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RELATIONSHIP OF SPEED STRENGTH AND AGILITY TO SOCCER PERFORMANCE

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Abstract:

The purpose of this study was to investigate the relationship of speed, strength and agility to soccer performance. Twenty one male players of soccer belonging to B.P.Ed and M.P.Ed of Lucknow Christian College were selected as subject for this study. The criterion measures taken were firstly the players have played an Intramural competition and secondly all the students have football specialization and regularly attending the match practise period. To find out the relationship between the dependent variable namely soccer performance to the independent variables such as speed, strength and agility Pearson's product moment correlation techniques were employed.

KEY WORDS:

Speed Strength , Soccer Performance , football specialization .

INTRODUCTION:

Soccer is the most popular sports in the world at present. It is apparently one of the ancient sports and it is the direct ancestor of American football, Canadian football, Rugby and several other similar sports. Soccer can be traced back directly to Eleventh Century A.D. in England but its antecedents might be much order that in many pagan religious ceremonies perhaps as long as 4000 years back also the head of puppet representing the God darkness was the ball in a kind of field contest. Early football game in England was associated with religious ceremonies. In 1863 the London football association was formed and vetted to stick to the old style of play.

The duration of the soccer game is very long i.e. ninety minutes or more therefore the soccer players requires tremendous amount of motor fitness level and skill. In which basic movements such as the skills include kicking, running, jumping, throwing, dodging etc are involved endurance plays a vital role in order to play continuously for ninety minutes. Strength is also essential for taking powerful kicking, tackling, throwing, heading and so on for dribbling, frequent change of body directions, agility to essential element flexibility plays a major role for reducing the chance of injury as well as perfection of skills, speed, coordination, reaction time and balance are also important for exhibiting the modern skillful soccer performance.

OBJECTIVE OF THE STUDY:-

The purpose of the study was to investigate the relationship of speed, strength and agility of soccer performance.

PROCEDURE AND METHODOLOGY:-

The subjects for the study were twenty one male players of soccer belonging to B.P.Ed and M.P.Ed

of Lucknow Christian College, Lucknow. The selections of the subjects were based on the following criteria. Firstly the level of participation of the players was at Intramural Level and secondly the players have opted soccer specialization and regularly attending the match practice period. The following motor variables were taken into consideration which directly influences the performance of soccer players in competitive situations were speed, strength and agility. The following criterion measures were taken for speed was measured by 50 yards run test. The explosive leg strength was measured by standing broad jump, the abdominal strength was measured by sit-ups, upper body and shoulder girdle strength was measured by pull-ups and push-ups. The agility was measured by 4x10 yards shuttle run. The soccer performance was measured by three judges scores. The relationship between the dependent variable namely soccer performance to the independent variables such as speed, strength and agility Pearson's product moment correlation was used.

ANALYSIS OF DATA:-

The statistical analysis of data (scores of speed, standing broad jump, sit-ups, pull-ups, agility and soccer performance) collected from twenty one male soccer players of Lucknow Christian College, Lucknow who were the member's of college Intramural soccer team of the B.P.Ed and M.P.Ed class. The speed of the subject were recorded in seconds, standing broad jump in meters and centimeters, sit-ups in numbers, push-ups in numbers, pull-ups in numbers where as the score of agility was in seconds, the score of the soccer performance was the average score out of ten given by the three experts rating of each subjects. Performance of subjects on the said motor fitness variables was considered as independent variables where as the soccer performance formed the dependent variables.

RESULT OF THE STUDY:-

The coefficient of correlation obtained for the relationship of the selected motor fitness variables of speed, strength and agility with soccer performance have been presented in Table-1

Table-1
RELATIONSHIP BETWEEN SPEED, STANDING BROAD JUMP, SIT-UPS, PULL-UPS, PUSH-UPS, AGILITY AND SOCCER PERFORMANCE

| S.No | Variables | Coefficient of correlation |
|------|---|----------------------------|
| 1. | Speed to soccer performance | -0.21 |
| 2. | Standing broad jump to soccer performance | -0.0034 |
| 3. | Sit-ups to soccer performance | -0.38 |
| 4. | Pull-ups to soccer performance | -0.14 |
| 5. | Push-ups to soccer performance | -0.45* |
| 6. | Agility to soccer performance | -0.34 |

N=21 Degree of freedom 0.433

Analysis of data in Table-1 reveals that there is negative significant relationship of push-ups with soccer performance. The statistical analysis of data also clearly reveals that speed, standing broad jump, sit-ups, pull-ups and agility do not have any significant relationship with soccer performance. The motor fitness variables of strength push-ups were underlying the performance in the game of soccer. These findings may be attributed to the following facts. The significant correlation was push-ups and soccer performance. This may be attributed to the fact that soccer is a game of combined strength and skill. In modern game of high class soccer, a player is required strength of upper body at the time of dynamic balance, coordinating in running, diving head, shoulder push and thrown in.

The motor fitness variable of push-ups that have shown negative significant relationship with the soccer performance of the subjects might have developed during the course of their general practice. As running with the ball and without the ball (strength) involve more or less same group of muscles and upper body is also involved in running as well as in other pushing movements in the normal game of soccer. The game itself might have acted as a specific training schedule for the development of this aspect.

It was noticed that there is no significant relationship between the soccer performance and the selected variables speed, standing broad jump, sit-ups, pull-ups and agility. Though this is attributed to various factor but physical training is one of the important aspect in which we lack to great extent. This has

its effect on the motor fitness as well as physique of the sportsman. Following the same line of treatment i.e playing less attention on the motor fitness development part of the training with some specific special exercises the subjects also lacked behind in their various motor fitness aspects.

Where as insignificant correlation with the other motor fitness variables and soccer performance might be attributed to lack of similarities between the actions performed in their test and the conditioned which arise during the game. The general practice of the game might not have given sufficient load on these groups of muscles specifically explaining the reason for low correlation of these factors with the soccer performance. It is an area which should not be neglected and it seems that this might be the reason of poor performance of the college intramural team at higher level of competition and should be given proper attention.

CONCLUSIONS:-

Within the limitations of the study and on the basis of the result of the study, the following conclusions may be drawn:-

- 1). There exists negative significant relationship in terms of strength i.e push-ups with soccer performance.
- 2). There was no significant relationship in terms of speed with the soccer performance.
- 3). There was no significant relationship in terms of agility with the soccer performance.
- 4). There was no significant relationship in terms of strength i.e standing broad jump, sit-ups and pull-ups with the soccer performance.

REFERENCES:-

- 1.Arthur, Jones. "Specificity in strength training" Athletic Journal 57 May 1977.
- 2.Burley, Liayd R. "Relationship of Power, Speed, Flexibility and certain Anthropometrics measures of junior high school girls" Research Quarterly 30 (May 1989).
- 3.Gray, Peter N. "The relationship of Baseball players strength, speed and agility to the coaches ranking of ability" completed research in health, physical education and recreation 8 (1966).
- 4.Johnson Barry L. and Jack K.Nelson, Practical measurement for evaluation in physical education (Minnesota Burger Publishing company 1969).
- 5.Kansal, Devinder K. Test and Measurement in sports and physical education (D.V.S. Publications, New Delhi 1996).

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