ACHIEVEMENT GOALS IN COMPETITIVE SPORT: A CRITIQUE OF CONCEPTUAL AND MEASUREMENT ISSUES

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Achievement Goals; Measurement Issues; Competitive Sport

INTRODUCTION

The extensive application of NICHOLLS' (1989) achievement goal theory has led to an enhanced appreciation of human behaviour and a realisation that behavioural processes hinge on the quality of thought or perception as opposed to merely a quantity of innate desire. However, as the body of knowledge has developed on achievement goals in the sport domain, it is our contention that a closer look needs to be afforded to the process by which achievement goal theory has been operationalised in the context of competitive sport.

The purpose of this presentation is to appraise and critique the conceptualisation and measurement of achievement goals with sole reference to the competitive sport context. Our objectives lie in aiding the definition and understanding of task and ego goal perspectives in competitive sport in order to assist in promoting an accurate and valid measurement technology for this domain.

METHOD & DISCUSSION

Issue no. 1: Is the conceptualisation of achievement goals clear?

Nicholls' research within the educational setting appears to consist of two dimensions. Primarily, his research focused on establishing the developmental process via which young children differentiated the concepts of ability, effort, task difficulty and luck (NICHOLLS & MILLER, 1983, 84). According to Nicholls, central to the existence of two conceptions of ability (task and ego) is an understanding of the stages which have led young children to a cognitive-developmental point where they can, within a given achievement situation:

i)   conceptualise ability as effort   (undifferentiated conception)
ii)   conceptualise ability as a capacity less influenced by effort   (differentiated conception)

Nicholls reasoned that the nature of the achievement goal pursued by the individual was contingent upon the differentiation process and the conception of ability

adopted by the individual. An undifferentiated conception of ability equated to personal goals characterised by a state of task involvement. A differentiated conception of ability equated to personal goals characterised by ego involvement. In addition, NICHOLLS (1989; p.95) proposed that the existence of two orthogonal goal orientations reflected "individual differences in proneness to different types of involvement." DUDA AND WHITEHEAD (1998; p. 24) state that "the two goal orientations, labelled task and ego orientation, relate to whether an individual is more or less likely to employ an undifferentiated or differentiated concept of ability". Similar statements are common within published research on achievement goals.

Considering statements like this, however, it is important to note that although the origins of dispositional tendencies may have been related to the differentiation process, the fact that goal orientations are orthogonal means that they cannot logically be defined by the likelihood of an individual adopting either an undifferentiated or differentiated concept of ability. The construct of ability is either psychologically differentiated from effort, task difficulty and luck or it remains undifferentiated from these constructs; it cannot be both. In this way, it is argued that differentiation or undifferentiation cannot be the defining characteristics of two independent goal orientations. Goal profile research (e.g. FOX ET AL., 1994) shows how performers may be simultaneously oriented towards both goals and are not constrained to employing either a differentiated or undifferentiated conception of ability. Indeed, the problem of suggesting that an ego oriented individual utilises a differentiated conception of ability, whilst a task oriented individual uses an undifferentiated conception is totally encapsulated by the orthogonality of goal perspectives. Namely, what conception of ability does the individual with a high task/high ego orientation goal profile utilise? From a theoretical viewpoint, and bearing DUDA AND WHITEHEAD'S (1998) statement in mind, the individual cannot be differentiated and also undifferentiated.

Issue No. 2: Are assessments of dispositional achievement goals designed to predict 'competition' beliefs appropriate?

The conceptualisation of achievement goals in sport mirrors Nicholls' approach in education. Reported by DUDA AND WHITEHEAD (1998), the development of the Task and Ego Orientation in Sport Questionnaire (TEOSQ) was largely based upon the items and format of the task and ego dimensions in the Motivational Orientation Scales. A close analysis of the items reveals that task orientation is tapped by statements revolving around the relevance of effort, trying hard, learning (new) skills, fun, and the practice of new skills. Assessments of the level of ego orientation depend upon responses to the relevance of doing better than friends, scoring the most points and demonstrating superior skill to others. The internal consistency of the TEOSQ as a measure of dispositions is very strong and, consistent with classroom findings, the task and ego subscales are orthogonal. Nonetheless, researchers (e.g. HARDY, 1998) have questioned whether the defining characteristics of task orientation (e.g. self-referent achievement goal focus) and ego orientation (normative achievement goal focus) in competition contexts are accurately reflected within the composition of the questionnaire.

The second issue to address revolves around debating the applicability of the TEOSQ for measuring dispositional achievement tendencies to competitive sport situations. The following points are salient in this respect:

i)   determining the conceptual nature of achievement goals pursued by performers in the competition context
ii)   addressing the item composition of dispositional measures to accurately assess task and ego tendencies with respect to achievement goals pursued in competition
iii)   examining the need to consistently employ a goal profiling analytical design in order to recognise the orthogonal nature of goal perspectives
iv)   maximising discriminant validity to ensure that performers with different levels of task and ego orientation are clearly identified

Issue no. 3 : Goal orientation and goal involvement in competitive sport – a mismatch?

In competitive sport, one test of the validity of a dispositional measure would be its consistently accurate prediction of respective goal states, whilst controlling or accounting for the influence of situational factors. Within achievement goal research, solid agreement has yet to be reached on the relationship between goal orientation and goal involvement. DUDA AND WHITEHEAD (1998) recently stated that "goal states are qualitatively different from dispositional goal orientations rather than simply a manifestation of those dispositions at one moment in time." One might argue that this statement questions the reasoning behind even assessing dispositional goal orientation if one's intention is to accurately predict states of task and ego involvement. There is reason to be confident, however, if goal orientation (as an attitudinal disposition towards competition) and goal involvement (as an attitudinal state within a competition situation) can be conceptualised in synergy.

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KINESIOTHERAPY IN THE TREATMENT LONG TERM HOSPITALIZED SCHIZOPHRENIC PATIENTS

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KEY WORDS: schizophrenia, kinesiotherapy, long term hospitalised patients.

INTRODUCTION

Psychic illness has been recognised and described through-out recorded history. Priests in Egypt three thousand years ago treated it. They operated within a theological rather than a medical framework, but their observations were acute and they noted characteristic aspects of disorders. In the treatment daily used exercises with elements from sports gymnastics and dance, have experience with their implementation.

In the Middle Ages was a resurgence of the supernatural theory of mental illness. The ancient gods had long been forgotten. Beginning with the Renaissance, however, the emphasis shifted permanently toward natural causes for mood disorders. Today we categorise the major mood disturbances

The therapy of psychiatric patients has many forms. The methods of some of these forms are well known and documented in detail.

We were searching for better kinesiotherapeutic program for different psychic illnesses.

Everyone of us, including the patients, have had some previous experience with physical activity. This has been mainly during the early part of our life, when we have dedicated most of our time to games and sport.

During this time we experienced very pleasant and rewarding moments. Similarly the patients, have in most cases comparable experiences and they also have pleasant memories about their sport activities.

Reflections of our body are intimate to your emotional interpretation and result frequently in pleasant feelings. For these reasons it is why we believe that using physical exercise is one of the most appropriate forms of therapy.

It is known that:
- some exercises or sets of these, have activating impact and cause temporary increase in the level of the sympathetic nervous system.
- other kinds of exercises lead to the program stimulation of the reflexogenic zones and to a decrease of stimulation which leads to activation of parasymphatetic nervous system, and in total generates relaxing and overall slow-down. In such cases the exercise has a sedative impact.

During the last seven years we have been applying a gymnastic program with long term hospitalised schizophrenic patients. The number of patients was 70 (45 men, 25 women). We applied two types of different gymnastic programs with all patients hospitalised in

the time of the experiment in the departments. Only schizophrenics was selected with no other simultaneous therapy except farmakotherapy.

The purpose of that study was to analyse the possibility of the therapy of schizophrenic patients by application of gymnastic exercises.

In principal this study attempts to answer the following questions:
- is physical exercise appropriate for patients with schizophrenia?
- which kinds of exercises are preferable: activating or sedative ones?

METHOD AND PROCEDURE

Psychiatric Methods

The psychiatric status of the patients was evaluated by the Brief Psychiatric Rating Scale, authors: Overall, J.E., Gorham, DR. by blind method. All patients were evaluated at the beginning, and after three months, when the experiment ended. The therapy was applied regularly twice a week. The evaluation was carried out by two psychiatrists, who did not known whether the patient was involved, and by therapist , who worked with the patients.

Exercise Methods

The kinesiotherapeutic program was applied regularly two times a week for three month. One lecture lasted in the beginning 20 minutes and at the end 50 minutes. There were three groups of patients.

The first group has been performing exercises with progressively increasing proportion of the sedative components. In this approach the emphasis after an active start changed towards the lay-down exercises. These were exercises of pressure and pull, causing better blood circulation in internal organs. The exercises were regularly by some warm-down relaxation positions. The session was then concluded by a short period of relaxing positions, stimulated verbally by the therapist. This helps the participants to achieve a progressive relaxation of all muscular groups.

The second group has been performing activating exercises similar to the European Gymnastic Systems. In the first part of the lecture exercises were oriented towards quick contraction of the muscles. The second part uses sport elements characteristic:

for men: exercises with football ball, 5 kilo full ball, exercises on bars and with barbell

for women: exercises with rubber, ball and with silk ribbon

In the end we used a simple form - for men sports competition, for women composition with music. This types of exercises have more emotional and social factors.

Exercises were oriented towards quick contraction of the muscles. The level of the sympathetic was increased during and also after the exercises. The feeling of tiredness, caused by the increased level of endorphins, had a pleasant reflection.

The third group was involved in no exercises.

RESULTS

The changes in the psychiatric status of the expect three persons were positive. Only patients with high anxiety were not able take a part in kineziotherapeutic program.

Patients exposed to the activating kind of exercise recorded greatest improvement in the women group. 95% of patients were able to accept the stimulating kinesiotherapeutic program with sport elements.

Concentrate-relaxing kinesiotherapeutic program were able to active participate only of 15% patients and 40% patients passive. Patients exposed to the concentrate relaxation components kind of recorded greatest improvement in the men group. The most significant improvement was found with the group of patients which where able accepted the concentrate-relaxing exercises.
Patients with no exercise program attained minimal changes by the BPRS scale.

DISCUSSION AND CONCLUSIONS

Two different kineziotherapeutic programs were applied regularly two times a week for three month. One lecture lasted in beginning 20 minutes and at the end 50 minutes.
Significant improvement was found.
These findings allow us to conclude that:
The therapy of schizophrenic patients by means of gymnastic exercises is an appropriate approach. The exercises must be determinate according condition personality patients.

IMPROVEMENT KINEZIOTHERAPEUTIC PROGRAMS

kineziotherapeutic program		mean average	standard deviation	t- value	t- prob. level
activating	men	90.21	7.4864	4.508	0.0006
	women	96.0	27.4631	11.0540	0.0000
concentrate-relaxing	men	131.25	7.454	6.099	0.0001
	women	70.375	42.9183	4.6378	0.0024
control group	men	-.1538	34.999	1.5848	0.9876
	women	5.5	21.6134	0.7197	0.4950

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RELATIONSHIPS BETWEEN GOAL ORIENTATION, SELF-CONSCIOUSNESS AND THOUGHTS OF ESCAPE ATHLETES EXPERIENCE DURING COMPETITION.

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KEY WORDS: sport competitions, thoughts of escape, goal orientation, self-consciousness.

INTRODUCTION

Thought Occurrence

Thoughts that athletes experience during competitions, though an important aspect of sport performance has yet to attract the attention of researchers within the cognitive sport psychology framework. The occurrence of thoughts during competition might affect performance in a positive or negative way. A certain type of thoughts that the authors in previous research found to have significant detrimental effects on performance is the thoughts of escape (E-thoughts) from a situation. Such thoughts are the focus of the present study. A first aim was to examine whether or not such thoughts appear consistently on athletes' minds.

Goal Orientation

One of the most popular theories in contemporary achievement motivation, is goal orientation theory. This suggests the existence of two major types of orientations: task orientation, which is based on a self-referenced conceptualisation of competence and focuses on learning and personal improvement, and ego orientation which is based on a normative and comparative conceptualisation of competence and focuses on winning and outperforming others. Research has generally shown that task orientation compared to ego orientation is related to more 'adaptive' patterns of cognitions. A second aim of this study was to explore the relationship between goal orientation and the occurrence of E-thoughts while competing.

Self-Consciousness

In contrast to goal orientation, self-consciousness (SC) is not among the most popular topics in sport psychology. However, it has attracted considerable attention in other achievement contexts such as education. SC refers to the tendency of individuals to direct attention to themselves. It consists of two aspects: (a) private SC: the focus of attention on the covert aspect of the self (e.g. inner thoughts and feelings), and (b) public SC: the focus of attention on the self as a social object (Feginstein, Scheier & Buss, 1975). Considering the way competence is conceptualised within ego orientation we postulated that SC might play an important role in the relationship between goal orientation and E-thoughts.

Hypothesis

Overall, three specific hypotheses were made: (a) whether or not athletes experience E-thoughts during competitions is relatively consistent (tendency), (b) task orientation will be negatively related to such tendencies, while ego orientation will be positively related, and (c) SC will mediate the relationship between ego orientation and 'E-thoughts'.

METHOD

Sample

Seventy one (21 males and 50 females) volleyball players who took part in the finals of the British Universities Sport Association (mean age 23 years, SD 2.97years) comprised the sample.

Instruments

Three instruments were used: (a) The 'Thoughts of Escape' subscale from the Thought Occurrence Questionnaire modified for sport (TOQ-S; Hatzigeorgiadis & Biddle, under revision) which was used to assess the E-thoughts athletes were experiencing during the games, (b) the Task and Ego Orientation in Sport Questionnaire (TEOSQ; Duda and Nichools, 1992) which was used to assess athletes' goal orientation, and (c) the Self-Consciousness Scale (SCS; Feginstein et al., 1975), which comprises three subscales namely 'Private self-consciousness', 'Public self-consciousness' and 'Social anxiety' and was used to evaluate the self-consciousness tendencies of the athletes. All scales had satisfactory internal consistency (Cronbach's alpha ranging from .70 to .88).

Procedure

The 'thoughts of escape' scale was administered three times immediately after the conclusion of three games. The questionnaires including the TEOSQ and the SCS were completed during off-competition time.

RESULTS

Correlations within the Thoughts of Escape Measures

The initial analysis examined the correlations between 'E-thoughts' for the three games (Table 1). The analysis revealed quite high correlations. However, because of previous research by the authors suggesting that the frequency of such thoughts largely depends on perceived performance an attempt was made to control for such effects. Thus, partial correlation were computed controlling for the effects of perceived performance (measured by means of two items for each game) on the relationship between the three measures. The correlation coefficients for the three measures dropped slightly, however they remained high suggesting that the frequency of such thoughts seems quite consistent across situations (Table 1). For the purposes of the path analysis total scores from the three measures were computed.

TABLE 1. Correlation Coefficients for the three 'Thought of Escape' Measures. The bold characters represent partial correlation coefficients after controlling for the effects of perceived performance.

	Game 1	Game 2	Game 3
Game 1	*	49	50
Game 2	55	*	40
Game 3	58	56	*

All correlations significant at the .001 level

Structural Equation Analysis

Subsequently, the structural models designed to test the hypotheses were tested. The initial model included only goal orientation as the independent variable and 'E-thoughts' as the dependent. The analysis revealed a negative association between task orientation and 'E-thoughts' (standardised coefficient: -.32), and a positive association between ego orientation and 'E-thoughts' (standardised coefficient: .18; Figure 1, model a). When self-consciousness was entered in the model the direct path connecting ego orientation and 'E-thoughts' became non-significant, and was replaced by an indirect path (standardised coefficient: .13), through self-consciousness (Figure 1, model b). The fit indices for the two models (Table 2) indicated that they both represented the data satisfactorily.
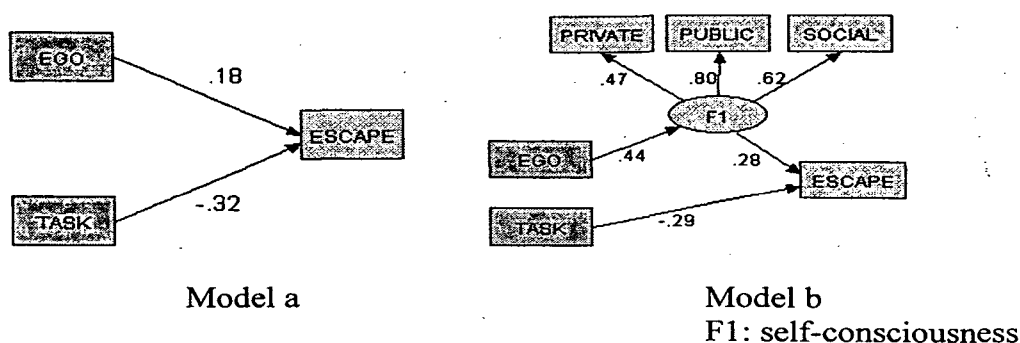
Model a   Model b
                                           F1: self-consciousness

Fig. 1. The Structural Equation Models.

TABLE 2. The Fit Indices for the Path Models.

Fit Index	Model 1	Model 2
Chi-square/probability	.50/p=.48	7.69/p=.56
Bentler-Bonett Non-Normed Fit Index	1.175	1.044
Comparative Fit Index	1.000	1.000
LISREL Goodness of Fit Index	.995	.966
Root Mean Squared Error of Approximation	.000	.000

DISCUSSION AND CONCLUSION

Thoughts of Escape as a Tendency.
The results revealed relatively high correlations between the three measures of 'E-thoughts', even after controlling for the effects of performance, suggesting that whether or not individuals experience such thoughts is relatively consistent across situations. Therefore, it was considered appropriate to further investigate the degree to which such tendencies can be explained by trait characteristics.

Goal Orientation, Self-Consciousness, and Thoughts of Escape.
Task orientation was negatively related to the frequency of E-thoughts athletes experienced, whereas the relationship between such thoughts and ego orientation was positive, supporting previous findings that task orientation is connected to more 'adaptive' cognitions. Finally, it was revealed that one of the mechanisms through which ego orientation is connected to 'E-thoughts' is the tendency of individuals to direct attention to themselves. Considering the self-centred character of ego orientation as opposed to the task-centred character of task orientation the pattern of relationship between ego orientation and SC seems justifiable. This, in combination with the fact that directing attention to oneself was related to the frequency of E-thoughts athletes experienced explains to a degree why ego orientation had a positive relationship with E-thoughts. Further research could investigate the role of perceived competence, within these relationships and explore other personality factors to explain the mechanisms through which goal orientations are associated to patterns of cognitions.

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INFLUENCE OF COMPETITIVE CONTEXT ON SOCIAL LOAFING

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KEY WORDS

Social loafing, competitive context, sports group

INTRODUCTION

The phenomenon of social loafing is understandable as a decrease in individual efforts in a group situation. This phenomenon is observed through the discrepancy between the group's real performance and its theoretical performance which would result from the sum of each of its member's individual abilities (Kravitz & Martin, 1986). Social loafing has been viewed across a variety of tasks involving both physical effort and cognitive effort, regardless of age or group situations (for a review of researches, cf. Hardy & Crace, 1991).

Social loafing may result from motivational losses (Hardy, 1990; Latané, Williams, & Harkins, 1979). The psychosociologists suggested that the diffusion of responsibility between group members and the lack of confidence between them, deriving from this decrease of individual responsibility might produce the motivational decrease.

Several researches have identified factors which moderate the social loafing effect: identification of individual effort, assessment of individual performance; increases in group interaction, task commitment and cohesion; increases in the personal salience and incentive value of the task; setting specific group and individual goals with the provision of performance feedback (Hardy, 1990; Hardy & Crace, 1991). On the whole, Harkins and Petty (1982) suggest a decreasing effect of this phenomenon for every factor which gives individuals the impression to contribute in unique manner to group effort.

The researches emphasize the importance of social loafing and present it as a group phenomenon. Therefore, these researches interest everyone who works with sport teams. Nevertheless, the results of these studies cannot be generalized to team sports; methodological obstacles exist. If researchers wish to appraise the importance of social loafing in team sports, they have to work on real sport teams rather than experimental groups. Lichacz and Partington (1996) showed that prior group experience influences social loafing. Moreover, the previous studies didn't take account of a key element in sport, competition. When a team competes against a stronger, weaker, or same level adversary, how does social loafing appear? The goal of this work is to appraise the influence of the competitive context on social loafing.

We express the hypothesis that during a game between two teams with different levels, social loafing appears strongly in the weaker team. On the other hand, during a game between two teams of the same level, social loafing does not affect the performance of each team.

METHOD AND PROCEDURE

Population

The population comprised fifty first and second years students in sport sciences. They were 20,3 years old (± 2,55) and they all had team sport experience.

Procedure

The students carried out two series of thirteen free throws including one try throw. The two experimental sessions were spaced one week apart. Each student executed series of throws in basketball regular conditions. The subject, alone in front of the basket, on the free throw line, remained in the semicircle during the duration of his series. The other subjects waited behind and at a distance from the thrower. Between each throw, a gatherer catched the ball and gave it back to the thrower with a rebound pass. An observer noted the success or the failure of each throw and attributed one point for each successful throw.

During the first session, each individual had been given orders to achieve his best performance, that is to say the biggest number of points out of twelve throws, without any time limit. During the second session, individuals were split up into five groups: a control group and four experimental groups opposing each other two by two. The control group subjects had to carry out their second throws session with the same orders as during the first session. The formation of experimental groups was based on theoretical performances (TP), that was the sum of the members' scores in the first session. The theoretical performances were identical for two groups and different for two others groups. Group 1 (TP = 55 points) performed against group 2 (TP = 25 points). Groups 3 and 4 (TP = 35 points) performed against each other. For the experimental groups subjects, the orders was that the experimenter measured the collective performance of each team and not the individual performance. For each team, the task consisted in achieving the best score to beat the opposing group. Before carrying out the task, the experimenter gave to each group its formation, its opponent's formation and the score of each member of groups. To give importance to the competition, the subjects had five minutes in each group to discuss their team's probable performance and their opponent's probable performance; each member gave a personal written prediction of the two teams' scores. In each group, subjects performed their task in an order determined by draw. During the free throws, the gatherer noted the score of the team.

Variables

The effects of two independent variables on free throws success of individuals (dependent variable) were studied. For the first independent variable (group), four levels (strong, weak, medium and control) were taken into account. For the second independent variable (experimental session), two levels (individual and collective) were taken into account.

Data processing

During statistical processings, groups 3 and 4 were brought together (group 3-4); they represented a same level of the «group» independent variable. ANOVA 2x4 and Student t-test were processed.

RESULTS

The results emphasize an interaction effect between group and session, $F(1, 3)=2.93$, $p<.05$. Significant differences are observed between the sessions for groups 2 and 3-4 (cf. Table 1). During the second session, a significant decrease of the performance for group 2 and a significant increase of the performance for group 3-4 are observed.

TABLE 1. Comparison of each group performance for the two sessions

		Group 1	Group 2	Group 3-4	Control Group
Session 1	m	5.50	2.50	3.50	1.90
	s	2.63	0.97	1.39	1.85
Session 2	m	5.20	1.40	4.45	3.00
	s	2.39	1.17	2.37	1.70
Student t-test		NS	*	*	NS

NS: No significant; *: significant at .05

DISCUSSION AND CONCLUSIONS

Our hypothesis are partially confirmed. A phenomenon of social loafing is observed in group 2 (the weak group) when opposed to an opponent with higher theoretical performance. But in group 1, we did not observe significant variation of individual performances. For the same level of performance, social loafing did not appear but we noted an increase of individual performances during the second session. Inter-groups competition could influence social loafing; in a competitive context, this phenomenon would happen in the weaker group. Because the experiment has not been realized with real teams (cf., Lichacz & Partington, 1996), other studies are necessary to confirm these results. Moreover, the task used in the experiment is not completely appropriate to study social loafing because it allows the subjects to assess their individual performance during the collective session. This reason may explain why social loafing does not appear in group 1. At last, we need to know if this kind of results would appear in an interactive task performed by real teams.

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ON THE ROLE OF EXPERIENCE IN THE PHILOSOPHY
OF THE OLYMPIC GAMES

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KEY WORDS
Agathon, Areté, experience, piety of quest, competition, sacredness of the Olympic Games

INTRODUCTION
Gadamer stressses the necessity to understand the problem as an answer to which we must seek questions; by finding adequate questions we comprehend the problem; in other words, questions are more important than answers.

The original philosophical objective of the Olympic Games is put into antithesis to its present present form, i.e. antithesis to commercialization which is atendant today upon this significant phenomenon of the present-day world.

One of the most venerable ideas of Greek philosophy is the idea of Areté. It was for the sake of this idea that the ancient Olympics were held. But a problem arises when we ask what Areté in fact is. Virtue is mostly spoken of in this connection but it is not as simple as that. It is sufficient to recall Plato's dialogue Menón: how many questions arise here in connection with Areté. Areté understood as prowess is not only an attribute of man but also, for example, of animals, objects,in fact of all, provided that this all participates in creating an overall order, an overall harmony of the universe; cf. Plato: Menón. Prague, Oikúmené 1992, p. 75.

The Czech philosopher Jan Patočka asserts that Areté is prowess - ability to further Entirety in every individual, specific situation in man's life. Cf.: Patočka, J.: Péče o duši I. (Care of the Soul). Prague, Oikúmené 1996, p.33.

But of course, what is it, this Whole? Therein lies the greatest problem. The Whole is the same as Agathón - Good. For this reason, Areté should be more correctly translated as goodness which is very awkward indeed.

Good is something that is absolutely supreme, the most godlike, and its essence lies outside the ideas in the Platonic sense.

A very inexact representation of this Good is fire, the Olympic flame. Why is fire good? By light, it proffers truth, by warmth, it gives us a home; everything is equitably consumed by fire according to degree and right, and fire is also very beautiful and autarkic. It is not possible to appropriate fire. Of course, this comparison is merely symbolic. Good is something that cannot be conceived of as an object, whereas fire is objective. If we wish to comprehend Agathon, we do not face an object (tossed, thrown in front of us) but a Whole the borders, form, limits of which are not cognizable because the Whole simply does not have them. Our existence is given thanks to this Whole, and therefore we cannot objectify it. This Whole does not have objective validity and existence. The Good-Agathon is not an object lying in front of us, it is not a thing, and according to Plato, the Good even lies outside ideas. Agathon thus has no form, no primary or secondary attributes by means of which we could describe it etc. Empirical approach is ruled out in this respect. And yet Agathon is supreme. It is only thanks to the Good that things, relations, people, ideas, nature etc. manifest themselves. Everything reveals itself only against the background of the Good, and the human Areté is ability to "push" this Agathon into every particular situation in man's life. We can "visualize" Agathon as the background of the movie screen on which existences, the whole

world are shown. This background is the Whole without borders, without form. If the Good is conceivable, then only through good particulars, just like the Sun exists in light and heat and not otherwise, then it is possible to agree with Gadamer that "..for us, also the Good is perceivable only through the gift it presents:. Cf. Gadamer, H.G.: Idea Dobra mezi Platónem a Aristotelem (The Idea of Good between Plato and Aristotle). Prague, Oikúmené 1994, p.23. If also the Olympic Games are such a gift, then everything that this Good contains is of divine origin, seen and viewed in the Platonic way.

If the Good is not tangible and reveals itself only in gifts, then access to the Good is through gifts that have to be seen as gifts. If we are incapable of doing so, we see only empty things around us. Gifts present themselves as gifts but we are unable to understand these challenges. That is why we encounter only an evil infinity of objects in a pragmatic sense. We have lost the ability to be recipients of gifts. We don't know how to accept gifts, we cannot ask questions. Why? because we are capable of believing only in what has a form, what lies before us as an object.

The Olympic Games are a gift from mythical Greek gods. When the Games lose their donative "force", what will be left to us?

The Sun as well as the Good bestow gifts. Areté is ability to be aware of it, ability to bestow gifts on others. Areté is not mere knowledge, it is not "techné", it cannot be given firm methodological foundations because applying a method to a process is merely a technical act. When Heidegger in his later work speaks of a marriage between the Heavens and the Earth (Hieros Gamos), he has in mind sacredness of the Good itself. In epistémé, mnémé (memory) is drawn upon in a methodical way, technically. There is transcendence only when thinking comprises self-analysis, self-examination, i.e. care of the soul, as both Patočka and Gadamer showed.

We cannot objectify the Good, Agathon; we can only experience it and share in the process of experience, to render it present. However, we then realize a claim for the absolute existential whole, i.e. Areté. Therefore, Areté is what makes a thing more perfect, which complements it, raises it to a level of godlike being. Areté originates through abiding within Agathón.

Cf. Patočka, J.: Sókratés. Prague 1991, p. 128. This Whole can be perceived only when it originates or ceases to exist, i.e. in flux. It is not possible otherwise because it is a Whole that has no form, is not an object. If this Whole had a form, it would be a part, not a Whole. The origination of this Whole which is Agathon can be installed mimetically (imitatively), in games or in rituals. All those present then witness sharing, rendering present a transcendent whole which cannot be experienced otherwise than in this way. The Whole-Agathon is thus a background which is present in experiencing a game or a ritual. Experience of the participants is the only possible way of giving access to this non-objective and non-objectifiable Whole - Good-Agathon. These Wholes cannot be apprehended in a Cartesian way, i.e. by measurement, description, rational explanation. It is always a matter of rendering present a sacred content. Authenticity of experience is the only access to Agathon. It is possible to approach the Whole, the background, only by means of questions; in the case of the Olympic Games, they are questions which the athlete puts to his body. Such a question is aimed at the very bottom of capabilities, at the inception which is also the inception of the Whole. The struggle with one's own body, and through it also with the bodies of the others is a gift offered to the gods because the process brings about the presence of Agathon, and presence with the Good is Areté. Only such athletes are aretéed because their bodies and souls resemble fire, a pure fire. By achieving such presence, the Greek man gained access to the epiphanic space of the gods, experienced sacredness, had gifts bestowed on him by giving gifts to others. All wholes which are simultaneously backgrounds, horizon, can be shared only in

questions, and therefore great philosophers speak of piety of inquiries. Questions are more than answers, and corporeal inquiries at the Olympic Games are more important than who the winner was, ultimately. Therein rests the sacredness of the Olympic philosophy. Questions open the semantic field of those meanings that are not accessible otherwise, questions make it possible to touch the Whole with the manifesting background, with sacredness.

Gadamer, Patočka as well as Heidegger speak of piety of inquiry. Competitions in Olympic disciplines constitute such an inquiry, corporeal and spiritual inquiry which makes possible participation in sacredness, in Good, in Agathon. Who is close to Agathon has Areté. Only who succeeds in inserting the Whole in every specific situation is a man aretéed, kalokagathic, because in addition to taking care of his body, he also takes care of his soul (Technai and Epimeleia). This is especially true of the Olympic Games which are to render present the entirety of the world created by Olympian gods, to bring about the presence of Hieros Gamos because this whole can be shared only when the process of its origination is imitated. i.e. in the ritual of inquiry which can be perceived as asking questions through the performance of human bodies, with the rules of fair contest observed. Only in this way can sacredness of background be rendered present, of the whole, the horizon which does not have an objective form, is not an object, is not measurable, falsifiable and verifiable. This whole belongs to the sphere of being, to the sphere which is ontological and not only ontic. Scientistic, neo-positivist attempts at absolute exactitude are preposterous; such an intention in itself bears witness against the neo-positivist scientistic concept of thinking, in that this intention goes beyond the limits of the language, and yet is the guilding principle of this relating oneself to the world.

In Castaneda's well-known book, Don Juan would make this comment: "The key to everything which is related to indubitability is sense of whether we have or don't have time. The fundamental rule is that when you feel that you are an immortal being that has all the time in the world, and when you act accordingly, you are not faultless. At such a moment, you should turn and have a look round. You'll then realize that the feeling of having time enough is

idiotic. No one on this Earth will survive!" Cf.: Castaneda, C.: Příběhy síly. Prague, Volvox Globator 1996, p. 172.

The Olympic philosphy must be taken care of very circumspectly because it is one of the most essential parts of cultivation of humanity in general.

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CHILDREN'S PHYSICAL SELF PERCEPTION AND ANXIETY TOWARDS PARTICIPATION IN PHYSICAL EDUCATION
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Key words: Physical Self Perception; Anxiety; Physical Education

Introduction
A considerable amount of research has been conducted which has focussed on the self-perceptions of children and it's influence on their participation levels within the school PE environment. Findings suggest that children's accuracy of evaluating their own competence increases with age and also that boys tend to have significantly higher perceived athletic competence scores in comparison to girls..

A minority of children display low participation levels in school Physical Education (PE) and therefore do not fully develop the possible beneficial qualities such as self-confidence, self esteem, discipline, sportsmanship as well as many health related benefits. A child's physical fitness is greatly influenced by both hereditary and behavioural patterns and although a child's genes cannot be easily altered it is possible that through education and training their personal behaviour can. It is thought that possessing positive feelings of self worth is not only an indication of mental well being but also a mediator of behaviour (Fox 1988).

Through observation and evaluation it appears that a number of comprehensive school children desperately search in need for conceivable excuses to avoid participation in Physical Education, which is often taken to extremes for example resulting in truancy. Although sports psychologists have considerable knowledge of children's self-esteem, little research has involved the influence of self-perceptions on state anxiety levels in children.

This investigation examines the effect that children's self perceptions have on their state anxiety levels prior to participating in a typical school PE lesson. It was hypothesised that children with low physical self-perceptions would demonstrate higher levels of state anxiety.

The implications of this study are to increase the knowledge of teachers to assist in the development and improvement of PE lessons. This would accommodate the children's more essential needs, and therefore create sessions which are more relaxed and enjoyable, consequently eliminating any elements of anxiety and furthermore increasing motivation and participation of children within the school PE environment.

Method

38 participants from a selection of year 8 (Age 12-13 years) secondary school classes completed 2 questionnaires. Firstly the Children's Physical Self-Perception Profile (CY-PSPP) (Whitehead J R 1995), designed specifically for use with 12-13 year olds, to measure the following 6 sub-scales: Sport/Athletic Competence, Condition/Stamina Competence, Attractive Body Adequacy, Physical Self Worth, Strength Competence and Global Self Worth, and secondly the Children's Perceived Importance Profile (CY-PIP) (Whitehead J R 1995), designed to measure the perceived importance of the above mentioned sub-scales.

38 children of mixed gender (21 females and 17 males) from a selection of year 8 (age 12-13 years) secondary school classes participated in the investigation. Consent forms were completed by parents prior to the start of the testing.

On completion of the questionnaires the subjects took part in a short imagery session where they were asked to visualise themselves during the immediate course of events leading up to a typical PE lesson. Following the imagery session the children were asked to each complete a copy of Martens' (1988) Competitive State Anxiety Inventory (Martens et al.1990) to measure their state anxiety levels in response to the imagery session.

Results

Participants of both gender demonstrated higher levels of cognitive anxiety than somatic anxiety in response to the imagery session. The mixed gender results obtained from the CY-PSPP results found that the children tended to rate themselves most highly on the Global Self-Worth sub-scale and also scored highly on both the Physical Self Worth and Condition/Stamina Competence scales. The results also indicated that the children rated themselves considerably lower on the Strength Competence scale in comparison to the other sub-scales involved.

Female participants were identified to have significantly higher levels of both cognitive and somatic anxiety in comparison to the males. Analysis of the CY-PSPP indicated that the girls scored themselves lower on every category compared to the boys. Analysis of the CY-PIP showed that the girls rated Attractive Body Adequacy as the most important component, whereas the boys classed the Sport/Athletic Competence and Condition/Stamina Competence as the most important sub-scale. Both the male and females classed Strength Competence as the least important sub-scale.

Conclusions
The hypothesis that children with low physical self-perceptions were more likely to be anxious prior to participation in school PE lessons was supported. In addition, the identification of gender differences in both levels of state anxiety and physical self perceptions suggests that further work is warranted to evaluate the influence this may have on both participation and enjoyment of physical activity and sport in schools.

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THE EFFECTS OF GOAL ORIENTATION AND PERCEIVED COMPETENCE ON RPE, AFFECT, AND PERFORMANCE DURING A SUBMAXIMAL EXERCISE

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INTRODUCTION

Over the past decades, an extensive body of literature has evolved which tests and extends the tenets of goal perspective theory in athletic settings (Roberts, 1992; Duda, 1992, 1993). Past correlational studies have found goal orientations to be predictive of athletes' beliefs about causes of success (Duda & White, 1992), attitudes toward aggression and cheating (Duda, Olson, & Templin, 1991), intrinsic motivation (Duda, Chi, Newton, Walling, and Catley, 1995).. In short, this research indicates that a strong task orientation corresponds to more adaptive perceptions and achievement strivings. In accord with correlational studies, experimental studies have also found that goal orientation and perceived competence have impact on task choice, effort exerting, enjoyment, and performance during exercise (Chi, 1993).

The possible relevence of variations in goal perspectives to motivational processes, affect, and behavior in the exercise context has begun to be considered in recent research (Duda, 1992). It has been proposed in previous work that motivation has an important impact on perception of exertion and affective response during exercise (Rejeski, 1985). However, little research has been conducted to examined the effects of goal orientation and perceived competence on perception of exertion and affective response during the exercise. Therefore, the purpose of this study was to examine the effects of dispositional goal perspectives and perceived competence on RPE, affect, and performance during a submaximal exercise. It is hypothesized that there is an interaction effect of goal orientation and perceived competence on RPE, affect, and performance. Specifically, high ego-/low task oriented subjects with low perception of competence is assumed to report lower RPE, less positive affect, and perform worse than high ego-/low task oriented subjects with high perception of competence and high task-/low ego-oriented subjects regardless of their perceived competence.

METHOD AND PROCEDURE

One hundred and seventy three male undergraduate students were administered a questionnaire which assessed subjects' perceived fitness-related competence and dispositional goal perspective. The former was measured via a 4-item scale. The latter was assessed with the task and ego orientation in sport questionnaire (TEOSQ; Duda & Nicholls, 1989). Based

on subjects' dispositional goal orientation and perceived competence scores (by median split), four groups of subjects (N=46) were recruited for participation in this study. Subjects' mean age was 19.8 ± 1.02 years.

The subjects were asked to ride a cycle ergometer in order to test their Vo2 max. After a 3-minute warm up, subjects' workload was set at 100W. Subjects' workload increased 50W each 3 minutes. Subjetcs were requested to try hard to maintain a pedaling speed of 50 rpm. A week after the Vo2 max test, subjects were asked to ride a cycle ergometer at an intensity equal to 60 % of maximum oxygen uptake and maintain a pedaling speed of 50 rpm for at least 20 minutes. Subjects' RPE was assessed at the 20th minute by using Borg (1962) scale. Affective response was indicate on a 5-point feeling scale (Exercise-Induced Feeling Inventory, EFI; Gauvin & Rejeski, 1993) before and after the exercise. Subjects' performance were also measured by the time they exercise on the cycle ergometer.

RESULTS

To examine the effects of goal orientation and perceived competence on subjects' RPE, a 2 X 2 (goal orientation X perceived competence) ANOVA was conducted. The result indicated that there was a significant interactive effects of goal orientation and perceived competence on RPE ($F(1, 42)=4.98$, $p< .05$). High task-/low ego-oriented subjects who were low perceived competence reported significantly lower RPE than high ego-/low task-oriented subjects who were low perceived competence. In addition, high ego-/low task subjects who were high perceived competence reported lower RPE than high ego-/low task-oriented subjects who were low perceived competence.

To examine the effects of goal orientation and perceived competence on subjects' affect, a 2 X 2 (goal orientation X perceived competence) ANCOVA was conducted to partial out the initial variability of affect prior to cycling exercise. The result indicated that there were significant interaction effects of goal orientation and perceived competence on physical exhausting ($F(1,42)=4.40$, $p<.05$) and positive feeling ($F(1, 42)=4.19$, $p< .05$). It has found only for high ego-/low task-oriented subjects who were low perceived competence reported greater physical exhausting and lower positive feeling than who were high perceived competence.

The result of a 2 X 2 (goal orientation X perceived competence) ANOVA indicated that there was a significant main effects of perceived competence on performance ($F(1, 42)=6.29$, $p< .05$). Subjects who were high perceived competence performed significantly better than subjects who were low perceived competence.

DISCUSSION AND CONCLUSIONS

In general, the results of this study supported the hypotheses concerning the effects of goal orientation and perceived competence on RPE and affect during a submaxiaml exercise. The results suggest that dispositional goal orientations and perceived competence has an important impact on perceived exertion and affect rating during exercise. Specifically, if people emphasize improvement and learning during exercise (task orientation), regardless of their perceived competence, they tend to report greater positive feeling and appear less likely to focus on the discomfort associated with moderately demanding exercise. On the other hand, perceived competence plays an important role for people emphasize social comparison (ego orientation). When experiencing low perceived competence, ego-oriented people report much greater RPE and physical exhausting and less positive feeling during exercise.

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INCREASING PREDICTIVE POWER OF GOAL ORIENTATIONS ON PHYSICAL SELF-WORTH AND SELF-ESTEEM BY THE USE OF MORE DIFFERENTIATED CONCEPTIONS OF SUCCESS

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KEY WORDS

Goal Orientation, Perceived Success, Physical Self-Worth, Physical Self-Perception, Esteem, Self-Concept.

INTRODUCTION

It is clear that perceived success in exercise and sport is a major antecedent of physical self-worth (PSW). However, people are subjective in their self-perceptions. With different conceptions of success in mind, people experience different levels of success even when they are seemingly successful as measured by some objective indicators. In this study, it is proposed that the use of more differentiated conceptions of success will result in stronger predictions of goal orientations on physical self-worth and self-esteem. An a priori structural equation model that depicts the relationships between goal orientations, perceived success, and global self-concepts was tested (see Figure 1). Norm-referenced perceived success (NPS) and self-referenced perceived success (SPS) were used instead of the general measure of perceived success (XPS) which may confound effects of ego orientation (EGO) and task orientation (TASK). It was hypothesized that EGO affects NPS and TASK affects SPS, which then in turn affect PSW and GSE.

METHOD AND PROCEDURE

Participants

285 (148 males and 137 females) Chinese Hong Kong college students aged from 19 to 26 (mean = 21.9, s.d. = 1.51) took part in this investigation. A questionnaire containing 33 items (7 items on TASK, 6 items on EGO, 2 items on XPA, 2 items on NPA, 2 items on SPA, 6 items on PSW, and 8 items on GSE) were administered to the participants during their class time.

Instrument

Goal orientations – the Task and Ego Goal Orientation in Sport Questionnaire (TEOSQ; Duda, Fox, Biddle, & Armstrong, 1992) was used to tap for TASK and EGO. *Perceived success* – 6 items were specifically developed to tap for the XPS, NPS and SPS. Two items prompted subjects for an overall impression (XPS) of how successful they thought they were (e.g. "I am very successful"). Two items required participants to compare their performance to the others (NPS, e.g. "My performance is better than my class-mates"). Another two items required participants to compare their performance against themselves (SPS, e.g. "I keep improving all the times"). *Global self-concepts* – 14 items extracted from the Physical Self-Description Questionnare (PSDQ; Marsh, & Richards, 1994) were used to tap PSW and GSE.

Statistical Analysis:

Factor analyses for TEOSQ items and the PSDQ items were conducted on item-pair responses in which the first two items in each scale were averaged to form the first item-pair, the second two items were averaged to form the second item-pair, and so forth. The TEOSQ has got 13 items, so the last item of TASK became the 4th indicator of TASK. Thus, the structural equation modeling was conducted on response to a total of 20 indicators to represent 7 latent factors. Three indexes provided by the EQS 5.7 (Bentler, 1995) were used to assess model fit, namely root mean squared residual (RMSR), Bentler-Bonett nonnormed fit Index (NNFI) and comparative fit index (CFI).
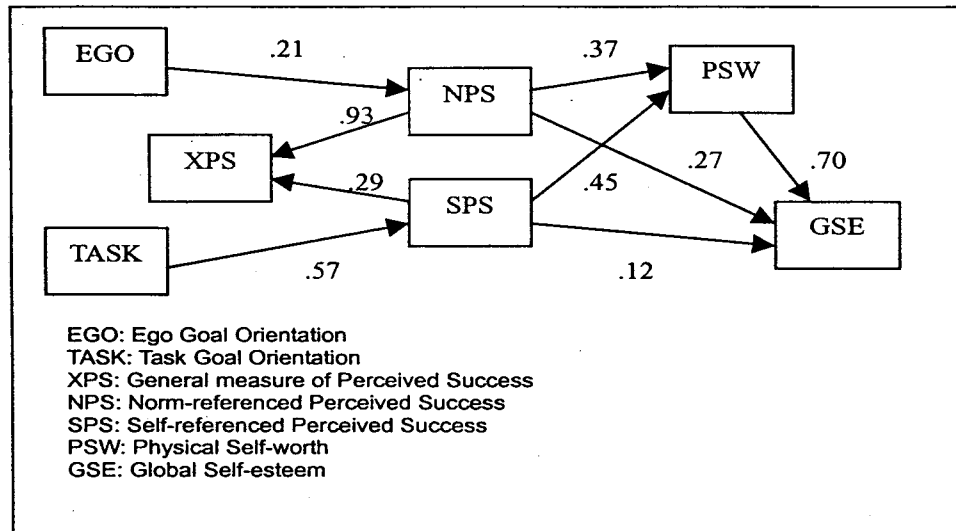

EGO: Ego Goal Orientation
TASK: Task Goal Orientation
XPS: General measure of Perceived Success
NPS: Norm-referenced Perceived Success
SPS: Self-referenced Perceived Success
PSW: Physical Self-worth
GSE: Global Self-esteem

Figure 1. A structural equation model for goal orientations, perceived success, and physical self-worth (with indicators of the latent factors omitted).

RESULTS

The a priori model fitted the data set reasonably well (RMSR=.04, NNFI=.89 and CFI=.91). XPS was found to be basically reflecting NPS. As predicted, EGO affected NPS and TASK affected SPS, both of which in turn affected PSW and GSE. Figure 1 shows the tested model structure with path coefficients. Except the one on the path from SPS to GSE, all path coefficients in the model were found to be statistically significant (p < .05).

DISCUSSION AND CONCLUSIONS

This study provided further support to the notion that goal orientations affect physical self-worth and self-esteem in an indirect way. Treasure and Biddle (1997) found weak but significant causal paths from TASK to PSW and GSE. In this sample, such a relationship could not be replicated. It is very encouraging to see that TASK was strongly related to SPS and SPS strongly related to PSW. This is not only in line with previous observations, but also

reiterates the value of TASK and provides strong justification for promoting TASK in exercise and sport people. However, the non-significance of the causal path from SPS to GSE was unexpected, whereas the causal path from SPS to PSW was very strong. Future research is required to further clarify this issue. To conclude, by adopting a differentiated conception of success and by measuring norm-referenced and self-referenced perceived success separately, relationships between goal orientations, physical self-worth and self-esteem may be more clearly delineated. It is recommended that the 4 items used to tap for norm-referenced perceived success and self-referenced perceived success should be further developed into a psychometrically sound instrument for further use. In future studies, we can examine how perceived importance moderates the effects of perceived success. We can also consider the interaction effects of TASK and EGO. With the inclusion of more relevant constructs and the accumulation of more data across age, gender and culture, we are optimistic that the mechanism of change involved in self-system in physical domain will be further uncovered.

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**PROFESSIONAL POLO PLAYERS'
UNDERSTANDING OF COMPETITIVENESS**
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KEY WORDS: Competitiveness, performance, horse-polo

INTRODUCTION

Athletic performance is tested to its maximum within competition and being competitive is a trait that can be found at the heart of competitors who strive for achievement (Gill, 1986). However, athletes' perspectives on competitiveness were not found in the reviewed literature. Athletes often talk about something they call competitiveness, competitive fire, edge, or desire, but what they mean has not been explored. Athletes in various sports use different language to describe competitiveness.

The theoretical basis of competitiveness can be found in the psychology literature of achievement motivation and orientation, as well as social evaluation (Gill, 1992; 1993; Weinberg & Gould, 1995). Achievement motivation reflects one's tendency to strive for satisfaction of the achievement motive, which is aroused by the achievement situation (Atkinson, 1983). It is a choice that individuals have to either approach or avoid competitive situations (Martens, 1976). Athletes have a sport-specific achievement motive that directs their behavior (Gill, 1992; 1993; Martens, 1976; Weinberg & Gould, 1995). According to Weinberg and Gould (1995), this sport-specific achievement motivation "is popularly called competitiveness" (p. 74). In terms of sport competitiveness, Martens (1976) wrote that it is the trait which makes athletes strong and persistent when pursuing excellence and helps them stay in the present.

In this study, the researcher attempted to uncover and understand the polo athlete's perspective, perceptions, and ideas on competitiveness. Just like all other athletes, poloists practice and play games, aspire to become better, want to compete, want to win, and want to be competitive. Polo brings together many sports on one field. It is like playing hockey, baseball, tennis, and soccer while riding a horse (Milburn, 1994). After reviewing the existing literature, the researcher "hypothesized" that if we could learn more on competitiveness, we possibly could work out a way to teach it to the "less competitive" athletes.

METHOD

To explore the concept of competitiveness in depth and its role in an athlete's performance, the qualitative paradigm was chosen. Denzin's (1989) Interpretive Interactionism methodological approach was followed. Interviews were the primary sources of information, yet articles on the participating poloists, and observations provided additional information. A semi-structured interview offered the necessary freedom and the opportunity to learn, while questions were not formulated ahead of time to avoid forcing and guiding the players to answer in a manner determined by the researcher (Patton, 1990). Trustworthiness was established through

prolonged engagement, member checking, triangulation, peer debriefing, audit trail, and thick description (Lincoln & Guba, 1985).

Participants and Procedures

Six poloists were asked to participate based on three criteria: (1) employment as polo player, (2) handicap of 7- to 10-goals, and (3) proficiency in English. The interviews were conducted in West Palm Beach, FL., at a location chosen by the participant. All interviews were conducted by the researcher who spent variable time with each poloist to ensure that the player's thoughts and ideas were explored in depth and well comprehended.

Analyzing the Information

Denzin's (1989) phases of bracketing and construction were followed for the analysis. In the bracketing phase, essential themes on competitiveness were identified. Key phrases associated with competitiveness were taken apart to be interpreted. In the construction phase, the experiences that were taken apart during bracketing were gathered together, classified, and reassembled. The bracketed elements were listed into categories that were mutually exclusive, exhaustive, ensured independence, and were based on a single classification principle. A cross-case analysis procedure that paid more attention to the process being studied than the persons, was utilized to synthesize the categories that emerged from all six interviews (see Table 1).

TABLE 1. Themes and Categories

Themes	Categories
"adrenaline rush", "medicine", "playing against the best", "intensity", "fun", "money"	Benefits from competing at high-goal polo
"a gritty will to win", "being better"	Thoughts about competitiveness
"scoring a goal no matter what", "work ethic", "dedication", "focused on what I do"	Behaviors showing competitiveness
"makes you play and prepare 100%", "gives you the desire to achieve a goal"	The role of competitiveness in performance
"Playing dirty or cheap, that's unhealthy", "there is nothing violent in competitiveness"	Healthy-unhealthy, good-bad competitiveness
"the determination to do well is competitiveness, the love for competition is the motivation", "Competitiveness is something indescribable, like a feeling that's there. Motivation, I can see written on a blackboard"	Motivation and competitiveness

RESULTS AND DISCUSSION

The players described themselves as "competitive," "very competitive," or "even super competitive." They were determined and dedicated to play great and hard, to defend their positions and the ball, and they didn't see a place for violence or aggressiveness. To approach their winning goal they had a clear focus of what they needed to do before, during, and after a

game and they kept moving from one play to the next play, the next chukka, the next game, the next tournament, the next handicap rating. There was no single form of competitiveness nor one constant level of competitiveness. Competitiveness is a personal process, a unique state of mind that energizes their preparation and play.

The researcher's interpretation of competitiveness was triggered from the poloists' thoughts about becoming better or the best, from their desire to win a ride-off or to score a goal. All these entail some comparison to a standard of performance and this comparison gave them a point of reference, which made the players aware of where they were and where they wanted to go. Like, I am this good and I want to become this much better, or I am at the 60-yard line with the ball and I want to get through the goal posts. Thus, competitiveness was described as the process of acquiring a point of reference and a focus on what the athlete needs to do. Competitive athletes use their goals, plus the gap between themselves and their goals to direct and energize their performances. Competitive athletes are motivated by their goals but also become aware of the distance they want to travel and lock into it. On the other hand, non-competitive athletes may also be motivated by their goals but the distance to be traveled does not attract their attention, it does not become a source of energy for their performances.

In conclusion, the role competitiveness plays is to create focus, and to trigger the necessary behaviors for reaching one's goals, while it is triggered and released by performance. Riding hard, becoming "brick-walls" to defend your position, finding risky ways to score, persisting, never letting go or quitting are behaviors that helped poloists reach their point of reference. These behaviors have been described by sport psychology researchers as distinctive of highly competitive athletes (Gill, 1993; Scanlan, 1974; Weinberg & Gould, 1995).

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COACHING DURING ELITE FOOTBALL GAMES

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INTRODUCTION

This paper is based on the third study (Isberg 1997, 1992, 1991) in the project dealing with the coaching process in team sports on elite level and is dealing with the part of the coaching process, that is taking place just before, during and after a game. Chelladurai (1985) points out that few studies have tried to define and describe the coaching process just before, during and after a game. The aim of this study was to illuminate how coaches on elite level in football create conditions for, carry out and follow up the coaching process. Many factors should be involved in such a study, e g the context, the structure of the task, relations between the coach and the players and the power related to the coach´s position. In my paper and presentation I will illuminate some basic factors in the coaching process, e g the coach´s leadership philosophy and football philosophy (soccer), the coach´s knowledge of his own personal preferences and how to uses them in acting and the coach´s capacity to integrate each players preferences in an effective tactical system. With reference to the coaching process in connection with a game the coach must also know what factors are possible to act upon during the game and how to find out which one of them should be used if he wants to make a change. Furthermore the coach need to know what factors to observe and how to concentrate on them, and to be able to analyse his observations and make proposals of changes in order to make the team play more effectively. During a game the communication between the coach and his players is a very important element in the coaching process. The main task in this paper and in my presentation will therefore be to discuss what really takes place in that communication process.

METHOD AND PROCEDURE

Three Swedish national top- coaches in soccer are studied during two seasons. The reason of choosing soccer coaches is that the field and the rules of the game creates a situation more difficult than in other team sports. The three coaches are so called "Runners up", which means that they have made successful results with their teams in spite of that the teams have no crack players. This circumstances may add to that the positive team results is an effect of successful coaching. To study the coaches´ actions on the players bench I used two synchronised video cameras one focused on the game, the other on the coach. The coach was also equipped with a wireless transmitter. The editing process resulted in that in one corner of the screen you are able to see the coach and hear his messages and on the rest of the screen you see the running game. Afterwards some chosen situations are used for stimulating recall-interviews with the coach and involved player/s.

RESULTS

The Coaches Philosophy of Football

Coach 1 wants the team to play offensive, make good passes and start the offensive play from the goalkeeper and advance to a scoring position with help of a short passing system. Coach 2 has a simple philosophy, when the own team has the ball every player shall help the team to score a goal, when the opposite team has the ball every player shall help to avoid that

the opposite team score a goal. Coach 3 wants an offensive play and to do so the players must dare to take chances. Therefore he motivates players to do so and he listens to players proposals of how they want to act and then delegate the responsibility to them.

Players Roles in the Tactical System
To make players understand their roles in the tactical system all the three coaches train different situations on the field, more seldom they are using theoretical discussions in front of the tactical white board.

Preparation of Players for a Specific Game
After giving the information to a player the coaches never check if the player has understood the information as expected. The checking take place first when the coach studies a player's acting on the field.

Coaches' Observational Strategy
Coach 1 start to observe the opposite team's tactical system. He has prepared his own team with two alternatives and after observing the opposite team he decides if he must change from the first to the second alternative. If not his observation focus on the opposite team's defendants to se if he could find some shortages in their acting. Coach 2 focused on his own teams defendant players. If he wants to do any changes he uses a signal system that he believes the players are well aware of. Coach 3 starts to observe the opposite team's defendants to se if they act as he has informed his players. Then he focuses on his own team's defendant players. With reference to the result of the observation the coaches make some analysis and then decide how to act.

Messages Sent
Totally the coaches send 297, 337 and 83 messages. Categories of messages send are, private communication (88, 25 and 6), testing an idea with the assistant coach (61, 55, 11), the intention of making tactical changes (101, 167, 54), meaning of rewarding a player (10, 49, 8) and the meaning of criticising the referee or the linesmen (6, 17 and 1). The reliability and validity of those categories are very strong. Their are different causes behind the messages in the different categories. The category *private communication* shows that the coach is "thinking loud" because of nervousness and this "talking" helps him both to lower his nervousness and to rise his concentration during observing and analysing of what happens in the game. *The criticism on the officials* both shows the coach's concentration, his nervousness, his way of defending his players against mistakes and unwillingness to lose a game because of an official's mistake. The *rewarding of players* (10, 49 and 8) is the coach's way of telling the players that he is pleased with their acting of those messages are (2, 9 and 1) addressed to unnamed players, which means that they function more as a social support to the whole or one part of the team. The function of *testing an idea with the assistant coach* (61, 55 and 11) is to get support on a proposal to make some changes.

Messages with Intention to Change
The main reason of sending those messages is to make the team more successful. Table 1 shows the categorisation of messages within that category

TABLE 1. Messages with the Intention of making Tactical Changes

Messages send and which players are able to hear

a. Addressed to unnamed player/s	67	55	12
b. Addressed to named player/s	34	112	42
Messages send and which players are not able to hear			
a. Addressed to unnamed player/s	6	11	
b. Addressed to named player/s	9	9	1
Totally	116	187	55

ANALYSIS

The three coaches are sending 116, 187, and 55 such messages during a game. I like to discuss something about the requirements, such messages should fulfil to get the expected effect. I will do it with the help of a simple communication model by Fiske (1984).
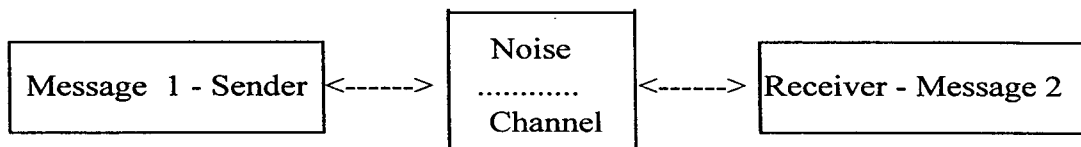

Figure 1. Model of the Communication Process (Fiske 1984).

Fiske's (1984) model is simple in its structure but gives at the same time a view of what is going on in the communication process. The model needs some explanations first the definition of the concept message : "*A message is every sign that can be interpreted in a purposeful way and that can be given a meaning* " (Nilsson & Waldemarsson 1990, s 18).

The information the coach want to send to a player must be compressed in order to be transmittable (message 1), either as a symbol (needs interpretation to be understood) or as a signal (does not need an interpretation e g when the coach shouts "*Shoot* ").

The sender then uses a channel or a medium by which he transmits his message in order to reach the receiver (the player/s). This channel used must be so effective that the player can hear the message sent, and know for whom it is meant and be able to interpret the message and have the qualities needed to act in the expected way.

To Make the Actual Player Observant on the Message

One simple solution of that is to attach the player/s name/s. Looking at table 1 this actualises the question of why so many messages are sent without attachment of a player's name. It seems that the coaches rely to much on an expectation that the actual player/s should react automatically. Many messages only consists of the players name, they are compressed as a signal, but to understand the information they must be interpreted. Such messages could be more effective if the coach attached something that indicated that an interpretation is necessary. Another way of handle such messages is to explain (before the game) to the actual player how to interpret such a message. I find it astonishing that none of the coaches asked how the players have understood the tactical orders given before the game starts. Instead coaches make their judgements when they see the players in action. An effect of that is the

difficulty for the coach to understand which links in the chain are not functioning. A more effective way is to try, at an early stage, to exclude as many links as possible .

One of the coaches wait until a player's third mistake then he shouts and includes the players name and uses a very sharp voice. Another question worth raising is, if sending to many messages, risks to be a disturbance in itself. A player in coach 2:s team answer no on that question.

Players Capacity to Interpret a Message and Transform it into Acting

To interpret and transform a message in the expected way seems to depend more of how long time the coach and the player have worked together than how they have worked together. It became evident that players often looked for codes in the coach's body language to get help to interpret a message. When the message was sent without address the players draw the conclusion that it is not meant to me. Some messages consisting of only a player's name were interpreted in expected way, because that the player no the code in the actual situation. One interesting comment made of one of the coaches, concerning the code, was: *"I wonder if they have understand the meaning of this tactical draw. We have talked about this and practised it, but still in the end of the season, they do not act as expected"*.

CONCLUSION

Is the coaching process during a game of a vital importance for a team's performance? My answer is: That depends! If the messages are audible, have a receiver's name, are able to be interpreted in the expected way, that means that the coach and players have a common frame of reference, that players have the capacity to act in the expected way, the answer is yes. Without those requirements, my opinion is, that the coaching process has very little importance for the team's performance. Of course players in the opposite team may be so clever, that they can stop a player's action although he has both interpreted and transformed a message in the expected way. From this analyses it is also possible to make the conclusion that, it takes relatively long time for players to understand the coach's frame of reference. Coaches, who are fired after one season haven't, according to my opinion, had a real chance to succeed. Another valid conclusion is that coaches can make the coaching process much more effective by learning more about the communication process.

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THE RELIABILITY AND VALIDITY OF THE OBSERVATION SCALE OF THE MOTIVATIONAL CLIMATE IN PHYSICAL EDUCATION LESSONS

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KEY WORDS: Motivational climate, observation, physical education

INTRODUCTION

Motivational climate is defined as a global psychological environment directing the goals of action (Ames 1992a). If children are guided towards intra-individual reference, this indicates a task-involving climate. Where they are guided towards inter-individual reference, e.g. better performances compared to those of others, this refers to an ego-involving climate (Ames 1992a). The teacher has a central role in regulating the motivational climate in school physical education (PE), e.g. by pedagogical and didactical choices and by discussions with pupils.

Pupils´ subjective experiences and their cognitions play an important role in assessing the impact of environment to their motivation. Ames (1992b) suggests that achievement goal orientation cannot be studied by observation, because every pupil experience interventions in different ways. The same may be true also for motivational climate. However, even if we cannot see what pupils think by observation, it can still help us to see what is really happening in teaching, because there are many factors which have an important impact in motivational climate.

METHOD AND PROCEDURE

The aim of this study was to create an observation system to analyze physical education lessons and to find out how observed motivational climate and teachers´ pedagogical activities are associated with perceived motivational climate of the pupils. The participants of the study were 87 nineth grade (15 years old) Finnish male pupils representing four different classes and their four teachers. Totally 12 lessons, three of each class, were analysed.

After each PE lesson the children responded to a Percived Motivational Climate in Sport Questionnaire (PMCSQ)(Seifriz, Duda & Chi 1992), which was applied to Finnish PE settings. The lessons were videorecorded with a wireless microphone and a receiver which was connected to videocamera. Two different observation systems were used. First, the lessons were rated by two observers using a scale which included 11 dimensions, six of which were adopted from the PMCSQ-2 (Newton & Duda 1993): co-operative learning, important role, improvement, punisment for mistakes, unequal recognition and intra-team rivalry, and five other pedagogically meaningful dimensions: autonomy, teaching skills, positivity of teacher, amount of interaction and enthusiasm of the pupils. This subjective total rating of the lessons was done using a Likert scale (1=not existing...5=exists a lot).

Secondly, the videotapes were analyzed by using systematic observation in order to capture teachers´ actions, which may affect the motivational climate of the lessons. Six dimensions were analysed by using six-second-interval recording: arrangement, task explanation, teaching, feedback, observing and other activities. The level of autonomy of pupils was observed with the applied version of the Teachers Role In Providing Activity Choise (TRIPAC)(Darst, Zakrajsek & Mancini 1989) method, which included seven dimensions:

activity, implementation, material, group size, consistency of the group, roles of the group and time. Information about the use of pupils' first name, task differentation of pupils and teacher feedback were observed. by using event recording. According to the PMCSQ-assessments the lessons were classified into perceived high task/high ego (n=2 lessons), high task/ low ego (n=4) and low task/high ego climate groups (n=6) using median splits.

RESULTS

Cronbach Alphas for the task and ego climate subscales of the PMCSQ were .90., and .84 respectively. The inter-observer reliability between two independent observers of the observation of teachers' actions at sum level was 89% and at the six-second unit level 82%. Scott phi reliability coefficient based on the observations of the total 12 lessons was .92. Based on these reliability coefficients systematic observation scale of the teachers' actions can be considered as reliable.

The inter-observer reliability of the subjective total rating scale of the lessons varied from 88 to 100 percent, indicating a high reliability, too the inter-observer reliability coefficients of the dimensions of teacher feedback, autonomy of the pupils, unequal recognition and task differentiation of the pupils were high. At the sum level these varied from .91 to .99.
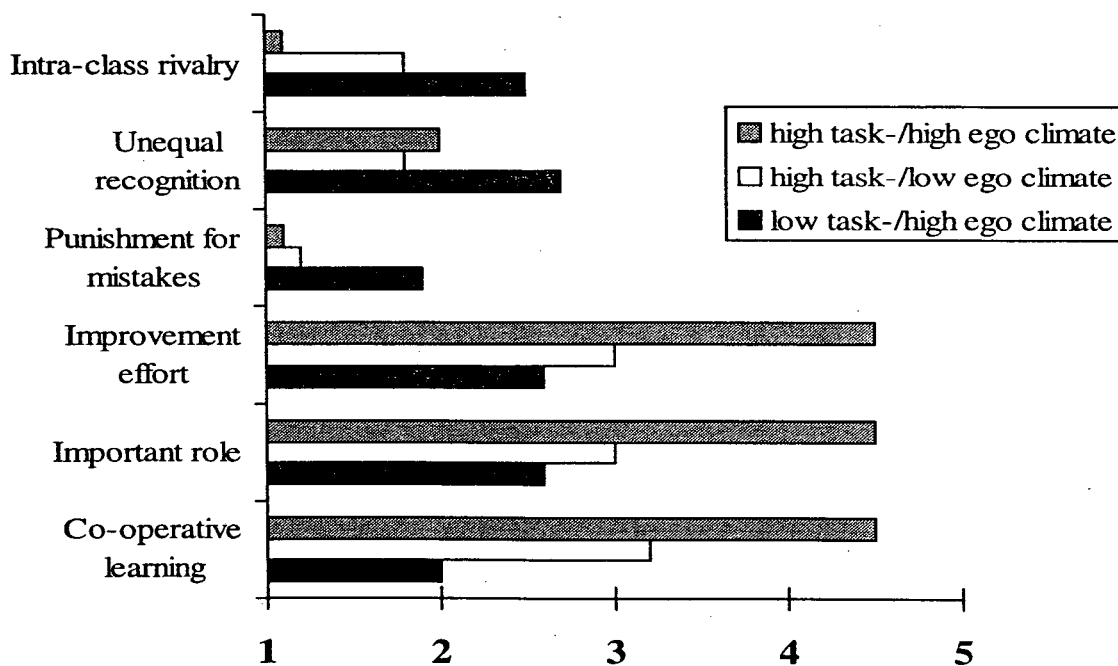

Fig. 1. The Dimensions of the Subjective Total Rating Scale in Different Motivational Climate Groups, post hoc LSD-test.

The concurrent validities of the observation scales were analysed by their associations with the pupils' perceptions of the motivational climate.The level of important role and co-operative learning dimensions were highest in the high task/high ego climate group and lowest in the low task/ high ego climate group. Intra-class rivalry, unequal recognition and punishment for mistakes were most existing in the classes with low task/ high ego climate (Figure 1). An interesting, supplementary finding was that there were statistically significant differences between the four teachers in the pupils' perceptions of the level of task-involvement of the climate in PE lessons (ANOVA p<.01). Although oneway ANOVA in the case of ego-involving climate did not reveal significant differences between the teachers, the post-hoc LSD-test showed differences (p<.05) between three teachers. Instead, there was minimal variation in the motivational climate between different PE contents in the same taecher. This result suggests that motivational climate is more personality than context related.

DISCUSSION AND CONCLUSIONS
The observation methods which were used in this study can be considered as reliable. The validity needs more research in future. Although the number of analyzed classes was small, the results suggest that several dimensions of the motivational climate can be analyzed by observation. However, the observation scales need further development in order to capture more accurately different task and ego-involving motivational climate dimensions.

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Social and Psychological Background of Football Spectators in Czech Republic

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**Key words:** Football spectator, social background, aggression

Introduction

Sport spectating is an important social phenomenon. In all historical periods spectators have created their heroes and idols, identified with them and experienced their success. Football spectatorship has as long history as football itself. Since the very beginning, football spectators have been inseparable part of football in the whole world as well as in the Czech Republic. Football spectators come to stadiums for an intensive emotional experience, excitement and suspense of the match or contest. The history of football spectating is accompanied by the paradox of increasing the spectators' interest on one hand, while hooliganism and violence on the other hand can be more frequently observed.

From the social point of view, it is important to emphasise the influence of the spectators' closest social environment and the role of the whole social background. It seems to be useful to answer basic the question: how changes in the social background since 1990 have influenced the social structure and behaviour of football spectators in stadiums in the Czech Republic.

Methods and Results

To answer these questions we compare the results from two investigations of the social characteristics of football spectators in Czechoslovakia from years 1986 - 1989 (before political changes) and the research which was done in 1995 (after great changes in 1989) in the Czech Republic. The first sample involved 3420 football supporters of the first division, the second sample of first division spectators from 1995 represented 2680 football fans. We studied basic social and demographic characteristic: age of spectators, family status, structure of interests and participation in active sport and games.

Fig. 1. Age distribution of football spectators

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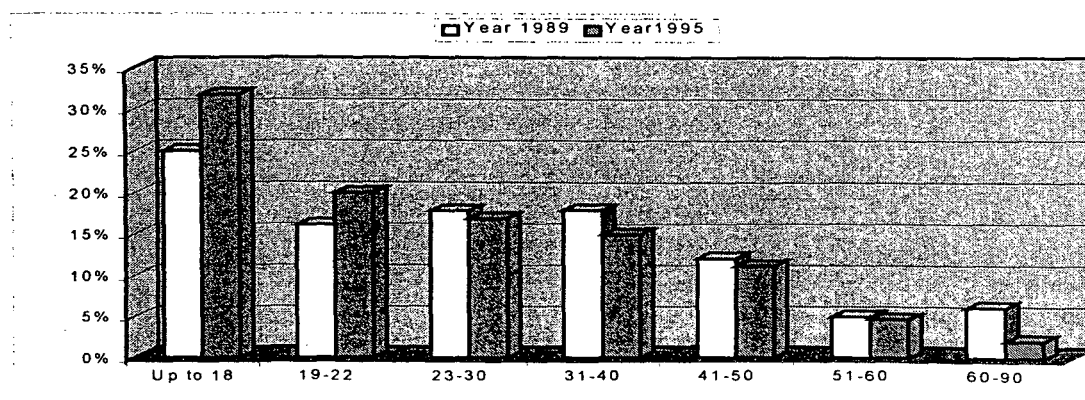
We find remarkable differences in the age distribution of spectators between those periods. Young people (22 years and under) constitute in 1995 more than half of football fans. This is relevant to spectators' inner feelings and experience of the match and their reactions to it (external behaviour). Generally, young people are usually more spontaneous, identifying with their idols and being more influenced by the atmosphere in the crowd.

For a long period young supporters have prevailed among football fans. This reality is more and more emphasised. Spectators base can be divided into two groups. First, there are young spectators: apprentices, students, and manual workers, who react more actively to the events of the game and to the crowd atmosphere. The second group are adult spectators with a higher education level. These spectators are mostly married, and they have formed certain social and personal relations in their family and occupation.

This polarisation in age, level of education and professional occupation is a remarkable social sign of the football audience. Active life styles and personal sport activity can significantly influence and attitudes, feelings and emotional experience of the game as well as behavioural reactions of football fans.

It is important to know basic reasons (motivation) why spectators want to go and to see a match. Knowledge of these factors facilitates, to a certain extent, prediction of their behaviour during the match. Our comparison research shows some important reasons attributed by the spectators for attending a football match.

Tab. 1. Spectators' most important reasons for attending football match

Reasons for attending football		
1988	Reason	1995
18%	Attractive opponents	21%
15%	Player individualities	18%
14%	Drama of the game	12%
16%	Be in group	22%
20%	Supporting	12%
17%	Good performance	10%

The spectators whose reasons for attending do not directly relate to the football itself, but they want to belong to a group, to find excitement or to provoke other spectators, are potential sources of socially unacceptable behaviour. The high percentage of such spectators in the terraces increases the probability of an outbreak of extensive undesirable reactions.

Spectators' Views of Their Individual Reaction

The results of our research presented in Figure 2 and 3 show how spectators themselves describe their reactions to unpunished rough play against a home player and a visiting player.

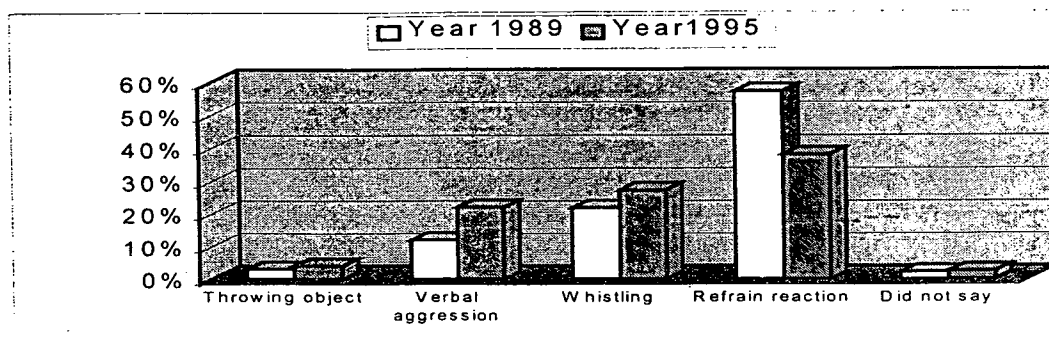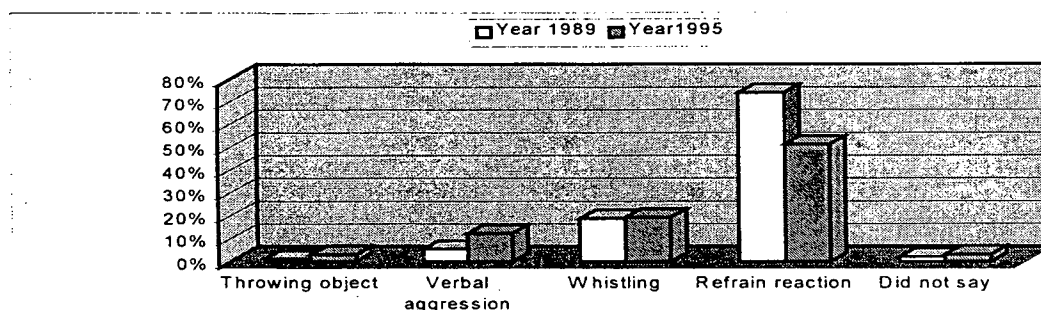**Fig. 2. Reaction of spectators to unpunished rough action against a home player**

Year 1989   Year1995

60%
50%
40%
30%
20%
10%
0%
Throwing object   Verbal aggression   Whistling   Refrain reaction   Did not say

Fig. 3. Reaction of spectators to unpunished rough action against visiting player

Year 1989   Year1995

80%
70%
60%
50%
40%
30%
20%
10%
0%
Throwing object   Verbal aggression   Whistling   Refrain reaction   Did not say

Conclusion

In football, which enables direct physical contact between players when a rough action against a home player remains unpunished, a minority of spectators reacts with a loud protest. Only a small minority reacts by throwing an object on the field (1,7%). There is also an interesting comparison between the spectator reaction to unpunished rough action against a home player and a similar action against a visiting player. The spectators react to such action against a visiting player much less with verbal reactions, whistling or throwing an object than they do when the action is against a home player. The same situation exists in the comparison between the results from 1989 and 1995. The results from 1995 show more intensive tendency to react aggressively (throwing object, verbal aggression). We could suppose this is in relation to situation in society.

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THE DIMENSIONS FOR INTERPERSONAL BEHAVIOUR OF SOCIALLY ACCEPTED/UNACCEPTED GROUPS OF YOUNGSTERS

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KEYWORDS

INTRODUCTION

One of the crucial topics of psychology seems to be the topic "personality and performance, professional/social success, socially accepted/unaccepted behaviour for life-span career". As satisfactory findings have not been uncovered in the structure of the isolated personality, attention was turned to personality behaviour in social contexts. There is a current presumption that interpersonal behaviour (considered as one of the main important personality features) is concentrated as the typical social role. Then - the role and interpersonal behaviour differences based on gender, age, subculture features and minorities characteristics can appear due to conformity, together with social environment. Two basic questions from the issue above must be solved:

- are there some identical dimension in interpersonal behaviour of individuals (groups) formed over a long period of time with sporting activities?

- is it possible to influence or change interpersonal behaviour with educational, and sports programme of individuals with unsocial behaviour?

Both questions were answered by two authors independently (Jansa et al. 1998: *sports in process of re-socialisation of young delinquents*. Válková 1999: *interpersonal behaviour of P. E. graduates and students*). Presented article compiles both aspects of the issue.

AIM

The main aim of the study was to describe and compare the dimensions of interpersonal behaviour among groups different in aspects of social acceptance and social prosperity:

- physical education teachers (P. E. teachers),

- physical education students in 1st course (P. E. students),

- high school students (HSS),

- youngsters/boys from re-educational residential homes (BRRH).

Higher capacity of physical activities were considered in P. E. teachers and students groups due to professional intention. Lower capacity in HSS and BRRH groups. Last one differed in terms of unsocial behaviour, emotional disturbances and crime behaviour symptoms. Next aim paid attention to BRRH group: description of subgroups with different importance on delinquency and comparison of dimensions of interpersonal behaviour after one year educational programme with sports activities.

PRESUMPTION

1. Groups with various social role and social acceptance present different dimensions in interpersonal behaviour.

2. The changes in interpersonal behaviour of BRRH group can be found after one year educational programme focused on physical activities and sports.

3. Subgroups of BRRH divided according to importance of delinquent acts present different dimensions in interpersonal behaviour both in initial assessment and after one year programme.

SAMPLE

BRRH - boys from re-educational residential homes recruited from various Bohemian regions. 108 boys aged between 15-17, relocated in homes due to anti-social behaviour, delinquent, petty crime acts. Divisioning on subgroup Del I - with major delinquency, Del II - with less important delinquency. Very low experience with sports, bad level in motor skills.

HSS - high school students as a comparative group of 86 boys from middle school in Mid-bohemian region, aged between 15-17. Common experience with sports, average level in motor skills.

P. E. students aged between 18-22, 78 men, extremely focused on sports activities, higher level of motor performance and skills.

P. E. teachers aged between 32-41, 42 men, highly socially accepted educational role, long term focus on physical exercises.

DESCRIPTION OF INVESTIGATION

Process of investigation (Jansa et al.) lasted from 1996-1998. Original project included evaluation of a lot of variables (motor and skill measurement, psychological features etc.). Only the comparison of dimensions in interpersonal behaviour is presented in this article.

1st assessment was realised in spring 1996 (including HSS), 2nd one in autumn 1998. Trained P. E. teachers and educators monitored educational programme with physical activities (40-60% of leisure time in residential homes, regular schedule, content targeted on games and plays, outdoor and adventurous activities).

P. E. students and P. E. teachers were assessed from 1991-1992.

Interpersonal behaviour was investigated with known Leary's questionnaire. Ego-real level (II level) was used. For more simple explanation is a modification with 8 basic octants and centre of dimensions: *DOM : dominance - submisivity, LOV : affiliation - hostility.*

RESULTS

The typical dimension in interpersonal behaviour of P.E. teachers is octant BC (competitive), less often in AP (dominant), NO (responsible). Similar results were found in sports coaches, partially in P.E. students groups. Adaptive form of behaviour can be described as follows: **BC** - self-confident, independent (considered as a very successful social technique), **AP** - energy, initiative, authority based on abilities, skills, the didactic activities seems to be the best adaptive behaviour, **NO** - rationality, regardless mature supportive behaviour often apparent in informal leaders. We presumed the BRRH group would be located in the dimensions based on power, strength, hard authority, dominance, aggressiveness, self-assertion. This is the

common opinion on individuals with unaccepted social behaviour. In spite of the presumption the centre of DOM-LOV bipolar dimension of interpersonal behaviour were mostly situated in octant **FG** (hostile-reserved) and **HI** (submissive - 2/3 of respondents), partially **LM** (affiliate). Critical, hostile attitudes towards surroundings usually provoke their rejection. Disappointment in interpersonal relations leads secondarily to rejection of social regulations. Vicious circle is closed, behaviour is channelled in pathologic, maladaptive behaviour. No strong, admired Rambos but weak, feeble and sour, suspicious youngsters start their life-career in re-educational homes. Considering other circumstances as failed system of values, family background etc., it is logical that they solve their problems socially and emotionally via unacceptable means.

The question if some changes of interpersonal behaviour can be found after one year educational programme cannot confirm: centre of DOM-LOV dimension shifted a little to octant **DE** (more self - activity and energy but emotional coldness remains). Subgroup Del I tends from octant **LM** to **AP** (dominant), subgroup Del II from **AP** to **NO** (responsibility).

CONCLUSION

The Leary's ICL technique for interpersonal behaviour is an available diagnostic tool to analyse behaviour dimensions in socially different groups. The presented behaviour of youngsters is possible to change toward socially accepted direction but it is a long have not achievable in one year only. Ideal results seems to get near to dimension presented by socially accepted groups formed in environment with physical activities, responsibility and independence.

TABLE 1. Survey of Variables in Compared Groups

Group	year resp.		n	DOM		LOV	
	inv.	age		x	s	x s	
P.E. teachers	92	32-41	42	57,4	9,4	43,2	7,1
P.E. students	91	18-22	78	55,6	8,1	47,7	8,6
SS	96	15-17	86	50,8	8,9	47,1	11,2
BRRH I	96	15-16	108	46,7	7,8	48,5	12,7
BRRH II	97	16-17	111	47,3	9,4	46,3	12,5

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There is a shrink in the team! A model for mental traning in team sports

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KEY WORDS

INTRODUCTION

This paper presents a model of mental training in team sports that is based on cognitive therapy. The model consists of three parts. The first part includes group sessions with players and coaches. The second part includes meetings with the coaches alone. In the third part a debriefing phase for evaluating games takes place with both players and coaches present.

Athletes and coaches in team sports seem to be of the opinion that the relationship between the climate of the group and the performance of the group is a positive one. A rewiew of research results in studies of group climate by Carron (1988) points in the same direction. More and more teams in different sports start up with mental training or get into contact with sport psychologists to help them work with the mental capacity of their teams. But according to Brustad & Ritter-Taylor (1997), a great deal of the traditional mental training programs are based on models for developing persons' mental capacities at an individual level. Brustad & Ritter-Taylor think that sport psychologists working with this individualised model forget about the social environment that is a part of the activity of the athletes. Applied to team sports this means that mental training is more focused on individual processes than on team processes. According to Cortlett (1996) mental training is focused on individuals but not on the individual processes. Instead of teaching athetes to develop self-knowledge, sport psychologists commonly teach athletes to depend solely upon technique-based symptomatic relief. For example, according to Cortlett the athlete learns that stress is a product of high levels of arousal and negative thoughts. From such learning follows the solution to try to eliminate the influence of the stress, instead of trying to confront oneself with stress or trying to understand the stress that one experiences. Cortlett believes that self-examination is an important means to self-knowledge and to success.

From these points of departure we have tried to apply a model based on schema concept, cognitive therapy, and system theory. A schema may be defined as a cognitive structure that represents knowledge about a concept or type of stimulus (Fiske & Taylor, 1991). A schema influences the encoding of new information, memory for old information, as well as inferences about missing information. Cognitive therapy is a form of psychotherapy that is used clinically and which is based on a Socratic school of thought, that is, guided experiencing (see Freeman, Pretzer, Fleming & Simon, 1994, for a review). In this method the therapist asks simple questions to the patient. Questions that make it possible to lead the patient to an understanding of his/her problems, evaluate possible solutions, and, finally, create a plan for how to solve the problems of the patient. System theory refers to the interplay between the individual and his/her social environment; as for example in the interplay between a player and his/her team-mates in a soccer game. When soccer players perform in a team they interact rather than act. For instance, one could compare a team and its different individuals with a mobile decoration. If someone touches one of the single parts in the mobile the whole figure is influenced. These interactions are of relevance for how the players commit to and co-ordinate instrumental acts (Wieck, 1995). According to Wieck, collective structure does emerge, as the players search for reasons that justify the earlier interdependent acts to which they have become bounded. This process can be reformulated as sensemaking in a team or committed interpretations.

PROCEDURE

Group meetings

In group meetings the psychologist participate in discussions together with the players and the coaches and organize exercises that deals with different issues. The purpose of the group meetings is to identify the individual players opinions and thoughts, the coaches opinions and thoughts, and the committed interpretations for that particular team. This is important because different sports and clubs have their own culturally coloured values, beliefs, attitudes, rituals, language, and expected behaviours. A club's subculture might influence, for example, how the players look at the match situation, formulate their individual goals, and respond on stress or injuries. Another purpose of the group meetings is to help the individuals to develop an ability to question their view of themselves and to learn to replace dysfunctional cognitive schemes. Individual sensemaking has the potential to be transformed into social structures (Wieck, 1995). Goal setting, rules and norms, and self-confidence are exampes of issues that may be discussed at the group meetings.

Meetings with coaches

The behaviour of the coach and his/her communication style is of great significance for how the team and the individual members experience the social climate in training and matches. The traditional view of team leadership is a leadership that directs the pathway to the goal, makes the right decisions and peps up the players. Such a leadership disregards the team as a system (Senge, 1993). According to Senge, looking upon the team as a system requires a different kind of leadership. Instead of charismatic leaders that focus on short-term solutions there is need for a leadership that develops people's abilities to understand complexity, makes their visions clear and improves their collective interpretations. During the coach meetings a Socratic attitude is strived for and the coaches are given support concerning coaching philosophy and performance. The coaches are responsible for implementing and deepening the discussions and exercises that have started during the group meetings.

Debriefing

In occupational teamwork groups, like in a fire brigade, where high performance and hard work is a part of the job, debriefing is a natural part of the afterwork. In these occupational groups there are programs especially designed to take care of all the information emanating from the perceptions and experiences of the team members. In our model some of the basic principles are:

> - *The whole team is present, including coaches and substitutes.*
> - *All the information that comes up during the debriefing stays within the team.*
> - *The team looks for facts, not faults and scapegoats.*
> - *Nobody is forced to speak, but the more of the team members that speak the more valuable the information.*
> - *There is no order of precedence during the debriefing, everybody is treated equal.*

During the debriefing session every member of the team identifies three situations that this member has taken an active part in. One of the situations should be a situation, where the player has done something that he or she thinks is good, and that he or she will keep on doing in the future. A second situation is a situation, where the player has done something less good and that the player will stop doing in the future. Finally, the third situation should involve something that the player wants to develop in the future, for example a greater strength, a better self-confidence or a better defence. These three situations are to be thoroughly described with respect to thoughts, emotions and behaviours. In addition, the player describes what has happened before, during, and after the occurence of the situation.

In our opinion the debriefing procedure will help the players to get a more objective judgement of what he or she has done and also to get a more realistic view of what he or she will have to practise on. In debriefing the player also practises to give and to take criticism in a constructive way. And finally, the player learns to identify the relationships between thoughts, emotions and behaviours and by that get able to take control over his or her mind.

CONCLUSIONS

In a team there are always interactions and experiences that produce a great deal of information that it would be a waste of time not to take advantage of. We believe that the present model of mental training will take care of the knowledge and experiences of the team in a constructive way. This model also helps the team to develop its ability to communicate and recognize climates in the team that have a positive or negative influence. Finally, we believe that each of the players, when using this model, feels more responsible, as an individual in relation to the sport itself and as member of a team.

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TO MOVE OR NOT TO MOVE: DIFFERENCES IN HEAD MOVEMENTS BETWEEN YOUNGER AND OLDER GOLF PLAYERS

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KEY WORDS
Concentration, head movements, MacReflex, golf, aging

INTRODUCTION
This study is concerned with golf players' concentration abilities in a putting situation. Of special interest was to examine changes in the head movements of the players during putting.

It is, of course, not easy to answer the question of what makes the difference between a successful and a not so successful golf putt. To answer that question many aspects of the behavior of the players have to be measured, especially interesting being the behavior during the addressing and cocentration phases. One way to find reliable and valid indicators of what happens during these phases is to use cardiovascular measures. For example, Lacey's intake-rejection hypothesis (e.g., Lacey & Lacey, 1980) presents a relationship between heart-rate changes and the direction of attentional focus. Laboratory and field research of golf players based on explanations of cardiac changes appears to offer promising support for the importance of the player's concentration ability for successful putting (Butcher & Zinsser, 1990; Molander & Bäckman, 1989; Molander & Bäckman, 1996). The study by Molander & Bäckman (1989) on miniature golf players demonstrated that differences between younger and older players in heart-rate changes were associated with differences in motor performance. However, in this study scores rather than motor movement per se was used as a measure of motor performance. One common belief among golfers and golf coaches is that the player's capability to hold his/her head steady during the putt is crucial for the success of the putt. If this is true, age-related differences in holding the head steady may be observed, as there is evidence for the existence of age-related differences in the capacity for inhibiting irrelevant stimulus information (Hasher & Zacks, 1988). In the present study we examine if such age differences will be found with respect to head movements during putting.

METHOD AND PROCEDURE
Data from 24 golf players were collected on two occasions in a laboratory equipped with facilities for putting. The participants represented two groups, young and old players, all members of Umeå Golf club. For the younger group the mean age was 21.9 years (SD=3.63) and the mean handicap level was 4.5 (SD=1.88). For the older group the mean age was 51.7 years (SD=2.80) and the mean handicap level was 8.3 (SD=2.33). The task was to make golf putts at a distance of 4 meters from the hole under training and competitive conditions. At the time of the first session the players performed 24 golf putts under no explicit competitive pressure. The players were told that this was a training session. A couple of weeks later there was a competitive session with another 24 putts, and the players were told that the performance during this session was decisive of whether the players would be qualified for a prestigious team competition in the club.

For analysis of head movements a MacReflex system was used. Three 50Hz cameras captured the movements of the golf players in three dimensions.

RESULTS

Performance, as measured by number of hole-in-one hits, decreased somewhat between the two sessions but did not differ between the age groups (p>.05). Overall the mean for the training session was 8.8 hits and the mean for the competitive session was 7.1 hits.
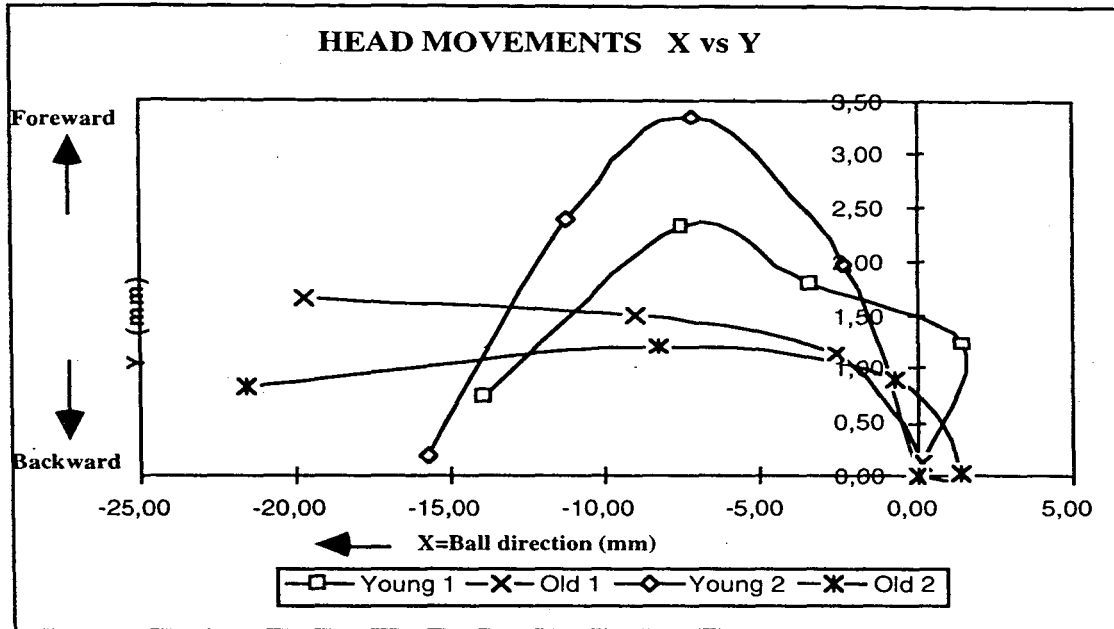

Fig. 1. Head Movements in Young and Older Adult Golf Players During Putting: Lateral vs. Depth Dimensions.
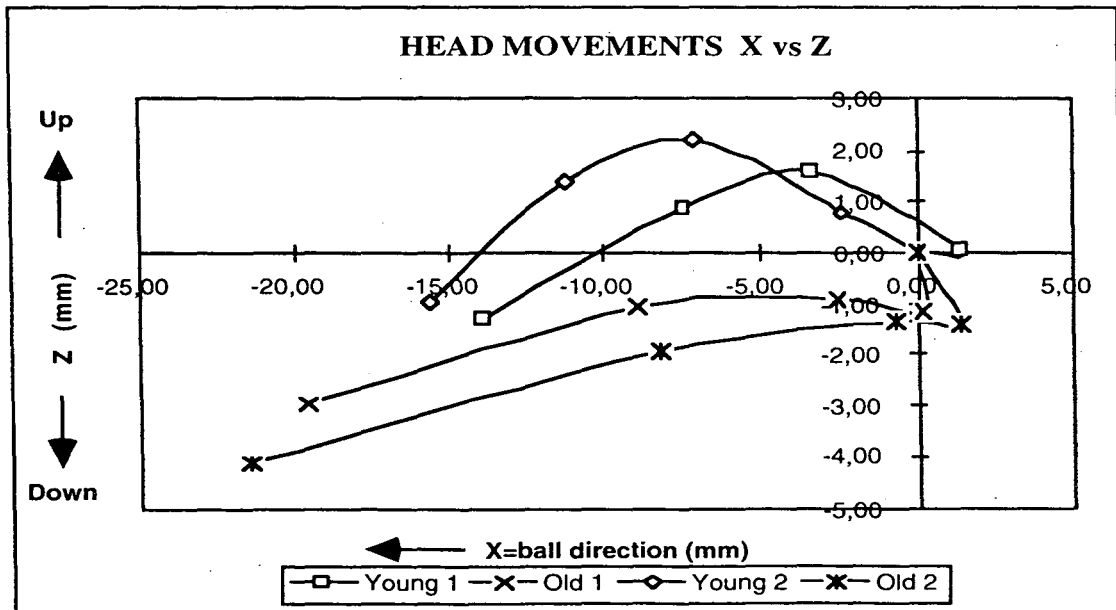

Fig. 2. Head Movements in Young and Older Adult Golf Players During Putting: Lateral vs. Height Dimensions.

Differences in head movements between younger and older players were analysed by means of ANOVAs. The different movement phases were "start of backswing", "backswing", "turning-point", "downswing", and "hit" in lateral (left-right), depth (forward-backward), and height (up-down) directions.

During the training condition, young and older players differed significantly in the hit phase in lateral movement (p<.01), in the backswing phase in depth movement (p<.01), and in all phases in height movement (ps<.05). During competition there were significant differences between the two groups in all of the lateral phases (ps<.01), in all of the depth phases (ps<.05), and in all of the height phases (ps<.01). These differences are illustrated in Figures 1-2.

DISCUSSION

This study demonstrates that young and older adult golfers show different patterns with respect to head movements. The younger players appear to move their heads curvilinearly. At the same time as the head moves in the direction towards the ball it is moving upwards and forwards during the start of the backswing and during the carrying out of the backswing. At the turning-point there is a change in the direction of the head movement and the head starts moving downwards and backwards. In contrast the older players seem to move their heads in a more linear and straight direction. When the head of the player moves in the direction towards the ball it is also moving downwards and forwards. When hitting the ball the older players have moved their heads a longer distance in the direction of the hole than the younger players, a finding indicating less inhibition in older as compared to young players. Keeping the head still and simultaneously trying to carry out the movements needed for the putt seems to be more of a problem for the older players than for the younger players. These results are noteworthy, keeping in mind that the older players are highly skilled and that the putting task requires only minimal physical strength in the players.

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PREDICTIVE VALIDITY OF THE INVENTORY "QUESTIONNAIRE – PSYCHOSOCIAL RISK FACTORS AND SPORTS INJURY" (Q-PRSI) ON A SAMPLE OF LONG-TERM INJURED COMPETITIVE ATHLETES.

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KEY WORDS: Prediction, Psychology, Risk factors, Sport Injury.

INTRODUCTION

From the moment of injury to the return to competitive-level sport, many athletes go through different phases of psychological "upsets". Leddy, Lambert & Ogles (1994) report on a study showing injured athletes immediately following physical injury to exhibit greater depression and anxiety and lower self-confidence than a control group, no significant change in this respect being recorded in a follow-up 2 months later. Research suggests, however, that some 5-10 % of those long-term injured competitive athletes seeking treatment shows signs of marked physical and/or psychological imbalance that strongly affected their rehabilitation and thus their return to active sport (Johnson, 1993).

Longitudinal studies, focused on how competitive athletes adapt psychologically to sport during and after a severe sport injury are important, since they can allow psychological risk factors to be detected early in the rehabilitation. In a study, Johnson (1997), 81 long-term injured competitive athletes were followed during and after rehabilitation. It was found that, about 30 month after the end of rehabilitation, about 8-9% of the athletes had not returned to their sport, despite a favourable physical prognosis. A multiple logistic regression analysis revealed, already on the first test occasion at the very beginning of rehabilitation, a distinct pattern or risk markers (p=.0026, correctly predicted cases, 96 %). Ominous signs were the following: insufficient mental plan for the rehabilitation, a negative attitude toward rehabilitation, restricted social contact with former club mates, low hedonic tone, gender and a stress-and anxiety laden experience regarding the injury.

The purpose of this study is to test the predictive validity of the inventory *Questionnaire - Psychosocial Risk factors and Sport Injury (Q-PRSI)* on a sample of long-term injured competitive athletes.

METHODS AND PROCEDURE

Subjects
Totally 30 patients participated in the study with at mean age of 23.6 year (sd 4.2), 25 men and 5 women. All of them suffering from acute injuries. The inclusion criteria were as follows; a) Over 18 year of age, b) more than 1 month of rehabilitation before competition, and c) on a competitive level of activity. Five patients participated in individual sports the rest in team sports (soccer, n=19). The most common injury was knee-injury (21). The patients were divided into two groups. Twenty-three patients scored less than 5 points and 7 patients scored more than 5 of 10 possible points on Q-PRSI indicating potential psychosocial problems to come. Although subjects were rated by treating physiotherapist as physically restored at the end of the diagnosed treatment period. Five of these 7 patients rated them self as physically and mentally ready for training and competition again despite tentatively

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labelled "Risk group". These five patients have a mean age of 23.4 (sd 2.9), divided into 3 men and 2 women.

Measurements and Procedure
Four different questionnaires were in used; Q-PRSI and The Diagnostic Check-List 1 (DCL:1) in the beginning of rehabilitation, The Diagnostic Check-List 2 (DCL:2) and the Patient's self rating questionnaire (PSQ) at the end of rehabilitation. *The Q-PRSI* consist of 4 subheadings; a) Background information; mainly questions concerning demographic data and injury related history, b) Psychosocial factors; mainly questions which deals with potential risk factors such as social network, goal setting and the assessment of the injury as being stressful, c) Mood level; comprise 12 adjectives, from the inventory Mood Adjective Check-List (Sjöberg et al, 1979), distributed on a bipolar mood-dimension labelled Hedonic tone (pleasure-nonpleasure), d) Coping strategies, consist of 11 items comprising 2 dimensions from the inventory "General coping inventory" (Persson, 1985). Those are Problem-solving and Wishful thinking. The *DCL:1* concerned the patient's physical status at the beginning of the rehabilitation. The *DCL:2* concerned the results of the individual rehabilitation process judged by the physiotherapist. Each item serves as an element in the evaluation of the individual's recovery following injury. The *PSQ* concerned the patients experience of physical and psychological readiness at the end of rehabilitation.

RESULTS
Analyzing frequency distribution differences between the groups, Fishers exact test was used. Six significant differences emerged under 10%-level (see table 1).

TABLE 1. Q-PRSI, PSQ, DCL:1 and DCL:2. Risk group (n=5) vs Others (n=25), Fisher's Exact Test. aOther answer: As expected, bOther answer: Positive/negative attitude.

Questionnaire/Questions	Answers	Risk group	Others	p-value
Q-PRSI				
Have you imagined yourself in a competitive	Yes	2	24	.009
situation in your sport?	No	3	1	
Do you have any goal or guideline for	Yes	2	21	.068
making your rehabilitation successful?	No	3	4	
PSQ				
Do you consider yourself to be fully restored	Yes	0	19	.003
physically and ready for competition?	No	5	6	
Do you consider yourself to be mentally	Yes	0	22	.0001
prepared and ready for competition?	No	5	3	
DCL:2				
How do you estimate the physically	Better/expected	0a	10a	.008
rehabilitation has gone for your patient?	Worse/expected	4	2	
Do you feel that your patient has a positive	Positive	1b	15b	.080
negative attitude at the end of rehabilitation?	Negative	2	2	

Two significant differences emerged using Students t-test (two-tailed). On the mood variable "Hedonic tone" The Risk group had a lower mean (m=2.59, sd=.33) than the Others (m=3.20, sd=.42), p=≤.024. As expected, the Risk group had a higher mean (m=5.80, sd=.27) than Others (m=2.54, sd=1.65) on the total sum of points scored on the Q-PRSI, p=≤.0058.

DISCUSSION AND CONCLUSION

In order to test the predictive validity in a newly constructed inventory, Q-PRSI, six independent variables was particularly of interest in order to identified a potential Risk group as compared to the patients self rating regarding physically and mentally prepared for competition at the end of rehabilitation and of the physiotherapists judgement. Two of the variables, low frequent answers on mental plan or images of the forthcoming rehabilitation and a low Hedonic tone turned out to be significant in relation to the group Others. Moreover, a predominantly negative attitude toward rehabilitation according to treating physiotherapist also showed a potential discriminating power. Although not statistically significant, an over-representation of women, 2 of 5 in Risk group vs 3 of 25 in the group Others, was noticed. Two variables did not prove to discriminate the Risk group from Others, that is, restricted social contact with club mates and a stress- and anxiety laden experience regarding the injury. Since the Risk groups self-rating (PSQ) clearly separate the groups on Fishers exact test, it is hypothesised that Q-PRSI demonstrate a feasible way of discover potential risk athletes with long-term injury in the beginning of rehabilitation. Durso-Cupol (1998) states this matters as; *"When new instruments are used in combination with well-validated tests, there exists the potential for development of assessment measures that can more accurately and specifically identify psychological factors involved in injury occurrence and recovery"(p. 115).*

Summing up: The Q-PRSI demonstrated a promising way of discover potential risk patients early in the rehabilitation. An important next step is to provide adequate psychological intervention and a follow-up on their actual behaviour, especially for risk patients, as a complement to traditional physical therapy

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A PRELIMINARY CONCEPTUALISATION OF THE COACH-ATHLETE RELATIONSHIP.

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Key words: coach-athlete, dyad map, closeness, co-orientation, complementarity.

INTRODUCTION

Although attempts have been made to explore coaches and athletes relationships, sport psychology research in this area has been accused as being cursory and superficial (Bryan & Gratty, 1982) because its focus has been on either one or another interactant. Therefore this study is focused on dyads, in particular coach-athlete relationships in top level sport in order to provide a more intricate relational picture (Mikulincer, 1998). According to Kelley and co-workers (1983) a "relationship" refers to the situation in which two people's behaviours, emotions, and thoughts are mutually and causally interconnected.

The constructs of closeness (Kelley et al., 1983), co-orientation (Newcomb, 1953) and complementarity (Kiesler, 1997) have been used independently, to examine either two person's emotional, or cognitive or behavioural interdependence in different settings. However from experience and observation it would seem appropriate to consider coach-athlete relationships as a holistic relationship-system which involves emotions, cognitions and behavioural interactions. Therefore the above constructs form this study's conceptual model and the basis from which coach-athlete relationships are examined (Figure 1).
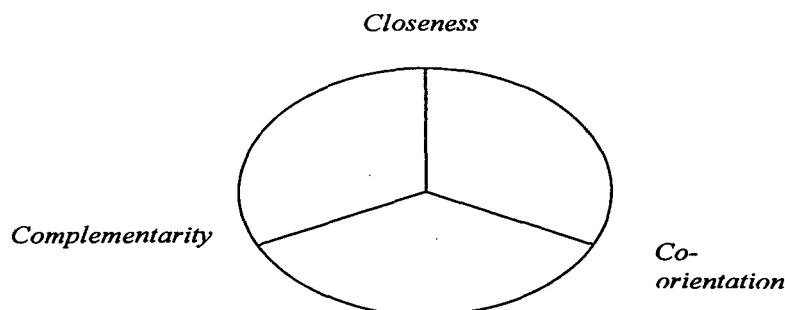

Fig. No. 2. A Conceptual Model: Coach – Athlete Map

The purpose of the study was to unveil the following,

a) close relationship-member's experience co-orientation or 'perceptual congruence', in other words, cognitions regarding their relationship and their partners, including their expectations, goals, philosophies, roles, are in agreement.

b) 'perceptual congruence' in turn acts as a platform where complementarity or 'interbehavioural congruence' takes place. Hence relationship-members' interactions are reciprocated in as much as to 'affirm and validate [their] chosen style of living and being' (Kiesler, 1997; p. 85).

METHOD

It appears that there are various coach-athlete relationship-types such as typical, married, family, teacher-pupil, correspondance. For the purpose of this study, it was decided to examine married coach-athlete dyads. The reason being that this type of relationship would be more likely to manifest the 'key' constructs under investigation. Hence four married coach-athlete dyads, from Greece, working in track and field athletics, were selected and with their consent participated in the study. These dyads, at the time of the study, had at least a two-year coach-athlete relationship and the time of being married varied from a few months to ten (10) years. The athletes-wives (coached to husbands) were members of the Greek national team for a number of years with major international distinctions. An interview schedule was used as the main method of gathering data. Following a number of pilot studies, the final interview schedule was consisted of 85 open-ended and follow-up questions and three major sections that of closeness, co-orientation, complementarity and an introductory section.

Content analysis (Weber, 1990) was employed to determine the theoretical chosen themes from the plethora of transcribed phrases as emerged in the interviews. The first author coded the raw data phrases into the appropriate theoretical themes. University staff and research students completed the content analysis to endorse reproducibility and face validity relative to the thematic classifications.

RESULTS

Closeness

Fifty nine (n=59) raw data themes were identified in relation to closeness. The construct of closeness cited by all dyads (N=4) and included two first order-themes personal and general emotions/feelings. Personal emotions appeared to reflect special feelings experienced largely as a result of being married (e.g., *'It is the love we feel for each other'*). On the other hand, general feelings appear to be largely the product of working together (e.g., admiration, respect, regard, pride). Specifically and as one coach put it *'I saw her sacrificing ... and so I respected her effort even more'*. Belief or trust in one another emerged as the most important high-order theme under closeness.

Co-orientation

The raw data themes (n=95) emerged from the interviews in relation to co-orientation were grouped into three categories that of communication, knowing and understanding and communication style-change. All dyads reported extensive communication about goals, training, competitions and other sport-related or unrelated issues. 100% of the athletes and 75% of the coaches reported the next higher order theme, that of communication style-change. Statements made, such as *'...eye and body can say everything'* illustrated its existence and *'He can read me'*. This style of communication goes beyond the conventional means, in that words become redundant. 100% of the coaches strongly felt that athletes need to be in the position to understand and appreciate the coach's efforts, however only, 50% of the athletes felt that athletes, in general, need to understand the coach's ways, be it thoughts, behaviours or motivations.