

## MORAL DEVELOPMENT IN SPORT CONTEXT: UTOPIA OR REALITY?

*Katerina Mouratidou<sup>1</sup>, Dimitrios Chatzopoulos<sup>2</sup>,  
& Sofia Karamavrou<sup>1</sup>*

*Aristotle University of Thessaloniki, Greece*

**Abstract:** The aim of the present study was to examine (a) if athletes' moral judgment is affected by sport type, the level of competition – in terms of the league in which one competes – and regular playing position, and (b) possible relations between moral judgment and the overall years of athletic experience, self-perception of sport ability, and achievement goal orientations. The sample comprised 170 adolescent athletes from three different sports: tennis ( $n = 59$ ), football ( $n = 58$ ) and handball ( $n = 53$ ). Three questionnaires were used: the Moral Judgment Test (MJT; Lind, 1978) to assess players' moral judgment, the Task and Ego Orientation in Sports Questionnaire (TEOSQ; Duda & Nicholls, 1992) to assess players' goal orientations, and the same questionnaire adapted to assess players' perceived goal orientations of their coaches (TEOSQ-PPC). Also, players' perceived sport ability as well as demographic data was reported. The ANOVAs revealed that tennis, as compared to handball athletes, scored significantly higher in MJT C-index (Moral Competence Index) and so did the amateurs ( $n = 114$ ), as compared to professionals ( $n = 56$ ). Playing position did not have a significant effect on C-index. Furthermore, the C-index positively correlated with perceived sport ability and task orientation. There was a low negative correlation with ego orientation. In addition, there was a nonsignificant negative correlation between the C-index and years of athletic experience.

**Key words:** Moral judgment, Sport, Task Orientation.

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**Note:** <sup>1</sup>Department of Physical Education and Sport Sciences at Serres, Aristotle University of Thessaloniki, Greece. <sup>2</sup>Department of Physical Education and Sport Sciences at Thessaloniki, Aristotle University of Thessaloniki, Greece.

**Address:** Katerina Mouratidou, Department of Physical Education and Sport Sciences at Serres, Aristotle University of Thessaloniki, Agios Ioannis, 62110 Serres, Greece. Phone: +30-2310-991056 and +30-23210-58284. Fax: +30-2310-991056. E-mail: katemou@phed-sr.auth.gr

## INTRODUCTION

### *Moral judgment*

The moral aspect of human behaviour, with its positive or negative consequences on society, has been the object of relevant psychological, sociological and educational research, especially in the last few decades. Scientists in athletics and in the field of physical education are preoccupied with this issue since the old saying "Sport builds character" is being heavily questioned lately.

According to Kohlberg's theory (Kohlberg, 1969, 1971, 1984), moral development is associated with cognitive development. Kohlberg proposed a model based on three levels of moral development that a child goes through: pre-conventional, conventional and post-conventional. Each of these levels includes two separate stages. To identify the moral development stage the person is required to think about and solve dilemmas regarding issues of morally good or bad behaviours. The idea is that in order to behave morally, an individual must have the cognitive capacity to make moral judgments as the ones in moral dilemmas. The ability to make moral judgments is defined as «the capacity to make decisions and judgments which are moral (i.e., based on internal principles) and to act in accordance with such judgments» (Kohlberg, 1964, p. 425).

The instruments which have been used in physical education and sport studies up to now assess morality either on an obedience to rules basis (behavioural approach), or by evaluating people's intentions (assessment of moral attitudes and values). Consequently, the resulting indexes from these evaluations do not permit any interpretations of a person's moral behaviour. This is because, according to the *dual aspect theory* of moral behaviour (see Kohlberg, 1958; Lind, 1985a,b,c, 2000a,b, 2002a,b), the moral behaviour of an individual is defined, on the one hand, by the person's dedication to basic moral principles (affective aspect) and by the person's ability to reason and act according to those principles (cognitive aspect), on the other. As Piaget also suggested «affective and cognitive mechanisms are inseparable, although distinct: the former depends on energy, and the latter depends on structure» (Piaget, 1976, p. 71). A questionnaire, which assesses the ability to form moral judgments according to the dual aspect theory of morality, is the Moral Judgment Test (MJT; Lind, 1978).

The central feature of the MJT and, at the same time its difference from

Kohlberg's Moral Judgment Interview (MJI) (Colby & Kohlberg, 1987), is that it assesses moral competence by providing counter-arguments which oppose one's position on a difficult moral problem. The MJI assesses moral judgement competence by recording how a person handles those counter-arguments. «While subjects' reactions to arguments that favour their own opinion indicates the preferred level of moral reasoning for resolving the dilemma, their reactions to counter-arguments tell us something about their ability to use a particular moral level consistently when judging other people's behavior» (Lind, 2002a, p. 3). The most important index which arises from the MJI analysis is the C-index (where C stands for competence), which «measures the degree to which a subject's judgments about pro and con arguments are determined by moral points of view rather than by non-moral considerations like opinion-agreement» (Lind, 2002a, p. 2).

### ***Sportpersonship and morality***

Presumably, concepts such as sportpersonship and fair play are related to morality, because they require acting in accordance with internal moral principles. Sportpersonship refers to understanding and valuing the rules, rituals, and traditions of sports and activities and distinguishing between good and bad practices in those activities (Siedentop, Hastie, & Mars, 2004). Fair play means not just playing by rules, but also respecting others, participating always with the right spirit and attitude, valuing equal opportunity, and behaving with responsibility towards a teammate or a player (Siedentop et al., 2004). Therefore, sportpersonship and fair play are directly related to morality and moral development, since developing autonomy in moral decision making in sports presupposes that one: (a) has the capacity to judge morally, (b) has the capacity for role taking in morally challenging situations, (c) is behaving responsibly, and (d) establishes attitudes and affections towards other people. As stated above, in order for a moral action to occur it is necessary for someone to have not only the capacity for moral reasoning (moral cognition) but also to have established attitudes and affects concerning a moral problem. As Lind (2006) suggested, moral affects energize moral behaviour, while moral cognition directs and structures it in a particular situation.

Taking into consideration that the study of morality is a complex issue, sport studies, which were conducted in order to examine various aspects of moral development, investigated moral judgment, reasoning, and intention either independently or in combination with other variables, such as achieve-

ment goal orientations (Duda, Olson, & Templin, 1991; Dunn & Dunn, 1999; Kavussanu & Roberts, 2001; Lemyre, Roberts, & Ommundsen, 2002; Παυλοπούλου, Γωνιάδου, Ζαχαριάδης, & Τσορμπατζούδης, 2003). As the aforementioned studies showed, the goal orientation that is positively related to morality is task orientation.

### ***Achievement goal theory***

According to the achievement goal theory (Ames, 1984, 1992; Duda & Nicholls, 1992; Dweck & Elliott, 1983; Elliot & Church, 1997; Nicholls, 1983, 1984) two major goal perspectives can be identified in people's behaviour: *task orientation* (or mastery or learning goals) and *ego orientation* (or performance goals). These goal orientations reflect differences in how individuals construe their level of competence and how they define success in specific situations. Task goal orientation represents participation in an activity in order to benefit from the activity itself and not in order to outperform others. High task-oriented individuals tend to use personal standards of achievement rather than social norms, and try to demonstrate mastery of the task rather than normative ability. In contrast, high ego-oriented individuals tend to use other-reference criteria – such as normative comparisons – to define success and judge competence, and they feel successful when they have outperformed others. In recent years, ego or performance goal orientation has been differentiated into performance approach and performance avoidance goals (Elliot & Church, 1997). However, in the present study the emphasis will be on ego goal orientation, since this is the framework of the most of the studies in this area.

In an effort to investigate how achievement goal orientations are related to athletes' moral judgment, several researchers examined the two goal perspectives in relation to indicators of moral development, to fair play, and to sportspersonlike behaviours (Duda et al., 1991; Dunn & Dunn, 1999; Kavussanu & Roberts, 2001; Lemyre et al., 2002; Παυλοπούλου et al., 2003). Specifically, Duda et al. (1991) examined the relationship between the two goal orientations and sportspersonship attitudes and perceived legitimacy of aggressive acts. Results showed that ego orientation had a positive correlation with endorsement of unsportspersonlike play (such as cheating) and was associated with greater acceptance of intentionally injurious acts or aggression against one's opponent. Dunn and Dunn (1999) also investigated the relationship between goal orientations, sportspersonship, and percep-

tions of athletic aggression. Their findings revealed that high ego orientation was associated with greater approval of the use of aggressive behaviours than low ego orientation was. On the contrary, high task-oriented players expressed greater respect and concern for social conventions, and for the rules and officials.

In a similar study, Lemyre et al. (2002) examined the extent to which goal orientations and perceived sport ability predicted sportspersonship. The results indicated that high ego-oriented athletes with low perceived sport ability had the lowest respect for rules and officials and endorsed cheating in order to achieve their goals. On the other hand, low ego-oriented athletes with high perceived ability expressed higher respect for rules and officials. Therefore, moral attitude in sports is a function of both goal orientation and perceived ability. Kavussanu and Roberts (2001) offered also evidence on the relationship of goal orientations with indices of moral functioning (namely moral judgment, intention, and behaviour), unsportspersonlike attitudes, and judgments about the legitimacy of intentionally injurious acts. Results revealed that ego orientation was positively associated with lower levels of moral judgment and moral intention, and greater acceptance of intentionally injuring acts.

In a more recent study (Παυλοπούλου et al., 2003) the relationship of students' sportspersonship orientation with their goal orientations and global motivation was examined. The results showed that task orientation was highly correlated with social assignment –one of the five factors of the Multidimensional Sportspersonship Orientation Scale (MSOS; Vallerand, Briere, Blancard, & Provencer, 1997)– which refers to the respect of social conventions, with sportspersonship commitment, and with obedience to rules and officials.

### ***Other factors affecting moral judgment in sports***

Other variables that have been found to have an effect on moral judgment in sports are the following: (a) Type of sport, i.e., low/ medium/ high physical contact sport and individual or team sports (Vallerand, Deshaies, & Cuerrier, 1997); (b) Years of experience in sports (Gardner & Janelle, 2002); (c) Level of sport participation, i.e., amateur or professional (Stephens, 2001); (d) Team's moral atmosphere, i.e., team norms, players' perception of their coach's goal orientation (Kavussanu, Roberts, & Ntoumanis, 2002).

According to the above studies, team-sports athletes express lower levels of concern for the opponent in contrast with athletes who participate in individual sports (Vallerand et al., 1997). It was also found that the amount of physical contact which characterizes a particular sport correlates positively with the perceived legitimacy of rule violating behaviour (Silva, 1983; Tucker & Parkis, 2001). Similar results were found with boys involved in high contact sports and with girls in medium contact sports (Bredemeier, Weiss, Shields, & Cooper, 1986). In so far as aggressive behaviour is concerned, the evidence is that it becomes more legitimate and acceptable as the participants' years of experience in the sport increase (Gardner & Janelle, 2002), particularly when the participants are males (Silva, 1983). In general, the length of participation in sports correlates negatively with sportspersonship behaviour (Blair, 1985; Potter & Wandzilak, 1981). Furthermore, it was found that the level of competition in which the players are involved affects their moral behaviour (Beller & Stoll, 1995; Stephens, 2001). More specifically, as the level of sport participation increases the emphasis on playing fairly decreases (Silva, 1983). Furthermore, team norms and willingness to injure if the coach requests it, are strong predictors of the likelihood to behave aggressively (Kavusanu et al., 2002; Stephens, 2001; Stephens & Bredemeier, 1996). Finally, athletes' perceived motivation climate, which is promoted by their coach and corresponds to ego-oriented goals, correlates positively with the likelihood to act aggressively against an opponent (Stephens & Bredemeier, 1996).

Overall, it seems that although the relation between athletes' goal orientations and their moral judgment has been examined quite extensively, more research is needed on the association of moral judgment with the specific sport (high, low physical contact), the years of experience in a specific sport, the league of sport participation (amateur or professional), the perceived sport ability, and the moral atmosphere. According to Power and his colleagues, moral atmosphere involves a set of collective norms regarding moral action on the part of group members (Power, Higgins, & Kohlberg, 1989). In a team sport the coach and the team members establish over time certain norms and respective goals, which are considered appropriate in that particular context. The goals of the coach and of the athletes may differ between them.

Moreover, there is a lack of research as to whether the playing position that an athlete occupies (defence, center, and offence) affects his or her level of moral judgment. Both defensive and central players experience a more intense feeling of threat as an opponent approaches their goal post

and victory is at stake. Consequently, they may be more willing to violate the rules and exhibit anti-athletic behaviour compared to the offensive players. Furthermore, an offensive player doesn't experience much pressure to score by using illegal means, while a defensive player has to use all means (legal and illegal) in order to avoid a goal scored by an opponent, since this could not be reversed and could probably prove critical for the outcome of the game.

The above analysis suggests that even if team players between them and with their coach share the same goal orientation, their moral behaviour will be affected by the playing position rather than the goal orientation per se.

The aim of the present study was to investigate whether the level of physical contact that characterizes a sport such as football, handball, or tennis, the level of competition (which corresponds to the league in which someone competes, i.e., amateur or professional league) and the players' regular playing position in a team sport, such as football or handball<sup>1</sup>, affect the moral judgment of athletes. However, since moral judgment is related to other personal factors, such as one's perceived competence in one's sport, that is, how the athlete rates his/her performance in the specific sport, we investigated the effects of this factor as well as of the overall years of one's athletic experience, the athletes' goal orientation and one's perception of his/her coach's goal orientation.

More specifically the hypotheses we tested were the following: (a) high physical contact sports should be associated with lower levels of moral judgement, as indicated with the C-index. (b) There should be negative correlation between competitive level (league) and moral judgment. (c) Defensive players in football should have lower moral judgment than offensive ones. (d) There should be a direct relationship between perceived sport ability and moral judgment. (e) There should be an inverse relationship between the years of sport experience and moral judgment. (f) Players high in ego orientation or perceiving their coach as favouring the same orientation should have a lower moral judgment. On the contrary, players high in task orientation or perceiving their coach as favouring the

<sup>1</sup>. At this point, it should be mentioned that although handball is considered a team sport, the athletes' playing position is not taken into consideration because their role as offensive or defensive players is not distinguished clearly, since all players take an active role in both offence and defence.

same orientation should have higher moral judgment. However, the relationship of goal orientation with moral judgment should be differentiated depending on perceived sport ability and sport type, level of competition, and playing position.

## METHOD

### *Design of the study*

In the present study three types of sports were chosen: tennis, football, and handball. These sports were chosen because they differ in the relative frequency and intensity of physical contact that is associated with them. Therefore, tennis was regarded as a low contact sport, football as a medium contact sport, and handball as a high contact sport (for a similar taxonomy of sports according to the physical contact see Bredemeier et al., 1986).

### *Participants*

The overall sample comprised 170 young athletes, with an average chronological age of 15.71 years ( $SD = 2.54$  years). Fifty-nine of the participants were tennis players (30 boys,  $M = 15.63$  years of age,  $SD = 1.93$ , and 29 girls,  $M = 16.21$  years of age,  $SD = 2.47$ ). Of them, 35 competed in the A professional tennis league and 24 were in the A amateur tennis league. The mean years of experience of the tennis players were 5.68 ( $SD = 2.43$ ).

Fifty-eight of the participants were football players (52 boys,  $M = 15.83$  years of age,  $SD = 1.33$ , and 6 girls,  $M = 15.17$  years of age,  $SD = 2.63$ ). Of them 6 played in A-D professional football league and 52 played in the A amateur football league. The mean years of experience of the football players were 5.55 ( $SD = 2.45$ ).

The rest of the 53 participants were handball players (26 boys,  $M = 16.96$  years of age,  $SD = 2.12$ , and 27 girls,  $M = 14.78$  years of age,  $SD = 2.91$ ). Of them, 15 played in A professional handball league and 38 in A amateur handball league. The mean years of experience for the handball players were 4.66 ( $SD = 2.70$ ).

In the entire sample, 114 of the participants were amateurs, and the rest 56 were professionals. The average chronological age for the professional players was 16.07 years ( $SD = 3.76$ ) and for the amateurs 15.58 years ( $SD$

= 3.47). The t-test for independent groups,  $t(168) = -.781, p > .05$ , showed that there was no significant difference between amateur and professional players with respect to age.

### **Measures**

Five self-report questionnaires were used to assess players' (a) demographic characteristics, (b) goal orientations, (c) perception of their coach's goal orientation, (d) moral judgment, and (e) perceived sport ability.

**Demographic questionnaire.** The demographic questionnaire regarded age, gender, sport, league of sport participation, regular playing position in team sports, and years of sport experience. In regard to sport experience three blank spaces were included for participants to indicate any other experience in sports besides their present sport.

**Player's goal orientations.** A modified Greek version (Papaioannou & McDonald, 1993; see also Barkoukis, Zahariadis, Anastasiadis, Tsorbatzoudis, & Grouios, 2004) of the Task and Ego Orientation in Sports Questionnaire (TEOSQ; Duda & Nicholls, 1992) was used to assess players' goal orientations. The TEOSQ comprises 13 items; seven of these items represent task-oriented goals (e.g., "I learn a new skill by trying hard"), and six represent ego-oriented goals (e.g., "I'm the best"). Answers are given in a five-point Likert type scale ranging from 'strongly disagree' = 1 to 'strongly agree' = 5. The stem for each of the thirteen items was "When playing football/handball/tennis I feel successful when...". Separate mean scores were computed on the items of the respective subscale (i.e., task or ego orientation). Cronbach's alpha coefficient for Ego and Task orientation for the present sample was .78 and .76, respectively.

**Perceived coach's goal orientations.** To assess players' perception of the degree of importance their coach places on task- and ego-involvement goals, the previously mentioned Greek version of TEOSQ was modified to create the 13-item TEOSQ-PPC (Player's Perception of Coach). The validity of the original TEOSQ-PPC was confirmed by Stephens and Bredemeier (1996). The TEOSQ-PPC is identical to the TEOSQ with two exceptions: (a) in TEOSQ-PPC the stem for each of the thirteen items was "How important is it to your coach...", and (b) in TEOSQ-PPC the wording of items was changed to reflect both the player and his/her team, rather than the player by himself/herself (e.g., "That your team is the best team"). Cronbach's alpha coefficient for Ego-PPC and Task-PPC orientation for the present sample was .77 and .81, respectively.

**Moral judgment.** Each participant was administered the modified Greek version of the Moral Judgment Test (MJT; Μουρατίδου, Χατζόπουλος, Γκούτζα, & Καραμαύρου, 2003) to assess students' moral judgment. The MJT was developed by Lind (Lind, 1978, 2002a,b) and is based on Kohlberg's structural-developmental theory for moral development. The MJT was selected because it is the only available instrument that measures all aspects of morality and not separate components of it.

In MJT the individual is presented with two moral dilemmas-stories. The first story-dilemma concerns workers, who illegally enter the administration offices of a company in order to find proof for an allegation, and the second concerns a doctor, who assists a dying patient to take away her own life (assisted suicide) according to her request. Participants must express whether they approve or disapprove a string of arguments (items) in favour of or against the behaviour described in each story – six items in favour and six against the behaviour. The participants respond to each item in a 9-point Likert-type scale ranging from 'totally disagree' = -4 to 'totally agree' = +4. Each item corresponds to one of the six of Kohlberg's stages of moral development. An example of an item in favour of the workers' behaviour, which corresponds to the developmental stage 1, is "Because they didn't cause much damage to the company". Another example of an item against the workers' behaviour, which corresponds to stage 4, is "Because we would endanger law and order in society if everyone acted as the two workers did".

The most important index that can be computed from the MJT analysis is the C-index. The C-index represents a person's ability to judge the arguments based on their moral quality. In other words, the C- index (or C-score or just C) measures the degree to which a person lets his/her judgment to be determined by moral concerns or principles rather than by other psychological forces, such as the human tendency to construct arguments in accordance to one's opinion or decisions about a certain issue (Lind, 2000a, 2002a, 2003).

According to empirical research on moral judgment, four basic assumptions must be met in order for the MJT to be considered valid and reliable (Lind, 2000b; Lind, 2002a,b). These are: preference hierarchy, quasi-simplex structure, cognitive-affective parallelism, and correlation with education level. The above criteria were all met in the Greek version of the MJT as it was indicated by the relevant study (Μουρατίδου et al., 2003).

**Perceived sport ability.** Perceived sport ability was measured with a single item of how participants evaluate their own ability in their sport. Respondents rated their self-perception on a 10-point Likert-type scale (1-10).

Specifically, participants were asked, "How would you rate your ability compared with other players in your age?" Although no reliability can be established for single-item measures, these types of assessments have been employed by a number of researchers to assess perceived ability (Hodge & Petlichkoff, 2000; Pensgaard & Roberts, 2000).

### ***Procedure***

The participants completed the questionnaires during their break in training and under the researchers' supervision. Participation was voluntary. The coaches of the athletes were not present during the completion of the questionnaires. At the beginning it was emphasized to all participants that the completion of the questionnaires was not any type of test or any other form of evaluating their progress in sport, and that there were no right or wrong answers. It was also emphasized how important it is for the participants to complete the questionnaires on their own without collaborating with each other. In addition, the athletes were assured that their answers would remain confidential. No difficulties emerged in item understanding. The procedure lasted for about 15 to 20 minutes.

### ***Data analysis***

The effect of sport type (tennis, football, handball) and the athletes' level of competition (amateur or professional) on the athletes' C-index was examined with a 3(sport type) x 2(level of competition) ANOVA. In order to investigate the significance of the differences between the group means the Scheffe test was used. The effects of sport type (tennis, football, handball) and the athletes' level of competition (amateur or professional) on the athletes' goal orientations, on the coaches' goal orientations, as well as on the perceived sport ability, were examined with a 3(sport type) x 2(level of competition) ANOVA. The age difference between the subgroup of amateurs and the subgroup of professionals was examined by using a t-test for independent samples. One-way ANOVA was also applied in order to investigate how a player's regular playing position in football affects his/her moral judgment. Furthermore, in order to examine the relationship of moral development (C-index) with goal orientations, perceived sport ability, and years of sport experience Pearson correlation was used. Finally, a hierarchical regression analysis was conducted in order to examine

**Table 1. Athletes' C-index as a function of sport type and level of competition**

Sport type	Level of competition	M	SD	N
Tennis	Amateur	21.23	11.15	35
	Professional	19.36	10.28	24
	Total	20.47	10.75	59
Football	Amateur	19.20	8.78	52
	Professional	8.30	5.74	6
	Total	18.08	9.11	58
Handball	Amateur	15.73	10.16	38
	Professional	9.74	8.43	15
	Total	14.03	10.00	53
Total	Amateur	18.72	10.06	125
	Professional	14.67	10.36	45

whether the goal orientations, sport type, level of competition or perceived ability could predict the players' C-index. In all analyses a significance level of  $p < .05$  was utilized.

## RESULTS

### *The effect of the sport type and the league of sport participation on the C-index, on goal orientations and on perceived sport competence*

To test the effect of sport type (tennis, football, handball) and level of competition (league of sport participation, i.e., amateur or professional) we applied a 3(type of sport) x 2(level of competition) ANOVA with the C-index as the dependent variable in the whole group. The main effect of sport type was significant,  $F(2, 164) = 8.383, p < .01$ . The Scheffe test indicated a statistically significant difference only between the tennis and the handball players ( $p < .05$ ). The main effect of the athletes' level of competition was also significant,  $F(1, 164) = 10.632, p < .01$ . Amateurs scored significantly higher than professionals in the C-index. There was no significant interaction between the two factors, namely sport type and level of competition.

Table 1 shows the means and the standard deviations of the C-index according to the sport type and the athletes' level of competition. As it can be seen in Table 1, tennis players (individual sport of low physical contact) scored higher in C-index, followed by the footballers (team sport of medium physical contact) and with the handball players to follow (team sport of high physical contact).

**Table 2.** Athletes' task orientation and coaches' task orientation as a function of sport type

Task orientation	Sport type	M	SD	N
Players' task orientation	Tennis	4.28	.54	59
	Football	4.24	.82	58
	Handball	3.83	.96	53
	Total	4.13	.81	170
Coaches' task orientation	Tennis	4.42	.48	59
	Football	4.19	.81	58
	Handball	3.95	.95	53
	Total	4.20	.78	170

To test the effect of sport type (tennis, football, handball) and level of competition (league of sport participation, i.e., amateur or professional) on goal orientations of athletes and coaches, and on perceived competence we applied a 3(type of sport) x 2(level of competition) ANOVA with the players' task- and ego orientation, perceived coaches' task- and ego orientation, and perceived sport competence as the dependent variables in the whole group. Sport type was the only factor that had a significant effect on the players' task orientation and on the perceived coaches' task orientation,  $F(2, 164) = 5.156, p < .01$  and  $F(2, 164) = 3.585, p < .05$ , respectively. Sport type and level of competition had no effect on ego orientation and perceived sport competence.

Table 2 shows the means and the standard deviations of the players' and of the coaches' task orientation according to each sport type. As can be seen from Table 2, the tennis players scored higher in task orientation followed by the footballers and with the handball players last. The same results were observed for the coaches as far as task orientation is concerned. Therefore, sport type significantly affected both players' and perceived coaches' task orientation and C-index, whereas level of competition affected only C-index and not players' and perceived coaches' goal orientations. Finally, sport type and level of competition had no effect on perceived competence.

### ***The effect of the athletes' position in football on their level of moral development***

To investigate how players' regular playing position in football affects their moral judgment, a one-way ANOVA was applied to the group of football players. Table 3 shows the means (M) and the standard deviations (SD) of the C-index according to the athletes' playing position in football (defensive, central, and offensive players).

**Table 3. C-index as a function of playing position in football**

Position	N	M	SD
Defence	20	16.04	9.38
Center	16	16.31	10.11
Offence	15	20.65	8.09
Total	51	17.48	9.31

As shown in Table 3 the defensive and the central players exhibited similar mean scores in C-index, which are lower than the mean score of the offensive players. However, the analysis of variance showed that there was no significant difference between the three positions,  $F(2, 48) = 1.245, p > .05$ . Therefore, the players' position does not affect their moral judgment. In a similar ANOVA with dependent variables the players' and perceived coaches' goal orientations as well as perceived competence showed no main effect of playing position on them nor any interaction with level of competition.

#### ***Correlations between C-index, perceived sport ability, years of experience in sport, and goal orientations***

The C-index showed a low positive correlation with perceived sport ability ( $r = .342, p < .05$ ) and a very low negative correlation with years of experience, which was nonsignificant ( $r = -.025, p > .05$ ). The positive correlation of the C-index with athletes' perceived sport ability is in accordance with the prediction that the greater the perceived ability the higher one's C-index. On the contrary, the nonsignificant low negative correlation of the C-index with the athletes' years of experience does not verify the hypothesis of the inverse relationship between years of sport experience and moral judgment.

Table 4 shows the Pearson Product Moment correlations between the C-index and athletes' goal orientations and perceived goal orientations of their coaches. In Table 4 it can be seen that there was a low marginally significant negative correlation between the C-index and the players' ego orientation ( $r = -.163, p < .05$ ) and a low positive correlation with their task orientation ( $r = .306, p < .01$ ). These findings are in accordance with the hypothesis that there is a positive correlation between the C-index and task orientation and a negative correlation between the C-index and ego orientation.

Table 4. Pearson's correlations between the C-index and the achievement goal orientations

	C-index (MJT)	Players' ego orientation (TEOSQ)	Players' task orientation (TEOSQ)	Coaches' ego orientation (TEOSQ-PPC)
Players' ego orientation (TEOSQ)	-.163*	1.000		
Players' task orientation (TEOSQ)	.306**	-.089	1.000	
Coaches' ego orientation (TEOSQ-PPC)	-.118	.609**	.010	1.000
Coaches' task orientation (TEOSQ-PPC)	.280**	-.127	.603**	.039

Note. \*  $p < .05$ . \*\*  $p < .01$ .

Finally, it is worth noting that the players' goal orientation was highly related to their coach's respective perceived goal. Furthermore, the players' C-index exhibited a moderate positive correlation with the players' perception of their coaches promoting a task-oriented motivational climate ( $r = .280$ ,  $p < .01$ ) and a nonsignificant negative correlation with players' perception of their coaches promoting an ego-oriented motivational climate (Table 4). These findings are in accordance with the hypothesis that there is a positive correlation between the C-index and a motivational task-oriented climate. On the contrary, they do not support the hypothesis of the negative correlation between the C-index and ego-oriented motivational climate.

To examine the extent to which players' goal orientations<sup>2</sup>, perceived sport ability, sport type, and level of competition can predict the players' C-index, a regression analysis was conducted. In the first model we included only two of the four aforementioned variables, namely goal orientations (task- and ego orientation) and perceived sport ability. In the second analysis all four variables (i.e., goal orientations, perceived sport ability, sport type, and level of competition) were included. The analysis showed that the second model explained higher percentage of the C-index variance,  $R^2 = .27$ ,  $F(5, 164) = 12.39$ ,  $p < .01$ , than the model that depicted only personality characteristics of the players,  $R^2 = .19$ ,  $F(3, 166) = 13.6$ ,  $p < .01$ . Specifically, the 2-factor model showed that perceived competence,  $\beta = 1.85$ ,  $T = 4.19$ ,  $p < .01$ , task orientation,  $\beta = 2.99$ ,  $T = 3.32$ ,  $p < .01$ , and ego orientation,  $\beta = -1.71$ ,  $T = -2.04$ ,  $p < .05$ , were all significant predictors of C-index. The 4-factor model involved perceived ability as the best predictor,  $\beta = .30$ ,  $T = 4.42$ ,  $p < .01$ , followed by sport type,  $\beta = -.21$ ,

<sup>2</sup> The goal orientations of the coaches were not included in the regression analysis because there was a high correlation between the athletes' ego-task orientations and the coaches' ego-task orientations as they are perceived by the athletes themselves.

$T = 3.13, p < .01$ , level of competition,  $\beta = -.20, T = 3.10, p < .01$ , task orientation,  $\beta = .19, T = 2.75, p < .01$ , and ego orientation,  $\beta = -.13, T = -2.01, p < .05$ . Thus, our results showed that despite the fact that sport type and level of competition did not affect players' perceived competence, perceived competence is critical for athletes' moral functioning. Furthermore, goal orientations still maintain an independent effect on C-index, beyond that of sport type and level of competition.

## DISCUSSION

The present study was designed to examine (a) if athletes' moral judgment is affected by the sport type, the level of competition, and their regular playing position, and (b) the possible relations between moral judgment and the overall years of athletic experience, self-perception of sport ability, and achievement goal orientations.

The results of this study both support and extend extant knowledge about moral development in sports context. Specifically, as regards the effect of sport type on C-index, the findings of this study suggest that the degree of physical contact plays an important role in the athletes' moral judgment. Therefore, an athlete who participates in a low contact sport tends to have a higher moral development index compared to an athlete participating in a high contact sport. These results are in accordance with other related studies that indicated that low levels of physical contact are related to higher moral judgment (Bredemeier et al., 1986; Silva, 1983; Tucker & Parkis, 2001). Probably, the more the level of physical contact increases, the more the aggressive tendencies and/or the athletes' perceptions that less ethical acts are permissible. Furthermore, this relationship between the C-index and sport type was confirmed through regression analysis, since sport type was the second best predictor, after perceived ability, for the players' C-index.

In addition, another important factor that affects athletes' moral development is the level of sport participation namely, being amateur or professional. It was shown in the present study that as the level of participation in sports increased the players' C-index decreased. This finding is in accordance with the results of previous studies, which also examined how the level of competition in which the players are involved is related to their moral behaviour (Beller & Stoll, 1995; Silva, 1983; Stephens, 2001). Generally, both the present study and the ones mentioned above suggest that professional-

ism, which is closely linked to strong competition, is a significant reason for lowering a person's character. Thus, athletes participating in higher competition levels are characterized by lower levels in moral development, such as the pre-conventional level. This finding suggests that their moral decisions are the result of external pressures or influences, rather than of internal moral values. Furthermore, this difference in the level of moral development between professional and amateur athletes cannot be attributed to the age difference between the two subgroups, since the average chronological age of the professionals was similar to that of the amateurs. The impact of the level of competition on the C-index was further confirmed through regression analysis, which indicated that the level of competition played a significant role in predicting a player's C-index.

An issue that was examined for the first time in the present study was how the players' regular playing position in football (which is a team sport) affects their index of moral development. The results showed that although the differences among offensive, defensive and central players was not significant, there was a tendency for the offensive players to have a higher index of moral development than the defensive or central players. However, our primary hypothesis that defensive players would have lower moral judgment than offensive ones was not verified. A probable explanation is that nowadays, during a football game, the roles of players are multiple, that is, a defensive player could play as an offensive one, either because of game tactics or due to an injury. Nonetheless, further research with more participants is needed regarding this issue.

Two more variables which were examined were the years of experience in the field of sports and the athletes' perceived ability regarding their particular sport. The results showed that there was a moderate positive correlation between the moral development index and perceived sport ability. This finding suggests that the more able an athlete feels, the less he/she succumbs to rule violations of the game and the less likely he/she is to adopt anti-athletic behaviour. This finding is in accordance with a previous study which indicated that athletes with low perceived ability presented the lowest respect for rules and officials, and endorsed cheating in order to achieve their goals (Lemyre et al., 2002). In addition, the results of the hierarchical regression analysis showed that perceived sport ability was the best predictor for athletes' C-index, followed by sport type, level of competence, task orientation and ego orientation. It seems that perceived sport ability is a more significant factor for predicting the C-index compared to other factors concerning the

sport context. Apparently, when someone feels competent this affects positively his/her morality compared to someone else, who doesn't feel competent. Therefore, it seems necessary during relevant intervention programmes in schools to emphasize the promotion of positive perceived sport ability. However, even though findings from previous studies suggested that the years of experience in sport adversely affected athletes' moral behaviour (Blair, 1985; Gardner & Janelle, 2002; Potter & Wandzilak, 1981; Silva, 1983), the results of the present study did not support this finding. The correlation between the length of sport participation and the C-index was nonsignificant. This fact can be attributed to the participants' young age and hence their short-term experience in the field of athletics. However, this hypothesis has to be tested in future research.

Concerning the possible relationship between perceived coaches' goal orientation and athletes' moral judgment, our results suggest that the more the athletes perceive that the motivational climate their coach promotes is ego-oriented, the more their level of moral judgement decreases. Findings from a previous study also indicated that an ego-oriented perceived motivational climate correlated positively with the likelihood that the players would act aggressively against an opponent (Stephens & Bredemeier, 1996). Therefore, it seems that the moral atmosphere, which prevails in a sport, affects players' moral behaviour and their readiness to endorse unsportspersonlike play. Finally, in the present study it was confirmed that there was a positive correlation between moral judgment and task orientation, and a negative correlation with ego orientation. This has been shown in a plethora of other studies and is an area that has been investigated thoroughly (Duda et al., 1991; Dunn & Dunn, 1999; Lemyre et al., 2002; Kavussanu & Roberts, 2001; Kavussanu et al., 2002; Παυλοπούλου et al., 2003). However, since it has been shown that the sport type affects the players' and perceived coaches' goal orientations (particularly in individual sports, such as tennis, the players as well as the coaches tend to be more task oriented than in team sports, such as football, as our results have shown), it seems that the expression of an athlete's moral behaviour depends not only on a task-oriented motivational climate per se, but also on other factors. This fact was also confirmed through the two models of regression analysis, which showed that the players' goal orientations could predict the athletes' C-index. However, more significant predictors were the sport type and the level of competition.

In conclusion it can be said that sole participation in athletics is not by itself a sufficient and necessary condition for building character. If the goal

of participation in athletics is among others to support the moral development of athletes, then it is necessary for other appropriate conditions to co-exist, such as competition and/or the ego-oriented motivational climate, and in general to create an atmosphere which emphasizes the principles of fair play, the adherence to rules and respect towards the opponents and the officers. Future studies should examine how the playing position of an athlete in a sport team influences his/her moral development and his/her readiness to violate the rules. Since the perceived sport ability, sport type, level of competence and orientation goals in predicting the C-index were examined for the first time in the present study, further research is suggested. Moreover, the examination of athletes' moral judgment during 'big events' – such as the Olympic games or other international organizations – could possibly detect any changes in moral behaviour during the competition period.

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