The effect of achievement goals on moral attitudes in young athletes

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Abstract
The purpose of the study is to assess the hypothesis that achievement goal orientations will predict sportpersonship attitudes among young athletes, namely that task orientation will predict socially positive attitudes and ego orientation will predict socially negative attitudes. For hundred and eighty two athletes, aged 13 to 16 years completed the Portuguese versions of the Task and Ego Orientation in Sport Questionnaire (TEOSQp) and of the Sports Attitudes Questionnaire (SAQp). Bivariate correlations were used to examine the relationships between TEOSQp and SAQp. Afterwards, relationships between ego orientation and score agreement in cheating and gamesmanship as well as task orientation and score agreement in convention and commitment were examined through EQS (version 5.7). For the estimation of the model, the maximum likelihood method was used. A matrix correlation between the variables (task orientation, ego orientation, cheating, gamesmanship, convention and commitment) showed positive correlations between task orientation and convention (r = 0.29, p < 0.01) and commitment (r = 0.40, p < 0.01). Ego orientation appeared to be positively correlated with cheating (r = 0.30, p < 0.01) and gamesmanship (r = 0.33, p < 0.01), and negatively with convention (r = -0.16, p < 0.01). The fit of the model was evaluated using the CFI (0.97) and SRMR (0.04). The hypothesized model showed positive correlations between TEOSQp and SAQp. Afterwards, relationships between task orientation and score agreement in cheating and gamesmanship as well as ego orientation and score agreement in convention and commitment were examined through EQS (version 5.7). For the estimation of the model, the maximum likelihood method was used. A matrix correlation between the variables (task orientation, ego orientation, cheating, gamesmanship, convention and commitment) showed positive correlations between task orientation and convention (r = 0.29, p < 0.01) and commitment (r = 0.40, p < 0.01). Ego orientation appeared to be positively correlated with cheating (r = 0.30, p < 0.01) and gamesmanship (r = 0.33, p < 0.01), and negatively with convention (r = -0.16, p < 0.01). The fit of the model was evaluated using the CFI (0.97) and SRMR (0.04). The hypothesized model was confirmed. Task and ego orientations produced a significant effect on prosocial attitudes and on antisocial attitudes, respectively. Task-oriented goals in youth sport programs can represent a relevant framework for promoting prosocial attitudes and consequently increment the effectiveness of educational interventions.

Key words: Youth sports, cheating, gamesmanship, convention, commitment.

Introduction
Regular participation in physical activities is considered to be fundamental for the development and maintenance of desirable levels of motor and metabolic fitness. It is very likely an important factor for regulating growth and maturation processes and the integrity of musculoskeletal structures (Malina et al., 2004). In addition, sport seems to be an important component of daily physical activity in children and adolescents and its importance is often viewed as positive. Among the potential benefits of participation in competitive sports is the impact of its experiences for enhancing interactions with peers, coaches and other significant adults, believed to be essentials in character development (Roberts, 2001). However, as noted by Shields and colleagues (Shields et al., 2002), these benefits do not happen simply through participation in the activity, but depend on the climate of practices as well as of competitions, and the influence of peers, coaches, and other significant adults (Brustad and Partridge, 2002; Ntmuanis and Vazou, 2005; Smith et al., 2006; Smoll and Smith, 2002).

To measure and assess the values and attitudes of adolescents towards sports has been therefore a major concern among researchers, particularly after the mid 80s. The problem lies not only in the difficulty in finding the adequate instruments to the object of study, but also in defining a conceptual framework that gives coherence to the validation mechanisms of moral decision making and, at the same time, allows the intervention of educational agents. The complexity of the issues involved makes it difficult to analyse them from a single theoretical point of view or to use a single methodology. A recent instrument, the Attitudes to Moral Decision-Making in Youth Sport Questionnaire (AMDYSQ; Lee et al., 2007), measures acceptance of cheating, acceptance of gamesmanship, and keeping winning in proportion. Whitehead (2007) demonstrated that moral values positively predicted commitment and conventions, and negatively predicted gamesmanship. Thus, these values (which include trying to be fair, helpful, and obedient, and to play properly and be sporting) lift pro-social attitudes and lower the acceptance of gamesmanship in which players attempt to upset their opponents. Such values should be encouraged by coaches.

As a starting point to approach the problem, different authors (Boixadós et al., 2004; Lee, 1996; Vallerand et al., 1997) used the construct fair play, based on normative/conventional components, supposedly sustained by sport rules, as well as cognitive (renounce to “victory at all costs” and “give one’s best”) and social components (“get along with all interveners”). In United Kingdom, the Sports Council conducted a research that lead to the elaboration of a set of Values and Attitudes Questionnaires, aimed at youth sports (Lee, 1996).

Based on these premises, the Sports Attitudes Questionnaire –SAQ, composed of 23 items, was applied to a sample of male and female athletes, aged from 13 to 16 years old, and engaged in the United Kingdom’s most popular sports (Whitehead et al., 2003). This study resulted in a four factor model proposal, two of which factors were considered socially positive (Commitment and Convention) and the other two socially negative (Cheating and Gamesmanship). The concept of gamesmanship is defined by Lee and Whitehead (1999) as a category of actions that do not violate the rules of the particular sport.
but “do appear to violate the spirit of the contest... using the laws to gain some advantage that might be considered unfair or dishonourable”. It should be stressed that the Commitment and Convention scales coincide with the Commitment in participation and Respect for Social Conventions scales of the MSOS-25 (Vallerand et al., 1997).

Since the 1990s the achievement goal theory (Nicholls, 1989) provides a solid theoretical framework to explain the relationships between dispositional orientations and moral issues in youth sport (Duda, 2001; Roberts, 2001). Nicholls suggested that achievement goals represent different reasons for engaging in achievement activities. Task oriented individuals use an undifferentiated conception of ability that is self-referenced and dependent of effort and learning. In contrast, ego oriented individuals use a differentiated concept of ability, perceived as a capacity, and inversely related with effort.

The Task and Ego Orientation in Sport Questionnaire – TEOSQ (Chi and Duda, 1995) represents a psychometric reliable instrument (Hanrahan and Biddle, 2002), with sufficient cross-cultural validation (Gonçalves et al., 2005a; Peiró and Sanchís, 2004).

Literature suggests that a high task orientation has a positive link with moral variables and a high ego orientation is likely to promote inappropriate behaviours, as a result of extensive participation in competitive youth sport programs (Kavussanu and Ntoumanis, 2003; Lemyre et al., 2002). Furthermore, previous research (Magyar and Feltz, 2003; Treasure, 2001) has shown that task or ego individual orientations may be affected by situational variables created by significant adults and peers (Greendorfer et al., 2002; Ntoumanis and Vazou, 2005; Vazou et al., 2005).

Following this results, we argue that the theoretical model must be simplified, based on the hypothesis of a direct relation between dispositional goal orientations and the moral attitudes expressed by adolescents. Hence, achievement goal orientations would represent the link between the individuals’ attitudes and the ecological environment.

In this article, the relationships between achievement goal orientations and sport attitudes were analyzed among Portuguese athletes, aged from 13 to 16 years old. It was hypothesized that a dispositional task orientation will predict the expression of prosocial attitudes in sports, namely the respect for social conventions and the commitment to sport participation; and that an ego orientation will predict the expression of anti-social sport attitudes, like cheating and gamesmanship. Previous studies consistently found that between achievement goals and moral constructs it is possible to be established positive and negative links (Boardley and Kavussanu, 2007; Cervello et al., 2004; Rascle et al., 1998; Sage et al., 2006; Stephens, 2000). The aforementioned studies consistently found that between achievement goals and moral constructs it is possible to be established positive and negative links. Those studies were performed in the specific context of youth sport and physical education. The current study tested the potential effects of achievement goals on moral attitudes in an additional cultural context based on a Portuguese sample of adolescents recruited in schools and clubs who were engaged in large number of competitive and organized sports. The growing research would provide an unique opportunity to appreciate the cultural independence of the relationship between achievement goal orientation on attitudes.

The purpose of the study is: a) to assess the hypothesis that task orientation will predict pro-social sport attitudes among Portuguese young athletes aged from 13 to 16 years; b) to assess the hypothesis that ego orientation will predict anti-social sport attitudes among the same population.

**Methods**

**Participants**

Four hundred and eighty-two Portuguese adolescents (13 to 16 years of age, M = 14.28, SD = 0.86) participated in this study. Players were recruited in school teams (n = 167; 72 males, 95 females) and clubs that compete in regional and national leagues (n = 315, 176 males, 139 females). In terms of sport affiliation, the sample included track and field, badminton, canoeing, judo, gymnastics, swimming, rowing, table tennis, handball, basketball, soccer and volleyball.

**Instruments and preliminary analysis**

*Task and Ego Orientations in Sport Questionnaire.* To measure the players’ achievement goal orientations in sport, the Task and Ego Orientation in Sport Questionnaire – TEOSQ (Chi and Duda, 1995) was applied. The Portuguese version of the questionnaire was obtained by Fonseca and Biddle (Fonseca and Biddle, 1996). Answers on 13 items were indicated on a 5-point Likert scale ranging from (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, to (5) strongly agree (5). The task and ego orientations are composites of items in accordance with a previous outcome (Gonçalves et al., 2005b). The internal consistency for the two scales were satisfactory (task orientation: Cronbach’s alpha .80; ego orientation: Cronbach’s alpha 0.80) and the confirmatory factor analysis using an independent sample produced indexes of goodness within the acceptable margins (CFI = 0.91, GFI = 0.93, SRMR = 0.07).

*Sport Attitudes Questionnaire.* Sport attitudes were measured using the Lee and Whitehead (1999) questionnaire. The instrument is composed of 23 items that intend to identify the respondents’ opinion about how they play their main sport activity. Participants responded on a 5-point Likert scale (1, strongly disagree, 2, disagree, 3, neutral, 4, agree, 5, strongly agree). The 23 items questionnaire was translated by two panels of 5 members each (one panel included Portuguese PhDs in Sport Science who studied in the US or the UK, while the other panel included 5 Bachelors in English Studies), and then back translated by two English native speakers. The questionnaire was then applied on two samples of 13 to 16 year old athletes. The exploratory factor analysis identified four dimensions whereas the confirmatory factor analysis showed the consistency between the 4-factor model and the collected data. The variables (each of them resulting from 4 items) that emerged from the questionnaire were: cheating, gamesmanship, convention and
commitment. The internal consistency for the four scales was satisfactory (Cronbach’s alpha: cheating 0.90; gamesmanship 0.85; convention 0.78; commitment 0.67). The confirmatory factor analysis using an independent sample produced indexes of goodness within the acceptable margins (CFI = 0.98, GFI = 0.96, SRMR = 0.04).

**Procedures**

After registering the research proposal in the National Committee for Data Protection (Comissão Nacional de Proteção de Dados Pessoais), the Faculty of Sport Science and Physical Education of the University of Coimbra established a protocol with the Ministry of Education. This agreement allowed the researchers to obtain contact information from the Pedagogic Councils of schools and also from the secretariats and coaches of community clubs. All contacted institutions agreed to take part in the study and convenient meeting dates were then arranged. All athletes received consent forms to be filled in by their parents or guardians. To none of the athletes permission was denied to participate in the study. Therefore, a two-section questionnaire was distributed by the main researchers either before or after a normal practice in a team clubhouse or a school sport facility. At all meetings, instructions on how to fill in the questionnaire were provided and it was emphasised that responses would be kept confidential to stimulate respondents to answer as honestly and spontaneously as possible. It was stressed that there were no right or wrong answers. The questionnaires required approximately 20 minutes to be completed.

**Statistical analysis**

After presenting the mean and standard deviation for the total sample and also for males and females, separately, bivariate correlations were determined to examine the relationship between variables derived from the questionnaires. The potential predictive effect of goals orientations on prosocial and antisocial dimensions of SAQp was examined through EQS (version 5.7).

**Results**

Table 1 shows the means and standard deviations of task- and ego-orientations and of the dimensions of the Sports Attitudes Questionnaire for the total sample and also for males and females. The general pattern, transversal to all groups is high task-, low ego orientation. Males were more ego-oriented than females.

<table>
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<tr>
<th>Table 1. Mean (±standard deviation) of task- and ego-orientations and of the dimensions of the Sports Attitudes Questionnaire for the total sample and by sex.</th>
<th>Total (482)</th>
<th>Boys (248)</th>
<th>Girls (234)</th>
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</thead>
<tbody>
<tr>
<td>Task orientation</td>
<td>4.18 (.64)</td>
<td>4.17 (.68)</td>
<td>4.18 (.51)</td>
</tr>
<tr>
<td>Ego orientation</td>
<td>2.20 (.97)</td>
<td>2.44 (.99)</td>
<td>1.95 (.88)</td>
</tr>
<tr>
<td>Cheating</td>
<td>2.06 (1.09)</td>
<td>2.15 (1.15)</td>
<td>1.92 (.96)</td>
</tr>
<tr>
<td>Gamesmanship</td>
<td>2.43 (1.13)</td>
<td>2.69 (1.13)</td>
<td>2.10 (.96)</td>
</tr>
<tr>
<td>Convention</td>
<td>4.19 (.80)</td>
<td>4.16 (.81)</td>
<td>4.20 (.76)</td>
</tr>
<tr>
<td>Commitment</td>
<td>4.39 (.58)</td>
<td>4.43 (.63)</td>
<td>4.34 (.55)</td>
</tr>
</tbody>
</table>

The scores of SAQp (Table 1) showed a general acceptance of pro-social attitudes (convention and commitment) and a rejection of anti-social attitudes (cheating and gamesmanship), with the girls expressing a more evident rejection of the dimensions cheating and gamesmanship.

Correlations between the variables (task orientation, ego orientation, cheating, gamesmanship, convention and commitment) were then calculated. Task and ego orientations appeared uncorrelated. Among the SAQ dimensions, two significant correlations were found between cheating and gamesmanship (r = 0.67, p < 0.05) as well as between convention and commitment (r = 0.27, p < 0.05). Positive correlations between task orientation and convention (r = 0.29, p < 0.05) and commitment (r = 0.40, p < 0.05) were also significant. Ego orientation appeared positively correlated with cheating (r = 0.30, p < 0.05) and gamesmanship (r = 0.33, p < 0.05), and negatively with convention (r = -0.16, p < 0.05).

A path analysis was performed to verify the hypothesized predicting role of dispositional achievement goal orientations on the moral attitudes. In particular, the estimated model previewed that task-orientation will predict socially positive attitudes, like convention and commitment, and that ego-orientation will predict socially negative attitudes, like cheating or gamesmanship (Figure 1). The fit of the model was evaluated using the CFI (0.97) and SRMR (0.04) as recommended (Tabachnik and Fidell; 2001; Chatzisarantis and Hagger, 2005). The cutoff values are 0.95 for CFI and 0.08 for SRMR. For the estimation of the model, the maximum likelihood method was used.

![Figure 1. Solution of the path model.](image)

**Discussion**

The results of descriptive statistics of goal orientations and sports attitudes among Portuguese athletes aged 13 to 16 years suggest a general acceptance of the positive components of sportsmanship by the Portuguese young athletes and a high task-, low ego- goal orientation. The results are similar to the ones found in previous studies with Portuguese samples (Gonçalves et al., 2005b; 2006), but somehow different from others studies (Miller et al., 2005; Weiss and Ferrer-Caja, 2002), namely the low scores of ego-orientation. The high task-orientation expressed by these athletes is consistent with other studies with similar samples (Lemyre et al., 2002; Ommundsen et
The main purpose of the study was to assess the hypothesis that task orientation will predict pro-social sport attitudes, and to assess the hypothesis that ego orientation will predict anti-social sport attitudes among Portuguese young athletes, aged from 13 to 16 years. The hypothesized model was confirmed by the results. Task orientation appears as a predictor for both factors Respect for Social Conventions and Commitment to Sport. On the other hand, Ego orientation predicts the expression of socially negative attitudes, e.g., Cheating and Gamesmanship. Not included in the hypothesized model but theoretically plausible, Ego orientation presents a statistically significant negative correlation with Convention, meaning that ego-oriented individuals have more probabilities of expressing attitudes of disrespect for social conventions in the sport fields. These findings suggest a bipolar link between ego orientation and the antisocial dimensions of SAQ, while task orientation seems to be related to prosocial attitudes.

The present model is confirmed by the results emerging from this sample. But the conceptual model is in accordance with other studies that present evidences of a positive correlation between task orientation and socially valued moral variables while ego orientation showed positive correlations with socially negative attitudes (Duda, 2001; D’Arripe-Longueville et al., 2006). Boixadós et al. (2004), yet using another instrument for measuring sportpersonship and situational achievement orientations, found a similar association in a sample of Spanish soccer players aged 10-14 years old.

Kavussanu and Spray (2006), in a study with male footballers aged 12 to 17 years, although using a structuralist approach and a perceived performance involving climate, found a significant effect of sport involvement on moral functioning and a significant effect of the perceived performance climate on lower levels of moral functioning. This study confirms the evidences collected by Kavussanu and Ntoumanis (2003) with a sample of adult athletes.

Also Fry and Newton (2003), in a study with young tennis players, state that both dispositional task-orientation and contextual task-involvement represent key factors to foster sportperson like attitudes.

Although we must be careful about comparisons between different constructs, namely the dispositional goals and the situational perceived climate, it is possible to suggest a pattern in which the self-referenced achievement goals can promote the expression of sportpersonship attitudes, while normative achievement goals are potentially predictors of the expression of negative moral attitudes. The present study presents evidences that dispositional achievement goals predict moral attitudes in a positive or negative sense, with an expectable effect on sport behaviors. We highlight, in accordance with other authors (Boixadós et al., 2004; Kavussanu and Spray, 2006; Roberts, 2001) that the concern with normative success and peer social comparison, inherent to ego orientation, may affect moral development of the young athletes.

Whitehead et al. (2004), in a study with British track and field athletes, aged 11 to 16 years, emphasize the importance of the interaction between dispositional and situational variables, indicating that the “outcomes are equivalent when achievement perspectives have the same meaning, regardless of their dispositional or situational origin.” The knowledge of dispositional achievement goals and of their potential predicting role of sports attitudes can represent an important theoretical framework for an educational intervention with young athletes, peers and significant adults, specially coaches and families (Vazou et al., 2006). We agree with other authors (Boixadós et al., 2004; Miller et al., 2005; Sousa et al., 2006) on the importance of the dissemination of the information in the coaches training programs. For coaches and other significant adults achievement goal orientations would represent the link between individuals’ attitudes and the ecological environment. Consequently, in research with children and adolescents, “it is important to establish the participant’s level of task and ego orientation” (Roberts, 2001). These findings stress the importance of the coaches’ agency, through a deliberate orientation of the practice to promote self-referenced evaluation of motor performance, which can foster the respect for social conventions and sport commitment.

Limitations of the study and implications

The tested model fits the hypothesis of the study, that task- or ego-orientations predict socially positive or negative sport attitudes respectively. More, ego-orientation predicts negatively the endorsement of Respect for Social Conventions attitudes. However, there are some important limitations and more research is expected in the future.

Subsequently, one complementary aim of the study was to assess the cross cultural validity of the model for the Portuguese population of young athletes. First of all, the cultural biases cannot be ignored, despite of the overwhelming globalization. Most of the instruments used in the research that is published in international journals, are originally in English and are validated for English speaking populations. As pointed by Weiss and Smith (2002), the answers to achievement goal questionnaires of populations with different ethnic, cultural and educational backgrounds reflect clearly those differences. Even if the general pattern of the results is similar, the psychometric properties of the instruments can be affected (Gonçalves et al., 2005b).

The present study used only dispositional goals as predictor variables, and with a dichotomous model. The study of the context, namely the perceived motivational climate created by the coach (Boixadós et al., 2004), or peers (Vazou et al., 2005) represents an important step to have a more clear and complete framework, and to enable the generalization of the model. Also the research of the achievement orientations clusters and their relationship with attitudes will allow a more sophisticated insight of the group differences, thus giving much more accurate information to coaches and families (McArdle and Duda, 2004), having in mind the ethnic and cultural differences above referred. Exploring the effect of age groups and of the increasing level of competition, remains also an important topic (D’Arripe-Longueville, et al., 2006; Magyar.
and Feltz, 2003).

It remains the problem, relatively unexplored, of the real meaning and impact on the youngsters of task/mastery or ego/performance orientations. Some strategies used by coaches to foster, in practice and in competitions, self-referenced or normative climates may be perceived differently by young athletes (Miller, et al., 2005; Whitehead, et al., 2004).

If we assume, according to the evidences of various studies, including this one, that the enhancement of the youngsters’ sports person like attitudes is fostered by task orientation and task-involving climate, it is crucial to assess the real achievement profiles of the individuals and the perceived meanings of the coach’s strategies (Smith et al., 2006). In order to clarify the issue, it is important the use of various methodologies. Quantitative research has showed patterns of results and pointed directions for intervention that must be complemented by qualitative and observational research. The complexity of the topic demands also the combination of other variables and theories (Whitehead et al., 2004; Conroy et al., 2006), but also a more detailed research on the possible interactions between task-and ego-orientations (Sage and Kavussanu, 2007; Sage et al., 2006) and on the environmental factors that can be more influential than dispositional orientations when it comes to sportpersonship (Shields et al., 2007).

**Conclusion**

Finally, the purpose of the research is to provide youth sport organizations with valuable information in order to include the theme of moral development through sport in coaches (and significant others) education programs (Sousa et al., 2006). The next step is to assess and to evaluate, in a longitudinal way, the interventions in the field and the perceptions of the youngsters, aiming to have a complete picture of the moral effects of sport.

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**References**


**Key points**

- Sport seems to be an important component of daily physical activity in children and adolescents and its importance is often viewed as positive.
- Literature suggests that a high task orientation has a positive link with moral variables and a high ego orientation is likely to promote inappropriate behaviours.
- Task orientation will predict pro-social sport attitudes, and to assess the hypothesis that ego orientation will predict anti-social sport attitudes among young athletes.
- It is possible to suggest a pattern in which the self-referenced achievement goals can promote the expression of sportpersonship attitudes.
- Environmental factors can be more influential than dispositional orientations when it comes to sportpersonship.

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<th>Research interests</th>
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<td>the relationships between young athletes and significant others.</td>
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