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Moral Atmosphere and Athletic Aggressive Tendencies in Young Soccer Players

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ABSTRACT *The major purpose of this study was to examine the relationship of the moral atmosphere of athletic teams to athletes' self-described likelihood to aggress (SLA). Two additional purposes were: first, to determine whether there was a predominant figure most influential to athletes' SLA and, secondly, to examine potential gender differences in athletes' perceived team moral atmosphere, their SLA and the most influential person affecting their SLA. Participants were 194 male and female soccer players 13–19 years of age. Athletes' perceptions of their team pro-aggressive norms emerged as the most consistent predictor of their SLA. Regardless of gender, the athletes reported that they would be more likely to aggress if they thought their coach supported such behaviour. The findings shed light on the influence that significant others have in "shaping" the moral atmosphere operating on youth sport teams.*

In the last decade, social constructivist theories have been used as a framework to understand the psychological processes underlying aggression in sport. In particular, structural developmental moral theory (Kohlberg, 1984; Haan, 1991) has provided the bases for most of the recent research on athletic aggression. One of the key tenets of Kohlberg's (1981, 1984) theory of moral development is that moral reasoning goes through different levels of development and represents the major determinant of moral behaviour.

Based on a structural developmental approach and, particularly, on Haan's interactional approach to morality (Haan, 1991), Bredemeier and colleagues contend that an act is not aggressive *per se*; instead, this "behavior is seen as a result of the interaction between an individual's organized meaning structures and environmental factors" (Bredemeier, 1983, p. 72). Accordingly, Bredemeier sees morality as "a process of balancing one's own needs and interests with those of others" (Bredemeier, 1985, p. 120).

Cognitive–developmental theorists contend that moral reasoning evolves through an invariant sequence of stages with each higher stage representing "more

complex and adequate organization of information" (p. 52). Particularly relevant for this work, sport involvement has been linked to the adoption of lower levels of moral reasoning (Shields & Bredemeier, 1995). When an athlete acts according to lower levels of moral reasoning, moral balances are egocentrically constructed and marked by a focus on self-interest and making self-serving compromises (Bredemeier, 1985). This literature also suggests that moral reasoning maturity is inversely correlated with aggressive tendencies among diverse samples of sport participants (Bredemeier, 1985, 1994; Bredemeier *et al.*, 1987). Higher levels of moral reasoning correspond to lower levels of aggression and this relationship is "strong and linear" (Bredemeier, 1983, p. 75).

Individuals, however, do not behave in a vacuum; rather, they interact with a community that affects their decisions and ultimate behaviours. Thus, moral reasoning, or the personal capability necessary to arrive at a moral judgement, is not isolated from the social context. In the case of sport, athletes interact with significant others (such as parents, coaches and teammates) whose values, beliefs and behaviours influence their attitudes, decisions and actions.

The relevance of the social context to moral action was pinpointed by the later work of Kohlberg and his colleagues (Power *et al.*, 1989) who focused on the impact of the moral atmosphere on people's moral reasoning and moral behaviours. They contend that groups have shared definitions of specific situations and subsequent appropriate behaviours and suggest that this collective knowledge provides the base for individuals' moral actions (Higgins *et al.*, 1984). On sport teams in particular, Stephens *et al.* (1997) suggest that collective norms exist which impact the actions and attitudes of team members.

Supporting the relevance of moral atmosphere in sport, Stephens and Bredemeier (1996) found that the best predictor of young female soccer players' self-described likelihood to engage in unfair game tactics was their belief about the likelihood that their teammates would play unfairly. These findings were replicated by Aziz (1998) in the case of Malaysian youth soccer. Drawing from such work, the present study also explores the impact of the moral atmosphere of an athletic team on the players' likelihood to aggress (SLA). We extend Stephens and Bredemeier's study, however, in several ways. First, male soccer players as well as female soccer players were included in our sample. Secondly, the parental influence on the players' SLA was also explored here.

Previous work in general psychological literature suggests that parents do have an influence on their children's endorsement of aggressive behaviour and moral reasoning maturity (Harralson & Lawler, 1992; Boyes & Allen, 1993). Sport-specific studies have also shown a relationship between aggression and parental influence. Stuart and Ebbeck (1995), for example, differentiated between the social approval offered by mothers, fathers and coaches and found that mothers' approval had the highest relevance to moral development among younger children while teammates' approval was more important among older youngsters.

Another aim of the current study was to examine potential gender differences in self-reported aggressive tendencies in youth sport. The general psychological literature suggests that males are typically more aggressive than females (Geen,

1998). In the sport domain, however, results concerning the existence of gender differences in aggressive tendencies have been equivocal. Bredemeier and Shields (1984) found no significant differences in the amount of faulting by female and male basketball players, who were also viewed as equally aggressive by their coaches. However, in a posterior study, Bredemeier and colleagues reported higher scores for males than females on all measures of aggression (Bredemeier *et al.*, 1986). Bredemeier (1994) also found that male players were more aggressive and less submissive than their female counterparts. Such discrepancies in findings might be explained by the fact that the samples used in these investigations were not parallel in terms of age and/or competitive level of the participants.

Gender differences in athletes' perceptions of significant others' norms for cheating and aggression have also been reported (Shields *et al.*, 1995). Thus, in the current investigation we also explored and expected gender differences with respect to the athletes' perceptions of their significant others' norms for cheating and aggression.

In sum, the main purpose of this investigation was to examine the relationship of the team moral atmosphere to aggressive tendencies among young soccer players. In particular, this study addressed whether significant others from the sport and family culture of young athletes (i.e. parents, coaches and team-mates) are pertinent to athletes' perceptions of their personal likelihood to aggress. Secondly, this investigation explored whether or not a predominant figure/figures exists in regard to reported influence on players' decision to aggress. The last purpose of the study was to examine potential gender differences in perceived moral atmosphere (i.e. perceptions of norms for cheating and aggression), likelihood to aggress and significant others' influence on aggression.

Based on previous theoretical and empirical work, a positive association between the athletes' perceived moral atmosphere and their SLA was expected. Secondly, due to the age of our participants (M age = 15.3), we expected the perceptions of team pro-aggressive norms to be the main predictor of athletes' SLA (Morra & Smith, 1996; Stephens & Bredemeier, 1996). Thirdly, regarding the perceived most influential person on athletes' decision to aggress, it was hypothesised that the coach would be considered the most important figure affecting the players' decision to engage in the depicted aggressive act. Finally, in terms of potential gender differences, we predicted that male athletes would report higher scores in likelihood to aggress, and perceptions of team pro-aggressive norms than female athletes. Due to a lack of previous research on the differential effect of parents (i.e. mother and father) pro-aggressive norms in relation to their children's SLA, no hypotheses were posed regarding the differential relationship of parental figures' pro-aggressive norms to the athletes' SLA.

Method

Participants

The sample in this study consisted of 194 young male (N = 135; mean age = 15.41)

and female ($N = 59$; mean age = 15.32) soccer players ranging from 13 to 19 years of age. The participants differed in ability level and soccer experience and were recruited from four age group divisions, i.e. 14 and under (21.2%), 16 and under (45.8%), 18 and under (24.3%) and 20 and under (8.7%). All of them were involved in a summer soccer camp organised by a large Midwestern university. Most of the participants had between 8 and 10 years of soccer experience (53.1%) and had been playing under the same coach for between 1 and 3 years (69.9%). A majority were Caucasian (94.8%), but African-American (0.5%), Asian (3.1%) and other ethnic groups (1.5%) were also represented.

Procedure

In a group setting and during a break in the camp activities, volunteer athletes, who had parental consent as well, were administered a multi-section questionnaire, targeting demographic information, perceptions of norms regarding aggression and legitimacy judgements concerning aggressive behaviours. Following the data collection, athletes were thanked for their participation and dismissed.

Measures

The multi-section instrument used in this study consisted of several sections, including the following.

Section I: demographics.   Demographic information was assessed, including the athletes' age, gender, ethnicity, years of involvement in organised sport, years of soccer experience, and years of participation in their current soccer team.

Section II: Judgements about Moral Behavior in Youth Sport Questionnaire.   A measure of the athletes' perceived likelihood to aggress from a modified version of the Judgments about Moral Behavior in Youth Sport Questionnaire (JAMBYSQ; Stephens *et al.* 1997) was used to assess the athletes' potential endorsement of aggressive behaviour. This instrument assesses several dimensions of moral functioning in relation to issues of sport play (e.g. players' self-described action tendencies and legitimacy judgements concerning unfair play, perceptions of team norms pertaining to unfair play behaviour), and is specifically designed for the context of youth soccer (JAMBYSQ; Stephens *et al.*, 1997). The modified version of the JAMBYSQ used for this investigation (Aziz, 1998) consists of three soccer scenarios depicting hypothetical protagonists faced with choices regarding whether to engage in unfair but strategically advantageous aggressive behaviour. In the first scenario, a dilemma is described in which a soccer player is faced with the choice of whether or not to tackle an opponent from behind in order to prevent a shot, with the likelihood of the opponent being hurt. The second scenario depicts a defender who has to decide whether or not to bump an opponent with a shoulder to knock him/her off balance and prevent him/her from gaining the ball. Again, the scenario explains that

the opponent may fall awkwardly and probably be injured. Finally, the third scenario describes a situation in which a goalkeeper is rushing to the penalty area to clear the ball from an opponent. In a one-on-one situation, the player could pretend to punch the ball and punch the opponent instead. The possibility of injury is also acknowledged. The last section of the modified JAMBYSQ (i.e. Question 4) addresses the influence of significant others on athletes' SLA. In particular, the players are asked to rate how likely they would be to engage in the action described in the scenario if different people would want them to endorse the action. There are six significant others listed, i.e. best friend, most popular player, team captain, best player, coach, parents, and the athletes rate their perceived influence of each individual on a five-point Likert scale. Responses to this question were used to explore who was the most influential person on the athletes' SLA, which was an additional purpose of the study. A more extensive description of the original JAMBYSQ as well as evidence for their internal consistency and construct validity has been provided (Stephens *et al.*, 1997).

Section III: Perceived Norms Questionnaire. A 10-item modified version of the six-item Team Norm Questionnaire (TNQ; Shields, Bredemeier, Gardner & Bostrom, 1995) was used to assess six components of perceived team norms. The first two questions assess the athletes' perceptions of how many of their team-mates would violate a rule if it would help their team win (peer cheating). The next two questions ask athletes to estimate how many of their team-mates would deliberately hurt an opponent if it would help their team win (peer aggression). The following two questions pertain to the coach and refer to whether, in the athlete's opinion, the coach would want the athlete to cheat (coach cheat) or injure an opponent (coach aggression) if it would help the team win. The TNQ was further extended in this study. Specifically, the athlete's perceptions of whether his/her parents (differentiating mother and father) would want him/her to cheat (mother/father cheat) or injure an opponent (mother/father aggression) if it would help the team win were tapped.

There are six response options for the questions regarding the athletes' perceptions of their team-mates norms for cheating and aggression, i.e. none (0), a few (1), several (2), about half (3), most (4) and everyone (5). The items regarding the coach and the parents are responded to on a four-point scale, i.e. no (0), probably not (1), probably (2) and yes (3). The TNQ was developed for the investigation mentioned above (Shields *et al.*, 1995) and its psychometric properties were not provided in that study. Therefore, the reliability and validity of the modified version of the TNQ were examined in the present work.

Data Analysis

Pearson product-moment correlations were calculated in order to establish the psychometric properties of the modified version of the JAMBYSQ and the TNQ, respectively. Chi-square difference tests and univariate analyses of variance were performed to investigate possible gender differences in the variables of interest.

Multiple regression analyses were performed with *perceived likelihood to aggress* as the endogenous variable, and *athletes' perceived norms for aggression* (i.e. team and significant others) as the exogenous variables. Finally, after exploring whether differences in the reported most influential significant other appeared as a function of gender, a *t*-test procedure for mean comparison was employed to determine whether there was a predominant figure most influential in the players' decision to aggress. Results of these analyses are presented next.

Results

Psychometric Properties of the Measures

Judgements about Moral Behavior in Youth Sport Questionnaire (JAMBYS-Q). Drawing from past work (Stephens *et al.*, 1997), the internal consistency of the JAMBYSQ was examined by establishing that responsibility judgements (i.e. questions regarding what the respondents thought they would personally do) were distinguished from deontic judgements (i.e. questions concerning what the respondent thought the hypothetical protagonist of the scenario should do). In particular, more responsibility judgements for the self-endorsed athletic aggression than for the hypothetical protagonist were reported across the three scenarios. Results were in line with past work by Stephens and colleagues (Stephens *et al.*, 1997). The interested reader can refer to Guivernau (1999) for a more complete description of these results.

Revised Perceived Team Norms Questionnaire (TNQ). Since no evidence regarding the reliability and validity of the Team Norms Questionnaire was provided in previous literature, we explored the psychometric properties of the modified version of this instrument used in the current investigation. The reliability of the TNQ was determined by examining the assumed conceptually consistent associations between the items measuring participants' perceived team norms for aggression from the revised TNQ and the ones measuring perceived team pro-aggressive norms from the JAMBYSQ. It was expected that the scores from both instruments would be significantly and positively associated. Results from the Pearson product-moment correlation analysis supported this assumption, with values ranging from 0.36 to 0.70. (Table I).

Reliability Across Scenarios

Influence on aggression. To examine the consistency of the measure of participants' self-reported most influential person in their SLA, Pearson product-moment correlations across the three different scenarios were calculated. A positive and significant association was revealed between the indices of *influence on athletes' decision to aggress* for the first and second scenario ($r = 0.78$, $P < 0.001$), as well as between the first and the third scenario ($r = 0.76$, $P < 0.001$). Similarly, a significantly positive association emerged between the second and third scenario ($r = 0.66$, $P < 0.001$).

TABLE I. Association between perceived team norms for cheating and aggression (from the TNQ) and perceptions of team pro-aggressive norms (from the JAMBYSQ)

Variable	Correlation (r)						
	1	2	3	4	5	6	7
1. Perceived team norms cheating	1.00						
2. Perceived team norms injure	0.55	1.00					
3. Perc. team norms cheating/losing	0.64	0.53	1.00				
4. Perc. team norms aggress/losing	0.48	0.70	0.68	1.00			
5. Team Pro-aggressive norms (S1)	0.39	0.50	0.41	0.45	1.00		
6. Team pro-aggressive norms (S2)	0.46	0.37	0.41	0.36	0.43	1.00	
7. Team pro-aggressive norms (S3)	0.47	0.44	0.45	0.45	0.46	0.51	1.00

All correlations significant at $P < 0.001$ level. S1, S2 and S3 refer to scenarios 1, 2 and 3, respectively.

Self-described likelihood to aggress.   To explore the reliability of responses to the three scenarios in terms of the athletes' SLA, the correlations between this variable across the scenarios were examined. Scenario one and two were moderately associated ($r = 0.61$, $P < 0.001$) while the observed correlations between scenario three and the other two scenarios ($r = 0.44$, $P < 0.001$ with scenario 1; $r = 0.42$, $P < 0.001$ with scenario 2) were significant but less appreciable. In light of these results, it was deemed appropriate to conduct the subsequent analyses separately for each scenario.

Gender Differences

Perceived team norms for cheating and aggression.   To investigate whether there was a significant gender difference in the athletes' perception of their team norms for cheating and aggression, as well as for cheating and/or exhibiting aggression over losing a game, chi-square significance tests were performed. Response options for these variables ranged from 0 (i.e. none) to 5 (i.e. everyone in the team). No differences emerged between male and female players' perceptions of team norms for aggression against an opponent or for injuring an opponent over losing a game. However, a significant gender difference appeared in the perceived norms for cheating over losing a game (X^2, 5 df $= 20.634$; $P < 0.001$). In particular, male athletes perceived that most players (i.e. from half to everyone on the team) would cheat rather than lose an important game (50%) more than the female players (28%).

Perceived team pro-aggressive norms.   To investigate possible gender differences in athletes' perceptions of their team pro-aggressive norms as assessed by the JAM-BYSQ, a chi-square significance test was performed for each scenario. No differences emerged between male and female athletes in their perceptions of their team pro-aggressive norms. Regardless of gender, the athletes perceived that more teammates would engage in the action depicted in the last scenario than in the actions described in the previous two.

Perceived coach/parental norms for cheating and aggression.   To investigate whether there was a significant gender difference in athletes' perception of their significant others' (i.e. coach, mother and father) norms for cheating and aggression, a series of chi-square significance tests were performed. No significant differences were revealed between male and female athletes in their perceptions of their significant others' norms to cheat nor in their significant others' norms for injuring an opponent over losing a game. Overall, the athletes perceived their significant others more approving of cheating than of aggression.

Self-described likelihood to aggress.   A univariate analysis of variance was utilised to determine whether males and females differed in their SLA in each hypothetical scenario. Univariate *F* tests revealed no significant gender differences across the

TABLE II. Self-described likelihood to aggress across scenarios

	Males M (SD)	Females M (SD)
Self-described likelihood to aggress (First scenario)	4.27 (1.02)	4.34 (0.92)
Self-described likelihood to aggress (second scenario)	4.32 (1.08)	4.32 (1.18)
Self-described likelihood to aggress (third scenario)	3.69 (1.41)	3.42 (1.35)

three scenarios [scenario 1:F (134, 58) = 1.22, NS; scenario 2: F (56, 134) = 1.18, NS; scenario 3: F (134, 56) = 1.09, NS]. The means and standard deviations for this variable by gender for each scenario are presented in Table II.

In sum, preliminary analyses indicated that gender differences existed with respect to team norms. As a result, our examination of the significant predictors of SLA was conducted separately for males and females.

Major Predictors of Self-described Likelihood to Aggress (SLA)

To address the first purpose of the study, a separate stepwise multiple regression was performed for the first, second and third scenarios, with SLA as the dependent variable, and the perceived norms for cheating and aggression as the independent variables [1]. Due to the limitations of the stepwise multiple regression regarding the inclusion and removal of predictors from the equation based solely on statistical criteria, the recommendation of a less conservative criterion of inclusion was taken in this work (Hosmer & Lemeshow, 1989). The limitation of this procedure in terms of the relative impact of each variable depending on the established order of entrance of that particular variable is not critical in this study, since the primary interest here was on uncovering the variables most relevant to the prediction of likelihood to aggress. Hosmer and Lemeshow (1989) recommend a criterion for inclusion of a variable that is less stringent than 0.05, suggesting that something in the range of 0.15 or 0.20 is more appropriate to ensure entry of variables with coefficients different from zero. In this work, the criterion of 0.15 significance level of entry into the model was utilised. These analyses, which were performed separately by gender, are summarised below.

First scenario/female athletes. Results from the regression analysis performed on the female athletes' responses to the first scenario are presented in Table IIIa. The

TABLE III. Results of stepwise MR procedure using team and significant others norms for cheating and aggression to predict self-described likelihood to aggress (scenario 1)

Variable	beta[a]	t	P	R^2change
(a) Female sample:				
Perceived team pro-aggressive norms	0.30****	2.85	0.006	18.20
Coach norms for cheating	0.18**	1.78	0.082	5.05
	Total R^2 = 23.25		F = 7.27	Sign. F = 0.0017
	Adjusted R^2 = 20.05			
(b) Male sample:				
Perceived team pro-aggressive norms	0.47****	5.67	0.0001	18.79
Mother's norms for injuring	− 0.17	− 1.49	0.138	1.39
	Total R^2 = 20.19		F = 16.06	Sign. F = 0.0001
	Adjusted R^2 = 18.93			

$*P < 0.10$; $**P < 0.05$; $***P < 0.01$; $****P < 0.001$. [a]Variables are listed by order of entry into the procedure. Only variables accepted are shown.

results showed that the regression coefficient was significantly different from zero, $F (2, 48) = 7.27$, $P < 0.01$. Two of the independent variables contributed significantly to the prediction of athletes' SLA in the situation they found most tempting. The players' perception of their team's pro-aggressive norms entered the equation first and accounted for 18% of the variance in their SLA. Players' perceptions of their coach norms for cheating entered the equation next (5% of the remaining variance).

First scenario/male athletes.   Results from the regression analysis performed on the male athletes' responses to the first scenario are presented in Table IIIb. These results show that the regression coefficient was significantly different from zero, $F (1, 128) = 16.06$, $P < 0.001$. In this case, two of the independent variables contributed significantly to prediction of athletes' SLA. In particular, the players' perception of their team's pro-aggressive norms entered the equation first accounting for 18% of the variance SLA. Furthermore, the athletes' perceptions of their mothers' norms for injuring accounted for an extra 1.4% of the remaining variance. Surprisingly, however, the latter norms were inversely related to the players' SLA. In other words, the more the athletes perceived that their mothers did not approve of them injuring an opponent, the more likely they were to aggress and vice-versa.

Second scenario/female athletes.   Table IVa presents the results from the regression analysis performed on the female athletes' responses to the second scenario. The regression coefficient was significantly different from zero, $F (2, 48) = 4.9$, $P < 0.05$. Two of the independent variables contributed significantly to the prediction of

TABLE IV. Results of stepwise MR procedure using team and significant others norms for cheating and aggression to predict self-described likelihood to aggress (scenario 2)

Variable	beta[a]	t	P	R^2change
(a) Female sample:				
Perceived team norms for cheating	0.27**	2.60	0.012	12.61
Mother's norms for injuring	0.44*	1.59	0.118	4.37
	Total $R^2 = 16.99$		$F = 4.912$	Sign. $F = 0.012$
	Adjusted $R^2 = 13.53$			
(b) Male sample:				
Perceived team pro-aggressive norms	0.19***	2.211	0.028	3.68
	Total $R^2 = 3.68$		$F = 4.89$	Sign. $F = 0.028$
	Adjusted $R^2 = 2.93$			

$*P < 0.10$; $**P < 0.05$; $***P < 0.01$. [a]Variables are listed by order of entry into the procedure. Only variables accepted are shown.

athletes' SLA. Players' perception of their team norms for cheating entered the equation first (13% of the variance), while players' perceptions of their mothers' norms regarding injuring an opponent entered the equation next (4% of the remaining variance explained).

Second scenario/male athletes. Results from the regression analysis performed on the male athletes' responses to the second scenario are presented in Table IVb. The observed regression coefficient was significantly different from zero, $F (1, 128) = 4.89$, $P < 0.05$. Only one of the independent variables contributed significantly to the prediction of athletes' SLA, i.e. players' perceptions of their team's pro-aggressive norms, accounting for a minimal amount of the variance (4%).

Third scenario/female athletes. Table Va shows the results from the regression analysis performed on the female athletes' responses to the last scenario. The regression coefficient was significantly different from zero, $F (2, 48) = 5.77$, $P < 0.001$. Three of the independent variables contributed significantly to the prediction of athletes' SLA. Players' perception of their team pro-aggressive norms entered the equation first, accounting for 17% of the variance in SLA. Athletes' perceptions of their coach norms for cheating entered the equation next (4% of the variance explained), while perceptions of team norms for cheating over losing a game entered the equation last (capturing 5% of the remaining variance). In contrast to what we would expect, however, players' perceptions of their coach norms for cheating were inversely associated with their SLA.

TABLE V. Results of stepwise MR procedure using team and significant others norms for cheating and aggression to predict self-described likelihood to aggress (scenario 3)

Variable	beta[a]	t	P	R^2change
(a) Female sample:				
Perceived team pro-aggressive norms	0.36*	1.72	0.092	17.23
Coach norms for cheating	− 0.40*	− 2.27	0.027	4.39
Perceived team norms for cheating losing	0.31****	1.85	0.071	5.31
	Total $R^2 = 26.93$		$F = 5.77$	Sign. $F = 0.001$
	Adjusted $R^2 = 22.27$			
(b) Male sample:				
Perceived team pro-aggressive norms	0.63*	5.19	0.0001	13.16
Coach norms for injuring	− 0.28	− 1.738	0.0845	2.87
Mothers norms for injuring	− 0.31	− 1.649	0.101	1.77
	Total $R^2 = 17.81$		$F = 9.1$	Sign. $F = 0.0001$
	Adjusted $R^2 = 15.85$			

*$P < 0.10$; **$P < 0.05$; ***$P < 0.01$; ****$P < 0.001$. [a]Variables are listed by order of entry into the procedure. Only variables accepted are shown.

Third scenario/male athletes.   Results from the regression analysis performed on the male athletes' responses to the third scenario are presented in Table Vb. The regression coefficient was significantly different from zero, F (1, 128) = 9.1, $P < 0.0001$, and three of the independent variables contributed to the prediction of male athletes' SLA. Perceived team pro-aggressive norms entered the equation first accounting for 13% of the variance. Players' perceptions of their coach norms for injuring entered the equation next, explaining an additional 3% of the variance. Finally, the athletes' perceptions of their mothers' norms for injuring entered the equation last accounting for about 2% of the remaining variance in their SLA. Consistent with the findings in the first scenario for this group of athletes, a surprising finding was that the athletes' perceptions of both their coaches' and their mothers' norms for injuring an opponent were negatively associated with their SLA.

Gender Differences in Significant Other Influence on Aggression

To investigate gender differences in the athletes' significant others' influence on aggression an overall index of influence was computed. This score was calculated by averaging players' responses to each significant other within each scenario. A single score (for each scenario) was obtained which represented the *average influence of significant other* on players' likelihood to aggress. Then, a one-way ANOVA was

TABLE VI. Significant others' influence: average influence by scenario

	Males M (SD)	Females M (SD)	F	P
Most influence of significant other (first scenario)	2.31 (1.16)	2.21 (1.0)	1.33	0.62
Most influence of significant other (second scenario)	2.46 (1.23)	2.27 (0.97)	1.62	0.27
Most influence of significant other (third scenario)	2.12 (1.15)	1.88 (0.79)	2.11	0.10

conducted to explore the potential differences among males and females in this average influence score. Results from this analysis suggested no differences on significant others' influence as a function of gender for the first [$F (129, 51) = 1.33$, NS], second [$F (129, 51) = 1.62$, NS] or third scenario [$F (129, 51) = 2.11$, NS], respectively. Mean influence of significant other for each scenario by gender is presented in Table VI.

Most influential significant other. Is there a significant individual who is mostly influential to the athletes' likelihood to aggress? To answer this question the means of all the athletes' responses to their perceived influence of each significant other (i.e. best friend, most popular player, team captain, best player, coach, parents) across scenarios were compared (via *t*-test difference of means). Results from this analysis suggested that the athletes were significantly more influenced by their coach than by any other individual listed ($P < 0.001$). No significant differences between the means for the rest of the significant others emerged. The means and standard deviations of all athletes across the three scenarios are presented in Table VII.

Discussion

This investigation examined the relationship of team moral atmosphere to aggressive tendencies in youth soccer. The study further explored whether significant others from the sport and family culture of the youngsters were deemed to have an effect on their aggressive tendencies. As expected, a significant positive correlation between athletes' perceived team pro-aggressive norms (which is a facet of the team moral atmosphere) and their SLA emerged for each moral dilemma posed in the study. These findings are aligned with past work by Stephens and Bredemeier (1996), who found that the best predictor of young female soccer players' self-described likelihood to engage in unfair game tactics was their belief about the likelihood that team-mates would play unfairly. It is not surprising that athletes at

TABLE VII. Significant others' influence across scenarios: mean and SD
of each individual

	Total (N = 182)	
	M	(SD)
1 "Your best friend on the team"	1.81	(1.14)
2 "The most popular players on your team"	1.81	(1.14)
3 "Your team captain"	2.01	(1.22)
4 "The best player on your team"	1.90	(1.15)
5 "Your coach"	2.80★★★	(1.40)
6 "One of your parents"	1.99	(1.33)

*P < 0.10; **P < 0.05; ***P < 0.01; ****P < 0.001. Athletes' score of
the coach influence was significantly different from the influence scores
of any other individual listed.

this age (M age = 15.3 years) tend to rely on their peers (e.g. team-mates) as a
source of diverse information, e.g. their degree of social acceptance, personal
competence (Horn & Hasbrook, 1986, 1987). Peer acceptance and popularity is
linked to athletes' involvement at this age, especially for boys (Stein *et al.*, 1971;
Buchanan *et al.*, 1976). One can argue that these young athletes may contemplate
excelling in sport as an instrumental way to attain popularity among their team-
mates. What it means to excel in sport will depend on the athletes' own definition
of success; importantly, this definition will be partially based on athletes' perceptions
of their significant others' values, beliefs and views concerning appropriate be-
haviours.

Results from this study also provided information with respect to the influence
of significant others on athletes' aggressive tendencies. In particular, the data
revealed that, when faced with moral choices, players' perceptions of their coach
norms for cheating and aggression were most influential in their decision to engage
in the inappropriate act.

With regard to the perceived influence of significant others, the hypothesis that
the coach would emerge as the most important figure influencing the players'
decision to engage in the described behaviour was supported. Regardless of gender
and scenario, the coach seemed to be the only individual that athletes perceived as
being most influential when faced with a moral decision such as the one depicted in
each proposed scenario. This pattern of findings concurs with previous work that
has found the coach to be most relevant to athletes' subsequent moral action (Vaz,
1982; Ryan *et al.*, 1990; Shields *et al.*, 1995).

Apparently, the coach is still perceived by young players as one predominant
figure to pattern. Indeed, Shields *et al.* (1995) have proposed that "should future
research substantiate the important role of the coach in relation to transgressive
moral norms, it will become incumbent upon sport scientists to help show how

coaches can deter the development of norms that support cheating and aggression" (p. 335). In our view, it has become increasingly clear that coaches do indeed have an impact on young athletes' acquisition of certain values, such as fair play and respect for the rules or cheating and aggressive/injurious play. As one of our athletes' quoted in his/her questionnaire: "I trust my coach's ethics".

A final purpose of this investigation was to explore potential gender differences in the athletes' perceptions of their team moral atmosphere, their likelihood to aggress and the most influential person affecting their decision to aggress. Contrary to our expectations, no differences in athletes' SLA emerged. This finding is consistent with Bredemeier and Shields (1984) but in contrast to other studies, which reported that males consistently scored higher than females in measures of aggression (Bredemier, 1994; Bredemeier *et al.*, 1986). However, this disagreement may be explained by the different characteristics of the participants used in those investigations and the present study. Participants in this study were about 15 years of age and were all part of an élite level soccer camp. Bredemeier's study targeted younger children (10–13 years of age) and both samples (i.e. Bredemier *et al.*, 1986; Bredemeier, 1994) participated at a lower competitive level than was the case in the present investigation.

As expected, and in agreement with past work (Shields *et al.*, 1995), gender differences appeared in the athletes' perceived team norms for cheating. Males reported higher perceptions of peer acceptance of cheating than females.

Although no differences appeared in this investigation between male and female players' SLA scores, gender differences emerged in the predictors of these scores. Male athletes' perceived team pro-aggressive norms consistently emerged as the most important predictor of aggressive tendencies, while perceptions of their coach pro-aggressive norms emerged as relevant for the last scenario only. Among the female players, however, the perception of their coach norms for cheating appeared relevant to the prediction of their SLA for two of the three scenarios. For some reason, female players seemed to pay more attention to their coaches than their male counterparts. Further, the prediction of SLA for the female athletes as a function of the significant others' norms for aggression accounted for more variance than in the case of the male athletes. This means that there may be other variables not considered in this investigation that are also important, especially for the male athletes, when making this moral decision.

In light of past findings as well as the results from this study, coaching education seems imperative to provide coaches with information about how relevant their role is to young athletes' moral functioning. Most importantly, coaches need to be aware that they have an indirect influence on their athletes' moral development through the relationships they emphasise and messages they convey among the team members (i.e. peer relations). The current findings suggest too that educational opportunities, not only for coaches but also targeting parents, sport organisers, etc. (in the form of workshops, club newsletters or similar sources of communication) appear fundamental to improving the moral climate of sport teams.

As judged by the predictors of athletes' SLA that emerged in this study, the current work also reinforces the critical impact that peers (i.e. friends and

team-mates) have on athletes' moral functioning. Hence, this group is also proposed as an appropriate target of intervention.

A handful of intervention programmes have been developed and tested which are geared at enhancing moral development in the physical domain (Giebink & McKenzie, 1985; Romance *et al.*, 1986; Wandzilak *et al.*, 1988 Gibbons *et al.*, 1995; Miller *et al.*, 1997). Drawing from both structural developmental moral theory and social learning theory, these programmes were successful in the promotion of moral growth. Thus, they can provide guidelines regarding recommended practices and strategies designed to enhance moral development in young people. For instance, Romance *et al.* (1986) implemented and evaluated a programme designed to foster positive moral development through elementary school physical education and found the programme to be more effective to promote moral growth than the traditional physical education approach. The intervention programme incorporated the use of moral dilemmas and provided students with the opportunity to dialogue and resolve conflicts. These researchers found the programme to be more effective to promote moral growth than the traditional physical education approach.

Along the same lines, Gibbons *et al.* (1995) also implemented a programme that was effective in facilitating moral development through physical education classes and regular school subjects. Their intervention was based on activities that are similar to those used by Romance and colleagues (1986) and included moral dilemmas, dialogues and problem solving through games. Importantly, however, the authors emphasised that enhancing moral growth is not a direct result of participation in physical education but instead that "systematic and organized delivery of theoretically grounded curriculum is necessary to make a difference *on moral development*" (p. 253, emphasis added). Wandzilak *et al.* (1988) also concur that changes in sportspersonship and moral development will not occur spontaneously unless sport and PE programmes are planned systematically to provide opportunities for moral growth. Contributing to this body of research from a social learning perspective, Giebink and McKenzie (1985) provided support for the primary effectiveness of a point system to increase sportspersonship behaviour among a group of 12-year-old children. The system they employed could be easily adopted by teachers and coaches in physical education classes or sport practices and games.

Finally, with respect to intervention strategies, Miller *et al.* (1997) identified four major components of moral education with an at-risk population, i.e. co-operative learning, building moral community, creating a mastery motivation climate and personal and social responsibility. These authors noted that it is more difficult to alter the personal attributes mostly involved in moral development. In contrast, they advocate organising the social environments surrounding children and adolescents in a way that would influence moral growth.

The findings from this work suggest that the socialisation influences on young athletes' moral functioning have many sources. Individuals involved most directly with youth sport practices and games, such as coaches, seem to be the figures that athletes most look to when making their judgements about the appropriate action at a particular point in the athletic context. However, the present results also point to the potential relevance of athletes' perceptions of their parents' approval of specific

types of behaviours (i.e. cheating or injuring an opponent) to their views of what is appropriate to do within the sport milieu. Hence, based on our research, we would add to the voices that have argued for a holistic approach to moral education (Damon & Colby, 1996; Lickona, 1996).

The present investigation had some limitations that should be recognised. First, it seems that more work needs to be undertaken regarding the assessment of moral functioning in sport settings. For example, some discrepancies did exist in the young athletes' responses to and the correlates of the three scenarios presented. They were assumed to be parallel and, indeed, this was not the case across the board. Secondly, particularly as gender differences were evident in a number of the targeted variables and relationships of interest, a larger sample of male and female athletes would have been preferable. It would also be interesting to compare the responses of young soccer players of different ages and competitive levels in the same study.

From an intervention standpoint, future studies should continue to assess the effectiveness of sport versus physical education programmes to promote moral growth since some authors have highlighted physical education as the potentially strongest avenue for moral developments programmes (Miller *et al.*, 1997). Finally, longitudinal designs would provide a greater understanding of the contextual and individual difference characteristics that influence moral development and make athletes more prone to cheat and/or aggress in youth sport.

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NOTES

[1] Due to the high correlation between the *perceived team pro-aggressive norms* (measure of perceived team norms for aggression from the JAMBYSQ) and *perceived team norms for aggression/cheating* (measure of perceived team norms from the TNQ), a composite was calculated. This composite was assumed to represent a global measure of the athletes' perceptions of their team-mates' norms for cheating and aggression. This variable was the one used in the regression analyses.

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