

20. APPLIED PSYCHOLOGY

O-116 Psychological skill training for the Japanese soccer team in 2005 Universiade games in Izmir

¹Miyazaki Junichi ✉ and ²Koga Hajime

¹Aoyamagakuin University, Japan, ²TokyoDenki University, Japan

OBJECTIVES The final soccer match at the 23rd Universiade games in Izmir ended up with the Japanese team's dominance over Italy. The team adopted psychological support and mental training for performance enhancement. These skills were useful to contribute toward overcoming difficulties. Thus, we tried to reveal the role of psychological support and mental training for the Japanese soccer team in this study.

METHODS Relaxation programs such as progressive muscle relaxation, breath control method and meditation with relaxation music were operated by a mental coach. What is more psyching-up programs, morning exercise sessions, and logbook inscriptions were also practiced as parts of the mental training program. Psychological competitive ability of 20 Japanese university soccer players were examined by original questionnaire and DIPCA 3(Diagnostic Inventory Psychological Competitive Ability test which is authorized by Japanese Society of Sport Psychology).

RESULTS According to the data obtained from the original questionnaire and interview, these psychological trainings were effective for team building process. DICPA.3. evaluations revealed high psychological competitive ability with pre-test 186pts on March 2005, to post-test 192pts on August 2005.

CONCLUSION The team made great improvement in emotional stability (patience), self confidence, anticipation, and cooperative attitude through the training camps and tournament. It is suggested that the psychological supports from the mental coach such as mental training skills facilitate to enhance team relationship and team performance.

KEY WORDS: Mental training, soccer, team building.

O-117 Adaptation of self and other versions of the revised power in soccer questionnaire (RPSQ) for Turkish culture

Erkut Konter

Dokuz Eylül University, Buca Educational Faculty, Izmir, Turkey

OBJECTIVES Leadership power has frequently been studied within a theoretical framework known as the basis of social power (French et al., 1959). Wann et al. (2000) pioneered using French and Raven's five interpersonal powers construct in sports and developed the Power in Sport Questionnaires (PSQ-O and PSQ-S). This study aimed at exploration of validity and reliability of the revised versions of PSQ-O and PSQ-S for the Turkish culture related to soccer (RPSQ-O and RPSQ-S).

METHODS PSQ forms were revised and the data was collected from soccer coaches (n=165) and soccer players (n=870) for this second study. Analysis of the Turkish revised forms (RPSQ-O and RPSQ-S) involved confirmatory factor analyses related to the hypothesized, two-factor, three-factor and five-factor (Wann et al., 2000) models.

RESULTS Confirmatory factor analyses of the RPSQ forms revealed that two, three and five-factor models were not fit with the Turkish soccer players (Table 1).

DISCUSSION The analyses described above suggest that both forms of the RPSQ with the two, the three and the five-factor models were not confirmed in soccer related to Turkish culture. It seems that, cultural differences exist to some extent and thus, item eliminations, additional new items and models may be needed for the Turkish RPSQ-O and RPSQ-S forms.

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Table 1. Results of CFA of the Turkish RPSQ-O and RPSQ-S

RPSQ-O RESULTS (SOCCER PLAYERS FORM)									
Models	X2	df	X2/df	RMSEA	RMR	GFI	AGFI	CFI	P
5-Factor	856.10	80	10.70	0.11	0.08	0.88	0.83	0.91	0.0
3-Factor	1121.30	87	12.88	0.13	0.08	0.84	0.77	0.81	0.0
2-Factor	1293.21	89	14.53	0.12	0.08	0.83	0.78	0.87	0.0
RPSQ-S RESULTS (SOCCER COACHES FORM)									
Model	X2	df	X2/df	RMSEA	RMR	GFI	AGFI	CFI	P
5-Factor	316.25	80	3.95	0.13	0.12	0.80	0.69	0.84	0.00
3-Factor	491.13	87	5.64	0.17	0.13	0.71	0.61	0.75	0.00
2-Factor	589.91	89	6.62	0.19	0.15	0.68	0.56	0.69	0.00

KEY WORDS Interpersonal power, power in soccer questionnaire-revised, cultural differences, adaptation, Turkish culture.

O-118 Identifying the relationship between behaviour patterns (Type A - Type B) and discipline points of soccer players

Erden Or ¹✉ and Mahmut Paksoy²

¹Istanbul University School of Physical Education and Sports, Istanbul, Turkey

²Istanbul University Business Administration Faculty, Istanbul, Turkey

OBJECTIVES: The success of athletes can be closely related to their personal characteristics. This becomes even more important in team sports since positive or negative behaviours of a player would affect the performance and destiny of the team as a whole. As is well-known, football players can be booked or sent off as a result of misconduct in a match. Referees who control the game use yellow or red card according to the circumstances. They have been trained to evaluate the positions according to the regulations. In this respect, the purpose of this research was to analyze the relationship between the behavioural patterns and misconducts in the field.

METHODS: We tried to determine the personal characteristics of Turkcell Superleague players (A type or B type or in-between). In order to determine type A and type B characteristics, we used the "A/B lifestyle scale" developed by Charlesworth et al.1985 Questionnaires were sent to all clubs in Turkcell Super League 2005, however, the level of respond wasn't satisfactory. 41 questionnaires were replied. After the collection of questionnaires, card statistics between 2004-2006 were taken from "FSTATS" which is the best sport statistics company in Turkey. Data was evaluated with correlation analysis. 2 points were given for yellow cards and 5 points were given for red cards during the calculation of discipline points. Average discipline point of a player has been calculated by dividing total discipline points by the total of the games played.

RESULTS: According to the correlation analysis there is a relationship between behaviour type and discipline points. ($r=.31$ $p<.05$) Type A players were booked and/or sent off more frequently than Type B players.

DISCUSSION: Coaches should be aware of the players behaviour types and manage them according to these facts. All clubs should conduct some tests to evaluate the mental conditions in addition to physical tests. Personal characteristics and mental condition of the players are important as much as physical conditions in modern football.

KEY WORDS: Type A & B Behaviour Pattern, Football Psychology, Organizational Behaviour

O-119 Participation motives of 9-15 years old Turkish soccer players

Bülent Gürbüz ✉, Atahan Altıntaş and F. Hülya Asci

Baskent University, Ankara, Turkey

OBJECTIVES Understanding the motives for youth sport participation has become an important issue for sport practitioners and researchers in the last decade. This research area has engaged the interest of researchers because the accu-

mulation of knowledge through these efforts will enable youth sport leaders and coaches to design sports program and athletic experiences for participants. The aim of this study was to determine participation motives of 9-15 years old soccer players in Turkey.

METHODS The “Participation Motivation Questionnaire” (PMQ) was administrated to 304 (Mage=12.18 ± 1.18) male soccer players from private and public summer sports school in Ankara. PMQ consists of a list of 30 possible reasons for participating in sports and includes 8 subscales- energy/fitness, achievement/status, team affiliation, friendship, fun, competition, skill development, and movement. Descriptive statistics and t-test were used to analyze the data.

RESULTS Soccer player rated improvement skill as the first in importance according to mean importance ratings. 21.4% of the soccer players rated the team spirit” as the most important participation motive. There was a significant difference in friendship subscale of PMQ between 1-4 years experienced players and 5 or more years experienced players ($t = -2.49$, $p < 0.05$) but no significant difference in subscales of the PMQ.

Table 1. The five highest mean importance rating of soccer players.

PMQ items	M	(SD)
I want to improve my skills	1.04	(0.21)
I like the team work	1.12	(0.37)
I like being on a team	1.12	(0.39)
I want to go to higher levels	1.13	(0.38)
I want to be physically fit	1.14	(0.37)

DISCUSSION Analysis indicated significant differences in friendship subscale of PMQ between less and more experienced soccer players. Soccer players rated “improving skills” as the most important reason for their sport participation. This finding is parallel to studies (Gould et al., 1985; Klint et al, 1987; Oyar et al, 2001) reported skill development as one of the most important reasons for the athletes.

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KEY WORDS: Motivation, summer school participants, sport experience.

O-120 Player position and mental rotation times in Turkish soccer players

Savas Akkus¹ ✉, Mitat Koz¹, Erhan Kiziltan² and Ethem Gelir³

¹ School of Physical Education and Sports, Ankara University, ² Department of Biophysics, Faculty of Medicine, Karaelmas University, Zonguldak, Turkey, ³ Department of Physiology, Faculty of Medicine, Hacettepe University, Zonguldak, Turkey

OBJECTIVES The ability to react to sensory impulses is a fundamental physiological process for athletes (Montes-Mico et al., 2000). Especially in soccer, players often require a fast reaction to stimuli, as instantaneous judgment influences their success and game results. Moreover, soccer players react quickly mainly to visual stimuli such as movement of the ball and movement of the other players. In soccer, for various areas in the game, players with different physical and physiological features are required. The purpose of this study was to determine the affects of player position on mental rotation (MR) times in male soccer players.

METHODS Thirty six 17.00±1.00 aged male soccer players, who are playing in regional youth league in Ankara participated in the study. For descriptive purposes, players were divided into the following groups: defence, midfield, and forward. Measurement of mental rotation times were done via computer supported Finger Tapping test tool (Kiziltan et al. 2006). One-Way ANOVA was used to analyse the data.

RESULTS According to the positions of the players (defence, midfield and forward), significant relationships ($P < 0,05$) are determined in MR test parameters. The results showed that forward players had better results in MR-Ttime, MR-AvTime, MR-TTime/True, compared to the defence players, and in MR-TTime/True compared to the midfield players (Table 1).

DISCUSSION Position of players affected the MR time, and forward players responded to stimuli faster than midfield and defence players. With regard to literature indicating that reaction time could be improved in the transition period

from childhood to puberty (Johnson 1989), this study suggested that MR test could be used as a test tool in evaluation and improvement of spatial perception and decision making ability.

Table 1. Mental rotation times of soccer players.

	Defence (N=12)	Midfield(N=16)	Forward(N=8)
MR-Event	25,00	25,00	25,00
MR-True (event)	7,83 (1,40)	6,62 (1,78)	8,00 (2,26)
MR-False (event)	17,00 (1,35)	18,25 (1,77)	17,00 (2,27)
MR-TTime (msec.)	54232,24 (18546,46)	42987,45 (15743,09)	34127,05 (15692,15)*
MR-AvTime (msec.)	2169,29 (741,86)	1719,49 (629,72)	1365,08 (627,68)*
MR-TTime/True (msec.)	7031,14 (2469,68)	6485,88 (1158,91)	4388,50 (1891,37)*+

MR: Mental rotation, TTime: Total time, AvTime: Average time

*Different from defence at $P < 0.05$, +Different from midfield at $P < 0.05$

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KEY WORDS Soccer player, reaction time, mental rotation.

O-121 Relationship between competitive state anxiety and trait state anxiety

Sertan Kagan¹✉, Ziya Koruc² and Nihan Arsan²

¹Eastern Mediterranean Uni. Faculty of Educational Sciences, Northern Turkish Cyprus, ²Hacettepe Uni. Sport Sciences and Technology, Turkey

OBJECTIVES Since the conception of an interactional model of anxiety distinguishing trait and state symptoms, considerable understanding of the debilitating effects of anxiety upon sporting performance has been made. A large contribution has come from the development of sport-specific competitive anxiety theory, which states that, in advance of sporting competition, an individuals' competitive trait anxiety. The aim of this study was to examine the relationship between the football players' competitive state anxiety and trait- state anxiety levels in two Turkish Turkcell Super League football teams.

METHODS Volunteer, 41 professional soccer players (Turkish Turkcell Super League football teams) participated in this study. Pearson Correlation has been used for analysing relationships between CSAI-2 and STAI and differences in two teams. Inventories used were the Turkish version of State - Trait Anxiety Inventory (STAI), the Turkish version of CSAI-2. MANOVA was used to analyse CSAI-2 and STAI results.

RESULTS The analysis revealed that state anxiety and cognitive anxiety ($r = -.397$, $p > .05$), state anxiety and cognitive anxiety ($r = -.398$, $p < .01$). Significant relationship was found between state anxiety and self confidence ($r = .478$, $p < .01$). No significant differences were found between CSAI-2 results and STAI results.

Table 1. Correlations between football players' STAI and CSAI-2 results.

	Trait Anxiety	Cognitive Anxiety	Somatic Anxiety	Self- Confidence
State Anxiety	.302	-.397*	-.398**	.478**
Trait Anxiety		.291	-.089	.192
Cognitive Anxiety			.261	-.338*
Somatic Anxiety				-.508**

*Correlation is significant at the .05 level. ** Correlation is significant at the .01 level.

DISCUSSION It was concluded that, there was a significant relationship between State - Trait Anxiety Inventory (STAI) results and Competitive State Anxiety Inventory -2 (CSAI-2) results of football players.

KEY WORDS Competitive state anxiety, trait anxiety, STAI, CSAI-2, football.