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THE INFLUENCE OF COACHES` COMMUNICATION ON THE LEVEL OF PLAYERS` PRE-COMPETITIVE ANXIETY AND SELF-ESTEEM

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Summary: The purpose of the study was to evaluate the influence of coaches` communication discourse determined by educational program Mastery Approach to Coaching (MAC) on changes of players` level of pre-competitive anxiety and self-esteem. The research was applied on 10 coaches of collective sports and 161 players. For diagnosing, the level of cognitive, somatic anxiety and self-esteem was used standardized questionnaire CSAI-2R. Players of experimental group decreased level of intensity of cognitive ($p = 0.004$) and somatic anxiety as well as frequency and increased level of self-esteem intensity ($p = 0.021$) and frequency during intervention period. After three months' experiment period players of experimental group experienced lower intensity ($p = 0.000$) and frequency of cognitive anxiety as well as lower intensity ($p = 0.012$) and frequency ($p = 0.037$) of somatic anxiety than players in control group. Players of experimental group perceived direction of self-esteem intrusions ($p = 0.041$) as well as intrusions of cognitive and somatic anxiety more positively than players of control group after intervention period.

Key words: Mastery Approach to Coaching, cognitive anxiety, somatic anxiety, self-esteem

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Introduction

Coaching approach, within period between 10 to 15 years old players, demands important knowledge and experiences, not only in creation and regulation of teams' motivational climate but also in regulation of young players' emotional load (Perič 2004). Moreover, it is important to take into consideration that this period is crucial for healthy development of psychic. Hormone activity influences emotional outcomes and relationships among young players and can positively or negatively affect their behaviour in sport activities or other parts of social life (Perič 2004). Coaches who create ego climate through their own communication increase maladaptive reactions from the players' side and those give impulse to increase of anxiety level and decrease of players' self-esteem (Nicholls 1984; White et al. 2004). Mastery climate developed by coaches' communication is more supportive than ego climate (Duda 2005; Cumming et al. 2007). Correlational studies show that mastery climate correlates with lower levels of cognitive and somatic anxiety (Walling et al. 1993; Newton-Duda 1999; Papaioannou-Kouli 1999; Yoo 2003) and perception of ego climate positively correlates with higher level of pre-competitive anxiety (Vazou et al. 2006). Results of studies focused on young players (Smith et al. 2007) show that the influence of mastery climate created through coach communication decrease anxiety and increase the level of self-esteem. Duda (2004) in the study points on increase of players' self-esteem who perceived motivational climate as mastery not ego oriented. By incoming beginning of match or competition, we could presuppose significant effect of positive coach communication on regulation of pre-competitive anxiety and self-esteem. Hanton et al. (2004) showed significant increase of somatic and cognitive anxiety intensity and frequency in young players within time between two hours and 30 minutes before the match. Starting point for correct regulation of players' emotional load is detailed diagnostics of pre-competitive states. On this basis, we could implement series of prepared cognitive intervention strategies and regulate not only intensity but also frequency and direction of players' thoughts and feelings especially an hour before competition (Uphill et al. 2009). In connection to applied techniques of stress situation coping such an imaginary it is important to create specific forms of coping like verbal interventions applied intra-individually (positive inner speech) or using external encouragement from the coach side (Mellalieu et al. 2009). In this way coach way of communication can be inspiring and supportive for players (MacMorris & Hale 2006). Interventions focused on emotional load regulation are usually directly implemented on players. On the other hand; it is possible to apply intervention like MAC (Mastery Approach

to Coaching) program on coaches who in a role of positive motivational climate creator could regulate emotional load of players through determined communication style. Smith & Smoll (2012) declare that effectivity of MAC program has not been evaluated only from the aspect of coaches' behaviour and communication changes but also monitoring of the influence on players is very important. The way how players perceive behaviour and communication of coach influences the way of players' evaluation of their sport experiences (Smith & Smoll 2011).

The aim of the paper is to evaluate the influence of coaches` communication discourse determined by educational program MAC on changes of players` level of pre-competitive anxiety and self-esteem.

Methods

Participants

Based on purposive sampling experimental and control research group was created *(Table 1)*. Experimental group consisted of 5 coaches whose average age was 35.4 year (± 7.17) and 82 players with average age 11.9 year (± 1.51). Players competed in one team on average 3.36 year (± 2.26). Control group consisted of 5 coaches whose average age was 38.4 year (± 7.23) and 79 players with average age 11.4 year (± 0.99). Players of controlled research group competed in one team on average 2.7 year (± 1.93).

Table 1

Coaches and players of experimental and control group

SPORT	CLUB	COACH	PLAYERS Category/n
Basketball	BK ISKRA Svit	J.M.	U10/15
Football	TJ SLAVOJ Trebišov	M.U.	U11/16
Football	TATRAN Prešov	T.E.	U12/19
Football	TJ SLAVOJ Trebišov	C.V.	U13/13
Hockey	HC Košice	M.L.	U13/16
Control group			
Football	TJ SLAVOJ Trebišov	J.C.	U10/16
Football	TATRAN Prešov	P.D.	U11/15
Hockey	HC Košice	M.Š.	U12/18
Volleyball	MIRAD Prešov	T.L	U13/15
Handball	TATRAN Prešov	J.Ž.	U14/18
Experimental group			

Intervention

From the organizational aspect, the research was divided in three main periods. Before and after the implementation of intervention program, player's level of pre-competitive anxiety and self-esteem was diagnosed. Intervention was applied on five coaches of experimental group during 12 weeks. As an intervention, instructional program MAC was used that consisted of DVD and manual. Coaches that were in experimental group were acquainted with the approach how to learn and implement effective communication principles according to MAC program. Video recordings enable coaches to understand how those learnt principles appropriately apply to praxis (model situations). Trained coaches then implement those principles to training process through their communication discourse in interaction with players during 12 weeks. To enhance the effectivity of intervention program coaches were asked to check briefly all main principles before each match and training unit and to fill in self-monitored formulae after each match and training unit in order to see their own progress and concentrate on their communication. Program MAC was translated into Slovak language by linguist.

Data collection

For diagnosing, the level of pre-competitive anxiety and self-esteem was used French version of standardized questionnaire *CSAI-2R* (Martinent et al. 2010). Questionnaire consists of 16 items that evaluate intensity (range from 1 - low up to 4 - high)*, frequency* (range from 1 - never up to 7 - always) *and direction* (range from -3 as supportive to performance up to +3 as debilitative to performance of *cognitive anxiety* (5 items), *somatic anxiety* (7 items) and *self-esteem* (5 items). Standardization process of French CSAI-2R version was applied on 642 sportsmen in individual and collective sports within age range from 10 to 25 years. Internal consistency of translated Slovak version of questionnaire was evaluated as adequate based on Cronbach alpha values repeatedly in input and output measures *(Table 2)*. Questionnaire was translated by three different linguists.

Table 2

Reliability of French and translated Slovak version of CSAI-2R

		Intensity			**Direction**			**Frequency**		
	n	**SA**	**CA**	**SE**	**SA**	**CA**	**SE**	**SA**	**CA**	**SE**
CSAI-2R FRE	642	0.77	0.80	0.83	0.82	0.81	0.76	0.77	0.77	0.78
CSAI-2R SVK-I	149	0.77	0.77	0.75	0.77	0.85	0.70	0.85	0.81	0.74
CSAI-2R SVK-O	142	0.84	0.77	0.77	0.77	0.79	0.78	0.78	0.80	0.78

Note: **n** – number of participants; **SA** – somatic anxiety; **CA** – cognitive anxiety; **SE** – self-esteem; **SVK-I** – translated Slovak version of CSAI-2R input measure; **SVK-O** – translated Slovak version of CSAI-2R output measure; **FRE** – standardized French version of CSAI-2R

Data analysis

The significance of differences in the level of intensity, frequency and direction of somatic, cognitive anxiety and self-esteem between input and output measurements was calculated using parametric test for depended research groups Paired T-test and T-test for independent research groups. The significance of differences was evaluated on the level of significance $p < 0.05$. Practical significance was evaluated based on Pearson correlation coefficient d. The range of influence of monitored factor was evaluated according to Cohen (1988): $r < 0.2$ (small), $0.5 \leq r < 0.8$ (medium), $r \geq 0.8$ (high). Coefficient of practical significance was calculated from pattern $d = (x1 - x2)/s$ in which s is common variance of both groups and x1 and x2 are average values in individual groups.

Results

Intra-group analysis of pre-competitive anxiety and self-esteem changes

Changes between input and output values of individual anxiety and self-esteem components *(Table 3)* indicate following findings in experimental group after intervention period:

Table 3

Statistical comparison of input and output values of pre-competitive anxiety and self-esteem level in experimental group

InE (n=80)		**Cognitive anxiety**			**Somatic anxiety**			**Self-esteem**		
OuE (n=74)		*Int.*	*Dir.*	*Freq.*	*Int.*	*Dir.*	*Freq.*	*Int.*	*Dir.*	*Freq.*
$\bar{x}$	***InE***	**1.72**	**-0.47**	**2.51**	**2.00**	**-0.09**	**2.88**	**3.10**	**-1.14**	**4.41**
	OuE	**1.56**	**-0.54**	**2.45**	**1.88**	**-0.22**	**2.85**	**3.24**	**-0.92**	**4.67**
s	***InE***	*0.958*	*1.885*	*1.816*	*0.908*	*1.825*	*1.781*	*0.875*	*1.674*	*1.987*
	OuE	*0.756*	*1.531*	*1.713*	*0.850*	*1.540*	*1.637*	*0.823*	*1.568*	*1.883*
N	***InE***	**409**	**399**	**398**	**355**	**344**	**345**	**361**	**354**	**353**
	OuE	**409**	**399**	**398**	**355**	**344**	**345**	**361**	**354**	**353**
df		*408*	*398*	*397*	*354*	*343*	*344*	*360*	*353*	*352*
t		**2.937**	**0.562**	**0.482**	**1.898**	**1.015**	**0.213**	**-2.326**	**-1.891**	**-1.771**
p		***0.004****	***0.574***	***0.630***	***0.059***	***0.311***	***0.831***	***0.021****	***0.059***	***0.077***
d		*0.145*	*0.028*	*0.024*	*0.101*	*0.055*	*0.011*	*0.122*	*0.101*	*0.094*

Note: **n –** number of participants; $\bar{x}$ **–** mean; **s –** standard deviation; **df –** degrees of freedom; **N –** number of measurements; **t** – testing criterion; **p –** p value of unpaired T-test; ***** – statistical significance on the level of *p<0,05*; **d –** effect size *(0.2 – small; 0.5† – medium; 0.8‡ – large)*; **InE –** input experimental group; **OuE –** output experimental group; **Int. –** intensity (scale 1↔4); **Dir.** – direction (scale 3↔-3); **Freq.** – frequency (scale 1↔7)

Cognitive anxiety - results showed decrease of intensity (9.30 %, statistically significant p = 0.004) and frequency (2.39 %) of cognitive anxiety experienced by players. We also found increased perception of positive direction of cognitive intrusions by players (12.96 %).

Somatic anxiety – data revealed decrease of intensity (6.00 %) and frequency (1.04 %) and increase of positive direction of somatic intrusions (59.09 %). Statistical analysis did not prove significance of monitored changes in all somatic anxiety dimensions.

Self-esteem – values pointed to increase of intensity (4.32 %) and self-esteem frequency (5.57 %) and decreased level of players' perception of positive intrusions direction in experimental group (19.30 %). Statistical analysis showed significance of self-esteem intensity change (p = 0.021). Considering the above-mentioned results, we can state that players in experimental group decreased level of cognitive and somatic anxiety intensity and frequency and increased level of self-esteem intensity and frequency during intervention period. Direction of pre-competitive intrusions was perceived more positively within cognitive and somatic anxiety and more negatively in self-esteem.

Players of control group were during three months period under the influence of undetermined coaches' communication style. Results presented in Table 4 show changes between input and output level of individual dimensions of cognitive and somatic anxiety as well as players' self-esteem.

Table 4

Statistical comparison of input and output values of pre-competitive anxiety and self-esteem level in control group

InC (n=83) OuC (n=76)		**Cognitive anxiety**			**Somatic anxiety**			**Self-esteem**		
		Int.	*Dir.*	*Freq.*	*Int.*	*Dir.*	*Freq.*	*Int.*	*Dir.*	*Freq.*
$\bar{x}$	***InC***	**1.71**	**-0.62**	**2.78**	**1.90**	**-0.38**	**3.07**	**3.12**	**-0.92**	**4.37**
	OuC	**1.79**	**-0.51**	**2.73**	**2.00**	**-0.16**	**3.15**	**3.07**	**-0.78**	**4.34**
s	***InC***	*0.953*	*1.624*	*1.951*	*0.844*	*1.501*	*1.744*	*0.852*	*1.530*	*1.861*
	OuC	*0.950*	*1.556*	*1.826*	*0.818*	*1.456*	*1.812*	*0.843*	*1.429*	*1.900*
N	***InC***	**442**	**432**	**426**	**368**	**370**	**363**	**367**	**365**	**370**
	OuC	**442**	**432**	**426**	**368**	**370**	**363**	**367**	**365**	**370**
df		*441*	*431*	*425*	*367*	*369*	*362*	*366*	*364*	*369*
t		**-1.326**	**-0.977**	**0.381**	**-1.684**	**-2.043**	**-0.666**	**0.739**	**-1.272**	**0.180**
p		***0.185***	***0.329***	***0.703***	***0.093***	***0.042****	***0.506***	***0.461***	***0.204***	***0.858***
d		*0.063*	*0.047*	*0.018*	*0.088*	*0.106*	*0.035*	*0.038*	*0.067*	*0.009*

Note: **n –** number of participants; **$\bar{x}$ –** mean; **s –** standard deviation; **df –** degrees of freedom; **N –** number of measurements; **t** – testing criterion; **p –** p value of unpaired T-test; ***** – statistical significance on the level of $p < 0,05$; **d –** effect size *(0.2 – small; 0.5† – medium; 0.8‡ – large)*; **InE –** input experimental group; **OuE –** output experimental group; **Int. –** intensity (scale 1↔4); **Dir.** – direction (scale 3↔-3); **Freq.** – frequency (scale 1↔7)

Cognitive anxiety – data show increase of intensity (1.12 %) and decrease of cognitive anxiety frequency (1.80 %). We also found decrease of perception of positively directed cognitive intrusions by players (17.74 %). Statistical analysis did not find any changes significance in any of monitored dimensions of cognitive anxiety.

Somatic anxiety – results point to increase of intensity (5.00 %) and somatic anxiety frequency (2.54 %) and decrease of positively directed perception of somatic anxiety intrusions (57.89 %). Statistical analysis confirmed significance of changes in somatic anxiety direction ($p = 0.042$).

Self-esteem – input and output values show decrease of self-esteem intensity (1.60 %) and frequency (0.69 %) and decrease of positively directed self-esteem intrusions by players of control group (15.22 %). Statistical analysis did not find any changes significance in any of monitored dimensions of self-esteem.

Values of effect size revealed small effect of monitored factor in all dimensions of cognitive, somatic anxiety and self-esteem. In conclusion, players of control group experienced increased intensity and frequency of cognitive and somatic anxiety and decreased intensity and frequency of self-esteem. Players of control group perceived pre-competitive intrusions more negatively in cognitive, somatic anxiety and self-esteem.

Inter-group analysis of pre-competitive anxiety and self-esteem changes

Differences in input values between control and experimental group confirm the following findings *(Table 5).*

Table 5

Statistical comparison of input values of pre-competitive anxiety and self-esteem level between experimental and control group

InC (n=83) InE (n=80)		**Cognitive anxiety**			**Somatic anxiety**			**Self-esteem**		
		Int.	*Dir.*	*Freq.*	*Int.*	*Dir.*	*Freq.*	*Int.*	*Dir.*	*Freq.*
$\bar{x}$	**InC** *InE*	**1.71** **1.72**	**-0.62** **-0.47**	**2.78** **2.51**	**1.90** **2.00**	**-0.38** **-0.09**	**3.07** **2.88**	**3.12** **3.10**	**-0.92** **-1.14**	**4.37** **4.41**
s	**InC** *InE*	*0.953* *0.958*	*1.624* *1.885*	*1.951* *1.816*	*0.844* *0.908*	*1.501* *1.825*	*1.744* *1.781*	*0.852* *0.875*	*1.530* *1.674*	*1.861* *1.987*
N	**InC** *InE*	**487** **467**	**483** **468**	**481** **465**	**410** **392**	**410** **388**	**407** **390**	**411** **393**	**409** **393**	**412** **389**
df	**InC** *InE*	*952* *948*	*949* *920*	*944* *942*	*800* *791*	*796* *742*	*795* *794*	*802* *801*	*800* *785*	*799* *789*
t	**InC** *InE*	**-0.874** **-0.874**	**-1.193** **-1.190**	**1.969** **1.972**	**-1.740** **-1.738**	**-2.550** **-2.535**	**1.846** **1.846**	**0.284** **0.284**	**2.299** **2.294**	**0.023** **0.023**
F		*0.735*	*12.341*	*3.647*	*0.555*	*17.638*	*0.022*	*0.000*	*7.300*	*1.352*
p		***0.391***	***0.000****	***0.056***	***0.456***	***0.000****	***0.882***	***0.984***	***0.007****	***0.245***
d		*0.029*	*0.314*	*1.491*‡	*0.213*	*0.333*	*1.569*‡	*0.488*†	*0.559*†	*2.041*‡

Note: **n –** number of participants; $\bar{x}$ **–** mean; **s –** standard deviation; **df –** degrees of freedom; **N –** number of measurements; **t** – testing criterion; **F –** testing criterion for F-test; **p –** p value of unpaired T-test; ***** – statistical

significance on the level of $p<0,05$; **d –** effect size *(0.2 – small; 0.5† – medium; 0.8‡ – large)*; **InE –** input data experimental group; **InC –** input data control group; **Int. –** intensity (scale 1↔4); **Dir.** – direction (scale 3↔-3); **Freq.** – frequency (scale 1↔7)

Cognitive anxiety – data revealed higher level of cognitive anxiety intensity in experimental group (0.58 %) and higher frequency of cognitive anxiety in control group (9.71 %). Difference in positive perception of cognitive intrusions was 24.19 % in favour of control group. Statistical analysis showed significance of difference in direction of cognitive anxiety (p = 0.000). Large effect size was found in dimension of cognitive anxiety frequency (d = 1.491).

Somatic anxiety – players of experimental group experienced higher intensity of somatic anxiety (5 %) which is on the contrary to frequency of somatic anxiety, which was higher in control group (6.19 %). Players of control group perceived more positively intrusions of somatic anxiety 76.32 %. We also found significant difference of somatic anxiety direction between control and experimental group (p = 0.000).

Self-esteem – differences in input average values indicate higher self-esteem intensity of players in control group (0.64 %) and higher frequency of self-esteem in experimental group (2.49 %). Players of experimental group perceived self-esteem intrusions more positively (19.30 %) than players of control group. Statistical analysis showed significant difference self-esteem direction (p = 0.007). We also found large effect size of monitored factor in self-esteem frequency (d = 2.041) and medium one in intensity (d = 0.488) and direction (d = 0.559) of self-esteem. Differences in output values between control and experimental group confirm the following findings in Table 6.

Table 6

Statistical comparison of output values of pre-competitive anxiety and self-esteem level between experimental and control group

OuC (n=76) OuE (n=74)		**Cognitive anxiety**			**Somatic anxiety**			**Self-esteem**		
		Int.	*Dir.*	*Freq.*	*Int.*	*Dir.*	*Freq.*	*Int.*	*Dir.*	*Freq.*
$\bar{x}$	**OuC** OuE	**1.79** **1.56**	**-0.51** **-0.54**	**2.73** **2.45**	**2.00** **1.88**	**-0.16** **-0.22**	**3.15** **2.85**	**3.07** **3.24**	**-0.78** **-0.92**	**4.34** **4.67**
s	**OuC** OuE	*0.950* *0.756*	*1.556* *1.531*	*1.826* *1.713*	*0.818* *0.850*	*1.456* *1.540*	*1.812* *1.637*	*0.843* *0.823*	*1.429* *1.568*	*1.900* *1.883*
N	**OuC** OuE	**453** **436**	**446** **425**	**442** **426**	**373** **363**	**375** **355**	**371** **353**	**371** **368**	**371** **360**	**373** **361**
df	**OuC** OuE	*887* *862*	*869* *868*	*866* *866*	*734* *731*	*728* *718*	*722* *720*	*737* *737*	*729* *718*	*732* *732*
t	**OuC** OuE	**3.660** **3.674**	**0.043** **0.043**	**1.817** **1.819**	**2.022** **2.021**	**0.362** **0.361**	**2.512** **2.519**	**-2.795** **-2.795**	**1.295** **1.293**	**-2.593** **-2.593**
F		*21.576*	*0.271*	*1.394*	*6.288*	*3.723*	*4.371*	*0.629*	*4.186*	*0.810*
p		***0.000****	***0.603***	***0.238***	***0.012****	***0.054***	***0.037****	***0.428***	***0.041****	***0.368***
d		*0.123*	*0.186*	*1.348‡*	*0.304*	*0.090*	*1.598‡*	*0.385*	*0.127*	*1.868‡*

Note: **n –** number of participants; $\bar{x}$ **–** mean; **s –** standard deviation; **df –** degrees of freedom; **N –** number of measurements; **t** – testing criterion; **F –** testing criterion for F-test; **p –** p value of unpaired T-test; ***** – statistical significance on the level of $p<0,05$; **d –** effect size *(0.2 – small; 0.5† – medium; 0.8‡ – large)*; **OuE –** output data experimental group; **OuC –** output data control group; **Int. –** intensity (scale 1↔4); **Dir.** – direction (scale 3↔-3); **Freq.** – frequency (scale 1↔7)

Cognitive anxiety – after three months' experiment period players of control group experienced higher intensity (12.85 %) and frequency of cognitive anxiety (10.26 %). Players of experimental group perceived direction of cognitive intrusions more positively 5.56 % than players in control group. Significance of difference was found in intensity of cognitive anxiety (p = 0.000). Large effect size of monitored factor was found in frequency of cognitive anxiety (d = 1.348).

Somatic anxiety – also in this dimension, players of control group experienced higher intensity (6 %) and frequency of somatic anxiety (9.52 %). Players of experimental group perceived direction of somatic anxiety intrusions more positively (27.27 %) than players of control group. Statistical analysis showed significant difference in intensity (p = 0.012) and frequency (p = 0.037) of somatic anxiety. Large effect size of monitored factor was found in frequency of somatic anxiety (d = 1.598).

Self-esteem – on the contrary, players of control group experienced higher intensity (5.25 %) and frequency (7.07 %) of self-esteem. Players of experimental group perceived direction of self-esteem intrusions more positively than players of control group (15.22 %). Significant difference was found in self-esteem direction (p = 0.041). Large effect size of monitored factor was found in self-esteem frequency (d = 1.868).

Discussion

Considering the results, it is important to point to the fact that within input measures we found heterogeneity in all dimensions` level of cognitive and somatic anxiety as well as players 'self-esteem of control and experimental group. On the other hand, regarding the results we can state considerably high level of players` self-esteem as well as low level of somatic and cognitive anxiety that players felt before matches in both input and output measures. High frequency of positive feedback, encouragement and support could be reflected on positive results in the level of players` pre-competitive anxiety; however, this hypothesis should be statistically proved in further research studies. Output data after three months' period of intervention showed decreased intensity and frequency level of cognitive and somatic anxiety as well as increased intensity and frequency level of players' self-esteem in experimental group. Similarly, the research study of Ceccchini et al. (2001) found decreased level of cognitive and somatic anxiety that corresponds with our results. Smith et al. (2007)

research results of MAC intervention also point on higher values of cognitive and somatic anxiety level in control group. Moreover, players of experimental groups significantly decreased the level of anxiety intensity and frequency. Authors explained that changes in coaches` communication determined by intervention program had positive influence on players of experimental group. Smith et al. (1995) in their study point on intergroup differences in anxiety where players of experimental group showed significantly lower level of anxiety. Further study of Smith et al. (2007) showed significant changes where players of experimental group significantly decreased the level of anxiety comparing to control group. Even thought we did not find significant changes in all monitored dimensions and components of anxiety and self-esteem, results showed considerable improvement in all above-mentioned areas. We can presuppose that positive influence of intervention could be within longer period adequate for more significant influence of monitored variables. Research studies dealing with the issue of educational program influence on the level of self-esteem show heterogeneous results. Gonzalez et al. (2004) revealed that players who perceived motivational climate in team as positive showed higher level of self-esteem. Studies of Barnett et al. (1992); Coatsworth & Conroy (2006); Smoll et al. (1993) did not show significant influence of MAC program on the level of self-esteem. Moreover, study results of Smoll et al. (1993) did not indicate statistical significance and results also did not point to any differences between research groups. However, further research studies of above mentioned authors showed increase of players` self-esteem in experimental group that corresponds with our results where we found significant increase of self-esteem intensity. Coatsworth & Conroy (2006) did not find any significant changes within experimental or control group; however, other studies showed that participants of experimental group significantly increased the level of self-esteem comparing to control group that is congruent with our results. Smoll et al. (1993) showed in their studies greater effect of intervention on young players who indicated low level of self-esteem. Direction of pre-competitive instructions was perceived by players of experimental group more positively within cognitive and somatic anxiety as well as self-esteem. Vosloo (2007) confirmed in research study that players in whom was found high perception of positive motivational climate perceived the intrusions of cognitive anxiety as supportive to performance comparing to players who perceived motivational climate in which only the performance is important. Even though the results showed on significant improvement only in two (significant decrease of cognitive anxiety intensity and significant increase of self-esteem intensity) out of nine monitored components of anxiety and self-esteem we can find protective influence of intervention (Smith et al. 2007). It is clearly seen

in greater differences *(in four cases statistically significant)* between control and experimental group in output measures. Comparing with other research studies like Smith et al. (1995) and Smith et al. (2007), we did not find significant increase of individual anxiety components` level in players of control group. Educational program MAC determined significantly some of individual components of anxiety even though literature search showed heterogeneity of results in the self-esteem component. However, authors state the same and confirm it with their results that the development of interpersonal effectivity, especially communicative one, supports specific cognitive aspects of players.

Conclusions

The study findings have shown that players of experimental group decreased level of intensity and frequency of cognitive and somatic anxiety and increased level of self-esteem intensity and frequency during intervention period. On the other hand, players of control group experienced after intervention period increased intensity and frequency of cognitive and somatic anxiety and decreased intensity and frequency of self-esteem. Players of control group perceived pre-competitive intrusions more negatively in cognitive, somatic anxiety and self-esteem. After three months' experiment period players of experimental group experienced lower intensity and frequency of cognitive anxiety as well as lower intensity and frequency of somatic anxiety than players in control group. Players of experimental group perceived direction of self-esteem intrusions as well as intrusions of cognitive and somatic anxiety more positively than players of control group after intervention period.

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