 to 17 years. Selected subjects was randomly assigned to two equal groups (n=20), group I underwent game specific field training with mental practice (GSMP) and group II acted as control group (CG). The game specific field training with mental practice was given to the experimental group for 3days per week for the period of 6 weeks. The control group did not practice in any training except their routine work. The following variables were measured with standard test items: Vo2 max and resting heart rate. Pre and post test was conducted on separate days with warm up. The Vo2 max measured by cooper 12 minutes run and walk test Kg /ml/ in liters, resting heart rate measured by bio monitor in minutes. To find out the individual effect 't' test was applied at 0.05level of significant. Further, the findings confirmed the game specific field training with mental practice is suitable protocol to bring out the desirable changes over the Vo2 max and resting heart rate of school boys.

Keywords: Vo2 max and Resting Heart Rate, Game Specific Field Training with Mental Practice

# INTRODUCTION

Soccer, in its global evolution, has, in its current stage, as a standard feature in all high-performance teams, the increasing effort throughout the game to win. The game has become perfectly balanced, with very offensive, very collective, with a full rhythm, with complete athletic training with total physical commitment. This game dramatically demands the manifestation of the physical factor determined by the content of the effort. Increasing the driving density in every unit of time is explained by a high number of gaming actions. A player of the world's elite football teams performs in 1-2 minutes or even 3, speeds, a jump, an air duel or an individual technical action. In general, all the minutes of the game are active, and even if some effort can stagnate, it is done with the intent of amplifying it in the next stages.

#### **Specific Skill Training**

This game dramatically demands the manifestation of the physical factor determined by the content of the effort. Increasing the driving density in every unit of time is explained by a high number of gaming actions. A player of the world's elite football teams performs in 1-2 minutes or even 3, speeds, a jump, an air duel or an individual technical action. In general, all the minutes of the game are active, and even if some effort can stagnate, it is done with the intent of amplifying it in the next stages. As for the motoring qualities, there is a predominance of velocity manifested in its forms of movement, execution, reaction; as well as the placement, movement, and handling of the ball. Speed is correlated with other driving qualities and is carried out in a resistance and force regime with the decisive role of skill in achieving technical-tactical combinations. Effort increment is represented primarily by the large number of official or preparatory meetings, their peculiarities, and stake. Physical demands made in the running at a total distance of 6-9 km from the majority of players in 80-140 speed actions maximum on a distance ranging from 700 - 2500 - 3000 m, in 40-80 direct physical contact with opponents, 80-120 jumping and other physical actions - turns, changes in direction, falls, jumping. In this paper, the issue of developing motor skills with the help of the specific means of football was pursued. The paper aims to bring the experts a methodical material, with scientific and systematized content, which is the basis of the training process, especially during the precompetitive and competitive period.

#### **Mental Practice Strategy**

The psychological factors involved in athletic performance have long been of interest to athletes, coaches, sport psychologists and sports scientists. Empirical studies have largely focused on individual psychological factors and their influence on performance which includes confidence, motivation, attention, visualization, and psychosomatic skills (Gucciardi, Gordon, & Dimmock, 2009). Similarly, some studies indicated that the use of

mental skills such as goal setting, imagery, relaxation, and self-talk are important areas in the field of sport psychology (Vealey, 2007; Williams & Harris, 2001). They also asserted that goal setting as attaining a specific standard of proficiency on a task, usually within a specified time limit can increase performance during competition. Speed, skill, and specific strength are the most critical driving qualities in the football game. Their specific means of development, as well as technical and tactical training, require dosing and management of training appropriate to age and competitive level. Moreover, imagery as using all the senses to re-create or create an experience in the mind helps athletes to perform better and increase self-confidence (**Rattanakoses, et al., 2009**).

The results show that specific training, conducted during a competitive season with appropriate methods and means, improves the performance of the footballers.

#### Methodology

In order to address the hypothesis presented herein, we selected 40 football players from national sports academy in coimbatore. Their age ranged from 14 to 17 years. The subjects were randomly assigned in to two equal groups namely, game specific field training with mental practice Group (GSMP) (n=20) and Control group (CG) (n=20). The respective training was given to the experimental group the 3 days of the weeks for the training period of six weeks. The control group was not given any sort of training except their routine. The evaluated performance Vo2 max was assessed by cooper 12 minutes run and walk test with unit of measurements in Kg /ml/ in liters, and resting pulse rate was assessed by bio monitor with unit of measurements in minutes. The parameters were measured at baseline and after 6 weeks of complex training were examined. The intensity was increased once in two weeks based on the variation of the exercises. The training programme was lasted for 60 minutes' session in a day, 6 days in a week for a period of 12 weeks' duration. These 60 minutes included warm up for 10 minutes, 35 minutes game specific field training, 15 minutes mental strategy practice and 10 minutes warm down. The equivalent in game specific field training with mental practice is the length of the time each action in total 3 days per weeks.

#### TABLE - I

#### COMPUTATION OF 'T' RATIO ON VO2 MAX ON EXPERIMENTAL GROUP AND CONTROL GROUP

(Scores in Numbers)

GROUPS	PRE TEST	POST TEST	NUMBERS	MAGNITUDE OF IMPROVEMENT	"T" RATIO
Experimental Group	3.54	3.86	20	9.03%	12.27*
Control group	3.56	3.59	20	0.84%	1.12

\*significant level 0.05 level (degree of freedom 2.09, 1 and 19)

Table I reveals the computation of mean, standard deviation and't' ratio on selected variable are Vo2 max of experimental group. The obtained't' ratio on Vo2 max were 12.27 respectively. The required table value was 2.09 for the degrees of freedom 1 and 19 at the 0.05 level of significance. Since the obtained't' values were greater than the table value it was found to be statistically significant.

Further the computation of mean, standard deviation and't' ratio on selected variable for Vo2 max of control group. The obtained't' ratio on Vo2 max were 1.12 respectively. The required table value was 2.09 for the degrees of freedom 1 and 19 at the 0.05 level of significance. Since the obtained't' values were lesser than the table value it was found to be statistically not significant.



### FIGURE – I

BAR DIAGRAM SHOWING THE MEAN VALUE ON VO2 MAX OF FOOTBALL PLAYERS ON EXPERIMENTAL AND CONTROL GROUP

#### TABLE - II

COMPUTATION OF 'T' RATIO ON RESTING PULSE RATE ON EXPERIMENTAL GROUP AND CONTROL GROUP (Scores in Numbers)

GROUPS	PRE TEST	POST TEST	NUMBERS	MAGNITUDE OF IMPROVEMENT	"T" RATIO
Experimental Group	73.40	68.15	20	7.15%	16.23*
Control group	73.75	73.55	20	0.27%	0.53

\*significant level 0.05 level (degree of freedom 2.09, 1 and 19)

Table I reveals the computation of mean, standard deviation and 't' ratio on selected variable for resting pulse rate of experimental group. The obtained 't' ratio on resting pulse rate were 16.23 respectively. The required table value was 2.09 for the degrees of freedom 1 and 19 at the 0.05 level of significance. Since the obtained 't' values were greater than the table value it was found to be statistically significant.

Further the computation of mean, standard deviation and 't' ratio on selected variable for resting pulse rate of control group. The obtained 't' ratio on resting pulse rate were 0.53 respectively. The required table value was 2.09 for the degrees of freedom 1 and 19 at the 0.05 level of significance. Since the obtained 't' values were lesser than the table value it was found to be statistically not significant.



#### FIGURE- II

# BAR DIAGRAM SHOWING THE MEAN VALUE ON RESTING PULSE RATE OF FOOTBALL PLAYERS ON EXPERIMENTAL AND CONTROL GROUP

# DISCUSSION AND FINDINGS

The current study investigated the influence of six week's game specific skill training with mental strategy practice on the physiological variables of football players. In contemporary of the study the football players to avoiding injuries in fastest movements to rebound the Ball/skill among the players during the match to help game specific training with mental strategy the successful of the competitions. The results of this study indicated that game specific skill training with mental strategy practice is more efficient to bring out desirable changes over the variables of football players. **Hill-Haas**, **S. V**., et al., (**2011**). Physiology of small-sided games training in football. Sports medicine, 41(3), 199-220. Selvakumar&, R., & Vigneshwaran, G. Influence Of Game-Specific Field Training On Speed Among Cricket Players. **Kruk**, **M**., et al., (**2017**). Mental strategies predict performance and satisfaction with performance among soccer players. Journal of human kinetics, 59, 79. **Omar-Fauzee**, **M. S.**, et al., (**2012**). Mental toughness among footballers: A case study. International Journal of Academic Research in Business and Social Sciences, 2(1), 639.Hence, it was concluded that for Vo2 max and resting pulse rate of improvement on game specific training with mental practice strategy of school level football players.

## CONCLUSIONS

From the results of the study and discussion the following conclusions were drawn.

1. Based on the result of the study it was concluded that the 6 weeks of game specific skill training with mental strategy practice have been significantly improved Vo2 max of school level football players.

2. The 6 weeks of game specific skill training with mental strategy practice have been significantly improved resting pulse rate of school level football players.

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