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Effects of SAQ training on physical and skill performance of tribal football players

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Abstract

The study was designed to investigate the effects of SAQ training on physical physiological end skill performance of tribal football players. In order to achieve the purpose of the study, forty (N = 40) Academy teams were Sathyakathi football academy, Lotus Soccer Academy and Sree Krishana Soccer Academy as subjects were randomly. The subject age ranged from 14 to 18 years. The subjects were divided into two equal groups. The group – I was underwent to SAQ training (SAQ) for the period of 12 weeks and group II acted as control Group (CG), they did not participate any specific training programme. Each group consists of 20 subjects. Physical fitness components leg explosive power was assessed by standing broad jump and unit of measurement was in meters and the skill performance kicking was assessed by Warner's Soccer Test and unit of measurement was in meters. The result of the present study explores that SAQ training produced significant improvement over leg explosive power and kicking ability among tribal football players.

Keywords: SAQ, leg explosive power, kicking and tribal football players

Introduction

The SAQ training method more frequently uses the programmed than random type conditioning after the SAQ continuum. One SAQ session is composed of 7 components, where the main part of the session, explosion and expression of potential, are combinations of programmed and random conditioning. Integral planning and programming is required to progress from fundamental movement patterns to highly positional specific movements. A logical sequence in the learning process must not be neglected because it develops neural structures that are a prerequisite for elite-level upgrade. On sequent, elite players manipulate with their bodies without the loss of speed, balance, strength, and control. Also, with correct movement patterns (technique) and greater muscle power, they accelerate faster.

The SAQ training method consolidates speed, agility, and quickness through the range of soccer specialized exercises. All exercises are performed with optimal biomechanical movement structures, and consequently, energy and time savings are made. Power performance aside from major abilities has the need for optimal joint mobility, dynamic balance, appropriate locomotor system, and energy production among others. It is well known that soccer players rarely achieve maximal speed during play, but the initial starting phase and acceleration phase have a higher value in a soccer performance. Also, elite soccer players have greater values of high-intensity running when compared with total distance covered during a game. Agility is very important when it comes to soccer players. Not only do they use it to outmaneuver the opposition but it also helps in preventing injuries. Optimal activation and inhibition of muscle fibers can prevent muscle tears and even more prevent the joints from injuries.

Pearson mentions 4 elements of agility such as balance, coordination, programmed and random agility all of which are used on the SAQ continuum with appropriate volume and intensity with regard to athletes' age and level of motor readiness. The purpose of this study, in agreement with the previously referred, was to determine how much the SAQ training actually influences the power performance parameters of elite soccer players during in-season period. Omrcen (2011) [1]. SAQ Training concentrates on proper running form and explosive movement patterns for sports which require speed, agility and quickness as a basic prerequisite

for success. It is ideal for all field and court-based sports which are mainly multi-sprint events requiring fast multi-directional movement patterns in addition to anticipation, sharpness of mind, reaction and acceleration as key components of sports specific fitness.

Methods

The purpose of the study is to find out the effects of SAQ training on physical physiological and skill performance of tribal football players. Forty tribal men football player were selected randomly Academy teams were Sathyakathi football academy, Lotus Soccer Academy and Sree Krishana Soccer Academy. The selected subjects were divided into two equal groups consisting of 20 each. Experimental Group I (n=20) underwent SAQ training, Group II (n=20) acted as control group as not given any sort of training.

Experimental Design

Physical fitness components leg explosive power was assessed by standing broad jump and unit of measurement was in meters and the skill performance kicking was assessed by Warner's Soccer Test and unit of measurement was in

meters.

Training Programme

Training programme is lasted for 60 minutes a day for a session, 3 days in week for a period of 12 weeks. Those 60 min consists of 10 minutes warm-up, 40 min respective training and 10 minutes for warm-down. Each two week's 5 % of load was increased from 50% to 80% of load.

Collection of data

The subjects of the three groups namely SAQ training Group and control group were tested on selected physical variables (leg explosive power), and skill performance variables (kicking) were tested before the treatment and the score was recorded with their respective units as pre-test scores. On completion of pre-test, they were treated with the respective training programme for a period of twelve weeks. At the end of the twelve weeks, all the subjects belonging to the various treatments the three groups were tested again on selected variables. It was considered as post test score. The collected data were processed with appropriate statistical techniques.

Statistical Techniques

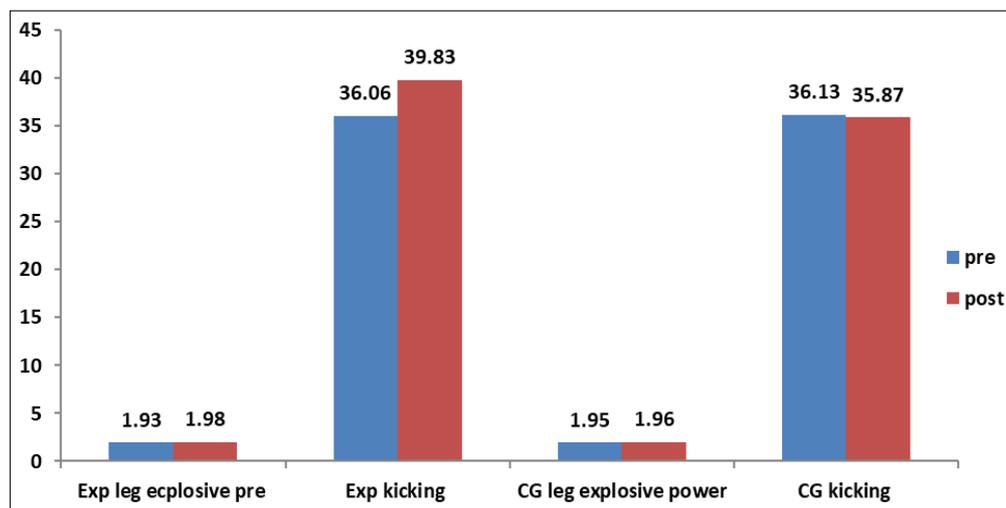
Computation of 't' ratio on physical and skill performance of SAQ training and control group

Group	Variables	Pre Test mean	Post Test mean	Pre test Std. Dev	Post test stddev	't' ratio
Experimental group	Leg explosive power	1.93	1.98	18.48	16.67	6.06*
	kicking	36.06	39.83	0.43	0.54	31.63*
Control group	Leg explosive power	1.95	1.96	15.26	16.73	0.63
	kicking	36.13	35.87	0.52	0.47	2.08

*Significant at 0.05 level

Table 1 data show that the 't' ratios on leg explosive power and kicking ability of SAQ training and control group. Mean value were 1.93, 1.98, 1.95 and 1.96 respectively. 'T' ratio were 6.06*, 31.63*, 0.63 and 2.08. Since, these t values of experimental group were higher than there required table value

of 2.09, it was found to be statistically significant and the t value control group were lesser than there required table value of 2.09, it was found to be statistically insignificant at 0.05 level of confidence for the degrees of freedom 1 and 19.



The bar diagram shows the mean value of leg explosive power and kicking ability of experimental and control group

Discussion on findings

The results of this study showed that the subjects participated in SAQ training for the period of twelve weeks were able to improve their performance in physical, and skill variables. After analyzing the results the researcher found that there were significant differences among the experimental and control group and there was a significant improvement over

leg explosive power and kicking ability of experimental group. These results demonstrate that specific speed and agility training (SAQ), as part of the overall training process, can be considered a useful tool for the improvement of speed and agility among young soccer players. They also confirm Bloomfield *et al.*, (2007) [38] viewpoint that the SAQ regimen is an important training method for the improvement of speed

and quickness. Furthermore, Weineck, (2000) suggested that agility along with quickness and speed during the first three steps represent the most significant motor ability of a soccer player. Whilst recent studies (Bloomfield *et al.*, (2007) ^[38], Polman *et al.*, (2004) ^[39] have tended to show that SAQ training methods have a positive impact on power, speed and quickness these did not consider agility with and without the ball. This result is in agreement with Polman *et al.*, 2004 ^[39] who found that SAQ training was effective in the physical conditioning of female soccer players due to a significant improvement in lateral agility. It seems, therefore, that speed, agility and quickness should be viewed as independent motor abilities, which have limited influence on each other, and thus specific training is required for each Little and Williams (2006). The SAQ training protocol used in this study included a large number of complex coordination exercises with the ball deemed important by Weineck (2000) as these included relevant technical elements within the conditioning training. This training protocol was shown to improve performance, which was thought to be primarily as a consequence of improved agility. Agility is one of the key components of contemporary soccer, which requires high levels of endurance, power performance and agility Jeffreys (2004) ^[43], Meckel *et al.*, (2009) ^[44] Whilst one might expect that training protocols would attempt to enhance all three of these components, Jovanovic *et al.*, (2011) suggest a tendency for emphasis on non-specific endurance and power training and less emphasis on agility. The seven different phases of a specific speed and agility (SAQ) training programme Pearson (2001) contributed to a statistically significant improvement in performance in different agility tests with and without the ball in U19 soccer players. Although, it is considered that the best period for the development of agility is at the age of 16, this study has shown that agility can also be improved in later years using an appropriate training programme. This confirms previous findings by Sporis (2010b) where a poly-structural complex training programme produced improved performance in young soccer players. Mohanasundaram (2013) ^[4] S.A.Q training had significant effect on agility. Rajkovic (2014) ^[7] confirm a positive influence of SAQ training on certain parameters of speed and explosiveness of football players. Manikandan (2014) ^[3] there was a significant difference on selected motor fitness components such as speed and leg strength between SAQ drills group and control group. Subramainiam (2014) ^[9] there was a significant improvement in the speed and breath holding time for plyometric training group when compared with the control group. Milanovic (2013) ^[11] SAQ training is an effective way of improving agility, with and without the ball, for young soccer players and can be included in physical conditioning programme. Karthick *et al.*, 2016 ^[12]. The results of this study indicated that SAQ training is more efficient to bring out desirable changes over the speed, agility and kicking ability. Polman, Bloomfield & Edwards (2009) ^[18] stated that the SAQ training method “involves progressive exercises to develop an athlete’s ability to be more skillful at faster speeds and with greater precision” Jitender 2017 effect of S.A.Q training program on explosive leg strength of male soccer players of Choudhary Devi Lal University, Sirsa. Sudha, *et al.*, (2012) ^[37] Studied the effect of SAQ training given for six week on selected bio motor abilities (speed, agility and power) of male handball players.

Conclusions

1. Based on the findings and within the limitation of the

study it is noticed that practice of SAQ training helped to improved leg explosive power of tribal football players.

2. Twelve weeks of SAQ training program significantly improved kicking ability of tribal football players.
3. Further it was concluded that SAQ training will be suitable to bring the desirable changes over physical and skill performance of tribal football players.

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