Complementarity

The 82 raw data themes combined into two groups: perceived complementary roles and tasks followed by coach and athlete as inspirational tools. The generally expected pattern of interpersonal behaviour on track (during training) was described simply by athletes 'I execute and [coach] instructs' and by coaches 'I instruct and expect [athlete] to deliver'. In all cases, with the exception of one dyad, coaches not only appear to be the *leaders* of the sport relationship but also the 'inspirational directors'. This high order-theme appeared to be a very powerful component for the relationship itself. For example one athlete said *'[coach] gives me courage that I can accomplish the unthinkable... his way of asking and supporting with such a confidence, alters what I thought unachievable to achievable'.*

DISCUSSION AND CONCLUSIONS

Previous research with non-sporting populations has indicated that closeness, co-orientation and complementarity are valid constructs in their own right when the object of research is two-person relationships. In this study, these constructs were study conjointly in an effort to give a more intricate relational picture, which is expressed, simultaneously on three different levels of the relationship-members' behaviours, cognitions and emotions. This study has supported the prevalence of the constructs of closeness, co-orientation and complementarity in describing and explaining the nature of coach-athlete relationships. The constructs under investigation appear to successfully locate the level of relationship and as such have provided valuable information about the coach and athlete's relationship regarding their current state of affairs. More research is currently underway to further endorse the conceptual model.

REFERENCES

Bryan, J., & Gratty, D. (1982?). Psychological Preparation and Athletic Excellence. Mouvement Publication Incorporation.

Kelley, H.H., Berscheid, E., Christensen, A., Harvey, J.H., Huston, T.L., Levinger, G., McClintock, E., Peplau, L.A., & Peterson, D.R. (1983). Close relationships. N.Y: Freeman.

Kiesler, D.J. (1997). Contemporary interpersonal theory research and personality, psychopathology, and psychotherapy. New York: Wiley.

Mikulincer, M. (1998). Attachment Working Models and Sense of Trust: An Exploration of Interaction and Affect Regulation. Journal of Personality and Social Psychology, 74, 1209-1224.

Newcomb, T.M. (1953). An approach to the study of communicative acts. Psychological Review, 60, 393-404.

Weber, R.P. (1990). Basic Content Analysis. (2nd Ed.). London: Sage Publications.

PSYCHOLOGICAL ASSESSMENT PROCEDURES FOR YOUNG ATHLETES PART 1: DEVELOPMENT OF INSTRUMENTS

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KEY WORDS: Psychological assessment, young athletes, trait anxiety, competitive orientation, competitive worries

INTRODUCTION

A multi-factorial approach is needed to explain the interaction between sport performance and psychological states as well as to design and evaluate psychological intervention strategies. Taking into consideration the previous research work which has been done in the area of youth sport (e.g., Duda & Nicholls, 1992; Gould, Horn, & Spearman, 1983), and the need of qualitative improvement in youth sport programs, psycho-diagnosis should be a part of an integrated scientific program for developmental ages.

The purpose of this study was to examine the psychometric characteristics of three questionnaires adapted and used in a youth sport environment. Specifically, the factorial validity and the internal consistency of the instruments were examined.

METHOD AND PROCEDURE

Phase 1. - Preliminary Instruments Planning and Exploratory Work

For the creation of the Competitive Orientation Questionnaire for Children {COQC) an initial item pool (45 items) was generated based upon: (a) the Duda and Nicholls's (1992) questionnaire (Task & Ego Orientation Sport Questionnaire), and (b) the Gill and Deeter's (1988) scale (Sport Orientation Questionnaire), as these esere adapted to the Greek population by Karteroliotis (1995), and Karteroliotis and Stavrou (1996), respectively. This initial form was administered to 451 subjects (9-12 years, engaged in various sport activities). Based on the results of factor analysis and interval consistency coefficients, 13 items were excluded, so the final form consisted of 32 items. In order to assess general trait anxiety, the investigators selected 13 items of the Trait Anxiety Inventory for Children (TAIC; Spielberger, Edwards, Lushere, Montuori, & Platzek, 1973); as fit was adapted to the Greek population (Psychoudaki, Zervas, & Antoniou-Karaolidou, 1995). The selection was based on previous analysis of the factor structure of the TAIC. To assess the competitive worries in children, two scales (10 items) of the Competitive Worries Inventory (CWI; Kakkos & Zervas, 1993) were utilized. In order to adapt the items to the children's "language", five experts reviewed the questionnaires.

Phase 2. - Instruments Development (Assessment of Validity and Interval Consistency)

Subjects. The subjects of this study were 951 young athletes (613 boys and 338 girls, 573 engaged in team sports and 378 in individual sports), ranging in age from 9 to 12 years (M=11.25, SD=1.76). The subjects were involved in different sports (412 in volleyball, 86 in cycling, 35 in skiing, 55 in shooting, 23 in archery, 63 in table tennis, 23 in rowing, 29 in swimming, 161 in hand-ball, 23 in the triathlon, 14 in rhythmic gymnastics, and 27 in boxing). The subjects had taken part in the Greek National Support System of Sport Programs for Developmental Ages.

Questionnaires. In order to estimate the competitive orientation of young athletes, the COSC was used. COSC consists of five sub-scales: task orientation (7 items), ego orientation (6 items), win (6 items), goals (6 items), and competitiveness (7 items). The subjects responded on a 5-point Likert scale. The TAIC-s (short-form) was utilized to measure cognitive anxiety (8 items), and emotional anxiety (5 items). The athletes responded on a 3-point Likert scale.

The CWIC was used to measure performance and social evaluation worries. The CWIC comprised 10 items, 5 for each subscale, which had a 4-point Likert response format.

Procedure. The procedure of this study included the following phases: (a) background and demographic information, and (b) the completion of the questionnaires in non-competitive situations.

RESULTS

Principal components analyses for CWIC and TAIC-s extracted two factors which explained, respectively, 44.2% and 35.8% of the total variance. In COSC, the five factors, which were extracted in the principal component analysis, explained 42.8% of the total variance. All items of the three questionnaires met the criteria about eigenvalues (greater than 1) and factor loadings values (greater than .40). The summarized results of the factor analytic procedures and internal consistency are presented in Table 1. The intercorrelations among COSC, TAIC-s, and CWIC subscales are presented in Table 2.

TABLE 1. Summarized Results of the Factor Analytic and Internal Consistency Analyses Procedures

	Competitive Worries Inventory for Children		**Trait Anxiety Inventory for Children**	
	Factor 1	Factor 2	Factor 1	Factor 2
	Performance Worries	Social Evaluation Worries	Emotional Anxiety	Cognitive Anxiety
Number of Items	5(5)	5 (5)	5 (5)	8 (8)
Loadings	>.54	>.46	>.62	>.41
Eigenvalues	3.25	1.17	3.29	1.35
Expl. Variance	32.5%	11.7%	25.4%	10.4%
Communalities	.34 - .59	.35 - .53	.41 - .49	.26 - .38
Inter-item Correlations	.30 (.20-.38)	.28 (.22-.36)	.32 (.25-.39)	.18 (.08-.35)
Item-total Correlations	.44 (.39-.53)	.42 (.36-.46)	.45 (.42-.49)	.34 (.31-.37)
Cronbach *a*	.68	.66	.70	.64

Competitive Orientation Scale for Children	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
	Task Orientation	Ego Orientation	Win	Goals	Competitiveness
Number of Items	8 (7)	6 (6)	6 (6)	6 (6)	6 (7)
Loadings	>.47	>.49	>.59	>.40	>.38
Eigenvalues	5.87	3.47	1.57	1.50	1.29
Expl. Variance	18.3%	10.9%	4.9%	4.7%	4.0%
Communalities	.29 - .46	.29 - .56	.45 - .56	.30 - .53	.28 - .44
Inter-item Correlations	.29 (.19-.40)	.34 (.19-.55)	.35 (.25-.51)	.28 (.17-.43)	.19 (.02-.43)
Item-total Correlations	.45 (.39-.51)	.50 (.37-.56)	.51 (.44-.55)	.43 (.32-.51)	.34 (.25-.42)
Cronbach α	.74	.76	.77	.70	.62

TABLE 2. Intercorrelation among Questionnaires' Subscales

	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Cognitive anxiety (1)	.41**	-.10	.00	.08	.00	-.07	.39**	.47**
Emotional anxiety (2)		-.13	.08	.10*	.00	-.02	.19**	.27**
Task orientation (3)			.01	.10*	.42**	.40**	.02	-.07
Ego orientation (4)				.48**	.20**	.30**	.05	.05
Win (5)					.32**	.38**	.11*	.16**
Goal (6)						.44**	.06	.06
Competitiveness (7)							-.02	-.05
Performance worries (8)								.50**
Social evaluation worries (9)								1.00

** $p<.001$ * $p<.01$

DISCUSSION AND CONCLUSIONS

The purpose of this study was to develop valid and reliable instruments in sport environment in order to assess the multi-factorial emotional and cognitive characteristics of young athletes. The results indicated that all the instruments meet the psychometric criteria of validity and reliability. Moreover, the results of the present study support the hypothesis that we can simultaneously measure not only ego and task orientation, but also win and goal orientation as well as competitiveness. Specifically, task orientation and goal, as well as ego orientation and win, showed moderate relationships, indicating that they are not identical concepts for young athletes. The results also showed that: (a) the competitive orientation is not related to competitive worries and general anxiety, (b) there exist moderately significant relations between COQC subscales, and (c) there are moderately significant relations between CWIC and TAIC subscales. It is suggested that the study be replaced in other sport situations in order to build upon, modify, and extend more adequately the findings of this study.

REFERENCES

Duda, J.L., & Nicholls, J.G. (1992). Dimensions of achievement motivation in schoolwork and sport. **Journal of Educational Psychology, 84**, 290-299.

Gill, D.L., & Deeter, T.E. (1988). Development of Sport Orientation Questionnaire. **Research Quarterly for Exercise and Sport, 59**, 191-202.

Gould, D., Horn, T., & Speerman, J. (1983). Competitive anxiety in junior elite wrestlers. **Journal of Sport Psychology, 5**, 58-71.

Kakkos, V. & Zervas, Y. (1993). Competitive worries and self-confidence of the precompetitive cognitive emotional state. **Proceedings of the 8th International Congress of Sport Psychology**, (pp. 855-859). Lisbon, Portugal.

Karteroliotis, K. (1995). The Greek version of Sport Orientation Questionnaire: A confirmatory factor analysis. **Abstracts of IV European Congress of Psychology**, (p. 680). Athens, Greece.

Karteroliotis, K., & Stavrou, N. (1996). Validity and reliability of Task and Ego Orientation Sport Questionnaire. **Abstracts of 5th Hellenic Congress of Psychological Research** (pp. 69-70). Patra, Greece.

Psychoudaki, M., Zervas Y., & Antoniou - Karaolidou M. (1995). Validity and reliability of the State-Trait Anxiety Inventory for children. **Abstracts of IV European Congress of Psychology**, (p. 678). Athens, Greece.

Spielberger, C.D., Edwards, C.D., Lushene, R.E., Montuori, J., & Platzek, D. (1973). **Preliminary manual for the State-Trait Anxiety Inventory for Children**. Palo Alto, Ca: Consulting Psychologist Press, Inc.

HEALTH-RELATED ATTITUDES, INTENTIONS AND BEHAVIORS OF GREEK UNIVERSITY STUDENTS

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INTRODUCTION

Research has established that culture and ethnicity are important determinants of health-related behaviors (Gottlieb & Green, 1988). Today there is no research in Greece examining the relationship of regular exercise with other health-related behaviors such as use of contraception, abstinence from smoking, drug use and doping in sport. The present study examined Greek University students' attitudes, intentions and behaviors towards regular exercise, smoking, use of chassis, LSD and ecstasies, no use of condom in the first sexual intercourse with another person and doping in sport.

METHOD

Participants

Five hundred and two students (n = 244 males and n = 258 females) responded to the questionnaires described below. Their age was 21.2 (SD = 2.07). Most of them were students in the universities of North Greece (Democritus University of Thrace and Aristotle University of Thessaloniki). Three hundred twenty eight students were involved in departments of physical education and sport science, one hundred one in departments of law and the rest of them in other faculties. One hundred twenty seven students described themselves as active athletes, 285 said that in the last week they exercised at least once and 199 described themselves as regular smokers (n = 14,6 cigarettes per day, SD = 10.6).

Instruments

Students' attitudes and intentions were examined with respect to the following behaviors: (1) smoking during the next week (at least five cigarettes per day), (2) in the first day of the acquaintance with another person, making love without using condom, (3) using chassis, LSD or ecstasies during the next week, (4) suggesting doping to an athlete in order to win an Olympic medal (hypothetical scenario), (5) exercising three times during the Christmas week.

Attitudes towards health-related behaviors. For each of the five behaviors the participants responded on six 7-point semantic differential scales. For example, following the stem "for me, smoking during the next week is" responses were indicated on six evaluative scales: (1) good = 7, bad = 1, (2) clever = 7, foolish = 1, (3) healthy = 7, unhealthy =1, (4) safe = 7, unsafe = 1, (5) attractive = 7, forbidding = 1, (6) pleasant = 7, unpleasant, (7) reassuring = 7, alarming = 1.

Intentions towards health-related behaviors. For each of the five behaviors the participants responded on three questions implying intention, determination and effort to behave accordingly. For example, intentions towards suggesting to the athlete the use of doping in order to win an Olympic medal were assessed using the questions "I intent to suggest to the athlete the use of doping in order to win an Olympic medal" (likely = 7, unlikely = 1), "I am determined to suggest to the athlete the use of doping in order to win an Olympic medal" (yes = 7, no = 1), and "I will try to persuade the athlete to use doping in order to win an Olympic medal" (yes = 7, no = 1).

Behaviors. Students responded to a yes-no scale for the behaviors: (1) being a regular smoker, (2) whether the person had sexual intercourse in the first day of the acquaintance, (3) whether the person had tried chassis, LSD or ecstasies in the past, (4) whether the person had suggested to another person the use of doping in the past, (5) whether the person did exercise the last week, (6) being presently an athlete. Finally, the students reported how many cigarettes they smoke per day, how many times they did exercise the previous week and how many times they had sexual intercourse in the first day of an acquaintance.

RESULTS

The internal consistency of the scales assessing attitudes and intentions was satisfactory (Table 1). The correlation analysis revealed a positive intercorrelation pattern among the attitudes towards smoking, no use of condom, doping and use of drugs. Attitudes towards exercise corresponded negatively to the four attitudes towards unhealthy behaviors. Moreover, a positive intercorrelation pattern emerged among the four intentions towards unhealthy behaviors. Intention towards regular exercise was negatively related to intentions towards smoking.

TABLE 1. Reliability α and Correlation Matrix

		Correlation matrix										α
	Attitudes towards	1	2	3	4	5	6	7	8	9	10	
1	Smoking	1.0	.40	.31	.46	-.34	.61	.33	.25	.37	-.28	.87
2	No use of condom	.40	1.0	.23	.42	-.22	.08	.59	.15	.36	-.10	.81
3	Doping	.31	.23	1.0	.45	-.41	.24	.37	.75	.35	-.11	.85
4	Chassis or ecstasies	.47	.42	.45	1.0	-.46	.22	.36	.36	.78	-.15	.88
5	Exercise	-.34	-.22	-.41	-.46	1.0	-.21	-.30	-.37	-.37	.42	.86
	Intentions towards											
6	Smoking	.61	.08	.24	.22	-.21	1.0	.24	.29	.15	-.18	.92
7	No use of condom	.33	.59	.37	.36	-.30	.24	1.0	.41	.33	-.01	.83
8	Doping	.25	.15	.75	.36	-.37	.29	.41	1.0	.30	-.03	.88
9	Chassis & ecstasies	.37	.36	.35	.79	-.37	.15	.33	.30	1.0	-.14	.80
10	Exercise	-.28	-.10	-.11	-.15	.42	-.18	-.01	-.03	-.14	1.0	.85

Note: Correlation coefficients larger than .13 are significant at the .01 level.

A series of multivariate analyses of variance (MANOVAs) were conducted using as independent variables the behaviors which were assessed by the yes-no self-reports. Dependent variables were all the attitudes, all the intentions, the number of cigarettes per day, the number of times having sexual intercourse the first day of an acquaintance and the number of times doing exercise in the previous week. The summary of the results appears in Table 2. Those who were doing regular exercise had more positive attitudes and intentions towards exercise, more negative attitudes and intentions towards smoking and they smoked less than the non-exercisers. The athletes had more positive attitudes and intentions towards exercise, more negative attitudes and intentions towards smoking and they smoked less than the non-athletes. The smokers had more positive attitudes and intentions towards smoking and drug use, more positive attitudes towards doping, more positive attitudes towards no use of condom and more negative intentions towards exercise than the non-smokers. Those who had tried chassis or LSD or ecstasies in the past had more positive attitudes and intentions towards the use of drugs, smoking and doping, more positive intentions towards the no use of condom and more negative attitudes towards exercise than those who had never tried chassis or LSD or ecstasies. Moreover, those who had tried chassis or LSD or ecstasies in the past smoked

more and reported more instances of sexual intercourse in the first day of the acquaintance than those who had never tried chassis, LSD or ecstasies. The students who would suggest the use of doping had more positive attitudes towards all the health risks, more negative attitudes and intentions towards exercise and more positive intentions towards doping and drug use. The students who had a sexual intercourse in the first day of the acquaintance had more positive attitudes and intentions towards all the health risks, more negative attitudes towards exercise and were more heavy smokers than the students who reported no sexual intercourse in the first day of the acquaintance.

TABLE 2. F-Tests after MANOVAs

	Independent variables - Behaviors					
Dependent variables	regular exercise	being an athlete	smoking	use chassis	suggest doping	sexual behavior
	F	F	F	F	F	F
Attitudes towards						
Smoking	19.7**	16.6**	219.9**	27.5**	9.8*	21.1**
No use of condom	.4	0.0	5.4	3.2	11.7**	18.1**
Doping	1.0	0.1	7.4*	17.8**	13.9**	10.9**
Chassis or ecstasies	2.8	4.1	22.9**	77.2**	12.6**	15.1**
Exercise	27.7**	15.7**	4.5	12.0**	21.8**	8.6*
Intentions towards						
Smoking	20.0**	15.6**	544.1**	43.0**	5.2	26.2**
No use of condom	.6	.9	9.2*	14.8**	5.9	36.5**
Doping	.1	0.1	6.0	8.7*	15.1**	17.5**
Chassis & ecstasies	1.7	1.1	12.3**	70.1**	23.1**	15.6**
Exercise	74.2**	40.2**	11.1**	5.1	14.0**	2.3
Behaviors						
Smoking	13.6**	9.1*	-	91.8**	4.0	27.9**
Sexual behavior	.2	.3	2.5	52.3**	4.5	-
Exercise	-	92.2**	2.0	.01	0.4	.00

Note: **: p<.001, *:p<.01

DISCUSSION

The results imply that for the Greek University students the attitudes towards health-related behaviors are strongly linked to each other. This probably affects their health-related behaviors. Being an athlete and doing regular exercise was negatively related to smoking. Behaviors such as use of chassis, ecstasies or LSD and having sexual intercourse the first day of the acquaintance are linked with many more health risks. Interventions aiming to affect students' attitudes towards specific health-related behaviors such as doing regular exercise can contribute to the reduction of several other health risks.

REFERENCES

Gottlieb, N.H., & Green, L.W., (1988). Ethnicity and lifestyle health risk: Some possible mechanisms. American Journal of Health Promotion, 2, 37-45.

PREDICTING MORAL FUNCTIONING IN COLLEGE ATHLETES: THE CONTRIBUTION OF GOAL ORIENTATIONS, PERCEIVED MOTIVATIONAL CLIMATE, AND TEAM NORMS

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KEY WORDS: goal orientations, motivational climate, team norms

INTRODUCTION

Researchers have recently started to examine moral issues in sport from the perspective of achievement goal theory (Nicholls, 1989). The theory suggests that two achievement goals operate in sport, a task goal perspective (the goal is to demonstrate competence by mastering a task) and an ego goal perspective (the goal is to demonstrate competence by outperforming others). Whether one adopts a task or ego goal perspective depends on both dispositional (i.e., goal orientation) and situational (i.e., perceived motivational climate) factors. Although research has shown that goal orientations are differentially linked to sportsmanship attitudes and perceived legitimacy of aggressive acts (Duda, Olson, & Templin, 1991), the role of perceived motivational climate on moral issues in sport has received minimal attention.

Another variable presumed to have important implications for morality in sport is the moral atmosphere of the team (Shields & Bredemeier, 1995). Moral atmosphere refers to the prevailing team norms, what the group as a whole considers acceptable behavior. Higgins, Powers and Kohlberg (1984) have stated that moral decisions are almost always made in a group context, and this context influences decision-making. Further, recent research (Shields & Bredemeier, 1996) has shown that the predominant team norms significantly predict likelihood to aggress in girls' soccer.

One of the most inclusive models of morality is Rest's (1984) model, according to which four processes are implicated in each moral action, and various factors influence each process. These processes interact with each other, and are interpreting the situation, forming a judgment about what is the right thing to do, deciding what one actually intends to do, and implementing what one intends to do. The individual's motives as well as the predominant team norms are among the factors presumed to influence these processes (Shields & Bredemeier, 1995).

In sum, the goals individuals try to accomplish as well as the collectively shared definition of the situation and what ought to be done about it, have particular relevance for morality. This study examined the utility of goal orientations, perceived motivational climate, and team norms in predicting moral functioning in college athletes. Based on Rest's (1984) model, moral judgment, intention, and behavior were investigated as indices of moral functioning.

METHOD

Participants

Male (n=56) and female (n=143) college basketball players participated in this study. Their age ranged from 17 to 25 years old (M = 19.58, SD = 1.26). At the time of data collection, these athletes had played for an average of 20.01 (SD = 11.06) months in their current team.

Measures

Athletes completed measures assessing goal orientation, perceived motivational climate, moral functioning, and team norms. The Perception of Success Questionnaire (Roberts & Balague, 1991) was used to assess task and ego goal orientation, while the Perceived Motivational Climate in Sport Questionnaire (Seifriz, Duda, & Chi, 1992) was used to measure athletes' perceptions of the mastery and performance motivational climate of their team. Four scenarios describing inappropriate behaviors likely to occur during a basketball game were used to assess athletes' moral judgment, intention, and behavior in sport (see Stuart & Ebbeck, 1995). The behaviors were pushing an opposing player to intimidate him or her, faking an injury, and risking injuring an opposing player to prevent a basket. Responses were averaged across the four scenarios to provide a total score. Finally, the prevalent team norms were measured using two items adapted from previous research (Shields, Bredemeier, Gardner, & Bostrom, 1995; Stephens & Bredemeier, 1996). Specifically, athletes were asked (a) whether the coach would encourage this behavior if it was necessary for the team to win, and (b) how many of their teammates would engage in the described behavior if it was necessary for the team to win. All instruments demonstrated satisfactory validity and reliability.

RESULTS

Multiple regression analysis was used to determine significant predictors of the moral functioning indices. The two variables reflecting team norms emerged as the strongest predictors of moral judgment, followed by ego orientation (beta = .271, t = 3.87, $p<.001$, for coach; beta = .370, t = 5.26, $p<.001$, for teammates; beta =.203, t = 3.31, $p<.01$, for ego orientation). Perceptions that the coach would encourage the described behaviors and that a large number of teammates would engage in the behaviors, if it was necessary for the team to win, accounted for five and nice percent, respectively, of the unique variance in moral judgment. Ego orientation accounted for three percent of the unique variance in moral judgment. The total R square was .397.

Similar findings were revealed with regard to the intention to engage in the described behaviors. Again, team norms emerged as the strongest predictors of intention, followed by ego orientation (beta = .280, t = 4.09, $p<.001$, for coach; beta = .390, t = 5.66, $p<.001$, for teammates; beta =.197, t = 3.28, $p<.01$, for ego orientation). Perceptions that the coach would encourage the described behaviors and that teammates would engage in the behaviors, if it was necessary for the team to win, accounted for five and ten percent, respectively, of the unique variance in intention. Ego orientation accounted for three percent of the unique variance in intention. The total R square was .422.

In the case of reported behavior, team norms were the only significant predictors (beta = .229, t = 2.82, $p<.01$, for coach; beta = .235, t = 2.88, $p<.01$, for teammates). The total R square was .188. Interestingly, perceived motivational climate did not predict any of the indices of moral functioning.

DISCUSSION AND CONCLUSIONS

In all three indices of moral functioning (i.e., moral judgment, intention, and reported behavior), team norms emerged as major predictors. These findings highlight the importance of the immediate group context in athletes' moral functioning, and are consistent with research indicating that the moral atmosphere of the team significantly predicts self-described likelihood

to aggress against an opponent in girls' soccer (Stephens & Bredemeier, 1996). Further, the findings support contentions by Kohlberg and his colleagues (Higgins et al., 1984) that the social context has a profound influence on moral decision-making.

Ego orientation also emerged as a significant predictor of judgment and intention. In accord with previous work (e.g., Duda et al., 1991) the present findings show that as a function of their goal orientation, athletes have different conceptions regarding what constitutes appropriate behavior in the sport context. Also, our results suggest that the excessive focus on the self and the preoccupation with winning that characterize ego-oriented athletes may not be compatible with accomplishing progress in the moral arena.

Contrary to our expectation, perceived motivational climate did not predict moral functioning indices. It appears that whether the coach emphasizes interpersonal competition or personal skill development does not impact morality in a positive or negative manner (see also Guivernau & Duda, 1998).

REFERENCES

Duda, J. L., Olson, L. K., & Templin, T. J. (1991). The relationship of task and ego orientation to sportsmanship attitudes and the perceived legitimacy of injurious acts. **Research Quarterly for Exercise and Sport, 62**, 79-87.

Guivernau, M., & Duda, J.L. (1998). Integrating concepts of motivation and morality. The contribution of norms regarding aggressive and rule-violating behaviors. Goal orientation, and the perceived motivational climate to the prediction of athletic aggression. **Journal of Sport and Exercise Psychology, Supplement, S13.**

Higgins, A., Power, C., & Kohlberg, L. (1984). The relationships of moral judgment to judgments of responsibility. In W. Kurtinez & J. Gewirtz (Eds.), **Morality, moral behavior, and moral functioning** (pp. 74-106). New York: Wiley.

Nicholls, J. G. (1989). **The competitive ethos and democratic education**. Cambridge: Harvard University Press.

Rest, J. R. (1984). The major components of morality. In W. Kurtines & J. Gewirtz (Eds.), **Morality, moral behavior, and moral functioning** (pp. 356-429). New York: Wiley.

Roberts, G. C., & Balague, G. (1991, September). **The development and validation of the perception of success questionnaire**. Paper presented in the FEPSAC Congress, Cologne, Germany.

Seifriz, J., Duda, J.L, & Chi, L. (1992). The relationship of perceived motivational climate to intrinsic motivation and beliefs about success in basketball. **Journal of Sport and Exercise Psychology, 14**, 375-391.

Shields, D. L., & Bredemeier, B. J. L. (1995). **Character development and physical activity**. Human Kinetics.

Shields, D.L., Bredemeier, B., Gardner, D., & Bostrom, A. (1995). Leadership, cohesion, and team norms regarding cheating and aggression. **Sociology of Sport Journal, 12**, 324-336.

Stephens, D. E., & Bredemeier, B. J. L. (1996). Moral atmosphere and judgments about aggression in girls' soccer: Relationships among moral and motivational variables. **Journal of Sport and Exercise Psychology, 18**, 158-173.

Stuart, M., & Ebbeck, V. (1995). The influence of perceived social approval on moral functioning in youth sport. **Pediatric Exercise Science, 7**, 270-280.

GERMAN ATHLETES' ATTITUDES TOWARD SEEKING SPORT PSYCHOLOGY CONSULTATION

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KEY WORDS

Sport psychology consultation, mental training, stigma tolerance toward sport psychology, confidence in sport psychology, personal openness, and cultural preference.

INTRODUCTION

Despite the growth in the number of sport psychology consultants, many athletes and coaches remain reluctant to utilize their services (Ravizza, 1988). This has prompted several researchers to assess college and elite athletes' attitudes toward psychological skills and the services being offered by sport psychology practitioners (see Martin, Wrisberg, Beitel, & Lounsbury, 1997). Martin and colleagues (1994, 1997) followed a line of reasoning based on social learning theories view of learning and investigated difference in attitudes about sport psychology as a function of demographic characteristics of the respondents. Their research indicated that gender influences attitudes about seeking counseling and sport psychology consulting (e.g., Martin et al., 1997). The findings related to gender indicate that women express more willingness to seek psychological help than do men. In addition to gender, Martin et al. (1997) speculated that the type of sport (i.e., physical contact vs. nonphysical contact) may influence whether an athlete seeks sport psychology assistance.

To date, only United States athletes' attitudes toward seeking sport psychology consultation have been measured objectively using the Attitudes Toward Seeking Sport Psychology Consultation Questionnaire (ATSSPCQ) and the revised version, Sport Psychology Attitudes - Revised form (SPA-R), developed by Martin et al. (1994, 1997, 1998). The purpose of the present study was to determine German athletes' attitudes toward seeking sport psychology services. Based on the previously mentioned literature, it was hypothesized that (a) there would be a significant difference between male and female athletes' attitudes toward seeking sport psychology consultation, (b) there would be a significant difference between athletes participating in physical contact sports as compared to those in nonphysical contact sports, and (c) there would be no significant Gender x Type of Sport interactions for athletes' attitudes toward seeking sport psychology consultation.

METHODS AND PROCEDURE

The SPA-R developed by Martin (1998) was translated into German (Martin, Kellmann, & Beckmann, 1998) and administered to sport participants residing in Germany. A total of 146 questionnaires were distributed to college athletes during team meetings. The sample of sport participants included 68 males and 78 females ranging from 15 to 40 years of age ($\underline{M}$=21.79). In addition, the sample consisted of 27 (19 males and 8 females) physical contact sport (e.g., basketball, soccer, judo, karate, and wrestling) participants and 119 (59 males and 60 females) non-physical contact sport (e.g., aerobics, golf, gymnastics, swimming, tennis, track and field, and volleyball) participants. Physical contact sports were considered those sports that involved

physical intimidation and physical contact as part of the strategies of the game whereas non-physical contact sports were considered those sports that physical intimidation and physical contact with another individual rarely if ever occurs during competition (Coakley, 1998).

RESULTS

Descriptive Statistics

Descriptive statistics for each subscale of the SPA-R (German version) by gender and type of sport are presented in Table 1.

Table 1. Means and Standard Deviations for the SPA-R by Gender and Type of Sport

	Non Physical				Physical			
	Male		Female		Male		Female	
	M	SD	M	SD	M	SD	M	SD
Stigma Tolerance	2.59	.96	2.50	.79	2.73	.91	2.05	.50
Confidence	4.46	.77	4.17	.92	4.22	.79	3.93	1.30
Personal Openness	4.68	.79	4.40	.88	4.42	.64	4.52	1.13
Cultural Preference	3.64	1.29	3.04	1.18	2.97	1.12	3.04	1.18

Reliability

Cronbach's coefficient alpha was calculated for the entire SPA-R and for each of the derived subscales in order to determine levels of internal consistency of the entire instrument and of the derived factors. The Cronbach's coefficient alpha for total item responses (i.e., 29) for the SPA-R was .70. Cronbach's coefficient alpha of .83, .80, .63, and .63 were obtained Stigma Tolerance, Confidence in Sport Psychology, Personal Openness, and Cultural Preference, respectively. These reliabilities compare favorably with the alpha of .6 recommended by Nunnally (1978) for scales to be used in basic research.

MANOVA

It was hypothesized that there would be a significant difference between male and female athletes' attitudes toward seeking sport psychology consultation. The results of the MANOVA indicated no significant main effect for gender, Wilks' Lambda=.95, $F(4, 133)=1.81$, $p=.131$. Therefore, the gender hypothesis was rejected.

In addition, it was hypothesized that there would be a significant difference between physical contact and nonphysical contact sport athletes' attitudes toward seeking sport

psychology consultation. The MANOVA revealed no significant main effect for type of sport, Wilks' Lambda=.97, F(4, 133)=.91, p=.459. Thus, the type of sport hypothesis was rejected.

Finally, it was hypothesized that there would be no significant interactions with respect to high school athletes' perceptions of psychological skills and their attitudes toward seeking sport psychology consultation. The MANOVA revealed a nonsignificant Gender x Type of Sport interaction, Wilks' Lambda=.97, F(4, 133)=1.09, p=.364. Therefore, this hypothesis was accepted.

DISCUSSION AND CONCLUSIONS

The findings of this investigation extend the work of Martin and colleagues (1994, 1997, 1998). In the current study, there was not a significant difference between male and female athletes' attitudes toward seeking sport psychology consultation. This did not support previous research assessing United States athletes' attitudes toward sport psychology (Martin et al., 1997). In addition, athletes competing in physical contact sports as compared to those participating in nonphysical contact sports were expected to have different attitudes toward sport psychology. In the present study no significant differences were found for type of sport. There are several possible explanations for the findings in the current study. For instance, many of the males and females included in the study had knowledge of the importance of psychological skills training and had participated in more than one sport and/or type of sport. Future research should investigate athletes' perceived importance of sport psychology, their sport experience (i.e., non-physical contact, physical contact, and a combination), and multi-cultural differences (e.g., United Sates versus Germany) to better understand athletes' perceptions and attitudes about seeking psychological assistance.

REFERENCES

Coakley, J.J. (1998). **Sport in society: Issues and controversies** (6th ed.). Boston, MA: Irwin McGraw-Hill.

Martin, S.B. (1998). **Sport Psychology Aattitudes-Revised form**. Unpublished test manual. Denton, TX: University of North Texas, Department of Kinesiology, Health Promotion, and Recreation.

Martin, S.B., Kellmann, M., & Beckmann, J. (1998). **Sport Psychology Attitudes-Revised form (German Version)**. Unpublished test measure. University of Potsdam, Potsdam, Germany.

Martin, S.B., Wrisberg, C.A., Beitel, P.A., & Lounsbury, J. (1997). NCAA Division I athletes' psychological skills and attitudes toward seeking sport psychology consultation: The development of an objective instrument. **The Sport Psychologist, 11**, 201-218.

Nunnally, J.C. (1978). **Psychometric theory**. (2nd ed.). New York: McGraw-Hill.

Ravizza, K. (1988). Gaining entry with athletic personnel for season-long consulting. **The Sport Psychologist, 2**, 243-254.

Wrisberg, C.A., & Martin, S.B. (October 5-9, 1994). **Attitudes of African-American and Caucasian athletes towards sport psychology consultants**. Ninth Annual Conference of the Association for the Advancement of Applied Sport Psychology, Lake Tahoe, NV.

Individual vs. collective attributions and efficacy-expectations in soccer-teams acutely threatened by relegation

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In most team-sport leagues, a low table-ranking at the end of a season goes along with an acute threat of relegation. Often, this situation leads to high amounts of stress in players and coaches and is often accompanied by a performance crisis. The combined influence of two processes may be responsible for the psychological difficulties typically met in that situation. (1.) The teams already experienced a high number of defeats which negatively influences the teams' efficacy-expectations. (2) At the same time, the instrumental importance of winning (psychological pressure) increases from match to match. In order to effectively increase the players' efficacy-expectations in this situation, more knowledge is necessary about the way players attribute defeats and how efficacy-expectations are concerned. Of special relevance is the question, whether a series of defeats, as they mark the history of low-ranking-teams, goes along with decreases in collective as well as individual efficacy-expectations.

Several studies on collective efficacy support the assumption of a positive relationship between collective efficacy and team performance during a season (George & Feltz, 1995; Spink, 1990). Thus, it can be expected that at the end of the season, low-ranking teams do have especially low collective efficacy-expectations. On the other hand, the question whether there is also a positive relationship between individual efficacy-expectations and team performance is far from being clear. Nevertheless some speculations concerning this question can be drawn from group related attribution research: Here several studies showed (Schlenker & Miller, 1977; Zaccaro et al., 1987) that group members (players) attribute failures of their group (team) more to the group than to themselves. If one can assume that these self-protective attributions are commonly made by players of losing sport-teams as well, then individual efficacy-expectations should be relatively resistant against changes in a negative direction.

The assumption that players of less successful teams keep up high individual efficacy-expectations may also help to solve a theoretical problem raised by the collective-efficacy-performance relationship. How can motivation be high before a match when collective efficacy is low? As data presented by Kirchhof (1998) showed players of soccer-teams threatened by relegation at the end of the season intended to invest more effort in the next match than players of high ranking teams. Before a game, players of low-ranking teams possibly focus more on their individual efficacy than on their collective efficacy-expectations.

In order to find empirical evidence concerning the above mentioned processes, the following hypothesis should be tested empirically.

1a) Team-related attributions concerning a defeat and efficacy-expectations concerning the next match are more pessimistic in low-ranking than in high ranking teams.
1b) No differences between high and low-ranking teams are expected concerning individual-efficacy-expectations and attributions of individual mistakes.

Considering the motivation process preceding a game, it is expected that players from top-teams are mainly motivated by anticipating their *team* rather than their *individual*

performance to be successful; while on the other hand just the opposite is expected from players in low ranking teams. Consequently these assumptions lead to the following hypothesis:

2a) In top-teams, collective efficacy-expectations should be stronger related with *intended effort for the next match* than individual efficacy-expectations. To the contrary, in low ranking teams, individual efficacy-expectations should be stronger related with intended effort than collective efficacy-expectations.
2b) Since players of top-teams are expected to motivate themselves by anticipating team success, feeling personally responsible for the defeat of the team should induce *compensatory motivation* (Gollwitzer & Kirchhof, 1998). Thus it is expected that the amount of social responsibility after a defeat is positively related to the amount of intended effort for the next game - though in top-teams only. Since players of low-ranking teams are expected to motivate themselves focusing on individual performance, social responsibility should not be related to motivation.

METHOD

Players of soccer-teams were asked to fill in a questionnaire some days after a defeat. Collective and individual efficacy-expectations, collective and individual attributions, social responsibility for the defeat as well as intended effort for the next game were assessed with the help of 8-point-rating-scales. Concerning the collective attributions, players were asked to state the „main reason" for the defeat. For this main reason the attributional dimensions of internality, stability and globality (Peterson et al., 1982) had to be estimated. Analogously, the main reasons for „individual mistakes and weaknesses during the match" were assessed and had to be estimated along the same attributional dimensions.
Collective efficacy-expectations were assessed by a scale asking about the players' confidence in the teams' success in next match. The scale assessing the players' individual efficacy-expectations referred to the players' subjective probability to improve their individual mistakes and weaknesses displayed in the lost game.

Procedure

During the final quarter of the soccer season 97/98 , all coaches of the German first, second and third soccer-divisons ($N = 126$) were asked to participate in the study[1]. The questionnaire was to be filled in by all team-players during the „first team-meeting after the next defeat".

RESULTS

20 teams participated in the study. The data of two teams had to be excluded, because coaches did not follow the instructions. The final data set consisted of 18 teams (N=196). Teams were divided into three categories according to their table position after the critical defeat. There were 3 teams ($N = 34$) belonging to the category 'high-ranking-team" (position 1-4), 10 teams in the category „midfield-team" (position 5-13) and 5 teams ($N = 55$) in the category „low-ranking-team" (position 14-18). All scales used in this study showed sufficient reliabilities (*alphas* for collective efficacy, individual efficacy and intended effort were .79, .66. and .81).

Attributions. In accordance with our hypothesis (1a), low ranking teams rated the main reason for their defeat significantly more stable ($p < .05$) than top-teams. Concerning the attributions

[1] The German soccer leagues consist of 18 teams. At the end of the season, teams on position 18, 17, and 16 are to be relegated. 1. and 2. divisions are professional, 3. division is organized semi-professionally.

for „individual mistakes and weaknesses", no differences were found, thus confirming hypothesis 1b.

Efficacy-expectations. As expected players of top-teams expressed higher collective efficacy - expectations than players of low-ranking teams ($p < .01$) (Hyp. 1a). As also expected no differences were found for individual efficacy-expectations (Hyp. 1b).

Social responsibility. High vs. low-ranking teams did not differ concerning the extent of assuming social responsibility for the defeat. Corresponding to our expectations there was a significant correlation between this variable and *intended effort* in top-teams ($r = .34$, $p < .05$) but not in low-ranking teams ($r = .17$, *ns*) (Hyp. 2b).

Intended effort for the next game: In top-teams, intended effort was significantly ($z = 1.81$, $p < .05$) higher correlated with collective efficacy ($r = .59$, $p < .001$) than with individual efficacy ($r = .31$, $p < .08$). As expected, the reverse was true for low-ranking-teams. Here intended effort was significantly higher correlated ($z = 1.87$, $p < .05$) with individual efficacy ($r = .62$, $p < .05$) than with collective efficacy ($r = .33$, $p < .05$). Altogether, these results confirm hypothesis 2a.

DISCUSSION

Results of this study give first evidence that the motivational process preceding a game differ depending on the table-ranking of a team. It can be cautiously speculated that players of top-teams use more team oriented motivational strategies (anticipation of team success) while in low-ranking teams more self-centered strategies (anticipation of a good personal performance) may be used. At first glance, these data seem to justify the practical advice for low ranking teams at the end of a season to work primarily on the enhancement of collective efficacy-expectations. However this conclusion is premature: Raising collective efficacy-expectations is extremely difficult in case of a series of defeats. In this situation it might be also an effective coaching strategy to „use" the self-centered strategies of players by giving feedback, praise and criticism rather individually oriented than group oriented. This might enhance and stabilize individual efficacy which in turn might influence the sense of collective efficacy (the data show that both kinds of efficacy estimates are highly correlated). However, at this point in time the data do not allow too far reaching conclusion. In order to generalize the results obtained here further studies in other team sports are necessary.

LITERATURE

George, T. R. & Feltz, D. L. (1995). Motivation in Sport from a collective efficacy perspective. *International Journal of Sport Psychology, 26*, 98-116

Gollwitzer, P. M. & Kirchhof, O. (1998). The willful pursuit of identity across the lifespan. In J. Heckhausen & C. S. Dweck (Eds.), *Motivation and self-regulation across the life-span* (pp. 389-423). New York: Cambridge University Press.

Kirchhof, O. (1998). Die Bedeutung kognitiver Prozesse für den Umgang mit Niederlagen in Sportspielmannschaften. (Cognitive processes after failure in sport-teams) *Paper presented at the congress of the German Association of Psychology (DGPs), October '98 in Dresden, Germany.*

Peterson, C., Semmel, L., von Baeyer, C., Abramson, L. Y., Metalsky, S. I. & Seligman, M. E. P. (1982). The Attributional Style Questionnaire. *Cognitive Therapy and Research, 6*, 287-300.

Schlenker, B. R. & Miller, R. S. (1977). Egocentrism in groups: Self-serving biases or logical information processing? *Journal of Personality and Social Psychology, 35*, 755-764.

Spink, K. S. (1990). Collective efficacy in the sport setting. *International Journal of Sport Psychology, 21*, 380-395.

Zaccaro, S. J., Peterson, C., & Walker, S. (1987). Self-serving attributions for individual and group performance. *Social Psychology Quarterly, 50*, 257-263.

SHAPING PERFORMANCE OF ELITE ATHLETES IN COMPETITION: SOME THEORETICAL CONSIDERATIONS

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Key words: CH/AN model, Performance, Competition

Recently, several theories such as Reversal Theory (Kerr, 1997), The Catastrophe Cusp Model (Hardy, 1997), Psychological Performance Crisis Theory (Bar-Eli, 1997) and the Zone of Optimal Functioning Approach (Hanin, 1997) have been suggested in sport psychology as possible alternatives to the inverted U function. However, this field still remains exposed to several, mainly theoretical weaknesses. In this paper, the foundations of a new concept are presented, which may cope with these problems.

Model CH/AN Stage A - The basic process of shaping performance

Stage characteristics

The model presented suggests that performance is dependent upon, or determined by, a transaction of physiological and psychological variables originating in the athlete's assessment of the relationship between the demands of the competition - related to task and situation - and the abilities he or she developed for the competition (hereafter, D/A ratio). The athlete's goal is the criterion by which this ratio is evaluated and later on determines his or her position on the continuum between feeling challenged (CH) and anxious (AN), which is the complete stress interval or the CH-AN continuum. Since an elite athlete usually performs on a ratio of $D/A \cong 1$, perception of $D < A$ expresses feelings of challenge, while perception of $D > A$ expresses feelings of anxiety. The ratio D/A, therefore, determines the athlete's performance on the challenge sub-interval (in which the level of challenge rises as the value of the ratio approaches 1), or on the anxiety sub-interval (in which the level of anxiety increases as the relation increases above 1). As mentioned above, D/A ratio, or the precise position on the stress interval, has immediate physiological and psychological consequences which in turn shape the entire performance process. The dominant physiological variable is arousal level, increasing as the D/A ratio rises. The dominant psychological variable is the emotion accompanying performance. This emotion may be either a feeling of challenge composed of sense of control and intrinsic enjoyment, or anxiety, characterized by perceptions such as loss of control and inherent lac of enjoyment.

Where on the D/A axis is challenge replaced by anxiety? What is the replacement pattern and how do these replacements affect performance? The answers to these questions are conditioned on the structure of the general performance system, including the sub-systems of athlete, task and situation It seems that the transition from challenge to anxiety is not necessarily clear-cut and that there are situations in which a "gray" area - whereby the sense of challenge has declined but feelings of anxiet have yet to appear - may be identified between the two. The typical emotion for this area is a sense of control without intrinsic enjoyment.

Classification of athletic tasks.

The CH/AN model emphasizes not only the transactional relations between the physiological and th psychological systems in shaping performance, but also other performance variance stemming from different tasks and situations. Accordingly, an appropriate taxonomy of tasks is required. It is suggested that tasks be classified according to two criteria - type and level of regulation.

Type of regulation is determined primarily by the time-dimension in which the regulation is carried out. Two main types of regulation may be identified: regulation carried out during preparation for performance - "proactive regulation", and regulation that occurs during performance - "real-time regulation". Regulation level is dictated by the level of attention and awareness required to carry out a task. Tasks can be roughly divided into those requiring either a sensorimotor or a flexible action regulation (Bandura, 1991; Frese & Zapf, 1994). This taxonomy is consistent with types of tasks identified in the "peak moments" literature (McInman & Grove, 1991). Tasks that make peak performance possible belong to the proactive type, while flow tasks belong to the real-time type. Adding the dimension of regulation level allows us to divide tasks into four categories, which may be subject to variations in the performance process. Accordingly, short athletic tasks (e.g., throwing - discus, javelin or shot put; jumping - long or high), weightlifting and penalty shots (in basketball, soccer, team-handball or water polo) may be classified into the proactive/sensorimotor category. In contrast, gymnastics, aerobic dancing or diving may be classified into the real time/sensorimotor category, whereas long/medium distance running/swimming - into the real-time flexible action category. Proactive/flexible action tasks are quite rare in individual sports and may be ignored in the present context.

CH/AN Model Stage B - Performance variations typical to different regulation structures

Performance processes typical of proactive/sensorimotor regulation structure.

As mentioned above, this regulatory structure is characterized by relatively short performance and lack of feedback during performance. Therefore, it may be argued that most performance variance will be explained by the emotional and physiological results derived from evaluating D/A ratio prior, and near to, performance. The assumption that proactive regulation is based on adjusting one specific, well defined action program leads to the conclusion that the performance system is then relatively stable and tolerant to stress. Based on the findings of the "peak moments" literature (McInman & Grove, 1991) showing that, indeed, in this type of regulation maximal performance is made possible by high levels of physiological arousal and emotions typical of the "gray" area, we may derive the following hypotheses: (a) Evaluation of $D/A < 1$ will be translated into sense of control without enjoyment, increased arousal, and a level of performance lower than the athlete's average; (b) Evaluation of $D/A \approx 1$ will be translated into sense of control without enjoyment, increased arousal, and a level of performance on the athlete's average; (c) Evaluation of $D/A > 1$ will be translated into sense of control without enjoyment, higher state of arousal relative to former state and a level of performance higher than the athlete's average.

Based on the previous three hypotheses, it may be conjectured that the relationship between the D/A ratio and performance is linear, from $D/A < 1$ through $D/A \approx 1$ to $D/A > 1$, and a resulting increase in performance.

Performance processes typical of real-time/sensorimotor and real time/flexible ation

These structures are characterized by a relatively lengthy period of performance requiring resource allocation (physiological and emotional) along the time axis, awareness to feedback, and in some situations, readiness to operate alternative action plans. The feedback may include cues emerging from the limited performance system (the athlete) or the broader performance system (including the task and the environment). Therefore, the span of attention here is relatively wide. In these regulatory structures performance is also explained by the emotional and physiological results derived from the D/A ratio, except that here the D/A ratio may change over the course of performance.

In light of these characteristics, it can be concluded that the performance system tends in such a case to instability and low tolerance to stress. Therefore, it can be presumed that under these circumstances the system may tend to function at D/A ratios lower than, or at the most equal to 1. Regarding the "peak moments" literature finding (McInman & Grove, 1991), namely, that in these

structures the optimal performance is made possible by medium levels of physiological arousal and emotions typical to the challenge interval, we may derive the following hypotheses: (a) Evaluation of $D/A < 1$ will be translated to sense of control and enjoyment, increased arousal, and a level of performance lower or equal to the athlete's average; (b) Evaluation of $D/A \approx 1$ will be translated to sense of control and enjoyment, higher level of arousal relative to the former state, and a level of performance higher than the athlete's average; (c) Evaluation of $D/A > 1$ will be translated to sense of lack of control and lack of inherent motivation, a higher state of arousal relative to the former state, and a level of performance lower than the athlete's average.

Based on the previous three hypotheses, we may conjecture that the relationship between D/A and performance is a quadratic (inverted U) or a catastrophic relation. Taking into account the fact that in the real-time/flexible action pattern structure, the span of attention is widest - a situation with a high potential of shifting attention from the task at hand - we would expect a higher incidence of catastrophic relationships in this structure. In contrast, in the real-time/sensorimotor structure we would expect a higher incidence of quadratic relationships. Here, increased arousal, in turn, will cause a quadratic decline in the real-time/sensorimotor structure and a catastrophic decline in the real-time/flexible action pattern structure, even at low levels.

The relations between D/A, location on the stress interval and performance are illustrated in Fig. 1.

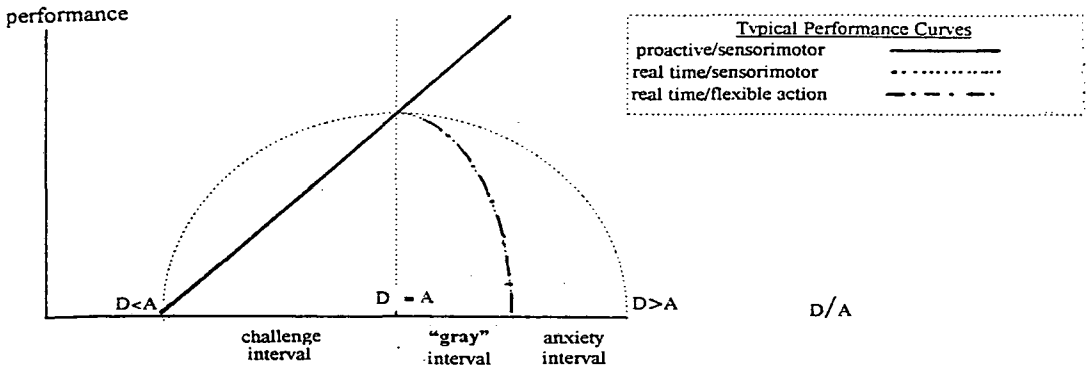

FIGURE 1. RELATION BETWEEN THE RATIO D/A, LOCATION ON THE STRESS INTERVAL AND THE PERFORMANCE CURVE

It remains to be seen whether this model will be validated in future research. Furthermore, its potential role in reconciling between the various alternatives to the inverted U function will be clarified.

References

Bandura, A. (1991). Social cognitive theory of self-regulation. Organizational Behavior and Decision Processes, 50, 248-287.

Bar-Eli, M. (1997). Psychological performance crisis in competition, 1984-1996: A review. European Yearbook of Spor Psychology, 1, 73-112.

Frese, M., & Zapf, D. (1994). Action as the core of work psychology: A German approach. In H. C. Triandis, M. D. Dunnette, & L. M. Haugh (Ed.), Handbook of industrial and organizational psychology (Vol. 4), (pp. 48-152). Chicago: Rand McNally.

Hanin, Y. L. (1997). Emotions and athletic performance: Individual zones of optimal functioning model. European Yearbook of Sport Psychology, 1, 29-72.

Hardy, L. (1997). Some recent advances in stress and performance research. In R.Lidor & M. Bar-Eli (Eds.), Proceedings of the 9th World Congress on Sport Psychology, July, 1997, Part I (pp. 28-30). Netanya: Wingate Institute.

Kerr, J. H. (1997). Motivation and emotion in sport: Reversal theory. Hove, East Sussex: Psychology Press.

McInman, A. D., & Grove, J. R. (1991). Peak moments in sport: A literature review. Quest, 43, 333-351.

MOTIVATIONAL CLIMATE AND INTRINSIC MOTIVATION TOWARDS PE LESSONS - CROSS-CULTURAL COMPARISON BETWEEN FINLAND AND RUSSIA

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KEY WORDS: physical education, motivational climate, intrinsic motivation, cross-cultural comparison

INTRODUCTION

The major goal of achievement behaviour is to demonstrate high ability and to avoid demonstration of low ability. Perceived competence and the criteria for its evaluation can be seen as essential factors in archievement motivation. Goal orientation theory presents a social cognitive and dynamic approach to understanding motivational processes in performance settings (Nicholls 1984). According to Ames (1992), motivational climate is defined as a global psychological environment directing the goals of action. A motivational atmosphere, which changes according to the situation, may be more stable in some contexts than in others.

Cross-cultural comparison gives a possibility to indicate the validity and reliability of the measures of goal orientation, motivational climate, and intrinsic motivation in different cultures and situations. In addition, it may help to develop the concept and the operationalization of motivational climate.

METHODS AND PROCEDURE

The purpose of this study was to analyze the associations of perceived motivational climate with intrinsic motivation towards PE lessons in Finnish and Russian pupils. The participants were 586 Finnish and 425 Russian 9th grade (15 year old) pupils. In Russia the girls and boys are taught in physical education lessons together, whereas in Finland they are taught separated.

Goal orientation in the PE lessons was analysed by the children`s version of the Perception of Success Questionnaire (POSQ; Roberts,Treasure, & Balague 1998). Motivational climate was measured by the Perceived Motivational Climate in Sport Questionnaire -2 (PMCSQ-2; Newton & Duda 1993), and intrinsic motivation was assessed by the Intrinsic Motivation Inventory (IMI; McAuley, Duncan, & Tammen 1989). The Cronbach alpha for the task orientation scale of the POSQ was .87 by Finnish and .73 by Russian pupils, whereas for the ego orientation scale it was .91 and .77, respectively. Task climate and ego climate were the two sub-scales of the PMCSQ-scale. Due to rather low factor loadings of the IMI with four factors, the new IMI-scale with one factor consisting of seven items was developed. The Cronbach alpha for the adapted version of the IMI was .90 by Finnish and .78 by Russian pupils. Perceived physical competence was measured with a two-item scale which was adapted from the IMI.

RESULTS

According to the regression analysis, task-involving motivational climate in the PE lessons explained alone 36 percent of the variation of intrinsic motivation in Finland and 27 percent in Russia. Also task orientation and ego-involving climate were included in the stepwise regression model. In the case of Finnish pupils, these three variables explained totally 43 percent, and in the case of Russians 35 percent of the variance.

TABLE 1. The Associations of high/low Goal Orientation, high/low Motivational Climate, high/low Perceived Competence to Intrinsic Motivation in Finland (F) and in Russia (R) values above mean bolded).

GOAL ORIENTATION	MOTIVATIONAL CLIMATE	PERCEIVED COMPETENCE			
		Low		High	
Task orientation	Task climate	F	R	F	R
High	High	**3.7**	**4.2**	**4.1**	**4.3**
High	Low	3.0	3.4	**3.8**	**3.8**
Low	High	**3.5**	**3.8**	**3.8**	**4.0**
Low	Low	2.7	3.2	3.4	3.2
Task orientation	Ego climate				
High	High	3.4	3.7	**4.0**	**4.0**
High	Low	3.4	**4.1**	**3.7**	**4.3**
Low	High	2.8	3.1	**4.1**	3.6
Low	Low	3.0	**3.8**	**3.7**	**3.8**
Ego orientation	Task climate				
High	High	**3.6**	**4.1**	**4.0**	**4.2**
High	Low	2.9	3.2	**3.6**	**3.8**
Low	High	**3.6**	**4.1**	**4.1**	**4.2**
Low	Low	2.6	3.4	**3.5**	3.2
Ego orientation	Ego climate				
High	High	3.2	3.3	**3.7**	**3.8**
High	Low	3.0	**3.9**	**3.9**	**4.3**
Low	High	2.8	3.3	**3.7**	3.1
Low	Low	3.3	**4.0**	**4.0**	**3.9**

Russian pupils perceived the climate of their PE lessons more task-involving than Finnish pupils ($p<.001$ for both genders). Finnish girls perceived the lessons less ego-involving than Russian girls ($p<.001$). Intrinsic motivation was higher for Russian than for Finnish pupils ($p<.001$) for girls and $p<.05$ for boys.

In both countries the highest level of intrinsic motivation was found in conditions where the pupils with high perceived competence were in groups of high goal orientation and high motivational climate. Intrinsic motivation of the pupils with low perceived competence is high in the task climate. It is also noteworthy that in the case of low perceptions of ego climate by Russian pupils with low perceived competence, intrinsic motivation was above average.

DISCUSSION AND CONCLUSION

In Finland as well as in Russia the PMCSQ-2 had a satisfactory level of reliability and validity. Instead, the factor structure of the IMI did not support the construct validity of the scale in either countries. The study gave clear cross-cultural support to the goal orientation model.

In this study the goal orientation model was valid in both countries, whereas the IMI-scale should be developed further in this context. The results indicated that the task climate is more relevant for the pupils with low perceived competence. This should be considered by parents and teachers when interacting with children and sport. Furthermore, there is a social concern to remain peoples´ physical activity beyond obligatory PE lessons.

REFERENCES

Ames, C. (1992). Archievement goals, motivational climate and motivational processes. In G.C. Roberts (Ed.) **Motivation in sport and exercise**. Champaign, Illianois: Human Kinetics, 161-176.

McAuley, E., Duncan, T., & Tammen, V. (1989). Psychometric properties of the intrinsic motivation inventory in a competitive sport setting. A confirmatory factor analysis. **Research Quarterly for Exercise and Sport**, 60, 48-58.

Newton, M.L. & Duda, J.L. (1993). The Perceived motivational Climate in Sport Questionnaire-2: Construct and predictive validity. **Journal of Educational Psychology**, 15 (Suppl.)

Nicholls, J.G. (1984). Conceptions of ability and archievement motivation. In R. Ames & C. Ames (Eds.), **Research on motivation in education: Student motivation**. Vol. 1. New York: Academic Press, 39-73.

Roberts, G.C., Treasure, D., & Balague, G. (1998). Archievement goals in sport: The development and validation of the Perception of Success Questionnaire. **Journal of Sport Sciences**, 16, 337-347.

PERFECTIONISM IN A GROUP CONTEXT: POSSIBLE DIRECTIONS FOR FUTURE RESEARCH

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KEY WORDS: Perfectionism, Groups, Teams

While there is a growing body of knowledge regarding the antecedents and consequences of perfectionism, previous research has neglected the influence of the group on this and many other important achievement related variables. As achievement in sport and many other contexts requires individuals to work together in a cooperative fashion, an understanding of group processes is critical if one is to understand individual cognitions and behavior within these contexts. Brawley (1998, p. vii) eloquently summed-up the importance of the group in his foreword to the second edition of Carron and Hausenblas's *Group Dynamics in Sport* "the group can be the catalytic mixing pot for the variety of motivational factors that spur individuals to reach unimagined performance heights or drastically damage their view of self worth." Certainly, perfectionism is a motivational variable that has the potential to produce the two extreme outcomes highlighted in the preceding quote. Self-oriented perfectionism is associated with adaptive achievement behavior and high levels of performance (Hewitt & Flett, 1991). In contrast socially prescribed perfectionism is associated with maladaptive achievement behavior and various psychopathologies (Hewitt & Flett). The third variety of perfectionism, other-oriented, appears to hold the most potential for eliciting negative consequences from social interaction.

The purpose of this presentation is to highlight a number of possible directions for future perfectionism research that take into account the group context in sport. These suggestions for future research will revolve around three themes. The first will argue that sport groups are an important socializing influence, and thus, may contribute to the development of perfectionist tendencies. The second will focus on the association between perfectionism and various group process (e.g., team cohesion). The final theme suggests that the group environment may be a critical moderator of the relationship between perfectionism and various achievement related cognitions and behaviors (e.g., anxiety).

At the moment, little is known about the role of the group environment in the development of perfectionistic tendencies. Brawley (1998) suggested that over long periods of participation, sport teams have almost a institution-like socializing influence similar to schools and churches. Widmeyer, Carron & Brawley (1992) argued that the sport team is second only to the family in terms of its influence on many individuals. Groups exert considerable influence on the individual through the norms that exist. Norms reflect the group's beliefs about the standards for acceptable and unacceptable behavior. Groups develop norms to govern social behavior as well as performance and productivity. Where task concerns predominate (e.g., work and sport) standards for performance are established and pressure is exerted on group members to conform to these standards (Carron & Hausenblas, 1998). It is entirely possible for a team of containing several perfectionists or a perfectionistic coach to develop over time perfectionistic standards as the norm. Under these conditions, perfectionism may be endemic. Future research might examine the influence of the group and the role of the coach on the development of perfectionistic dispositions.

Future research may investigate the association between perfectionism and various group processes such as team cohesion. Team cohesion was defined as a "a dynamic process which is reflected in the tendency of for a group to stick together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of member affective needs" (Carron, Brawley, & Widmeyer, 1997, p. 3). Other-oriented perfectionism, in particular, appears contrary to the development of a highly cohesive team. Other-oriented perfectionism is associated with poor interpersonal relations and even hostility towards others. Also, there is a tendency for other-oriented perfectionists to attribute blame to others for failing to meet their exceedingly high expectations (Hewitt & Flett, 1991). There is preliminary evidence to suggest that the attribution process is an important mechanism in the maintenance and/or enhancement of team cohesion. Attribution patterns within groups balance the need for maintaining a positive self-image and also satisfying relationships with others in the group (Carron, 1998). Previous research in group attributions (e.g., Gill 1980) found a team-serving rather than a self-serving bias in the attribution patterns of competitive groups. Crediting teammates for success and not blaming them for failure may be team-enhancing in that it maintains positive interpersonal relationships and cohesion. The opposite pattern is likely to produce negative interpersonal relationships and detract from team cohesion. Other-oriented perfectionistic behavior towards teammates would appears to be disruptive to the cohesive functioning of the group. This hypotheses requires testing.

Previous research in sport (Frost & Henderson, 1991) and other contexts (e.g. Hewitt & Flett, 1991) found a significant relationship between perfectionism and anxiety. There is evidence to suggest that the group environment may serve to moderate the level of anxiety experienced by athletes. Prapavessis and Carron (1996) suggested that the psychological situation experienced by athletes may vary considerably as a result of group differences in group structure, processes and cohesion. These authors argued that athletes would experience less competitive state anxiety in highly cohesive groups because the threat of evaluation is minimized and diffusion of responsibility for mistakes or a poor performance is maximized relative to teams low in cohesion. The results of their study indicated that task cohesion was a significant predictor of cognitive anxiety. It was also found that this relationship could be explained in part by athletes on highly cohesive teams feeling less pressure to carry out group responsibilities and satisfy the expectations of other team members. While, diffusion of responsibility was not supported as a mediator in this particular study, assessment problems prevented it from being ruled out as an explanation.

This research suggests that the group environment has the potential to moderate the perfectionism-anxiety relationship. High levels of team cohesion may minimize the evaluative threat experience by any one athlete by maximizing the diffusion of responsibility for mistakes or a poor performance amongst the group members. Previous research in educational settings (Frost & Marten, 1990) revealed no difference in negative affect between those high and low in perfectionism under conditions of reduced evaluative threat. High level of cohesion may reduce the strength of the association between perfectionism and anxiety by reducing the pressure to satisfy the expectations of others within the team. Thus, potentially counteracting the debilitating consequences of socially prescribed perfectionism. These hypotheses provide the basis for future perfectionism research in sport.

REFERENCES

Brawley, L. R. (1998). Foreword. In A. V. Carron & H. A. Hausenblas, **Group dynamics in sport.** Morgantown, WV: Fitness Information Technology.

Carron, A. V., Brawley, L. R., & Widmeyer, W. N. (1997). The measurement of cohesiveness in sport groups. In J. L Duda (Ed.), **Advances in sport and exercise psychology measurement.** Morgantown, WV: Fitness Information Technology.

Carron, A. V., & Hausenblas, H. A. (1998). **Group dynamic in sport.** Morgantown, WV: Fitness Information Technology.

Frost, R. O., & Henderson, K. J. (1991). Perfectionism and reactions to athletic competition. **Journal of Sport and Exercise Psychology, 13,** 323-335.

Frost, R. O. , & Marten, P. A. (1990). Perfectionism and evaluative threat. **Cognitive Therapy and Research, 14,** 449-468.

Gill, D. L. (1980). Success-failure attribution in competitive groups: An exception to egocentrism. **Journal of Sport Psychology, 2,** 106-114.

Hewitt, P. L., & Flett, G. L. (1991). Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. **Journal of Personality and Social Psychology, 60,** 456-470.

Prapavessis, H., & Carron, A. V. (1996). The effect of group cohesion on competitive state anxiety. **Journal of Sport and Exercise Psychology, 18,** 64-74.

Widmeyer, W. N., Carron, A. V., & Brawley, L. R. (1992). Group Dynamics in Sport. In T. S. Horn (Ed.), **Advances in sport psychology.** Champaign, IL: Human Kinetics.

THE FEELING OF BEING THE MAKER AND THE IMPORTANCE OF GOAL AMONG THE YOUNG STUDENTS OF A SPORT SCHOOL

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Key words: motivation, goal, self appraisal

INTRODUCTION

While studying the intentional behaviour in sport or the behavioural patterns leading to successful performance, the usual area of research are the personal, motivational and environmental conditions. Those conditions cover a number of little but important issues on the road leading from the appearance of such a cognitive concept like goal until the satisfaction from the accomplishment of that goal determining the feeling of being the maker (Zaleski, 1991).

The specific character of sport related activities allows to draw particular attention to the issue of the role of the subject in the accomplishment of the goal, particularly in the attribution of successes and failures, positive self-appraisal, internal motivations, the feeling of being the maker. Without doubt the sport success results in a certain gratification. The motivation of sport achievements, both the internal and the external one, leads towards self-improvement on the road to self-perfection or to overcoming (beating) others in a sport competition.

The dilemma "a master or a rival" has been vividly demonstrated by Krawczyński (1994). The author is of the opinion, that sport psychologists have not confined themselves to distinguish the motivation of sport achievements, but proved that it is a multidimensional structure. Following Roberts and Belaque (1989) Krawczyński enumerates two principal kinds of goals, conditioning the motivation to perform and to achieve: the goal of mastery and the goal of competing. There are, according to Krawczyński, matters that determine the people's vision of sports, since people strife with opposing forces (with other people) trying to get recognition and achieve success, while at the same time struggling with themselves on the road to perfection. Thus the emergence of completely distinct in their nature, yet complementary to each other mechanisms of control and involvement in human activities is identified.

The awareness of the goal of activity and involvement are concepts, which, if they are to be made operational in the sport context, they have to be closely linked together. The involvement in sport activities, without awareness of the goal, substantially weakens the regulating mechanism of interdependence of goals and motivations. And conversely, the linking of the awareness of the goal with sport activities without actualisation of mechanisms that maintain the inner commitment (a positive, creative mechanism) may also lead towards substantial impoverishment of the regulating function of that goal.

In order to fully understand the relations linking the problems of the goal of activities and the involvement in them in the context of regulating mechanisms it is worth while to take into consideration the opinion, that the motivational effects come not from the goals themselves, but from the fact that people tend to evaluate their own behaviour and themselves (Bandura, 1981). Thus the linkage that precisely determines the conditions for one's positive self-assessment via goals, which Bandura defines as "one's own effectiveness". The positive self - appraisal combined by mutual regulation with the goal motivation may also in certain circumstances prevent the appearance of the self –induced quenching of the process of being involved (Lewicka, 1993).

According to the thesis, that it is the subject himself that plays the central part among various factors conditioning the determination of a goal one has to adopt the opinion, that both the

setting of the goal and its accomplishment is realised in accordance with a configuration of various features that create his personality. The assessment of one's own capabilities as far as the control of events is concerned (the feeling of being the maker) is the form of self-appraisal, thus one of the possible dimensions of personality. The research question is related to the relation of self-appraisal to the characteristics of importance of the goal selected by the studied persons in their sport activity, declared degree of commitment in its accomplishment, and the linking of its accomplishment with various internal and external determinants.
One has to be aware of the fact, that the developmental aspect remains not without relevance to the studied relationship, which determines both the self-appraisal of the studied persons and the way they set their goals, the resolution in pursuing them, the degree of commitment in pursuing that goal. Certainly the level of involvement of the athletes (the number of years of practising) in a sport activity is equally important for the general image of the studied relationship, apart from the age of the studied persons. The information from that area will be provided more extensively in the paragraph that characterises the studied persons, i.e. the students of the highest forms of a higher (pre-baccalaureate) sport school.
Thus, on the basis of the literature presented in the discussion, the research hypothesis was formulated with the following wording: The high level of self-appraisal, as an element of feeling of being the maker among students of a sport school is positively correlated with the rank of the sport goal they have chosen.

METHOD AND PROCEDURE

Subjects: The research was made on a sample of male students of the latest forms of a sport lyceum in Gdańsk (N=30).
Method: Two research techniques were applied in the research project:
On the basis of the *Goal Questionnaire* of Z.Zaleski (1991) adapted to the needs of this study; a questionnaire containing 20 questions concerning various aspects of the relationship of the studied person to the selected sport goal was developed;
The Adjective Check List - ACL of Gough and Heilbrun (1983), allowing to learn the "real self" that is the real image of the studied person with the help of adjectives selected by her. The author of the Polish translation of the list of adjectives, in the 37-scale version was Z.Płużek. The degree of self-appraisal was determined by the number of positive adjectives.
Procedure: Prior to providing answers the tested persons formulated their main sport goal, without the need to limit the time horizon of their perspective.

RESULTS

The kind of sport goal selected by the young people allowed to distinguish three groups of the tested persons: 1. Selecting as a goal the Olympic trophies (Ol.) 2. Selecting as a goal participation in sport activities according to medium-ambitious goals (like to play further in a good team) (Med.) 3. Those who did not select any sport goals (like physical activity for recreational purposes) (Lack of a goal – LG). The numerical share of participants in particular groups was the following: 1. Group (Ol.) – 7 persons, 2.Group (Med.) – 12 persons, 3. Group (LG) – 11 persons. While studying the correlation of self-appraisal with the goal, the following results were found:

GROUPS	GOAL		SELF APPRAISAL		Correlation	
	M	SD	M	SD	r	p<
1. (Ol.) n=7	122,71	21,17	39,14	6,09	-0,17	-
2. (Med.) n=12	130,08	0,26	42,42	6,69	0,26	-
3. (LG) n=11	128,64	11,56	48,9	7,48	0,496	,01

TABLE 1. Means, Standard Deviations and Values of the Pearson Correlation Coefficient for the Measured Values of the Goal and Self Appraisal in Studied Groups.

As far as the level of self-appraisal is concerned, one can infer, that the lowest self-appraisal was declared among boys dreaming of Olympic successes, the highest self-appraisal was given by boys who did not foresee any sport successes, that would require from them self-perfection efforts that would test them. The medium level of self-appraisal was represented by a group which on one hand perceived sense in the struggle for the accomplishment of a sport goal, yet without the ambition of achieving extraordinary and exceptionally prestigious results. The first group (Ol.) differs from the second one (without a sport goal) as far as self – appraisal is concerned being characterised with a lower level of self-appraisal (LG), $p.< 0.01$; while the second group (Med.) declares as well a lower level of self-appraisal differing from the third group (LG) at $p.<0.05$. Correlation between goal and self-appraisal was only significant in third group (LG) ($r=0,496$; $p<0,01$).

CONCLUSION

The research allows to draw attention to the need of closer study of the self-appraisal issues from the point of view of being the maker, in relation to the fact of formulation of sport goals, declaration of their importance and the degree of devotion in pursuing them. Purposeful activities of the young athletes have a specific character because of obvious reasons related both to the period of development (the period of developmental threshold, equal importance of a number of goals) and the degree of "professionalism" of their sport involvement.

What practical suggestions can be drawn from the results of the presented research project in the area of sport psychology? Without doubt it would be worth while to study and characterise the relationships and conditions taking place between the purposeful activity in sport and the feeling of being the maker as a value of self-appraisal in different age groups, in different sport disciplines, among athletes with varying number of years of practising a given sport discipline. The collected data could make an important contribution to knowledge about scantily studied relationships between the sport goals selected, perception of one's role in their accomplishment and the perception of one's own capabilities as far as induction is concerned. It could be a relevant foundation for the selection of the content and form of psychological influence while preparing the athlete (athletes) to the sport struggle. The task of the sport psychologist would be to determine not so much the optimal level of sport aspiration of a given athlete, but his self-appraisal that would correspond to the goal he sets for himself, so that the appraisal could play a constructive part in linking the selected sport goal to the level of the athlete's commitment appropriate for its accomplishment. Thus the commitment enriched with a goal could be strengthened with an adequate level of feeling of being the maker, and a self-appraisal, which can be, and sometimes has to be subject to modification.

REFERENCES

Bandura, A. (1981). Self-referent thought: A developmental analysis of self-efficacy. In J.Flavell, L.Ross (Eds.): **Social cognitive development: Frontiers and possible futures** (pp. 200-239).Cambridge: Cambridge University Press.

Gough, H.G., Heilbrun, A.B. (1983). **The Adjective Check List. Manual (Rev. Ed.).** Paol Alto, Ca: Consulting Psychologist Press.

Krawczyński, M. (1994). Człowiek sportu - mistrz czy rywal? **Miscellanea Anthropologica et Sociologica, 3,** 296-303.

Lewicka, M. (1993). Mechanizmy zaangażowania i kontroli w działaniu człowieka. In M.Kofta (Ed.): **Psychologia aktywności: zaangażowanie, sprawstwo, bezradność** (pp. 15-62). Poznań: Wydawnictwo Nakom.

Roberts, G.C., Balaque, G. (1989). **The development of Social Cognitive Scale of Motivation**. Paper presented at the 7th World Congress in Sport Psychology, Singapore.

Zaleski, Z. (1991). **Psychologia zachowań celowych**. Warszawa: PWN.

USE OF YOGA IN A RESOCIALIZATION PROCESS

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KEY WORDS

Children and juvenile delinquency and crime rate, yoga, resocialization, self-efficacy

INTRODUCTION

We meet the underages crime rate and other social-pathological phenomena more or less in every society. On the basis of a long-term observation on a world-wide scale by some specialists (e.g. Alvesalo et al. 1974, Arieli 1996) we can claim that the children and juvenile social-pathological phenomena react sensitively to social changes. That has been proved in our country as well. As a result of changed social conditions after 1989 a dramatic increase of various social-pathological phenomena of underages was recorded, above all prostitution, thefts, burglaries, gambling, drug consumption and demonstrations of racism. From 1990 to 1995 the number of criminal acts registered by the police radically increased. In 1994 the necessity to solve this situation brought the government of the Czech Republic to approval of "The programme of social and crime rate prevention." According to the government these problems should be solved by means of such preventive measures that would lead to positive changes in juvenile value orientation, sticking to the behaviour rules and norms, tension relief and direction of aggression. At looking for the educational innovations, an aimed and qualified use of P.E. means is being offered. We did research on possibilities of application of yoga and relaxation techniques in the youth resocialization process in ethopedical institutions. We aimed at the compilation and verification of an special programme, above all for psychical tension relief, aggression reduction and positive changes in self-conception. Researches verify the psychosomatic and psycho-social effects of yoga (Dostálek 1996, Nešpor 1994). For the praxis it means that changes on a physical level can bring about changes in psyche or in interpersonal relations - e.g. the relief of unnecessary physical tension causes relaxation on a psychical level, which manifests itself positively in interpersonal relations and social adaptation.

METHOD AND PROCEDURE

Survey intentions resulted in following hypotheses:

- there will be improvement in performances of the children and youth group in ethopedical institutions in chosen exercises after finishing the interventional programme of yoga exercises and relaxation techniques.

- there will be positive changes in opinions and attitudes in the meanings of interpersonal characteristics of self-efficacy on a real and ideal (future) level after finishing the interventional programme of yoga exercises and relaxation techniques.- intersexual differences will be found in chosen indicators.

With regard to these facts following methods were chosen:

- Subject analysis of pedagogical documentation
- Directed individual interviews with pedagogical workers and psychologists
- Directed group interviews
- Observation (behaviour of charges during the programme, their reactions)
- Questionnaires: Self-perception gamut POP (Válková, 1995), Attitude questionnaireI. (Krejčí, 1996), Attitude questionnaire II. (Hošek, 1995)
- Interventional Method: The programme is made for charges at the age of 13 - 18. The programme is not very demanding on material or space. The optimum length of an unit with yoga is 90 minutes. Exercise units were included in the time-table of the institution regularly during two months once or twice a week always at the same time. For every day use (best in the morning) were recommended dynamic yoga exercises and exercises of one's own choice We worked with little groups of 9 or 10, which enabled a differential approach to each individual and use of individual forms of education. The interventional group consisted of 84 charges (45 boys and 39 girls). The control group consisted of 67 charges (40 boys and 27 girls). An average age was 15,6 years. The data were processed by SPSS - ANOVA 2x2.

RESULTS

The analysis of personality background of surveyed charges exemplify the existence of whole range of burdensome family factors - low level of education, criminal activity, alcoholism of parents, etc. The results showed an alarming discovery about smoking, alcohol and drug consumption among juveniles. Almost 90% of questioned persons smoke regularly, 64% drink alcohol if they have opportunity and 40% have already experience with taking drugs. The results show as well that those individuals who went through the interventional programme underwent after its finishing significant changes in one's self-perception in comparison with the individuals of the control group. As we can see, the yoga compensatory programme has a positive influence in areas of higher confidence and more positive attitude towards the surrounding world ($F,31 = 24,49$; $p/0,001$). Adjectives in bold type show the direction of the shift - e.g. rough - **tender**, difficult - **easy**, stroppy - **pliable**. From the found changes we consider to be essential in particular the shift from pliability and from the wish to be rough. We believe that both these tendencies hide in themselves a great potential for another educational work. There is a tendency to strengthen these qualities on an ideal level (as I would like to be) ($F,31 = 24,49$; $p/0,001$). The wish to be more friendly and perceptive together with a feeling of being relaxed supports the already mentioned trend of more positive attitude towards the surrounding world. We observed if there would be any change in differences between the real and the ideal level during the interventional programme. There was a decrease in this difference in the interventional group, which characterises the reduction of discrepancy between self-perception and the ideal image of one's own person. This change indicates the shift in the perception of one's own person to stability, which leads to a common feeling of subjective contentment, subjective feeling of psychical health and "well-being".

DISCUSSION AND CONCLUSIONS

Smoking and alcohol and drug consumption of juveniles is a great problem that cannot be overlooked. The reason of this cheerless situation is as well the increase in offer of drugs in the society, including the mighty coming of alcohol promotion. We believe that this problem might have deeper roots. The matter probably is an instinctive compensation of bad treatment, abuse or neglect, insufficient self-respect and self-confidence. The inability to relax in some other way leads children and juveniles to nicotine, alcohol or some other drug intoxication. In this connection the propagation of compensatory relaxation kinetic activities in reeducational institutions is very desirable. Significant positive changes in the interventional group have to do with the perception of one's own body, self-perception and in particular the acceptance of one's self, not only on a real (contemporary) level but as well on an ideal (future) level in the sense of "to be better". This changed self-image is the result of cognitive, emotional and social variables that the trainees absorb during the programme. The charges were used to a completely different conception of exercises. New experience and feelings connected with relaxation, controlled rhythm of breathing and slow motion represented a wholly new quality of motional relaxation. Positive changes were caused by a close connection of exercises and inner experience. A conscious inwardness of every motion and realisation of the body part that is exercised lead to the state improvement in a relative short period of time. That is why we recommend the yoga relaxation compensatory programme as a basis for development of self-realisation, individual creativity and tolerance with understanding of the other man's individual possibilities. Boys and girls showed to be very spontaneous. This fact is very positive, especially when we realise to bring nearer the moral aspects of yoga such as non-violence, truthfulness, constraint, self-discipline etc. It is obvious that this open possibility of communication with an adult about various problems is for the charges very attractive and it should be used more in practice. The contents of individual exercise units proved during the programme to be fully convenient for the specifics of socially impaired children. The choice of yoga exercises with considerable anti-stress effects proved right, further balance exercises, so called "winner" positions and relaxation. In lesson 9. - 12. we started to combine the relaxation with concentration, self-regulation and self-analysis.

REFERENCES

Alvesalo,R.(1974). **Die Geschichte der Heimkampagne und ihre Entstehung aus der Jugendbewegung der 60er Jahre.** Zürich: Päd. Institut der Universität Zurich

Arieli, A.(1996). **Péče o problémové děti ve stále otevřenějších institucionálních zařízeních.** Praha: FICE.

Dostálek. C.(1996). **Hathajóga**. Praha: Karolinum.

Hošek, V. (1997). Pohyb a kvalita života. **Těl. Vých. Sport. Mlád.,** roč. 63/7, s. 7.

Krejčí, M.(1995). **Jóga v praxi pedagoga.** České Budějovice: PF JU.

Krejčí, M.(1994). Positive influences of yoga exercieses for the adolescents. **Medicine and Mind**, VIII, 2-IX, s. 143-153.

Nešpor, K. (1996). **Jak předcházet problémům s návykovými látkami na základních a středních školách.** Praha: Sport-propag.

Válková, H., Bortoli, L., Robazza, C.(1995). Self-concept and Self-efficacy Differences Between P.E. Teachers and P.E. Students. **Acta Universitatis Palackianae Olomoucensis Gymnica** XXV.

Toward an Instrument to Assesses the Quality of Adjustment to Career Transitions in Sport: The British Athlete Lifestyle Assessment Needs in Career and Education (Balance) Scale

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Key-Words: methodology, career transition, adjustment, BALANCE, scale

INTRODUCTION

In 1980, McPherson reported that an extensive literature search generated 20 references pertaining to the topic of career transitions in sport. In 1998, a total of 221 references were identified on the same topic (Lavallee, Wylleman, & Sinclair, 1998), including several references pertaining to instruments developed to assess the career transition process among athletes. For example, the Professional Athletes Career Transition Inventory (PACTI; Blann, 1984, cited in Blann and Zaichkowsky, 1989) and Australian Athletes Career Transition Inventory (AACTI; Hawkins & Blann, 1993) have been devised to assess athletes' career transition needs. The Life After Competitive Sport (LACS; De La Rue, 1997), the Athlete Retirement Questionnaire (ARQ; Sinclair & Orlick, 1993), and the Collegiate Football Retirement Appraisal Inventory (Williams-Rice, 1990) have also been developed to address the retirement experiences of high-performance athletes. Although these instruments have been useful in surveying the needs of current and former elite-level athletes, none have been able to identify individuals who are at-risk to experience transition-related difficulties. Therefore, the British Athlete Lifestyle Assessment Needs in Career and Education (BALANCE) Scale was developed to estimate the quality of career transition adjustment, and we present here preliminary findings which we hope will act as a catalyst for the development of an instrument which can be used by practitioners to forecast adjustment difficulties.

METHOD AND PROCEDURE

Based on conceptual models of adjustment to career transition (e.g., Gordon, 1995; Taylor & Ogilvie, 1998) and empirical research in the area, an initial item pool for the scale was developed. The following 13 variables were identifying as being moderators of career transition adjustment among athletes: perception of control over the cause for retirement (Lavallee, Grove, & Gordon, 1997), identity as an athlete (Murphy, Petitpas, & Brewer, 1996), social support (Sinclair & Orlick, 1993), previous experience with transitions (Swain, 1990), continued involvement in sport-related activities following retirement from competition (Curtis & Ennis, 1988), degree of occupational planning (Grove, Lavallee, & Gordon, 1997), identity foreclosure (Murphy et al., 1996), socioeconomic status (Kleiber, Greendorfer, Blinde, & Sandall, 1987), transferable skills (Gordon, 1995), achievement of sport-related goals (Sinclair & Orlick, 1993), mentoring (Perna, Zaichkowsky, Bocknek, 1996), provision of career transition support services (Wylleman, De Knop, Menkehorst, Theeboom, & Annerel, 1993), and having a new focus after retirement (Baillie & Danish, 1992).

Following a content validation conducted by three experts familiar with the career transition literature, social support and mentoring were merged into one variable. The twelve remaining variables were then converted into questionnaire items which were rated on 7-point Likert-type scales (with higher scores reflecting an individual being more at-risk to experience

adjustment difficulties). This preliminary version was initially administered to a sample of 262 undergraduate sport and exercise science students (139 females, 123 males) solely to establish the appropriateness of the questions. Based on this evaluation, modifications were made in the wording of some of the items. A revised version of the scale was subsequently administered to a small sample of elite-amateur British pistol and rifle shooters who had experienced an involuntary and unanticipated career termination. The scale was distributed during a career transition workshop organised 6 weeks after these individuals had been forced to retire from club competition. Each individual was also invited to participate in an interview with one of four workshop advisors/counsellors focusing specifically on their adjustment to their career transition.

RESULTS

A total of 56 former pistol and rifle shooters (42 males, 14 females) completed both the scale and the interview. These individuals began participating in competitive shooting at the mean age of 24.65 years (SD = 3.71), reached their highest level at 28.62 years of age (SD = 4.93), and were forced to terminate their competitive careers at 33.39 years of age (SD = 4.06). All items on the BALANCE Scale were summed, resulting in a mean score for this sample of 68.6 (SD = 5.42). A quality of adjustment rating for each participant was also made based on the interview data, and these classifications were subsequently correlated with the scale scores. These anlayses revealed a strong correlation between the quality of adjustment and scale scores.

DISCUSSION AND CONCLUSIONS

Career transitions are one of the most significant and potentially traumatic experiences in sport (Murphy, 1995). Indeed, in a review of 11 studies which specifically examined the quality of adjustment to career termination, Grove, Lavallee, Gordon, and Harvey (1998) revealed that more than 19% of the former athletes surveyed require(d) considerable adjustment to retirement from sport. However, very little research has been conducted on the identification of athletes who experience career transition-difficulties. For this reason, we would recommend that further research be conducted on the development of scale which could assist sport psychologists to predict the quality of adjustment among athletes in transition. A better understanding of which variables serve as a buffer following athletic career termination is required, and we would recommend that the variables outlined in this paper, as well as other potential moderators (e.g., time in career, role changes involved, state of health upon career termination) be systematicall examined. Reliability and validity checks are needed.

REFERENCES

Baillie, P. H. F., & Danish, S. J. (1992). Understanding the career transition of athletes. **The Sport Psychologist, 6,** 77-98.

Blann, F. W., & Zaichkowsky, L. (1989). **National Hockey League and Major League Baseball players' post-sport career transition surveys.** Final report prepared for the National Hockey League Players' Association, USA.

Curtis, J., & Ennis, R. (1988). Negative consequences of leaving competitive sport? Comparison findings for former elite-level hockey players. **Sociology of Sport Journal, 5,** 87-106.

De La Rue, J. M. (1997, August). **Life after competitive sport: The development of an athletic retirement scale.** Paper presented at the 1st International Athlete Career and Education Conference, Canberra, Australia.

Grove, J. R., Lavallee, D., & Gordon, S. (1997). Coping with retirement from sport: The influence of athletic identity. **Journal of Applied Sport Psychology, 9,** 191-203.
Grove, J. R., Lavallee, D., Gordon, S., & Harvey, J. H. (1998). Account-making: A model for understanding and resolving distressful reactions to retirement from sport. **The Sport Psychologist, 12,** 52-67.
Hawkins, K., & Blann, F. W. (1993). **Athlete/coach career development and transition.** Canberra: Australian Sports Commission.
Kleiber, D., Greendorfer, S., Blinde, E., & Sandall, D. (1987). Quality of exit from university sports and subsequent life satisfaction. **Journal of Sport Sociology, 4,** 28-36.
Lavallee, D., Grove, J. R., & Gordon, S. (1997). The causes of career termination from sport and their relationship to post-retirement adjustment among elite-amateur athletes in Australia. **The Australian Psychologist, 32,** 131-135.
Lavallee, D., Wylleman, P., & Sinclair, D. A. (1998). An annotated bibliography on career transitions in sport: II. Empirical references. **Australian Journal of Career Development, 7 (3),** 32-44.
McPherson, B. D. (1980). Retirement from professional sport: The process and problems of occupational and psychological adjustment. **Sociological Symposium, 30,** 126-143.
Murphy, G. M., Petitpas, A. J., & Brewer, B. W. (1996). Identity foreclosure, athletic identity, and career maturity in intercollegiate athletes. **The Sport Psychologist, 10,** 239-246.
Perna, F. M., Zaichkowsky, L., & Bocknek, G. (1996). The association of mentoring with psychosocial development among male athletes at termination of college career. **Journal of Applied Sport Psychology, 8,** 76-88.
Sinclair, D. A., & Orlick, T. (1993). Positive transitions from high-performance sport. **The Sport Psychologist, 7,** 138-150.
Swain, D. A. (1991). Withdrawal from sport and Schlossberg's model of transitions. **Sociology of Sport Journal, 8,** 152-160.
Taylor, J., & Ogilvie, B. C. (1998). Career transition among elite athletes: Is there life after sports? In J. M. Williams (Ed.), **Applied sport psychology: Personal growth to peak performance** (3rd ed., pp. 429-444). Mountain View, CA: Mayfield.
Williams-Rice, B. T. (1990). After the final snap: Cognitive appraisal and coping among retired intercollegiate football players. Unpublished master's thesis, University of Idoha, Moscow, USA.
Wylleman, P., De Knop, P., Menkehorst, H., Theeboom, M., & Annerel, J. (1993). Career termination and social integration among elite athletes. In S. Serpa, J. Alves, V. Ferreira, & A. Paula-Brito (Eds.), **Proceedings of the VIII World Congress of Sport Psychology** (pp. 902-905). Lisbon, Portugal: Universidade Técnica de Lisboa.

SELF-PRESENTATIONAL CONCERNS AND PERFORMANCE AMONG FEMALE GYMNASTS

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KEY WORDS: social evaluation, anxiety, defense mechanisms, gymnastic

INTRODUCTION

Despite the numerous researches on the concept of anxiety, the predicted negative relationship between state anxiety and complex performance has not been demonstrated with consistency. In sport psychology, winners and losers cannot be differentiated in terms of their measured state or trait anxiety levels. Similarly, Hanin (1994) reported that state anxiety did not differ between successful and less successful competitions for the same athletes. Others factors external to measured anxiety have then to be considered.

Recently, research examining competitive anxiety tried to elucidate causes of anxiety. The perception of threat is now accepted as a key antecedent to competitive anxiety. Efforts have been made to understand the nature of perceived threat in sport competition, but our understanding appeared still limited (Leary, 1992). Researches on competition stress sources put forward three main factors : fear of failure/feelings of inadequacy, external control/guilt, and social evaluation (Gould, 1983). Social evaluation have long been recognized as important in competitive settings (Martens, 1977). However, no theory exists explaining precisely what athletes find threatening about social evaluation. Leary (1992) has argued that self-presentational theoretical perspectives provide a suitable basis to understand issues associated with competitive anxiety. Self-presentational theoretical perspectives are concerned with the constellation of processes by which people monitor and control the impressions other people form of them in social situations (Leary, 1992). Self-presentation usually involves selective presentation and omission of aspects of the self to make desired impressions or to avoid undesired impressions on specific people. When people doubt they will achieve a desired self-presentational goal, they may experience social anxiety. With regard to self-presentation in sport, Leary (1992) argued that "competitive anxiety, whether regarded as a state or a trait, revolves around the self-presentational implications of competition". Leary (1992) contended that competitive anxiety is a class of social anxiety that is specific to sport competition.

Another investigation explored relationships between competitive trait anxiety and dispositional constructs associated with presentation of the physical self (e.g. body shape) (Martin & Mack, 1996). Constructs associated with physical self-presentation were significantly correlated with competitive trait anxiety among females but not males. These gender differences were attributed to the ways that males and females are socialized regarding the importance of physical appearance.

In a recent research on self-presentational concerns, Wilson & Eklund (1998) showed that the tendency to experience competitive anxiety, particularly cognitive anxiety in the form of worries, is closely associated with the tendency to perceive self-presentational threat during sport competition. The difficulties encountered to measure self-presentational variables, however, were attributed to the fact that self-presentational processes could also operate at unconscious level.

Following these researches, the purpose of this investigation is to better understand causes of performance decrement in gymnastic. The hypothesis is that performance degradations are linked

to self-presentational perspective (e.g. fear of social evaluation/need for social recognition), and that some processes underlying these fears are unconscious. We hypothesize those athletes who fear social evaluation will try to present they in a socially desired way. A social desirability scale can assess that. This fear for social evaluation can be linked to unconscious conflicts resulting in anxiety. Defense mechanisms will be used to suppress anxiety.

METHODS AND PROCEDURES

10 young gymnasts (ages ranging from 18 to 22) participated to the study. They went through several personality tests: Bortner (1969), EPI (Eysenk,1971), DMI (Gleser & Ihilevitch, 1969), STAI (Spielberger, 1970).
These subjects were also assessed in a training setting and during a competition by two independent judges.
Two groups were built on the basis of their score on theEPI social desirability scale (L). One group of 5 athletes scored above 3 and was classified in the "self-concern" group (A); a group of 5 athletes scored 3 and were classified in the "no-self-concern" group (B).
The two groups' personality tests scores and the training and competition scores were compared using a T test for independent variables.

RESULTS

Personality Tests:
As shown in Table 1, 5 psychological characteristics differentiated the two groups ($p<.05$). The social desirability scale from EPI ($p<.000$) on which subjects were classified ; Anxiety trait Y2 ($p<.O15$) ; Ambition ($p<.045$) ; two defense mechanisms projection ($p<.016$) and denial ($p<.O46$

TABLE 1. Comparisons of the two groups personality tests scores

Variables	Group A Means - SD	Group B Means - SD	P
EPI L (social desirability)	M = 5.2 S = 1.7	M= 3 S = 0	.000**
Anxiety trait	M = 59 S = 4.6	M = 45 S = 8.4	.014*
Projection	M = 33.4 S = 4.5	M = 41.6 S = 4	.016*
Denial	M = 40.4 S = 5.1	M = 32.2 S = 5.8	.046*

Gymnastic performance scores
Subjects of the two groups obtained similar scores during the training. In competition group B scores are significantly higher than group A scores.

TABLE 2. Comparisons of the two groups gymnastic scores

	Group A Means - SD	Group B Means - SD	P
Training	M = 7.61 S = .76	M= 7.69 S= .42	.852
Competition	M = 6.55 S = .37	M = 7.62 S = .07	.045*

DISCUSSION

Our results showed that self-presentational concerns seem to affect gymnastic performance. Competitive anxiety did not appear as an essential factor of performance decrement, but trait anxiety differentiated the two groups. Trait anxiety could be an expression of an unconscious conflict in the form of worries. It could be also associated with the tendency to perceive self-presentational threat during sport competition, as shown by Wilson & Eklund (1998).

The presence of unconscious processes is demonstrated by the defense mechanisms used preferentially by the subjects. Denial is most frequently used by the group A subjects. These subjects may not be completely aware of their need to protect their self-image. They can try to suppress the anxiety linked to an unconscious process. When face to a public performance and evaluation, their fear to be assessed and unmasked can be detrimental to their performance in different ways: increase of anxiety, attentionnal diversion and drop of concentration to protect their image.Further researches are needed to understand in which way performance is affected by self-presentational concerns, the roles of gender socialization factors and sport type.

REFERENCES

Bortner, J.A. (1969). A short scale as a potential measure of pattern A behavior. **Journal of Chronical Disease, 22,** 87.

Eysenck, H.J., Eysenck, S.B.G. (1971). **Manuel de l'inventaire de personnalité d'Eysenck (EPI).** Paris, Ed. du C.P.A.

Gleser, G.C., Ihilevitch, D. (1969). An objective instrument for measuring defense mechanisms. **Journal of Consulting and Clinical Psychology, 33,** 51-66.

Gould, D., Horn, T., Spreeman, J. (1983). Sources of stress in junior elite wrestlers. **Journal of Sport Psychology, 5,** 159-171.

Hanin, Y.L. (1994). Does the STAI measure only anxiety ? Paper presented at the 15th STAR International Conference, Madrid, Spain.

Leary, M. (1992). Self-presentation in sport and exercise. **Journal of Sport & Exercise Psychology, 14,** 339-351.

Martin , K., Mack, D. (1996). The relationship between physical self-presentation and sport competition anxiety: A preliminary study. **Journal of Sport & Exercise Psychology, 18,** 75-82.

Spielberger, C.D., Gorsuch, R.L., Lusehene R.E. (1970).**Manuel for the State Trait Anxiety Inventory**. Palo Alto, Consulting Psychologists Press.

Wilson, P., Eklund, R.C. (1998). The relationship between competitive anxiety and self-presentational concerns. **Journal of Sport & Exercise Psychology, 20,** 81-97.

LEADERSHIP BEHAVIOUR AND GROUP COHESION IN SOCCER TEAMS

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Kew Words: leadership, cohesion, performance

INTRODUCTION

It has been evident, the relevance that is attributed, in sport contexts, to three elements: the athlete, while member of the group or team sport considered as a whole, the trainer, assumed a leader in the interactions that establishes with the athletes, and the sport success, that is the purpose of the generality of the sport competition. In this sense, the multidimensional leadership model (Chelladurai, 1978) and the conceptual cohesion model (Carron, 1985) have frequently been used to analyse the relationships between the trainer and the athletes and the behaviours of group cohesion. Also in according with these authors, the performance and the athletes' satisfaction are dependent variables of the leadership and group cohesion behaviours. During the last decade, some situational variables (e.g., personality, gender, sport modality, and maturity) were identified as antecedents of the leadership behaviours. In the same way, other antecedent variables as the dimension of the group (Widmeyer et al., 1990), the athletes' personal characteristics (Widmeyer et al., 1985) and the collective efficacy, seem equally to influence the development of the cohesion. However, in spite of the leadership being considered as an antecedent factor of the group cohesion (Carron, 1982) few investigation (Westre & Weiss, 1991; Antunes & Cruz, 1997; Leitão, 1997) has been accomplished with the purpose of analysing the relationship among this two constructs. Given the theoretical above, the purpose of this study was to verify the relationships among the perceived leadership behaviours, the group cohesion, the satisfaction and the athletes' performance.

METHOD AND PROCEDURE

Subjects and Design

The 316 federated athletes (seniors) of the soccer modality that participated in this study, competed in regional and national championships. They were coming from 23 teams of different soccer divisions (2nd national division and regional division), with a range of ages between 17 and 39 years (M=23.2 yrs, SD=4.33 yrs). Measurement was carried out at different points in time. Leadership, cohesion and satisfaction dimensions were measured at three times, that is early season (two months after beginning of the season), midseason, and end season. The time span between the measurements was two months. Team performance and perceived performance measures (individual and team) was evaluated at midseason and end season.

Procedures

One month before the beginning of the formal competitions, an appointment was arranged with the coach of each team for permission to conduct this study. Players were told that the general purpose of the study was to verify the coach-player relationship during the

season (three moments of evaluation). Accompanying the LSS and GEQ were directives for completing the questionnaires. All subjects were assured of the confidentiality of their responses.

Measurements

Leadership Scale for Sports (LSS): Leadership was assessed through the Leadership Scale for Sports (Chelladurai & Saleh, 1980). The LSS was translated to portuguese language and validated by Serpa et al., (1988). This is a 40-item interval scaled instrument measuring five aspects of leader behaviour: training and instruction, rewarding behaviour, social support behaviour, democratic and autocratic behaviour. Responses were coded in to 5-point Likert scale from 'never ' to 'always '.

Group Environment Questionnaire (GEQ): The GEQ was developed by Carron (Carron et al., 1985). It was translated to portuguese language and validated by Mendes & Bártolo (1993). This is an 18-item interval scaled instrument measuring four aspects of cohesiveness: group integration-task (GI-T), integration-social group (GI-S), individual attraction to the group task (ATG-T) and individual attraction to group-social (ATG-S). Responses are coded in to 9-point Likert scale ranging from 'strongly agree ' to 'strongly disagree '.

Satisfaction Scale for Athletes (SSA): The SSA (Chelladurai et al., 1984) was translated to portuguese language and validated by Cruz & Viana (1993). The factorial analysis revealed four dimensions: satisfaction with leadership, satisfaction with team performance, satisfaction with personal outcome and satisfaction with his own performance. Responses are coded in to 7-point Likert ranging from 'extremely unsatisfied ' and 'extremely satisfied '. The reduced version of the SSA was used in this research.

Additional Measures: team performance, perceived individual performance and perceived team performance was measured respectively through win/loss percentage and from responses to 5-point Likert scale.

RESULTS

To determine, in every moment of evaluation, the differences between leadership behaviour, cohesion and satisfaction, in function of the contractual responsibility (professional and non professionals athletes) and of the athlete's status (starter/no starter) a series of one-way multivariate analyses of variance was performed. This way, a significant main effect was observed in every moment of evaluation (Early season-Pillais = .09, $F(11,304)=3.06$; Midseason-Pillais = .13, $F(11,302)=4.24$, $p = .000$; End season-Pillais = .13, $F(11,225)=3.26$). The results show that the decision trainer's behaviours, the attraction toward group-task, group integration-social and satisfaction with the leadership, contributed to maximise the differences between the professional and non professionals athletes. The discriminants coefficients and the univariate Fs also revealed the existence of significant differences between the starters and non-starters, in each group. In addition, discriminant analyses were performed to determine, in the base of the differences among predictor's variables, the professional and non professionals athletes' classification. Thus, it was observed that the professional athletes of high performance were characterised by high levels of cohesion in the task and for low levels of social integration

(initial phase -Wilks' lambda = .75, Chi-square (3)=27.1, p <.0001; final phase - Wilk's lambda = .80, Chi-square(2)=13.0, p = .001). Through path analysis, significant relationships were obtained, in the different moments of evaluation, among of the predictors variables (cohesion, leadership and satisfaction) and the measures of perceived team performance and perceived individual performance (criterion variables). Last, the relationship among the cohesion and satisfaction measures with the team performance measures indicated a positive effect of the team performance (early season) in the cohesion (midseason) and in the team satisfaction (midseason) (Beta = .34, Z=2.14; Beta = .44, Z=2.92).

DISCUSSION AND CONCLUSIONS

Considering the influence of the athletes' characteristics in the perception of the trainer's behaviours, the results showed an agreement with the relationships proposals for Chelladurai (1978) and of Carron et al. (1985). However the high task cohesion levels for the starters (professionals and non professionals) suggest, through the operational definition of Carron et al. (1985), a stronger sense of group belonging, comparatively to the no starters athletes The results seem equally to evidence that the perception of the individual and team performance, the athletes' statute and the athletes' contractual responsibility, are moderator variables of the relationship between the leadership behaviours and group cohesion (Westre & Weiss, 1991; Antunes & Cruz, 1997; Leitão, 1997). Another purpose of this study was to ascertain, the contribution of leadership, cohesion and satisfaction variables to the prediction of perceived team performance and perceived individual performance. In this sense, the different prediction values of the variables of group process, along the time, seems to reinforce, for its time, the idea of instability and permanent change of the group processes (Widmeyer et al. 1993). On the other hand, the results obtained between the cohesion variables and team performance, seem to suggest that the team performance contributes to generate high levels of cohesion and satisfaction (Antunes & Cruz, 1997).

In conclusion, although few studies have still analysed the relationships between the group variables and team performance along the sport season, this study supplied some indications about the existent relationships in different moments, among the leadership factors, cohesion, satisfaction and the performance, and of the instability of the group processes change. However, for a better understanding concerning the relationship among these variables and performance, it is fundamental to analyse the variables that influence this process.

REFERENCES

Antunes & Cruz (1997). Dinâmica de grupos na alta competição. In J. Cruz & R. Gomes (Eds), **Psychology Applied to Sport and Physical Activity**. Braga: APPORT.

Chelladurai, P. (1993).Leadership. In R. Singer, M. Murphey & L. Tennant (Eds), **Handbook of Research on Sport Psychology** (pp. 647-671). New York: Macmillan.

Westre & Weiss M. (1991). Th relationship between perceived coaching behaviours and group cohesion in high scholl football teams. **The Sport Psychologist**, 5, 41-54.

Williams, J., & Hacker, C. (1982). Causal relationship among cohesion, satisfaction and performance in women's intercollegiate hockey teams. **Journal of Sport Psychology,** 4, 324-337.

PROPRIOCEPTIVE PERCEPTION OF VERTICAL AND SPORTS TRAINING.

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(A) KEY WORDS

Perception of vertical, Proprioception, Inner Representation of Space, Swimming, Fencing, Tennis.

(B) INTRODUCTION

Mainly studied in the visual modality, the subjective vertical appears to be close to the physical vertical. The accuracy of adjustments is indeed less than one degree (Luyat, 1997). The subjective vertical seems to imply an inner representation of space and the perception of position of the Z axis (cephalo-caudal axis) should be predominant (Luyat, 1997). In literature, this theme is not much explored from the proprioceptive modality angle. Few authors have reported the oblique effect in the haptic modality (Gentaz and Hatwell, 1996, 1998) in which the implied information is tactilo-kinesthesic and the task consisted of reproducing different orientations.

Moreover, sports seem to modify human behavior (Mesure and Crémieux, 1992). Playing a sport creates, according to Welford (1988), new nervous connections between the perceptive and the motor areas. Further, acquisition and integration of new motor abilities would depend on the activity (Weineck, 1990). Differential effects have been suggested regarding the posture control and the choice of a sensorial canal (Mesure and Crémieux, 1992; Bonnet and Crémieux, 1994).

Exercise has thus an effect on the basal functions of the organism. We suppose that differences in vertical perception exist between sportsmen and sedentary subjects. Our purpose was also to test the accuracy of adjustments to the vertical in sportsmen whose proprioceptive information may be specific to the sport played. This proprioceptive information is either an indication of the precision, more or less predominant during the playing of sport such as tennis or fencing, or differently solicited than on earth, such as swimming; their constant reclining position influences the body stability and their head is not the principal frame of reference (Mouchnino, Aurenty and Massion, 1992).

(C) METHOD AND PROCEDURE

Subjects: Forty right-handed male (swimmers, fencers, tennis players and sedentary subjects) were included in this study (TABLE 1).

TABLE 1: Means and Standard Deviations of Age and Years of Practice in each Group:

	Swimmers	Fencers	Tennis players	Sedentary Subjects
Number of subjects	10	10	10	10
Mean Age	20.6±1.3	14.8±1.3	21.5±2.5	21.0±1.6
Mean Years of Practice	12.0±1.9	7.6±2.9	12.0±3.2	0.0

Apparatus: The apparatus is composed of a rod (16 cm * 0.6 cm) centered on a mobile axis connected to a potentiometer. These elements are fixed on a support adjustable in height to the stature of the subject. The signal was retrieved by a computer.

Setting: The experiment took place in a dark room. The subject worn opaque glasses, stood up in front of the apparatus. The rod was placed in one of the eight start directions, characterised by the angular distance (between 90 and 22.5°) and the hemi-space (right or left). Then, the person conducting the experiment put the subject's hand at the end of the rod. The subject's task consisted of estimating the vertical, without exploring the rod but only using the digital handle. Each subject carried out eight attempts with their right hand and eight with their left hand. The sequence of each hand used was counterbalance for each group; five subjects used the right hand first, and five the left hand first.

(D) RESULTS

The vertical was defined as the 0° position. The dependent variable was the signed angular error: negatively, if the vertical was underestimated and positively if it was overestimated. The results are presented in Figure n°1.

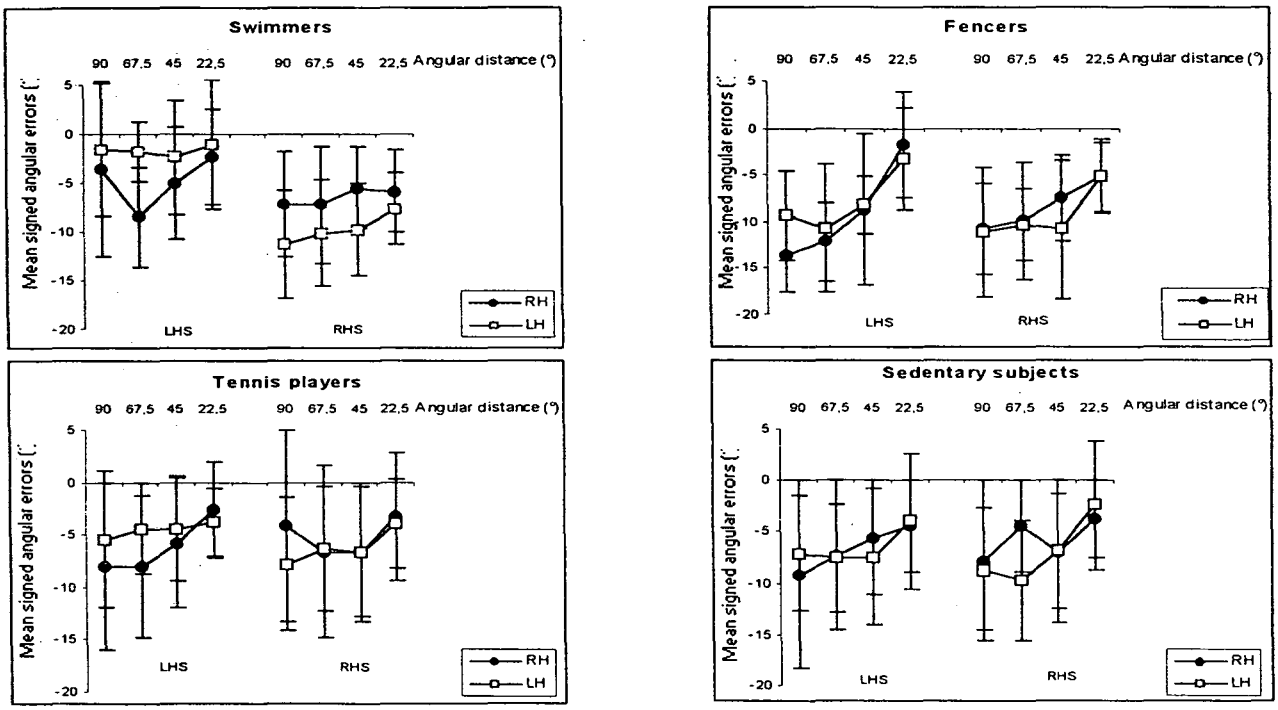

Fig.No.1 : Mean Signed Angular Errors according to the Hand (right (RH) or left (LH)), the Hemi-space (right (RHS) or left (LHS)) and the Angular Distance for each Group.

From a descriptive point of view, the four groups underestimated between -5.33° and -8.36° (Mean = -6.56°; SD=6.18°) of the vertical. For each group, an ANOVA was performed on the plane S10*M2*H2*D4 with S: the ten subjects of the group; M: the hand used to adjust; H: the hemi-space; and D: the angular distance. The ANOVA revealed a significant effect of the angular distance on the mean signed angular error for the fencers, the tennis players and the sedentary subjects (respectively $F_{3.27}=59.72$, $p<0.01$, $F_{3.24}=4.11$, $p<0.05$, and $F_{3.27} = 12.49$, $p<0.01$).

The swimmers' group was different from the other groups because a significant effect of the angular distance has not been shown. On the other hand, the angular error of the swimmers was significantly influenced by the hemi-space ($F_{1.9}=10.87$, $p<0.01$). Indeed, the swimmers underestimated more the vertical when the start orientations were in the right hemi-space than in the left hemi-space. Moreover, the interaction hand * hemi-space was significant ($F_{1.9}=6.99$,$p<0.05$). The mean signed angular error was more important in the right hemi-space than in the left hemi-space, this difference being higher for the left hand than for the right hand.

(E) DISCUSSION

The playing of a sport seems not to influence the accuracy of adjustments to the vertical. Nevertheless, whereas the angular error depended on the angular distance between the starting orientation and the physical vertical for the fencers, the tennis players and the sedentary subjects, this factor has not been found for the swimmers. In this last group, the hemi-space and the hand influenced the accuracy of adjustments.

This difference is probably explained by a particular frame of reference for the swimmers. It is possible that the starting direction of the rod occurred a small displacement of the head toward this orientation, favoured by the absence of visual references. If the adjustment is made according to a cephalo-centered system of reference, the vertical moves according to the position of the rod. Consequently, the perception of the vertical would be deviated for subjects using the head as frame of reference. Swimmers seem to use preferably the Z axis as reference, whose perception may principally depend on the hemi-space in which the adjustments are made; plantar signals being not much important in these subjects.

On the other hand, the increase of the mean angular error according to the angular distance was unexpected. Why the estimation of the vertical was different from a starting position to another for the same subject ? In literature, a similarly effect, called « range effect » has been found in pointing tasks occurring without visual feed-backs (Prablanc *and al.*, 1986). Therefore, our experimental task should be considered as a pointing task (probably « straight ahead ») as Paillard suggested (personal communication, 1998). New investigations are carried out to verify this hypothesis.

(F) REFERENCES

Gentaz, E. and Hatwell, Y. (1998). The haptic oblique effect in the perception of rod orientation by blind adults. **Perception & Psychophysics, 60(1)**, 157-167.

Gentaz, E. and Hatwell, Y. (1996). Role of gravitational cues in the haptic perception of orientation. **Perception & Psychophysics, 58(8)**, 1278-1292

Luyat, M (1997). Verticale subjective versus verticale posturale : une note sur l'étude de la perception de la verticale. **L'Année psychologique, 97**, 433-447.

Mesure, S. and Crémieux, J. (1992). Contrôle de l'équilibre postural et de l'effet de l'entraînement sportif. **Cinésologie, 31**, 228-234.

Mesure, S., Bonnet, M. and Crémieux, J. (1994). L'entaînement sportif peut-il influencer le contrôle postural statique ? **Science et motricité, 21**, p 39-47.

Mouchnino,L., Aurenty, R. and Massion, J. (1992). Control of the trunk axis verticality during leg movements in swimmers. In Woollacott, M et Horak, F. (Eds), **Posture and Gait : control mechanisms**. University of Oregon Books, vol 1 ; pp 127-130.

Prablanc, C., Pélisson, D. and Goodale, M.A. (1986). Visual control of reaching mouvements without vision of the limb. I Role of retinal feedback of target position in guiding the hand. **Experimental Brain Research, 62**, 293-302.

Weineck, (1990). **Manuel de l'entraînement** 3éme édition. Sport + Enseignement : Ed. Vigot.

Welford, A.T. (1988). Acquiring skill : some experience. **Journal of Motor Behavior, 20 (4)**, 458-461.

INDEX
Part 1

PSYCHOLOGY OF SPORT AND EXERCISE: ENHANCING THE QUALITY OF LIFE

10th European Congress of Sport Psychology Prague 1999

PROCEEDINGS PART 1

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