

31. SCIENTIFIC COACHING

P-082 Opinion of soccer players about off- season in Turkish super league

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OBJECTIVE The period when soccer players detraining at the end season is very important because it is not known how soccer players spend this period. The purpose of this study was to search opinions of soccer players about off season in Turkish super league.

METHODS 144 soccer players from Fenerbahce, Trabzonspor Denizlispor, Samsunspor, Genclerbirligi, Ankaragucu, Diyarbakirspor and Caykur Rizespor participated in this study. A questionnaire was developed, with 18 items. The reliability of questionnaire was 0,84. The following evaluations were used in 5 point Likert Scale a)disagree totally, b)disagree, c)not sure, d)agree, e)agree totally

RESULTS Soccer players had some physiological and psycholigical loses in off season. They should rest actively and their taining should be decreased. It is necessary to give information to soccer players on how much strenght they lose during off season, and soccer players should spend off season accordingly. Soccer players want to rest and get healed from injuries during off season. At the same time they want to get psychological support. Soccer players don't accept big losses in off season in off season while starting preparation period before season, and they think that preparation period before season is a waste of time.

DISCUSSION At the end off this research, soccer players in Turkish super leauge evaluated that off season was not an inactive and holiday period. Soccer players have enough information on doing various sport activities and physical preparation in off season period.

KEY WORDS Soccer, off season, player.

P-083 Impact of playing in Champions League on National League results

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OBJECTIVE In this paper, the impact of playing a Champions League match on the Spanish Football League match scores was analysed of given teams. According to the results of a logit multinominal regression, playing in the European Champions League did not decrease the probability of winning in the National Championship. The objetives of this study were to analyze the influence of playing in the European Champions League on the scores of Spanish Football League teams, and to examine if this impact was different for teams making debut in the European competition.

METHODS The sample consisted of the 184 matches of the Spanish Football League Seasons 2003-2004, 2004-2005 and 2005-2006 of those teams playing the European Champions League. The dependent variable was the scores obtained by teams. Five independent variables were included. The difference in the level among teams, playing at home or away, to play or no a match of the CL and if the team was a newcomer.

RESULTS As it can be seen in Table 1, playing in the European Champions League did not reduce the probability of winning in the National Championship. The variables playing at home and level were statistically significant and had the expected coefficient. According to the results displayed in Table 1, playing in the European Champions League did not reduce the probability of winning.

Table 1. The results of teams in the Spanish Football League: the influence of playing the European Champions League

<i>Independent Variable</i>	<i>Defeat vs Win</i>	<i>Defeat vs Dra.</i>
Level (LEV)	0.07 (0.03)*1	-0,23 (0,44)
Playing at home (PH)	0,95 (0,40)**	0,01 (0,03)
Champions League (CL)	0.46 (0.40)	0,29 (0,44)
Intercept	-0,30 (0,34)	0,03 (0,34)

Number of observations 172LR Chi² (6) 21,15*Pseudo R² 0,06

Notes: Estimation is by maximum-likelihood. Robust Standard Errors in parenthesis. *p<0.01 **p<0.05

DISCUSSION The findings of this empirical analysis showed that playing in the European Champions League did not reduce the probability of winning in the Spanish Football League. In contrast with the general prejudice, playing in the European Champions League did not decrease the probability of winning in the Spanish Football League for teams making debut.

KEY WORDS Result, soccer, champions league, logit multinomial, Spanish football league.

P-084 Influences of ball possession on team performances in FIFA World Cup Germany 2006

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OBJECTIVE In this paper, the effects of the possession of the ball on performances of teams in the FIFA World Cup Germany 2006 were analyzed. The research was based on linear regression analysis. Results pointed out that possession was a relevant variable for explaining the performance obtained by teams in matches. The objective of this paper was to examine the effects of the possession of the ball on performances of teams in the FIFA World Cup Germany 2006.

METHODS The sample consisted of 64 matches played in the FIFA World Cup Germany 2006. The dependent variable was the performance obtained by teams. The independent variables were the possession of the ball, the difference in the level of teams and the round of the competition. A linear regression model was used to analyze the influence of the performance on the points obtained by teams.

RESULTS All the variables were statistically significant. Possession is statistically significant at the level 0.01. In accordance with the results of the regression model a one-unit increase in possession caused an increase in 0.54 on the performance obtained by teams. The variables level and round were statistically significant at the 0.01 level and had the expected coefficient.

Table 1. Determinants of the performance in the FIFA World Cup Germany 2006. The role of the possession of the ball.

Independent variable	Model
Poseión	0.54*(0.09)
Level	1.57*(0.34)
Round	-16.65**(9.74)
Possession x Round	0.33**(0.19)
Intercept	-26.73*(2.111)
R²	0.53
Number of observations	128

DISCUSSION The main findings of this paper suggested that possession was a relevant variable for explaining the performance obtained by teams in the matches of FIFA World Cup Germany 2006. The influence of the possession on the performance was different in the two rounds of the competition, and the higher the difference between teams the higher the performance for the best team was.

KEY WORDS FIFA World Cup Germany 2006, performance, possession of the ball, football.

P-085 Changes in running economy after two different resistance training programs in soccer players

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OBJECTIVE Maximal strength training for neural adaptations has been shown to improve running economy in soccer players (Hoff and Helgerud, 2002). Although the concept that improvements in strength influenced aerobic endurance performance was widely studied, there is little knowledge regarding the effects of resistance training using other loads on running economy. The purpose of the present study, which had Ethical Committee approval, was to examine the

effects of two different resistance training programs (3 times/week, 6 weeks) on running economy and maximal oxygen uptake (VO₂max). One program was designed to promote muscle hypertrophy (H, 4 sets x 12 reps, with 70% 1RM) and the other aimed to increase maximal strength (S, 4 sets x 5 reps, with 90% 1RM).

METHODS Twenty male soccer players (age: 22.5±1.1 yrs, body mass: 74.1±1.9 Kg) were divided in two equal groups. VO₂max was measured before and after training using an incremental treadmill running test and running economy was calculated at the speed corresponding to the individual ventilatory threshold (VT). Aerobic fitness was also assessed using Hoff's dribbling track test (DTT).

RESULTS Running economy improved by 10.6±4.7% in the S group but was unchanged in the H group (Table 1). However, VO₂max and VT were unchanged in both groups. Speed at VO₂max was increased by 4.5±2.2% and 7.1±1.8% in the H and S groups and performance in the DDT was similarly increased in both groups (by 9.4±0.8%).

Table 1. Aerobic performance parameters before (BT) and after training (AT) in the hypertrophy (H) and the maximal strength (S) training groups. * P<0.05, ** P<0.01 from before training

	VO ₂ max (ml/kg/min)		Ventilatory threshold (ml/kg/min)		Speed at VT (kph)		Dribbling track test (m)	
	H	S	H	S	H	S	H	S
BT	51.7(2)	51.6(1)	38.7(1.2)	37.8(1.3)	11.7(0.2)	11.5(0.1)	1627(33)	1725(33)
AT	53.6(2)	53.4(1)	38.8(0.8)	38.3(1.8)	12.5(0.2)**	13.2(0.3)**	1777(34)**	1886(30)**

DISCUSSION The results suggested that strength hypertrophy training was not a sufficient stimulus for an increase in running economy. The improvement of running economy in the S group may be explained by a possible enhancement of muscle coordination induced by neural adaptations resulting from maximal strength training (Almasbakk & Hoff, 1996).

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KEY WORDS Running economy, efficiency, resistance training.

P-086 Beneficial effects of four months of street football practice on training status and health profile for homeless males

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OBJECTIVE It is well-established that physical activity is important for musculoskeletal function and cardiovascular health. However, little is known about the health promoting effects of recreational soccer, as most scientific studies have investigated the effects of jogging, swimming and bicycling. The present study investigated the effects of street football training performed twice a week for four months as preparation for the Homeless World Cup 2006 in Cape Town, South Africa. In addition, the heart rate (HR) response to ordinary street football training for this group was determined.

METHODS Thirteen players (19-44 yrs) took part in two weekly 90-min street football training sessions for four months (4v4, pitch 16x22m). Heart rate was recorded during one training session. Body mass, fat percentage (Durnin & Womersley, 1974), fat free body mass, quadriceps muscle mass (Krstrup et al. 2004) and blood pressure were measured and the Yo-Yo IE2 test and 1-min non-dominant leg balance test (Eurofit, 1988) were performed before (BT) and after the intervention (AT).

RESULTS Mean HR was 154±4 bpm or 84±1% of HR_{max}. HR was 80-90% and >90% HR_{max} for 30±2 and 31±4% of the time. Body mass was unaltered, but fat free body mass was 2.3 kg higher (p<0.05) and fat percentage tended to be lower after the training period. Diastolic blood pressure was 5 mmHg lower (p<0.05), quadriceps mass was 12% higher (p<0.05) and Yo-Yo IE2 performance was 54% better (p<0.05) after training (Table 1).

DISCUSSION This study characterized street football as aerobic moderate and high intensity training (Bangsbo et al. 2006) and provided evidence that regular participation in street football has beneficial effects on training status and health profile for a group of homeless males. Players with poor aerobic power, low muscle mass and mild hypertension, had their physical health profile normalized after 4 months of training.

CONCLUSION In conclusion, players with poor aerobic power, low muscle mass and mild hypertension, had their physical health profile normalized after 4 months of training.

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KEY WORDS Heart rate, muscle mass, fat percentage, blood pressure, Yo-Yo intermittent endurance level 2 test.

P-087 Effects of low intensity aerobic training program to maintain aerobic capacity of elite soccer players in mid-season transition period

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OBJECTIVE The athlete loses training benefits within short time. The speed of detraining varies from several weeks to several months. Researchers have noted a sizeable decrease (6-7%) in maximum volume of oxygen, physical working capacity, and total hemoglobin and blood volume following just one week of complete rest. The aim of this study was to investigate effects of two weeks of aerobic low intensity training program on physical characteristics of elite soccer players during mid-break transition period.

METHODS Mid-Break Transition period aerobic low intensity training program (see Table 1) was given to all of the players (n=25) except two injured players. Lactate and heart rate data from the tests at the end of first part of the season on December were used to design individual training programmes for each player.

Table 1. Elite soccer players training program for two weeks mid-break transition period.

Days	Warm-up	Training	Cool-down
1		Rest	
2		Rest	
3		Rest	
4	10 min. warm-up	35 min. 2 MMOL	10 min. stretching
5	10 min. warm-up	35 min. 2 MMOL	10 min. stretching
6		Rest	
7	10 min. warm-up	35 min. 2 MMOL	10 min. stretching
8	10 min. warm-up	40 min. 2 MMOL	10 min. stretching
9		Rest	
10	10 min. warm-up	40 min. 2 MMOL	10 min. stretching
11	10 min. warm-up	45 min. 2 MMOL	10 min. stretching
12		Rest	
13	10 min. warm-up	2x 20 min. 2.5 MMOL	10 min. stretching
14	10 min. warm-up	2 x20 min. 2.5 MMOL	10 min. stretching

RESULTS Findings indicated that there were no significant differences between athletes' aerobic capacity before and after mid-break transition period.

CONCLUSION Low intensity aerobic training during mid-break transition period attempted to help elite soccer players maintain a degree of aerobic fitness during this period, and whilst the lack of any significant difference between end of the first part of season and beginning of second part of season preparation suggested that two weeks of low intensity aerobic training programme may have been effective.

KEY WORDS Low intensity aerobic training, mid-break transition period.

P-088 Intermittent exercise performance evaluations in soccer players using Yo-Yo intermittent recovery test level 2

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OBJECTIVE Due to its specificity and practicality, the Yo-Yo intermittent recovery test 2 (YYIR2) has been extensively used in soccer to assess players' abilities to perform repeated high-intensity exercise. Studies have shown its sensitivity in discriminating players' performances at various competitive levels, between different playing positions, and after periods of different types of training. The aim of the present study was to examine the changes in physical condition that may occur during a season in soccer players and to evaluate the effectiveness of the YYIR2 in order to detect such changes.

METHODS Twelve elite male soccer players belonging to a team taking part in the league's top division performed the YYIR2 at the beginning of the pre-season preparation and after ten days of preparation, as well as at the Start of the competitive season and during Mid season. Performance data was subsequently analyzed for mean and individual seasonal variations.

RESULTS The YYIR2 performances were 1160±39 and 1068±52m at Start and Mid season, which were 23.4 and 13.6% better respectively ($p<0.05$) than After 10 days of preparation (940±40m). In Mid season the YYIR2 performance tended to be lower (-7.9%) compared to Start. However, large individual variations were observed (CV=8.2%) since two players improved whereas six had a drop in performance (Figure 1).

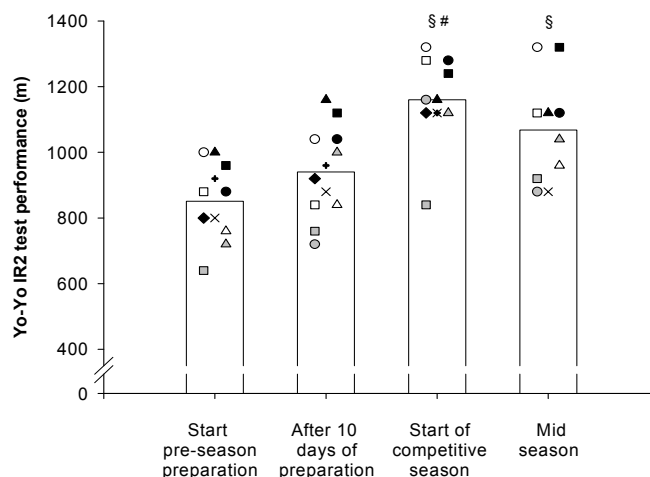


Figure 1. Individual and mean seasonal changes in the Yo-Yo IR2 test performance expressed in metres for 12 elite male soccer players. Values are means \pm SEM. §: Significantly different from Start pre-season preparation ($p<0.05$); #: Significantly different from After 10 days of preparation ($p<0.05$).

CONCLUSION Players' abilities to perform repeated high-intensity exercise varied considerably in pre-season, whereas levels were on average lower during the season. However it is not possible to generalize since there are major individual variations. These results also illustrate that the Yo-Yo IR2 test is sensitive enough to detect changes in players' performance levels during the season

KEY WORDS Testing, intermittent exercise, physical condition, seasonal changes.

P-089 Effects of age and playing position on Iranian elite soccer players' competitive motivation

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OBJECTIVE It is generally accepted that a competitive mindset is advantageous for success in sports (Heyman, 1992; Raglin, et al., 1990; Stewart & Meyers, 2004). Motivation is one of the most important psychological traits that have considerable implications on sport programs for which appropriate selection of athletes or motivational attributes are deemed essential for optimal performance. Too often, even the most experienced football coaches ignore the benefits of exploring the personality or psychological state of their athletes. Therefore, the purpose of this study was to investigate the effect of age and the position played on the Iranian elite male soccer players' competitive motivation.

METHODS 60 soccer players of senior, youth U 19 and U 23 national teams who were selected purposively completed the sports attitude inventory (Willis, 1982). The data were grouped by age and primary position played and analyzed by MANOVA.

RESULTS The statistical analysis indicated a significant effect by age ($p < 0.05$), but not by playing position ($p > 0.05$). According to the results of post hoc tests, players of senior national team were more motivated to avoid failure than youth U 19 national team players ($p < 0.05$).

CONCLUSION The results were consistent with Stewart & Meyers³. The fact that older players of senior national team scored higher on the motivation to avoid failure subscale than younger players indicated that those players may have had a tendency to be more sensitive to what adults (their coaches) thought than the younger players.

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KEY WORDS Competitive motivation, elite, player position.
