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Goal orientations and moral identity as predictors of prosocial and antisocial functioning in male association football players

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Abstract

The purpose of this study was to examine the effects of task and ego goal orientation and moral identity on prosocial and antisocial judgement and behaviour in football. The interaction between task and ego orientation in predicting these variables was also examined. Participants were 210 adult male footballers (age 25 ± 6 years) competing at recreational ($n = 133$) and semi-professional ($n = 77$) levels. They completed questionnaires measuring task and ego goal orientation, the importance of moral identity, prosocial and antisocial judgement, frequency of prosocial and antisocial behaviours in football, and social desirability. Regression analysis revealed no main effects for goal orientations and moral identity on prosocial judgement and behaviour. However, a significant interaction effect between task and ego orientation emerged in relation to prosocial judgement. Specifically, task orientation positively predicted prosocial judgement only at low levels of ego orientation. Ego orientation emerged as a positive predictor of antisocial judgement and behaviour, whereas moral identity negatively predicted these variables. The differentiation between prosocial and antisocial aspects of morality was supported. It was concluded that examining moral identity and interactions between task and ego orientation adds to our understanding of the influence of these variables on prosocial and antisocial functioning in sport.

Keywords: *Moral identity, goal orientations, prosocial and antisocial functioning*

Introduction

Although many assume that football builds character, reports suggest that the English game is in a moral crisis (e.g. Fordyce, 2003). In a recent article, elite English football was described as a society of “different morals, different outlooks . . . a different planet, in which young men live in a cocoon that they believe absolves them not just from any normal convention of decency but the rule of the law” (Collins, 2004). In addition to recent reports highlighting moral decline in football, sports moral literature has tended to focus on the negative aspects of morality (e.g. Bredemeier & Shields, 1986; Kohn, 1986; Stephens, 2000, 2001). This attention detracts from the traditional purposes of sport as a means of developing virtues such as fairness, loyalty and teamwork (Shields & Bredemeier, 1995). While empirical evidence supports the incidence of immoral thoughts and actions in sport (for a review, see Weiss & Smith, 2002), investigations into positive variables are rare.

With the exception of Vallerand’s work on sportspersonship (Vallerand, Briere, Blanchard, &

Provencher, 1996; Vallerand, Deshaies, Cuerrier, Briere, & Pelletier, 1997) and related empirical research (e.g. Dunn & Dunn, 1999; Lee, Whitehead, Ntoumanis, & Hatzigeorgiadis, 2001; Lemyre, Roberts, & Ommundsen, 2002), most studies examining moral issues in sport have focused on negative aspects of morality. Examples that feature in the literature are likelihood to aggress against an opponent (Stephens, 2000, 2001; Stephens & Bredemeier, 1996), tendencies towards aggressive and unfair play (Bredemeier, 1985, 1994; Bredemeier & Shields, 1986), perceived legitimacy of aggressive behaviour (Silva, 1983) and the endorsement of aggressive actions (Bredemeier, 1985; Duda, Olson, & Templin, 1991; Dunn & Dunn, 1999). Moreover, research examining judgement, intention and behaviour as indices of moral functioning (e.g. Kavussanu & Ntoumanis, 2003; Kavussanu & Roberts, 2001) has investigated athletes’ responses to situations pertaining to aggressive or cheating behaviours, and inferred high levels of moral functioning from low scores on these respective measures.

Investigating negative aspects of morality is important, but to support the use of sport as a vehicle for the development of character, research examining positive aspects of morality in sport is crucial. A class of moral behaviours that have received minimal attention in sport are prosocial behaviours. Prosocial behaviours have been defined as behaviours intended to benefit another individual or group of individuals (Eisenberg, 1986). Examples of prosocial behaviour in sport are helping an opponent off the floor, congratulating an opponent on good play or returning the ball to the opposition. Although prosocial behaviours can be performed for non-altruistic reasons, their defining characteristic is that they have beneficial effects for others and are therefore important in their own right. It is worth noting that Vallerand and colleagues' (1997) measurement of sportspersonship orientations includes items that are prosocial by definition. However, positive dimensions of sportspersonship reflect a combination of social convention, respectful and prosocial behavioural tendencies. In contrast, this study focuses exclusively on frequency of prosocial behaviours. Furthermore, an antisocial behaviour dimension was included here to refer to behaviours intended to harm or disadvantage the recipient. Examples of antisocial behaviours in sport are faking an injury or trying to injure an opponent to take an advantage. Essentially, these actions reflect unfair play and have negative consequences for others.

In addition to the interest in prosocial and antisocial behaviour, moral judgements were investigated in the present study and were similarly distinguished into prosocial and antisocial dimensions. To date, the broadly defined concept of moral judgement has been investigated extensively in sports research as one of Rest's (1984) four components of morality (e.g. Kavussanu & Ntoumanis, 2003; Kavussanu & Roberts, 2001; Ommundsen, Roberts, Lemyre, & Treasure, 2003; Stuart & Ebbeck, 1995), as Kohlberg's (1984) deontic and responsibility judgement (e.g. Stephens & Bredemeier, 1996), or as the perceived legitimacy of intentionally injurious acts (Bredemeier, 1985; Duda *et al.*, 1991; Silva, 1983). The latter variable has been referred to in the literature as "legitimacy judgements", and it has been argued that these judgements constitute moral judgements (Weiss & Bredemeier, 1990). Previous research has not distinguished between prosocial and antisocial judgements but this was attended to in the present study by determining footballers' perceived appropriateness of both prosocial and antisocial behaviours (e.g. Kavussanu & Roberts, 2001; Ommundsen *et al.*, 2003; Stuart & Ebbeck, 1995). The terms prosocial and antisocial functioning were used to refer to prosocial and antisocial judgements and behaviours respectively.

In a heuristic model of prosocial behaviour, Eisenberg (1986) has identified a number of person and situational variables that have the potential to influence prosocial action. Among the personal variables that have been suggested to have direct links to prosocial action are personal goals and self-identity. In sports moral research, personal goals and self-identity have been identified as components of the self-structure (Shields & Bredemeier, 1995). The self-structure is the "psychological conceptual system through which people apprehend their identity and value" (Shields & Bredemeier, 1995) and has been proposed to influence moral action through its influence on moral intention. Although highly complex, the self-structure has been reduced into two dimensions that determine the prioritization of moral values over conflicting values and resemble Eisenberg's (1986) personal goals and self-identity characteristics. These dimensions are the motivational goal orientation and moral identity and are now discussed separately.

While Eisenberg's (1986) model of prosocial behaviour includes the global concept of personal goals, in sports research goals have been investigated from an achievement goal perspective (Nicholls, 1989). The central assertion of achievement goal theory is that, in achievement contexts, individuals are motivated to demonstrate competence. The perception of demonstrated competence is held to vary in accordance with two orthogonal goal orientations. An ego orientation represents the tendency to perceive competence and success relative to others, while a task orientation reflects the tendency to perceive competence and success using self-referenced criteria. When an ego orientation prevails, concern is with outperforming or gaining superiority over others and the activity is viewed as a means to an end. A task orientation represents a concern for skill improvement and the intrinsic facets of the sporting experience. Nicholls (1989) has argued that a focus on demonstrating superiority over others may lead to a lack of concern for justice, fairness and the welfare of competitors. In contrast, because the predominantly task-orientated individual is concerned with partaking in an activity for its own sake and uses self-referenced criteria to judge competence, cheating and aggressing against another individual is irrelevant. Accordingly, when task orientation prevails, the individual is more likely to be concerned with fair play (Duda *et al.*, 1991).

To date, empirical research has supported these predictions. For example, ego orientation has been associated with the endorsement of unsportsmanlike cheating (Duda *et al.*, 1991) and rating aggressive acts as legitimate (Duda *et al.*, 1991; Kavussanu & Roberts, 2001) among basketball players. This goal has also been related to legitimacy of and intention to

engage in unsportsmanlike play among physical education students (Stuntz & Weiss, 2003), the endorsement of cheating and gamesmanship in youth sport competitors (Lee *et al.*, 2001), and low levels of moral judgement, intention and behaviour in college athletes (Kavussanu & Ntoumanis, 2003; Kavussanu & Roberts, 2001). Other work has found no relationship between ego orientation and likelihood to aggress against an opponent in young soccer or basketball players (Stephens, 2000, 2001; Stephens & Bredemeier, 1996). Finally, in studies investigating predictors of sportspersonship, a negative relationship has been identified between ego orientation and some dimensions of sportspersonship (e.g. Dunn & Dunn, 1999; Lemyre *et al.*, 2002). In the above studies, task orientation has emerged as a positive predictor of some sportspersonship orientations (Dunn & Dunn, 1999; Lee *et al.*, 2001; Lemyre *et al.*, 2002), has been negatively related to unsportsmanlike attitudes (Duda *et al.*, 1991; Stuntz & Weiss, 2003) and has weakly corresponded to high levels of moral functioning (Kavussanu & Ntoumanis, 2003). No significant associations, however, have been identified between task orientation and legitimacy judgements (Duda *et al.*, 1991; Dunn & Dunn, 1999), self-reported likelihood to aggress against an opponent (Stephens, 2000, 2001; Stephens & Bredemeier, 1996), or indices of moral functioning (Kavussanu & Roberts, 2001).

One of the assumptions of achievement goal theory (Nicholls, 1989) is that goal orientations are orthogonal—that is, one can be high on one goal orientation and low on the other, high on both, or low on both. Thus, it is possible that goal orientations interact in predicting outcome variables. Indeed, past work has identified significant interaction effects between task and ego orientations in predicting beliefs about success in sport (Roberts, Treasure, & Kavussanu, 1996). Even though goal orientations are assumed to be orthogonal, interaction effects in relation to moral variables in sport have rarely been examined. Using the median split approach to classify participants in goal profiles, Dunn and Dunn (1999) found that low task orientation combined with high ego orientation was the most detrimental motivational pattern for sportspersonship, whereas a high task orientation combined with a low ego orientation was the most beneficial for sportspersonship. These findings indicate that examining the interaction between task and ego orientation in predicting moral variables is important. In addition, it has been suggested (Hardy, 1998) that task orientation may moderate the detrimental effects of ego orientation on moral variables found in past research. Interaction effects were therefore explored in the present study.

A variable that has yet to be investigated in relation to morality in sport is moral identity. The value of

examining moral identity with moral functioning has been highlighted by sport psychologists investigating moral issues in sport (e.g. Ebbeck & Gibbons, 2003; Weiss & Smith, 2002). Moral identity has been defined as “a commitment to one’s sense of self to lines of action that promote or protect the welfare of others” (Hart, Atkins, & Ford, 1998, p. 515), and represents the importance of a set of moral traits to the self. It has been described as the mechanism that motivates moral action (Blasi, 1984) and constitutes the second dimension of the self-structure linked to morality by Shields and Bredemeier (1995).

Blasi (1984) has offered two assertions about moral identity that are assumed in this study. The first is that even though there may be non-overlapping moral traits that compose unique moral identities, a set of common moral traits exists that is likely to be central to most people’s moral self-definition. In recent work by Aquino and Reed (2002) on US university students, nine moral traits (e.g. caring, compassionate, fair, etc.) were identified. The second assumption is that being a moral person may occupy different levels of importance to each individual’s self-concept. Indeed, Aquino and Reed (2002) found evidence to support Blasi’s assumption that some individuals consider morality more central to their self than others.

Further to Blasi’s two assumptions, there are also two dimensions of moral identity known as internalization (private) and symbolization (public). The internalization dimension taps the degree to which moral traits are central to the self-concept, while symbolization reflects how much these traits are represented in the world. Research has shown that both dimensions of moral identity predict self-reported volunteering but only the internalization dimension predicted actual donation behaviour among college students (Aquino & Reed, 2002). In addition, a highly self-important internalized moral identity has been positively associated with an expansive circle of moral regard towards out-group members, a more favourable evaluation of a relief effort, and monetary donations (Reed & Aquino, 2003). Due to poor predictive qualities of the symbolization dimension and its ambiguous relevance to the football environment (e.g. participants are asked whether they read books, wear clothes or purchase products that identify them as having characteristics of moral identity), only the internalization dimension was considered in the present study.

In summary, the purpose of this research was to examine the relative contribution of goal orientation and moral identity, as well as potential interaction effects between task and ego goal orientations, in the prediction of prosocial and antisocial functioning (i.e. judgement and behaviour) among football players. Based on past research, ego orientation was

expected to positively predict antisocial judgement and behaviour, whereas importance of moral identity was hypothesized to positively predict prosocial functioning and negatively predict antisocial functioning. As previous research has revealed inconsistent findings, no predictions were made about task orientation. Similarly, based on suggestions from previous work (e.g. Hardy, 1998), interaction effects were explored but no hypotheses were provided.

Methods

Participants

The study included 210 male football players from UK north-western, south-eastern and midland regions. Players were drawn from recreational club ($n = 133$) and semi-professional ($n = 77$) competitive competitions. The players' ages ranged from 16 to 40 years (mean = 25 ± 6 years). The majority of participants were white Europeans ($n = 189$) but the sample also included other races ($n = 17$). Experience of playing competitive football ranged from 0 to 32 years (mean = 12.4 ± 6.8 years) and time spent playing football per week ranged from 1 to 23 h (mean = 5.1 ± 3.6 h).

Procedure

Data collection took place towards the end of a competitive season (April and May) using three methods. The first two methods involved contacting 50 association football clubs by letter to establish interest in participating in the study. Telephone contact resulted in a personal visit to collect data after a practice session or match (8 clubs), a request for a pack of questionnaires to be sent (15 clubs, 310 questionnaires), or no further interest in the study (35 clubs). The third method involved approaching known players outside the football environment and requesting their participation in the study ($n = 25$).

The majority of the data were collected using method 1, where the first author visited the club (8 clubs, $n = 120$). Participants were asked to complete the consent form and answer the questionnaire honestly. Verbal and written instruction repeatedly reminded participants of the importance of answering items on their own; supervising data collectors and club staff intervened on any conferring. It was stressed that responses would be kept confidential. Identical verbal instructions were presented for method 3. In the case of method 2, packs of questionnaires were either posted ($n = 220$) or delivered by hand ($n = 90$) and included instruction on the appropriate procedure for distribution; 65 were returned. A one-way multivariate analysis

of variance (MANOVA) revealed no significant differences in goal orientation, moral identity or moral variables as a function of method of data collection. In addition, MANOVA indicated that collecting data during a practice session or match had no significant effect on reported prosocial and antisocial behaviour.

The multi-section questionnaire included items assessing demographic information, goal orientation, importance of moral identity, prosocial and antisocial judgements specific to football, prosocial and antisocial behaviours specific to football, and social desirability. To control for potential response bias in ratings of moral judgement and behaviour, the order of presentation of these scales was reversed in half of the questionnaires.

Measures

Goal orientation. Task and ego goal orientations were measured using the Perception of Success Questionnaire (POSQ; Roberts, Treasure, & Balague, 1998). The POSQ consists of 12 sport-specific items that were related to football with the stem "When playing football I feel most successful when..." The scale includes two 6-item subscales measuring task orientation (e.g. "I show clear personal improvement"; "I perform to the best of my ability") and ego orientation (e.g. "I beat other people"; "I outperform my opponents"). Participants respond on a Likert scale anchored by the scores of 1 ("strongly disagree") and 5 ("strongly agree"). In this study, mean scores for the two subscales were calculated separately by adding scores for related items and dividing by six (i.e. the number of items). The POSQ has demonstrated adequate internal consistency with satisfactory alpha coefficients for both the task ($\alpha = 0.88$) and ego ($\alpha = 0.88$) subscales (e.g. Roberts *et al.*, 1998).

Moral identity. The internalized dimension of the Self-Importance of Moral Identity Scale (Aquino & Reed, 2002) was used to measure moral identity. Participants were presented with nine traits, validated as necessary characteristics of a moral person, and asked to respond to five items related to these nine traits. The nine traits are: caring, compassionate, fair, friendly, generous, helpful, hardworking, honest and kind. Examples of items assessing the importance of the characteristics are: "It would make me feel good to be a person who has these characteristics" and "I strongly desire to have these characteristics". Participants responded on a Likert scale anchored by the scores of 1 ("strongly disagree") and 5 ("strongly agree") and the mean scale score was calculated. Previous studies have shown a high internal consistency for the internalisation subscale items ($\alpha = 0.85$; Reed & Aquino, 2003).

Prosocial and antisocial functioning. Prosocial and antisocial behaviours were assessed with a measure developed specifically for this study. As behaviour was measured with a questionnaire, the term in this study refers to reported rather than actual behaviour. Four items measured prosocial behaviours and seven items measured antisocial behaviours. A full list of the items used in this study is presented in Table I. The items were developed based on previous research (e.g. Kavussanu & Ntoumanis, 2003; Kavussanu & Roberts, 2001) and discussions with football players, officials and coaching staff, who had been asked to specify prosocial and antisocial behaviours occurring in football. The definitions of prosocial and antisocial behaviour as well as a list of 21 behaviours were given to 12 football experts, each with a minimum of 20 years' experience in coaching, officiating or playing at a competitive level, and three sport psychologists; these individuals were asked to classify behaviours as prosocial, antisocial or neither using the definitions provided. This is a procedure recommended for assessing validity in scale development (John & Benet-Martinez, 2000). The behaviours investigated in the current study were classified as prosocial or antisocial by 87% (13/15) of the judges.

Participants were asked to report on how often they had engaged in the 11 behaviours during the current season. This is consistent with the way behaviour has been measured in previous research (e.g. Eisenberg *et al.*, 2002; Kavussanu & Ntoumanis, 2003; Kavussanu & Roberts, 2001; Ommundsen *et al.*, 2003). Footballers responded to the stem "How often did you engage in these behaviours" and responses were made on a 6-point Likert scale with the choice of responses being "never" (1), "rarely" (2), "sometimes" (3), "often" (4), "very often" (5)

and "always" (6). Each subscale was scored separately by adding responses on each item and dividing by the number of items on each subscale.

Prosocial and antisocial judgements were assessed using the same items as the behaviour scale. Respondents were presented with the 11 behaviours and were asked to indicate how appropriate they thought they were in football. The stem for each item was "How appropriate are these behaviours . . ." and responses were made on a 6-point Likert scale with the choice of answers being "never appropriate" (1), "rarely appropriate" (2), "sometimes appropriate" (3), "often appropriate" (4), "very often appropriate" (5) and "always appropriate" (6). Similar formats have been employed in previous studies assessing moral judgement in sport (e.g. Kavussanu & Ntoumanis, 2003; Kavussanu & Roberts, 2001; Ommundsen *et al.*, 2003). The prosocial and antisocial dimensions were scored separately by adding responses on each item and dividing by the number of items on each subscale.

Social desirability. When responding to items tapping moral variables, individuals may portray themselves in a favourable manner. Therefore, a measure of social desirability was included to control for any such potential bias. Specifically, a shortened version of the Marlowe-Crowne (Crowne & Marlowe, 1960) social desirability scale was used to assess how favourably participants rate socially desirable attributes. The short version comprises 10 items and respondents are asked to indicate whether the statement is true or false as it relates to them personally. Examples of items are "I like to gossip at times", "I always try to practise what I preach" and "I have never deliberately said something to hurt

Table I. Principal component analysis (oblimin rotation): Judgements and behaviours.

Item	mean \pm s	Judgement factors		mean \pm s	Behaviour factors	
		1	2		1	2
1. Trying to get an opponent injured	1.8 \pm 1.1	0.758		2.2 \pm 1.2	0.732	
2. Retaliating to a bad tackle, e.g. kicking out	2.2 \pm 1.1	0.723		2.6 \pm 1.1	0.682	
3. Diving to fool the referee	2.1 \pm 1.1	0.689		2.1 \pm 1.2	0.637	
4. Elbowing an opposition player	1.7 \pm 1.0	0.687		1.8 \pm 1.0	0.693	
5. Body checking an opposition player	3.0 \pm 1.3	0.683		3.0 \pm 1.2	0.648	
6. Deliberate hand ball	2.1 \pm 1.1	0.584		2.0 \pm 1.1	0.696	
7. "Winding up" opposition players	3.3 \pm 1.3	0.506		3.7 \pm 1.4	0.506	
8. Apologizing to opponent, e.g. helping off floor	3.7 \pm 1.2	-0.434	0.716	3.3 \pm 1.1		0.719
9. Congratulating the opposition on good play	2.9 \pm 1.3		0.653	2.9 \pm 1.4		0.593
10. Returning ball to opponent for a throw in, free kick, etc.	3.8 \pm 1.3		0.631	3.5 \pm 1.3		0.636
11. Kicking the ball out of play if an opponent is injured	5.0 \pm 1.0	-0.434	0.510	4.3 \pm 1.2		0.664
Eigenvalue		3.63	1.93		3.23	1.85
% of variance		33	18		29	17
Internal reliability		0.81	0.69		0.79	0.62
Factor correlations			-0.18			-0.11

Note: Minimum loadings = 0.40.

someone's feelings". When scoring the scale, one point was allocated to a socially desirable response and zero for a socially non-desirable response. Possible scores ranged from 0 to 10. A KR-20 (see Kuder & Richardson, 1937) score of 0.65 showed adequate reliability of the scale in this study.

Results

Scale analyses

Principal component analysis (PCA) was conducted on the 11 items of moral judgement and behaviour scales. Principal component analysis was chosen because it is the recommended analysis when the objective is to combine a set of measured variables into summary indices (Floyd & Widaman, 1995) and to assess unidimensionality of a scale (Cortina, 1993). Before performing PCA, the suitability of the data was checked. Kaiser values of 0.81 for moral judgements and 0.74 for moral behaviours both exceeded the recommended value of 0.6 (Tabachnick & Fidell, 1996) indicating sampling adequacy. Principal component analysis using oblimin rotation revealed the presence of two components, with eigenvalues exceeding 1, for each of the judgement and behaviour scales. The antisocial items from the judgement and behaviour scales loaded on Factor 1, while the prosocial items loaded on Factor 2. The item loadings on each factor together with internal reliability scores and means are presented in Table I.

The internal reliability of all scales was examined using Cronbach's (1951) alpha coefficients, and the values are presented in Table II. All scales had an alpha above or very close to the recommended criterion of 0.7 except for prosocial behaviour, which had an alpha of 0.62. Although some scales had alpha values lower than the recommended 0.70 criterion, it should be noted that alpha coefficients are highly dependent upon the number of items (Cortina, 1993; Schmitt, 1996). A low number of items could partly explain the marginal alpha values of the two prosocial scales (4 items each) and the measure of moral identity (5 items). It should be noted that results involving these scales should be interpreted with caution.

Descriptive statistics and correlation analyses

Descriptive statistics and zero-order correlations were computed for all variables and are presented in Table II. Most footballers reported that they sometimes or often engaged in prosocial behaviours during the season and they had rarely or sometimes engaged in antisocial behaviours. On average, they judged prosocial behaviours as sometimes appropriate, whereas they judged antisocial behaviours as

Table II. Descriptive statistics and zero-order correlations among variables (*n* = 210).

Scale	mean ± s	Zero-order correlations													
		1	2	3	4	5	6	7	8	9	10				
1. Prosocial judgement	3.82 ± 0.86	(0.69)													
2. Prosocial behaviour	3.50 ± 0.86	0.66**	(0.62)												
3. Antisocial judgement	2.30 ± 0.80	-0.21**	-0.16*	(0.81)											
4. Antisocial behaviour	2.48 ± 0.79	-0.14*	-0.12	0.68**	(0.79)										
5. Moral identity	3.82 ± 0.57	0.01	0.12	-0.22**	-0.39**	(0.68)									
6. Ego orientation	3.76 ± 0.77	-0.12	-0.09	0.18**	0.22**	-0.02	(0.84)								
7. Task orientation	4.15 ± 0.51	0.07	0.05	-0.06	-0.03	0.28**	0.20**	(0.74)							
8. Age	25.00 ± 6.10	0.04	0.10	-0.16*	-0.20**	0.25**	-0.13	-0.01	-						
9. Social desirability	4.59 ± 2.30	0.00	0.11	-0.01	-0.11	-0.03	-0.22**	0.03	-0.05	(0.65)					
10. Football experience	12.34 ± 6.76	-0.07	0.06	0.02	0.05	0.08	-0.11	-0.03	-0.05	0.58**	0.07				

Note: Ranges of scores was 1 – 6 for judgements and behaviours; 1 – 5 for task, ego and moral identity; 16 – 47 for age; 0 – 10 for social desirability; and 1 – 32 for football experience. Alpha coefficients are in parentheses across the diagonal. **P* < 0.05, ***P* < 0.01.

rarely appropriate. Interestingly, participants reported higher scores for prosocial judgements and behaviours than for antisocial judgements and behaviours. Mean scores for motivational variables were moderately high on ego orientation and fairly high on task orientation, while scores for moral identity and social desirability were both moderate.

The relationship between all the variables was examined using zero-order correlations (see Table II) with partial correlations controlling for potential effects of social desirability. Zero-order correlations indicated low negative relationships between prosocial and antisocial variables. Prosocial judgement was negatively correlated with both antisocial variables, while prosocial behaviour was negatively correlated with antisocial judgement. Judgements were highly and positively correlated with behaviours for both prosocial and antisocial variables. Ego orientation was positively related to both antisocial judgement and behaviour, while moral identity was negatively correlated with both antisocial variables. Finally, task orientation was positively correlated with moral identity and ego orientation. Correlations among variables controlling for social desirability were also computed. When compared with zero-order correlations, social desirability was shown to have a negligible effect on the relationships among variables with no changes in level of significance. The greatest deviance from the zero-order correlations was a value of 0.04 between prosocial judgement and moral identity.

Regression analyses

The aims of the present study were to investigate the relative contribution of goal orientations and internalized moral identity in predicting prosocial and antisocial judgements and behaviours, as well as to explore interaction effects between goal orientations. Thus, four hierarchical regression analyses were conducted, two for the prosocial variables and two for the antisocial variables. As recommended by Aiken and West (1991), before conducting the analyses task and ego orientation were centred by subtracting the mean of each variable from the individual variable scores. The interaction term was created by multiplying centred task with centred ego. This procedure is essential to avoid multicollinearity, and it does not alter the regression coefficients, standard errors or significance tests (Aiken & West, 1991; Cohen, Cohen, Aiken, & West, 2003).

Each regression analysis involved three steps. As the sample used in this study varied in both age and competitive level, these variables were entered in step 1, to control for their effects on prosocial and antisocial variables. Recreational standard was coded as 0, while semi-professional standard was coded as 1. Ego and task orientation as well as internalized

moral identity were entered in step 2, to examine their relative influence on prosocial and antisocial variables. The interaction term between task and ego orientation was entered in the final step to examine whether interaction effects were significant after the main effects were partialled out (Aiken & West, 1991; Cohen *et al.*, 2003).

Prosocial functioning. Age, competitive level, moral identity and goal orientations did not significantly predict prosocial judgement or behaviour. However, a significant interaction between task and ego orientation emerged for prosocial judgement ($B = -0.30$, $\beta = -0.14$, $t = -2.0$, $CI = -0.584 < > -0.004$, $F_{6,203} = 4.0$, $P < 0.05$, $R^2 = 0.02$, $R^2_{total} = 0.05$). The effect size was 0.02, which is considered small (Cohen, 1992). Although the interaction effect for prosocial behaviour was in the same direction, it did not reach significance ($B = -0.21$, $\beta = -0.10$, $t = -1.39$, $CI = -0.495 < > 0.086$, $F_{6,203} = 1.9$, $P = 0.18$, $R^2 = 0.01$, $R^2_{total} = 0.04$). As recommended by Cohen *et al.* (2003), the significant interaction was further explored by plotting three regression lines at three values of ego orientation (see Figure 1), and subsequently testing whether the slopes of these lines are significantly different from 0. The values of ego orientation chosen to plot the interaction were the mean, one standard deviation below the mean (-0.77) and one standard deviation above the mean

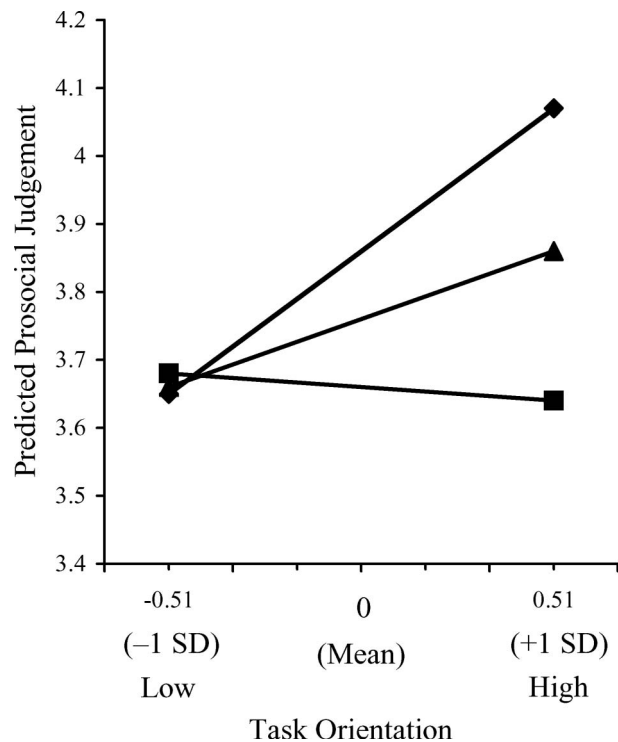


Figure 1. Task orientation predicting prosocial judgement at three values of ego orientation. ♦, low ego ($y = 0.42x + 3.86$); ▲, middle ego ($y = 0.19x + 3.76$); ■, high ego ($y = -0.04x + 3.66$).

(0.77). These values were substituted in the regression equation ($y = 0.19x + -0.14z + -0.30xz + 3.5$) to yield three simple regression equations (see Figure 1), which were then plotted to display the interaction. *Post hoc* analyses indicated that the gradient of only one regression line was significantly different from zero—that is, the regression of prosocial judgement on task orientation at one standard deviation below the mean of ego orientation ($t = 2.3$, $P < 0.05$ [CI = $0.07 \leq B$ y on x at $zL \leq 0.77$]). Thus, under conditions of low ego orientation, as task orientation increases there was a significant increase in predicted prosocial judgement. The regressions of prosocial judgement on task orientation at mean and high levels of ego orientation were non-significant, indicating that when players' ego orientation was at average or high levels, task orientation did not significantly predict prosocial judgement.

Antisocial functioning. Results of the regression analyses examining predictors of antisocial functioning are presented in Table III. Competitive level was a significant predictor of antisocial judgement, indicating that semi-professional players (coded as 1) were more likely than recreational players to consider antisocial behaviours as appropriate. Age and competitive level together accounted for 4% of the variance in antisocial judgement ($F_{2,207} = 4.2$, $P < 0.05$) and behaviour ($F_{2,207} = 4.5$, $P < 0.05$). Ego orientation was a significant positive predictor of both antisocial judgement and behaviour, whereas

internalized moral identity was a significant negative predictor of these variables. No interaction effects between task and ego orientation in predicting antisocial functioning were found. Goal orientations and moral identity together explained 7% of the variance in antisocial judgement ($F_{5,204} = 4.5$, $P < 0.01$) and 17% of the variance in antisocial behaviour ($F_{5,204} = 10.7$, $P < 0.001$). The corresponding effect sizes were 0.08 for antisocial judgement and 0.21 for antisocial behaviour. Cohen (1992) indicated that effect sizes of 0.02 are considered small, effect sizes of 0.15 are considered medium and effect sizes of 0.30 are considered large. Thus, goal orientations and moral identity had a relatively small effect on antisocial judgement and a medium effect on antisocial behaviour.

Discussion

Research examining moral issues in sport has primarily focused on negative or antisocial aspects of morality, such as aggressive tendencies or behaviour, unsportsmanlike conduct and judgements about the legitimacy of injurious acts (for a review, see Weiss & Smith, 2002). However, when sport is often heralded as a vehicle for character development (Shields & Bredemeier, 1995), then questions need to be asked of the prevalence and predictors of prosocial functioning. This offers a more holistic approach to examining moral issues in sport. The purpose of the present study, therefore, was to examine goal orientation and moral identity as

Table III. Hierarchical regression of antisocial judgements and behaviours ($n = 210$).

Variable	<i>B</i>	<i>B</i> 95% CI	β	<i>t</i>	ΔR^2
Antisocial judgement					
<i>Step 1</i>					
Age	-0.01	-0.03 < > 0.01	-0.06	-0.76	0.04*
Competitive level	0.25	0.02 < > 0.48	0.15	2.11*	
<i>Step 2</i>					
Ego	0.19	0.05 < > 0.33	0.18	2.63**	0.07**
Task	-0.11	-0.33 < > 0.12	-0.07	-0.93	
Moral identity	-0.25	-0.45 < > -0.06	-0.18	-2.52*	
<i>R</i> ² total					0.11
Antisocial behaviour					
<i>Step 1</i>					
Age	-0.01	-0.03 < > 0.01	-0.07	-1.06	0.04*
Competitive level	0.08	-0.13 < > 0.30	0.05	0.78	
<i>Step 2</i>					
Ego	0.21	0.08 < > 0.34	0.20	3.10**	0.17***
Task	0.04	-0.16 < > 0.25	0.03	0.41	
Moral identity	-0.52	-0.70 < > -0.34	-0.38	-5.60***	
<i>R</i> ² total					0.21

Note: $\Delta R^2 = R^2$ unique to each step. * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$. CI = confidence interval.

predictors of both prosocial and antisocial judgement and behaviour in football.

An important finding of this study is that prosocial and antisocial functioning are two independent constructs as indicated by the results of factor analyses as well as the low correlation between the prosocial and antisocial scales. The distinctiveness of these positive and negative dimensions of morality highlight the need to assess both constructs, rather than assuming high scores on antisocial functioning imply low scores on prosocial functioning and vice versa. It is also interesting to note that this sample of footballers reported relatively higher prosocial judgement and behaviour in comparison to the antisocial variables. This finding suggests that footballers are likely to view prosocial behaviours as appropriate and the football context encourages prosocial behaviours.

Predicting prosocial functioning

Regression analysis revealed no main effects for goal orientations and moral identity in predicting prosocial judgement or behaviour. While moral identity may not predict prosocial functioning in this sample of footballers, a significant interaction effect between task and ego orientation was found in predicting prosocial judgement. The interaction between the goal orientations suggests that the relationship between task orientation and prosocial judgement varies depending upon a footballer's level of ego orientation. Specifically, task orientation was a significant predictor of prosocial judgement *only* when ego orientation was low. That is, when individuals do not consider outperforming others a salient way of defining success, conceptualizing success in terms of learning, mastery and improvement predicts judging prosocial behaviour as appropriate. It appears that at average or high levels of ego orientation, the positive effect of task orientation on prosocial judgement is suppressed.

This finding highlights the complex relationship between goal orientations and moral variables and underscores the importance of examining interaction effects between task and ego orientation when predicting moral variables. In the occurrence of an interaction effect, main effects have to be interpreted in light of this interaction. Specifically, when an interaction effect exists between two variables, main effects reflect the influence of one predictor on the outcome variable at the *mean* of the other predictor (see Aiken & West, 1991; Cohen *et al.*, 2003). Thus, task orientation did *not* predict footballers' prosocial judgement when their ego orientation was *average* (i.e. the mean of this sample) but emerged as a significant predictor when ego orientation was low. In studies that have not examined interaction effects (e.g. Kavussanu & Roberts, 2001; Stephens, 2000),

significant findings for task orientation could have been overlooked under certain conditions (i.e. low ego orientation). Moreover, a failure to examine interactions may partly explain the inconsistency in findings linking task orientation to moral variables.

The absence of main effects of task orientation on prosocial variables is inconsistent with the positive links found with dimensions of sportspersonship in some studies (Dunn & Dunn, 1999; Kavussanu & Ntoumanis, 2003; Lee *et al.*, 2001; Lemyre *et al.*, 2002). Explanations may hinge on the fact that while sportspersonship includes elements of prosocial functioning, overall the construct reflects mutually beneficial behaviours characterized by social convention, fair play, respect and commitment to sport. In isolation, however, it appears that prosocial judgement and behaviour benefit the opposition to the point where self-interest may be undermined. For example, kicking the ball out of play if an opponent is injured may be at the expense of a goal-scoring opportunity. Such behaviour could benefit the opposition but have negative consequences for one's team. Although task-orientated individuals are not preoccupied with outperforming opponents, it is possible that these goals do not predict behaviour or judgement that is disadvantageous to their own performance outcomes. A second explanation may be that task orientation is not a strong predictor of prosocial functioning in the adult populations sampled in this study. Conjecture on the relationship between task orientation and prosocial functioning in adult populations remains speculative and requires further investigation.

Previously identified relationships between moral identity and prosocial functioning (Aquino & Reed, 2002; Reed & Aquino, 2003) were not found in the football environment. We offer two explanations for this inconsistency. First, Aquino and Reed's (2002; Reed & Aquino, 2003) research was not carried out in the achievement context of sport. In spite of the moderate frequency of prosocial judgment and behaviour, the football context could suppress typically higher levels of prosocial functioning that may exist outside of sport. As suggested by the theory of bracketed morality (Shields & Bredemeier, 1995), features of the sport context form "brackets" of regressed sport morality that is set apart from the broader morality of everyday life. The variation in scores for prosocial functioning in football may differ from the range of scores for prosocial functioning in other contexts and could explain why prosocial judgement and behaviour were unrelated to the global measure of moral identity. A second explanation may be the different measures employed in the two studies to assess prosocial variables. Whereas Aquino and Reed (2002; Reed & Aquino, 2003) measured perceived worthiness and actual food and

monetary donations to less well-off groups, this study relied on self-reported appropriateness and frequency of behaviours towards fellow footballers. The validity of these explanations may be determined by future research.

A final explanation for the non-significant findings in relation to prosocial variables is the low internal reliability of the instruments, in particular the prosocial behaviour measure. It is well known (Cohen *et al.*, 2003) that the internal reliability of a scale places a limit on the maximum correlation that can be achieved between two variables, with lower scale alpha values leading to lower correlations between variables. It is possible that we were not able to identify significant relationships between goal orientations, moral identity and prosocial variables due to the low alpha of the prosocial judgement and behaviour scales. Future research should attempt to improve the psychometric properties of these scales and examine motivational and moral identity predictors of prosocial variables with other samples.

Although analysis revealed some interesting findings, it is recognized that motivational and moral identity variables predicted a small proportion of the variance in prosocial functioning. Clearly, other aspects play a role in determining prosocial functioning. For example, additional personality characteristics such as sociability, social competence, self-esteem and emotionality (see Eisenberg & Fabes, 1998) may be influential in predicting prosocial behaviour and judgement, as might environmental variables such as motivational climate and moral atmosphere (Kavussanu, Robnerts, & Ntoumanis, 2002; Stephens, 2000, 2001).

Predicting antisocial functioning

In accordance with our hypothesis and past research, ego orientation was found to significantly predict both antisocial judgement and behaviour. Thus, footballers' endorsement of ego goals heightened the likelihood of judging antisocial acts as appropriate and reporting engaging in antisocial behaviours such as injuring, retaliating, elbowing and winding up the opposition. These findings are consistent with Nicholls' (1989) theoretical framework, which proposes that individuals high in ego orientation have a preoccupation with winning, which may be accompanied by a "lack of concern about justice and fairness... When winning is everything, it is worth doing anything to win" (Nicholls, 1989, p. 133). Links between ego orientation and antisocial functioning (judgement and behaviour) found in this study are consistent with previous research reporting associations between ego orientation and unsportsmanlike attitudes, legitimacy ratings of aggressive acts (Duda *et al.*, 1991; Dunn & Dunn, 1999; Kavussanu

& Roberts, 2001) as well as moral judgement and moral intentions (Kavussanu & Roberts, 2001). From an applied perspective, determining success by winning and losing is likely to lead to antisocial functioning.

No significant interaction effects were identified between task and ego orientation in predicting antisocial functioning. It has been suggested (e.g. Hardy, 1998) that the negative effects of ego orientation on low levels of morality may be moderated by task orientation; therefore, ego orientation may not be detrimental to moral behaviour when task orientation is high. The present findings, however, do not support this assertion. Ego orientation was found to predict antisocial functioning across *all* values of task orientation. Thus, even when an individual is concerned with improvement and doing their best in the sporting context, a preoccupation with winning may still result in unsportsmanlike conduct. Although this is an important finding, it should also be noted that interaction effects in regression analysis are difficult to detect (Chaplin, 1991; Cohen *et al.*, 2003) and future research should replicate the present findings using larger samples.

In congruence with past studies (e.g. Kavussanu & Roberts, 2001; Stephens, 2000, 2001), no significant findings were found between task orientation and antisocial judgement or behaviour. According to Nicholls (1989), a task orientation involves people tending to judge their competence and success with self-referenced criteria and perceiving the activity as an end in itself. The focus of task goals on self-improvement and the sporting pursuit may explain why they do not predict other orientated constructs of prosocial and antisocial functioning.

Of all the predictor variables in this study, moral identity explained the greatest variance in antisocial variables and negatively predicted both antisocial judgement and behaviour. These results support theoretical speculation and research that suggests placing high importance on moral identity positively relates to high levels of moral judgement and behaviour (Aquino & Reed, 2002; Reed & Aquino, 2003). While higher levels of morality, expressed as prosocial functioning, may be distorted by sporting contexts, both antisocial judgement and behaviour are inherently linked to the centrality of morality to footballers' self-identities, irrespective of the situation. Thus, evidence is provided in a sporting context to indicate that the greater importance placed on morality, the less antisocial thoughts and actions will occur.

Limitations of the study and directions for future research

While this study revealed some interesting findings that enhance our understanding of prosocial and

antisocial functioning in sport, it also contains some limitations. One limitation is that alpha coefficients for some scales fell slightly below the acceptable level of 0.70. Although low alphas may be partly attributed to the low number of items (Cortina, 1993; Schmitt, 1996), the findings involving these subscales must be interpreted with caution. The present results should be replicated to include additional prosocial behaviours that would provide a more complete picture of the football context and may strengthen the alpha coefficients. Measures should also be extended to include observations of actual behaviour which would serve as a more accurate assessment than self-report methods. A second limitation is that we used only adult male footballers as participants. Our findings, therefore, are limited to this population. Future research needs to replicate and extend these to female populations, youth participants and different sport contexts.

Future studies need to explore the contribution of moral identity variables, together with motivational variables and their interaction effects, to develop our understanding of the individual differences that contribute to the prediction of prosocial and antisocial functioning. Finally, the investigation of other potentially influential personal variables such as concern about social approval (Eisenberg & Fabes, 1998), together with their interaction effects with the social environmental variables of motivational climate and moral atmosphere, may help reveal the complex nature of moral functioning. Longitudinal studies using the personal, environmental and moral behaviour variables would also reveal the direction of any relationships.

In conclusion, the majority of sports moral research has focused on negative aspects of morality. The present results support the existence of prosocial functioning (judgement and behaviour) in association football and indicate that prosocial and antisocial functioning are independent constructs. Furthermore, our findings underscore the importance of examining interaction effects between task and ego orientation in predicting moral variables. It is suggested that the relationship between motivational and moral variables in sport is complex and researchers need to consider the interplay between task and ego orientation and whether the one goal moderates the influence of the other on moral variables. Finally, including the importance athletes place on moral identity as a predictor of morality appears promising and research needs to investigate this variable further.

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