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Dimensions of morality and their determinants in sport

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ABSTRACT

This paper reviews research examining dimensions of morality and their determinants in sport. Three moral development theories that have guided empirical work in sport are briefly discussed in the first part of the paper. In the second part, research investigating moral issues in sport is reviewed. Initial work examined the effects of sport participation on moral development as reflected on one's level of moral reasoning and the link of the latter to morally relevant attitudes and behaviours. Although this line of research has revealed that some athletes operate at lower levels of moral development than nonathletes, the findings are not consistent across gender, type of sport or competitive level and are therefore inconclusive. Moral reasoning has been associated with judgements about the legitimacy of injurious acts and aggression tendencies and behaviours. More recent work has focused on identifying determinants of morality in sport including sport type, motivational orientation, moral atmosphere, and perceptions of significant others' views regarding moral action. The findings suggest that the level of contact, whether one participates in individual versus team sports, the goals individuals pursue in achievement contexts and perceptions of one's immediate and wider social environment have significant implications for various dimensions of morality including moral reasoning, attitudes towards sportsmanship, moral judgements, intentions and behaviours. Interventions aiming at promoting participants' moral growth through physical activity are also discussed. The paper concludes with directions for future research in the sport domain.

Key words: Determinants of morality, Moral development, Morality in sport.

The adage that sport builds character is popular in society and can be traced at least back to the ancient Olympic games. This belief is based on the premise that sport provides a vehicle for learning to cooperate with teammates, negotiate and give solutions to moral conflicts, develop self-control, display courage, and learn virtues such as fairness, team loyalty, persistence, and teamwork (see Shields & Bredemeier, 1995; Weiss & Bredemeier, 1990). Despite popular beliefs, the idea that sport builds character has been questioned. Ogilvie and Tutko (1971), for example, published an article in the 1970s titled "Sport: If you want to build character, try something else." Furthermore, stories of illegal recruitment, use of performance enhancing

drugs, aggressive behaviours, and acts of cheating are abundant in the sport context.

Although sport has been claimed to be a character builder since ancient times, moral issues in sport have only recently been the subject of empirical investigation. This literature has examined various facets of morality in sport ranging from moral judgement and reasoning to moral intention and action, aggression tendencies, and judgements about the legitimacy of injurious acts. This paper reviews work pertaining to these constructs. To set the stage for the discussion that follows, in the first part of the paper three theoretical approaches to moral development are briefly reviewed, namely the contributions of Kohlberg, Haan, and Rest. Only

the concepts pertinent to the current discussion have been described. The remainder of the paper discusses empirical findings in sport and has been organized into four sections. In the first section, studies dealing with the relationship between sport participation and morality variables are discussed, followed by research examining determinants of dimensions of morality in sport. Then, interventions aiming at promoting moral growth through physical activity are described and the paper concludes with directions for future research.

Theories of moral development

Lawrence Kohlberg

Kohlberg (1969, 1971, 1984) has assumed a structural developmental approach to the study of moral development. Structural developmentalists view moral development as an orderly progression through a number of stages occurring as a result of the interaction between the person and the environment. Further, they differentiate between content and structure: Specific beliefs, thoughts, and values represent the content of thought, while the structure is reflected on the individual's moral reasoning pattern (Shields & Bredemeier, 1995).

Among the significant contributions of Kohlberg's work is the identification of a culturally universal six-stage sequence of moral development. A stage refers to the underlying structure of reasoning, and is an approach to problem solving in situations where moral conflicts arise. Classifying the six stages into three levels, Kohlberg (1969, 1971, 1984) described moral growth as moving from an egocentric through a societal to a universal perspective of distinguishing right from wrong. At the first level, the pre-conventional, the person adopts an egocentric perspective in his or her approach to moral problems, and to give solutions to moral conflicts one gives primary consideration to the self. At this level, the

individual does not comprehend yet the impact of social rules and norms on moral responsibility. At the second level, the conventional, the person approaches moral conflicts through the eyes of one's group or society as a whole. What is right is defined by the norms of one's reference group or society. Finally, at the third level, the postconventional, the individual recognizes universal values such as justice, equality, life, and truthfulness that are not associated with a particular society. Right action is decided based upon self-chosen ethical principles, aside from society's norms and rules. Thus, for Kohlberg moral development is inferred from one's stage of moral reasoning.

Norma Haan

Haan (1978, 1983), also a structural developmentalist, has focused primarily on how people believe they should deal with moral conflicts in daily life. Moral balance, moral dialogue, and moral levels are the three basic concepts of Haan's model. Moral balance refers to an interpersonal state, where all parties involved in a moral situation are in agreement regarding each other's rights and obligations. When people disagree about respective rights and obligations they are in moral imbalance. In this case, the parties involved try to restore moral balance using moral dialogue. The most common form of moral dialogue is verbal negotiation. However, any form of communication, verbal or nonverbal, can be considered moral dialogue as long as its aim is to maintain or restore moral balance (Bredemeier & Shields, 1993).

Haan (1978, 1983) distinguished five levels in the development of moral maturity. Each level reflects a different understanding of the way one reasons about moral conflicts and attempts to achieve moral balance. In the first two levels, the assimilation phase, the person believes that the moral balances construed should give preference to the needs of the self. The person has an egocentric view of morality, not because he or

she is selfish, but because the person is unable to clearly understand the needs and desires of others. Levels 3 and 4 comprise the accommodation phase, in which people seek to give more than they receive, thus priority is given to the needs of others. Finally, at the equilibration phase, the fifth level of moral development, people pay equal attention to the needs and interests of all parties involved in a moral conflict. Thus, similar to Kohlberg's approach, Haan views one's level of moral reasoning as the indicator of moral growth.

James Rest

Rest has assumed a different approach to moral development from those of Kohlberg and Haan. Rest (1984) argued that we need to focus on understanding and explaining moral action, because this is what ultimately matters. According to Rest (1983, 1984), at least four major processes are implicated in each moral action, and a number of factors influence each process. The four processes are: (a) interpreting the situation by recognizing the possible courses of action, and how different actions would influence the welfare of all parties involved, (b) forming a moral judgement about the right thing to do, which involves both moral judgement and moral reasoning (judgement is defined as the individual's decision about what ought to be done, whereas reasoning refers to the criteria the person uses to form a moral judgement), (c) deciding what one actually intends to do by selecting among competing values, and (d) executing and implementing what one intends to do, that is, actual behaviour.

Rest (1983, 1984) proposed that the four processes are dynamic, interact with each other, and are influenced by a number of factors. For example, the process of making a moral decision is influenced by motivational factors and social norms, while actual behaviour is affected by fatigue or distraction as well as factors that physi-

cally prevent someone from carrying out a plan of action. Because of the interactive nature of the four processes, factors proposed to act primarily on one process also indirectly influence the others. Due to the large number of factors influencing the four processes, prediction of moral behaviour is an extremely difficult task (Rest, 1984). Further, deficiency in any of these processes can result in failure to behave morally.

Rest's model is an inclusive model of morality because it attempts to account for all processes that influence moral action. Moral development is seen as gaining competence in all these processes. In Rest's view, moral reasoning reflects only one aspect of moral development and – together with moral judgment – addresses only one component (Component 2) of the model. Although this is an important part, alone it does not tell us the full story about morality. Thus, all components of morality are important to our understanding of moral action.

In sum, both Kohlberg and Haan have distinguished between different levels of moral development based on the criteria one uses to give solutions to moral conflicts (i.e., moral reasoning). Sport research guided by these approaches has also used moral reasoning as the indicator of moral growth. Rest, on the other hand, focused on the processes underlying moral behaviour and proposed that a number of factors influence these processes. Rest's model has particular relevance to the domain of sport and has guided much of the recent work in sport psychological research (e.g., Shields & Bredemeier, 1995). In the next section, research emanating from the above theories is discussed.

Empirical findings in sport

The vast majority of research conducted in sport has been guided by Kohlberg's, Haan's, or Rest's theories. Studies grounded on the first two approaches have examined moral reasoning of athletes participating in various sports or

investigated correlates of moral reasoning in sport, such as aggression tendencies or judgments about the legitimacy of intentionally injurious acts. Other work has examined one or more of the components of morality proposed in Rest's model either with or without reference to Rest's theory. The remainder of this paper reviews this work. First, studies pertaining to the relationship between sport participation, moral reasoning and its correlates are discussed followed by studies examining determinants of dimensions of morality in sport. Then, moral interventions in the physical activity context are described and directions for future research are provided.

Sport participation and morality

Research examining the effects of sport participation on moral development has focused on a comparison between athletes and nonathletes and has examined moral reasoning in sport and daily life contexts. Using Kohlberg's theory, early work (Bredemeier & Shields, 1984; Hall, 1981) found that male and female college basketball players reasoned at a less mature level than college norms and females reasoned at a more mature level than males. Subsequent work (Bredemeier & Shields, 1986a) using Haan's theory, reported that college basketball players demonstrated less mature moral reasoning than nonathletes in response to both life and sport moral dilemmas; such differences, however, were not identified at the high school level. Gender differences also emerged with college and high school females reasoning at a more mature level than males in response to sport dilemmas and high school females reasoning at a more mature level in response to life dilemmas.

The finding that basketball players operate at lower levels of moral reasoning than nonathletes casts serious doubts on the belief that sport builds character. To determine whether the relationship between sport participation and moral reasoning maturity would hold for athletes other

than basketball players, the authors added to the college sample 20 swimmers (Bredemeier & Shields, 1986b). Interestingly, swimmers' life and sport moral reasoning scores did not differ significantly from those of nonathletes and their sport reasoning was more mature than that of basketball players.

These findings show that it is not experience in sport per se that is associated with less mature moral reasoning because differences in moral maturity were not found between swimmers and nonathletes or between high school basketball players and nonathletes. Furthermore, sport participation did not have the same effect on males and females. Perhaps it is the competitive level that matters or the type of interpersonal interaction in one's sport experience (Shields & Bredemeier, 1989). Regarding gender differences, it has been suggested (Bredemeier & Shields, 1986b) that the egocentric aspects of competitive interaction may be embraced more by males than females, because sport traditionally has been a male domain (Oglesby, 1978), and expression and acceptance of physical aggression is viewed as more consistent with the male gender role (Weiss & Bredemeier, 1990). Thus, gender differences appear consistent with the culture of male and female sport.

The studies examining whether athletes differ from nonathletes on moral reasoning maturity are important because they have set the stage for subsequent work on the moral domain of sport. Also, for the first time the adage that sport builds character underwent the scrutiny of empirical investigation. Even though these studies were grounded on structural developmental theory in examining moral maturity in sport and daily life contexts, the issue of the effects of sport participation on character development was not a question derived from theory. This is a limitation of this early work on the moral domain of sport. Furthermore, limiting the study of moral development to the study of moral reasoning does not constitute a holistic approach to the study of morality in sport. As Rest (1984) suggested,

moral reasoning is only one part of the processes underlying moral action. Because moral development should be seen as gaining competence in all processes, a better understanding of moral action in sport necessitates examination of other processes.

Although moral reasoning maturity is important, the bottom line of morality is action. The relationship between participants' moral reasoning maturity and moral behaviour in sport was examined by Bredemeier and Shields (1984), in their study with basketball players. Moral action was examined in the form of athletic aggression, which was operationally defined as initiation of an attack with the intent to injure. Significant relationships were identified between stages of moral reasoning and athletes' aggressive behaviour, that is, athletes who operated at lower levels of moral reasoning were also more likely to be rated as aggressive by their coaches.

Judgements about the legitimacy of intentionally injurious sport acts have also been examined as a function of moral reasoning maturity. Bredemeier (1985) asked male and female college and high school basketball players to judge the legitimacy of certain aggressive behaviours. Athletes with less mature moral reasoning accepted greater number of aggressive acts as legitimate. In a related study (Bredemeier, Weiss, Shields, & Cooper, 1987), children were presented with moral interviews and slides depicting potentially injurious sport behaviours. Boys (but not girls) who displayed less mature moral reasoning also accepted a greater number of injurious acts as legitimate compared to their more mature peers.

In summary, preliminary evidence suggests that some (but not all) sport experiences are associated with lower levels of moral development as reflected on one's level of moral reasoning, the latter being linked to athletes' judgments, behaviours, and tendencies towards aggression. Differences between athletes and nonathletes have not been documented in females, swimmers, or high school basketball players. These

findings are intriguing and suggest that experience in sport per se is not the factor responsible for the less mature moral reasoning levels observed in some athletes. Clearly, other factors inherent or peripheral to the sport experience play an important role in determining various dimensions of morality in sport. It is to these factors that we now turn.

Determinants of morality in sport

Determinants of morality in sport have been the focus of empirical investigation in recent years. Studies have examined a variety of variables ranging from those directly associated with the sport experience such as the type of sport, to personal variables such as motivational orientation, to those residing in the social environment such as moral atmosphere, and perceptions of significant others' views regarding moral action. Because of the complexity of the moral phenomenon, various dimensions of morality have been investigated either independently or in conjunction with one another. Moral reasoning and judgement, legitimacy judgments, moral intention and behaviour are some of the morality variables examined in past work and reviewed in this section.

Type of sport. One of the first studies seeking to identify factors associated with moral reasoning in sport was conducted by Bredemeier and her colleagues (Bredemeier, Weiss, Shields, & Cooper, 1986). These researchers examined whether the level of contact of the sport one is involved bears any importance on morality variables. The variables assessed in this study were moral reasoning maturity and aggression tendencies. Children responded to dilemmas assessing moral reasoning in sport and daily life, completed a paper and pencil measure of aggression tendencies, and reported the number of seasons they had participated in low, medium and high contact sports. Boys' involvement in high contact sports and girls' involvement in

medium contact sports – the highest level of contact girls were involved – were associated with lower levels of moral reasoning (i.e., assimilative) and greater tendencies to aggress in sport and daily life contexts.

In interpreting these findings the authors considered the interaction between the participant and the environment. They reasoned that sports involving higher levels of contact allow rough play that can be perceived as aggressive thereby encouraging aggressive tendencies. These sports may actually impede moral growth because of their informal combat mentality. This mentality discourages altruistic interaction and encourages a negative view of others (Bredemeier et al., 1986), a state of affairs not compatible with the more advanced levels of moral reasoning. These levels are facilitated by the development of concern for other people, altruistic motivation, and a view of others as basically good moral beings. Indeed, extensive involvement in high contact sports was associated with more assimilative levels of moral reasoning (Bredemeier et al., 1986).

An alternative way of classifying sport experience is whether one participates in an individual versus a team sport. Vallerand and his colleagues (Vallerand, Deshaies, & Guerrier, 1997) examined the effect of this type of experience on moral intention. They argued that because team sport athletes are subjected to intra-group influences from fellow teammates and the coach, they are likely to feel pressured to conform and to act in ways to help the team reach the goal of winning. In contrast, individual sport athletes are less likely to feel pressure from others to engage in unsportsmanlike conduct. They spend much more time on their own and have to rely on their own standards when faced with situations involving moral conflict.

Athletes participating in seven individual and team sports were presented with two hypothetical scenarios involving a moral issue. The issues were: (a) informing an official of one's undeserved outcome, and (b) lending equipment to

a fellow competitor, who was one of the favorites in an important meet. Following each scenario, athletes were asked to indicate how they would behave if they were in this situation. The associated costs of acting morally by showing concern for the opponent, namely winning, were also manipulated. In the first scenario, the moral choice entailed a loss whereas in the second scenario the moral choice did not entail a loss. Athletes participating in team sports were less likely to indicate the intention to act morally than individual sport athletes confirming the authors' expectations. Not surprisingly, athletes involved in both types of sports were more likely to show concern for the opponent in the situation that did not entail a loss, and this effect was more pronounced for individual sport athletes.

The results of this study parallel the findings of previous work that has investigated differences in moral reasoning between individual and team sport athletes and nonathletes. As discussed earlier, college basketball players have been found to reason at a lower level than nonathletes (Bredemeier & Shields, 1986a; Hall, 1981). However, no significant differences in moral reasoning have been identified between nonathletes and swimmers, the latter reasoning at a more mature level than basketball players (Bredemeier & Shields, 1986b). Although some evidence suggests that participation in team sports may restrict athletes' moral growth, such conclusions at this point may be premature. These differences have not been confirmed for females and the results may be the outcome of the nature of competitive sport experience in North America, where these studies were conducted. For example, the lucrative awards accompanying winning and the excessive focus of the media on college team sports, especially basketball, may partly account for these findings. Clearly, more research is needed to ascertain the processes involved in the relationship between sport experience and dimensions of morality.

Although the studies examining the effects of type of sport on morality variables revealed

interesting findings, these studies were not based on theory. This is a drawback of this work, but should be anticipated given the fact that this area of research is relatively new and no theoretical developments regarding the effects of type of sport on morality variables have taken place yet. However, the findings of these studies have provided insight into the factors associated with dimensions of morality in sport. The studies reviewed in the next section and the questions they deal with have been grounded on a major motivational theory, namely achievement goal theory.

Motivational orientation. Achievement goal theory posits that to understand behaviour in achievement contexts such as sport we need to understand the intentions of the person (Nicholls, 1984, 1989). Achievement behaviour is considered intentional behaviour. Similarly, moral development theorists agree that moral behaviour is intentional, motivated behaviour (e.g., Blasi, 1980; Kohlberg, 1984; Rest, 1984). Thus, to understand moral behaviour in the achievement context of sport it is essential to consider one's motives.

The motivational factor or energizing force behind achievement behaviour – according to achievement goal theory – is the demonstration of competence. Competence, however, is conceived in two distinct ways, and people develop the tendency to use distinct criteria when they evaluate their competence. Individual differences on the criteria people use to define success and judge competence when they engage in achievement contexts are reflected on the individual's goal orientation and have significant implications for morality in sport.

Two major motivational orientations operate in the context of sport, namely task- and ego-orientation (Duda, 1992, 1993; Nicholls, 1984, 1989). The task-oriented individual tends to use self-referenced criteria to define success and judge competence and feels successful when he or she has achieved learning or mastery of the task. In contrast, the ego-oriented person tends

to use other-referenced criteria to define success and judge competence, and feels successful when he or she has outperformed others. The primary means through which the ego-oriented athlete demonstrates competence is winning. Nicholls (1989) has argued that this focus on demonstrating superiority over others that characterizes ego-oriented people may result in a lack of concern about justice and fairness and the welfare of opponents in a competitive setting.

Goal orientations have been investigated in relation to a variety of morality variables. The first study was conducted by Duda and colleagues (Duda, Olson, & Templin, 1991), who examined judgements about the legitimacy of intentionally injurious sport acts among interscholastic basketball players. Athletes responded to six scenarios depicting aggressive acts in basketball with increasingly serious consequences ranging from nonphysical intimidation to permanently disabling an opponent. Following each scenario, participants were asked if the behaviour was OK (legitimate), if it was necessary in order to win the game. Athletes high in ego-orientation viewed as legitimate acts such as injuring an opponent so that he or she missed a game or was out for the season, as well as nonphysically intimidating the opponent. Similar findings were reported by Kavussanu and Roberts (2001) in a sample of intercollegiate basketball players: Ego-orientation corresponded to the view that physically intimidating an opponent and intentionally knocking the wind out of the opponent so that he or she would need to leave the game for a few minutes are legitimate acts. Gender differences emerged in both studies with females expressing significantly greater disapproval of aggressive acts than did males.

Dunn and Dunn (1999) examined the generalizability of these findings to ice hockey, a sport with higher level of physical contact. Athletes responded to five hockey-specific scenarios portraying intentionally injurious acts by indicating their levels of approval or disapproval of these acts. Ego-orientation was a significant predictor

of all judgements regarding injurious acts. No relationship emerged between task-orientation and legitimacy judgements in any of the studies described above.

Taken together the findings of these studies suggest that athletes whose primary focus is on demonstrating competence in the normative sense by outperforming others also tend to view intentionally injurious sport acts as justified. Because winning establishes the superiority of ego-oriented athletes and confirms their competence, these individuals are expected to do whatever it takes to achieve victory including intentionally injuring an opposing player. The findings have important implications for the behaviours that occur in the sport context. Because ego-oriented athletes are more likely to consider injurious acts as part of the game, they are more likely to engage in such actions. Indeed, previous research has shown that legitimacy judgements predict aggressive behaviour during a competitive basketball season (Ryan, Williams, & Wimer, 1990).

The studies discussed so far have independently examined the role of motivational goal orientation on legitimacy judgments, a dimension of morality relevant to the second component of Rest's model of moral action. However, goal orientation should be expected to influence primarily the decision or intention to behave morally, the third component of Rest's model. Specifically, Rest (1983, 1984) proposed that among the factors that influence moral behaviour are one's motives. Motivation enters the moral behaviour equation at the third process of Rest's model by influencing the decision-making process. Thus, the individual may interpret the situation sufficiently, be able to form a moral judgement regarding what one *ought* to do in a particular situation, but decide not to act morally, because other motives have been activated during the decision-making process. It is easy to see that an athlete, who is motivated primarily to demonstrate superiority over others, may be tempted to choose a behaviour congruent with this goal,

even if this is not consistent with his or her beliefs.

Kavussanu and Roberts (2001) examined the role of achievement goals on three components of Rest's model simultaneously, namely moral judgement, intention, and behaviour. The authors presented American college basketball players with scenarios describing situations involving moral issues likely to be encountered during a basketball game, such as risking injuring an opposing player to prevent a basket, faking an injury, and intentionally injuring an opposing player to take him/her out of the game. Following each scenario, athletes were asked to judge whether it is appropriate to engage in the described behaviours, to indicate whether they would engage in the behaviours, and to report how often they engaged in the behaviours during the previous five games. The higher the athlete's ego-orientation, the more likely he or she was to judge the described behaviours as appropriate, and to report the intention to engage in the behaviours. Ego-orientation was not related to moral behaviour, and no relationship emerged between task-orientation and any of the components of morality.

These findings were corroborated by a second study in a sample of high school Singaporean hockey players (Kavussanu & Rameswaran, 2000). This investigation used the same scenarios in the hockey context and confirmed the link between ego-orientation and judgement and intention. Again, no relationship emerged between ego-orientation and behaviour or between task-orientation and any of the morality variables. Gender differences were revealed in both studies with females displaying higher task- and lower ego-orientation and higher levels of moral judgement, intention and behaviour than males.

This work was extended by a third study in a sample of 222 British college athletes participating in basketball, football, hockey, and rugby (Kavussanu & Ntoumanis, 2002). Participants' mean age was 20 years and they had participated in their respective sport for an average of eight years. This study modified the scenarios to

include a variety of behaviours applicable to the four different sports. Behaviours included violating a rule, risking injuring an opposing player and deliberately hurting an opponent. Judgement, intention and behaviour were assessed following each scenario. The higher the athlete's ego-orientation, the more likely he or she was to judge inappropriate behaviours as appropriate, and report the intention to engage and actual engagement in the behaviours. Task-orientation had small but significant positive effects on all three components of morality.

The findings of the studies described above highlight the importance of motivational goal orientation, ego-orientation in particular, on athletes' moral growth. Striving to accomplish primarily ego-oriented goals may deter individuals from achieving moral maturity. Indeed, a prerequisite for advancing to higher levels of moral development is the individual's ability to equally consider the needs of all the parties involved in a moral conflict as well as one's concern with the welfare of others (Shields & Bredemeier, 1995). The excessive focus on the self and the preoccupation with winning and demonstrating superiority over others that characterize ego-oriented athletes may not be compatible with accomplishing progress in the moral arena.

Motivational orientation may also explain the gender differences on dimensions of morality consistently observed in the sport literature (e.g., Bredemeier & Shields, 1986b; Bredemeier et al., 1986; Hall, 1981). Male athletes tend to report significantly higher ego orientation, lower task-orientation (e.g., Duda et al., 1991; Kavussanu & Rameswaran, 2000; Kavussanu & Roberts, 2001; Williams, 1994) and lower levels of moral functioning than females (e.g., Bredemeier & Shields, 1986a; Kavussanu & Roberts, 2001). These findings – when considered in conjunction with the documented link between ego-orientation and various dimensions of morality – suggest that differences on morality variables may be in part due to the different achievement

goals that male and female athletes tend to adopt. It is worth noting that Rest (1979) does not report major gender differences on general moral development suggesting that one's gender is not a significant variable. Yet, gender differences on various dimensions of morality are persistent in the sport literature in measures of both sport-specific and general moral maturity (Bredemeier & Shields, 1984, 1986a; Hall, 1981; Kavussanu & Roberts, 2001). It appears that extensive sport participation has a differential influence on moral development of males and females, who are socialized to adopt different goal orientations.

It should be noted, however, that although the link between ego-orientation and morality variables has been established, the role of task-orientation is less clear. With the exception of one study (Kavussanu & Ntoumanis, 2002), no relationship between task-orientation and the dimensions of morality considered on this paper has been identified (e.g., Duda et al., 1991; Dunn & Dunn, 1999; Kavussanu & Roberts, 2001; Stephens & Bredemeier, 1996). It appears that task-orientation does not exert a major influence on dimensions of morality. Applying effort, a focus on the task at hand and a concern with fulfilling one's athletic potential are not automatically translated into mature moral functioning. Moral maturity is achieved through social interaction and its occurrence requires the existence of many factors such as sensitivity to others' needs and mature cognitive functioning. A high score on task-orientation could not compensate for such essential qualities.

An important issue examined in the Kavussanu and Ntoumanis (2002) study was whether ego-orientation mediates the relationship between extent of sport involvement and moral functioning as indicated by judgement, intention and behaviour. Sport involvement was assessed by the number of seasons athletes had participated in their respective sport. Using structural equation modeling techniques the authors examined the path between sport experience and moral functioning in the

presence and absence of ego-orientation. The path was .22 and significant in the absence of ego-orientation, but when ego-orientation was introduced in the model the path was reduced to .11 and became nonsignificant, indicating that ego-orientation mediates the relationship between extent of sport involvement and moral functioning.

This finding is important because together with past research (e.g., Bredemeier et al., 1986) points to factors that are key to the relationship between sport participation and morality. Extensive involvement in competitive sport is associated with high ego-orientation (see also White & Duda, 1994) and this variable in turn influences moral functioning in the sport context. Thus, research grounded on achievement goal theory has provided some insight into the motivational processes that operate in the sport realm and are associated with various dimensions of morality. Other theories of motivation such as self-determination theory (Deci & Ryan, 1985) or theory of reasoned action (Ajzen, 1985; Ajzen & Fishbein, 1980) may also be useful in enhancing our understanding of these processes. Future work should consider other motivational theories when examining moral issues in sport.

Moral atmosphere. One of the important factors that have been recently linked to morality in sport is the moral atmosphere of the team. The concept of moral atmosphere was originally described by Kohlberg and his associates (Higgins, Power, & Kohlberg, 1984; Kohlberg & Higgins, 1987; Power, Higgins, & Kohlberg, 1989), who investigated school and prison environments to determine the influence of the group norms of these settings on moral reasoning and behaviour. As a result of the interaction among group members, groups develop their own culture and a shared understanding of what constitutes appropriate behaviour. These shared group norms define the moral atmosphere of a group (Power et al., 1989). Moral atmosphere therefore involves a set of collective norms regarding moral action on the part of group members

(Power et al., 1989).

This aspect of Kohlberg's work is particularly applicable to sport settings. For example, in a football or basketball team certain philosophies are developed regarding what is appropriate behaviour in that context. These philosophies are developed over time and are partly the outcome of characteristics of the coach and team members. Teammates' perceptions of their peers' choices in situations that give rise to moral conflict are also part of the moral atmosphere. These collective norms are presumed to influence moral decision-making and subsequent behaviour (Higgins et al., 1984; Shields & Bredemeier, 1995).

To date, several studies have investigated moral atmosphere in relation to dimensions of morality. Initial research focused on moral action operationally defined as self-described likelihood to aggress against an opponent. Stephens and Bredemeier (1996) presented young female football players with an aggression scenario featuring a hypothetical protagonist, who was faced with the decision of tackling an opponent from behind thereby risking injuring her. Athletes were asked to imagine themselves in this situation and indicate how likely they would be to tackle from behind. Moral atmosphere was assessed based on athletes' perceptions of the number of teammates being willing to engage in the behaviour, and perceived characteristics of the coach, namely goal orientation. The strongest predictor of self-described likelihood to aggress against an opponent among a number of motivational and moral variables was athletes' perceptions that a large number of their teammates would behave accordingly. Perceptions of the coach emphasizing ego-oriented goals also emerged as a significant predictor of likelihood to aggress.

These findings were corroborated by a second study (Stephens, 2000) designed to replicate and extend this work to athletes participating in coed and all girls and boys football leagues. Players' perceptions of their team's pro-aggressive norms were again the main predictor

of reported likelihood to aggress for boys and girls in the coed leagues and for girls in the all girls league. Perceived coach goal orientation also emerged as a significant predictor of reported likelihood to aggress against an opponent in all-girls league.

Moral atmosphere has recently been examined in relation to multiple components of morality, namely moral judgment, intention and behaviour (Kavussanu & Rameswaran, 2000). Inter-scholastic hockey players responded to scenarios describing behaviours such as pushing an opposing player, risking injury and deliberately injuring an opposing player, and were asked to judge whether these behaviours are appropriate, to indicate their intention to engage and to report frequency of engagement in the behaviours (Kavussanu & Rameswaran, 2000). Two aspects of the moral atmosphere were assessed, the atmosphere created by the coach and the atmosphere created by the teammates. When athletes perceived their coach encouraging the described behaviours and a large number of teammates willing to engage in the behaviours, they were more likely to judge the behaviours as appropriate, to report the intention to engage and greater frequency of engagement in the behaviours.

Similar findings were reported in a study with 199 basketball players (Kavussanu, Roberts, & Ntoumanis, 2002), aged 17-25, and competing in Divisions I-III of intercollegiate sport in the United States of America. At the time of data collection, these athletes had participated for an average of nine years in competitive basketball. Athletes responded to scenarios describing behaviours such as pushing an opposing player to intimidate him or her, faking an injury, and risking injuring an opposing player. Again, both aspects of moral atmosphere were strongly associated with moral judgement, intention and behaviour.

Thus, moral atmosphere of the team appears to have a profound influence on athletes' moral functioning. The findings of the studies conducted so far are unequivocal: The context within

which moral behaviours are performed is critical. The findings suggest that the roots of unsportsmanlike conduct encountered in the sport domain may reside within one's own athletic team. Many of the inappropriate actions we observe in the sport realm may be the result of certain social norms that become predominant in each team over time thereby reinforcing unsportsmanlike conduct. Eliminating such behaviours from the sport arena may be difficult because they become part of the norms of behaviour. However, interventions that involve educating coaches and athletes about the important role they play in maintaining the integrity of the sport institution may be promising.

Stephens and Bredemeier (1996) have proposed that every team develops a unique moral atmosphere within which decisions are made about proper behaviours in certain situations. They suggest that this moral atmosphere should be viewed as a dynamic process with a number of variables interacting with each other in this process. The competitive structure of the league, the nature of the sport, the motivational orientation of the coaches, parents and players, the cumulative experiences of athletes who make up the team and the leadership style of coaches are some of these variables. Indeed, research has shown that expectations of peer cheating and aggression and the belief that the coach would sanction cheating, if it was necessary for the team to win have been linked to an autocratic leadership style among softball and baseball players (Shields, Bredemeier, Gardner, & Bostrom, 1995). In addition, team norms supporting low levels of moral functioning have been associated with basketball players' perceptions that a performance motivational climate is predominant in one's team (Kavussanu et al., 2002).

Significant others. In addition to the moral atmosphere of the team, the wider social environment made up of significant others plays an important role on moral action. Stuart and Ebbeck (1995) examined multiple components of morality among young basketball players.

Athletes were presented with basketball-specific moral dilemmas, describing behaviours such as injuring another player to prevent a basket, cursing an opposing player and pushing an opposing player when the referees are not looking. Judgement, reason – defined as the importance athletes placed on various reasons in deciding whether to engage in the behaviours –, intention, and behaviour were assessed across the dilemmas. Participants were also asked about their perceptions of how their mother, father, coach and teammates viewed the behaviours. When athletes perceived that significant others in their immediate environment approved the behaviours, they judged these actions as appropriate and indicated the intention to engage in the described behaviours. In older (but not younger) children (i.e., grades 7 and 8) dimensions of perceived social approval were also related to reason and behaviour. Thus, older children who perceived that significant others in their environment approved the behaviours described in the dilemmas gave less mature reasons for making a moral decision, and were rated by coaches as engaging in the behaviours more frequently.

In this study, significant others included coach and teammates in addition to one's parents. Perceptions of coach and teammates' views regarding moral behaviour parallel the construct of moral atmosphere described previously. These perceptions concern the social norms regarding moral action predominant in one's athletic team. A team establishing that it is appropriate to injure opposing players and reinforcing this norm could influence the judgement process of each player and as a result subsequent decision-making and behaviour (Stuart & Ebbeck, 1995).

It appears that the responsibility for moral action lies to a large extent in the hands of significant others including coaches. Significant progress can be achieved in the sport context, if coaches decide to actively promote moral action. For example, coaches could organize dis-

cussions about dilemmas and create opportunities for moral dialogue (Haan, 1978). In addition, coaches can build dilemmas into their motor skill curriculum by creating situations involving moral conflicts such as taking unfair advantage or cheating or intentionally injuring opponents, and encourage moral dialogue in response to these situations. These types of interventions have been implemented in past work in the physical activity context and have been shown to be efficacious (e.g., Bredemeier, Weiss, Shields, & Shewchuk, 1986; Romance, Weiss, & Bockoven, 1986).

In a related study, Vallerand and his colleagues (Vallerand, Deshaies, Cuerrier, Pelletier, & Mongeau, 1992) presented 1056 athletes with two hypothetical situations portraying moral conflict and asked them to indicate whether they would engage in the described behaviours. The situations were (a) criticizing an official for having made a bad call that cost the athlete the event and (b) informing the official of one's undeserved outcome, which if told would cost the athlete the event. Athletes' perceptions of significant others' views of what the athlete should do in these situations were assessed. Significant others included father, mother, teammates, friends, coach and physical education teacher. In addition, athletes' perceptions of important (to them) people views regarding what the athlete should do (subjective norms) and attitudes toward the behaviour were assessed. Using structural equation modeling techniques the authors showed that attitudes and subjective norms had significant direct effects on moral intention. Perceptions of significant others' views regarding moral action also influenced intention through attitudes and subjective norms.

The findings of these studies (Stuart & Ebbeck, 1995; Vallerand et al., 1992) underscore the importance of the social environment in determining moral action. Through interaction with significant others such as parents, teachers, coaches, and peers, individuals learn what is appropriate behavioural conduct and over time they

develop relevant beliefs (Vallerand et al., 1992). These beliefs influence moral behavioural intention. Thus, it appears that one's moral inclination may reside in the social environment. However, it should be noted that it is one's perceptions of the social environment rather than significant others that determine the person's attitudes and subjective norms toward moral behaviours. The person, therefore, plays an active role in the potential influence of significant others.

In summary, a variety of factors play an important role on dimensions of morality. Extensive participation in high contact sports for boys and medium contact sports for girls was associated with less mature moral reasoning, while athletes participating in team sport indicated less concern for the opponent than individual sport athletes. Ego-orientation has been linked to judgements about the legitimacy of intentionally injurious acts, and low levels of moral judgement, intention and behaviour in sport. Further, this motivational goal has been found to mediate the relationship between extent of sport involvement and moral functioning. Finally, athletes' perceptions of both their immediate and wider social environment are critical: What significant others think about moral behaviour and how teammates are perceived to behave in a situation of moral conflict are essential determinants of dimensions of morality in sport.

Moral interventions in physical activity contexts

A number of studies have investigated the efficacy of theoretically grounded moral interventions in promoting moral growth through physical activity. This work has typically assigned children into experimental and control groups and investigated the effects of educational strategies based on moral development theory on various dimensions of morality. Moral reasoning, judgement, intention, and behaviour are some of the dependent variables examined. These studies

have revealed promising findings; part of this work is briefly discussed in this section.

Bredemeier and her colleagues (Bredemeier et al., 1986) conducted a field experiment in order to investigate the effectiveness of a moral development programme in promoting moral growth of children aged 5-7 years old participating in a summer sports camp. Children were assigned to one of three conditions: a structural developmental group, a social learning group and a control group. The intervention lasted six weeks and showed that both treatment groups improved their level of moral reasoning compared to the control group.

Gibbons, Ebbeck, and Weiss (1995) also conducted a field experiment, in which they investigated whether educational activities selected from a curriculum emphasizing fair play would influence moral development. Children in grades 4 through 6 were assigned to one of three conditions: fair play during physical education, fair play during all school subjects, and a control group. Based on Rest's (1984) model of moral action, the researchers assessed moral judgement, reason, intention, and prosocial behaviour. Both treatment groups were significantly higher than the control group at posttest for moral judgment, reason and intention, but not prosocial behaviour.

In a similar study, Gibbons and Ebbeck (1997) examined the effectiveness of social learning and structural developmental teaching strategies on moral development of physical education students in grades 4, 5, and 6. Children were assigned to a social learning, structural developmental or control group. Both treatment groups scored significantly higher on moral judgement, intention and behaviour than the control group. These findings provide support for the effectiveness of both structural developmental and social learning teaching strategies on the moral development of children in physical education.

Thus, there is evidence to suggest that instructional strategies grounded on moral devel-

opment theory can be efficacious in promoting moral growth of children participating in sports camps and in physical education. These findings are important in indicating that physical education can be structured in a manner that promotes moral growth. However, these findings cannot be generalized to competitive sport. Although sport and physical education share many common features, they also differ considerably in others. For example, the social experiences athletes have in sport and the moral issues they face are quite distinct from those encountered in physical education. To date, no studies exist to verify the efficacy of interventions designed to promote moral development through sport. This is a fruitful avenue for future research.

Directions for future research

Although research has provided interesting findings regarding the link between sport participation and moral functioning, and some determinants of dimensions of morality in sport have been identified, many questions remain to be answered. For example, do differences in moral reasoning between athletes and nonathletes exist in other types of sports and other competitive levels besides college basketball? More sports need to be explored before we generalize current findings. What is the influence of extensive involvement in sports that have different levels of interaction among participants? For instance, coactive sports such as rowing offer much less opportunity for interaction among team members than highly interactive sports such as basketball or football.

Research is needed to identify aspects of the sport experience that are related to the processes involved in moral thought and action. For example, the level of task and social cohesion or the leadership style of the coach may facilitate or impede moral growth. An autocratic coaching style has been linked to perceptions of

peer aggression in baseball and softball (Shields et al., 1995), while perceptions of team norms supporting cheating and aggression have been associated with a performance motivational climate in basketball (Kavussanu et al., 2002). Future work should determine the role of the coaches' goal orientation, and their philosophy and coaching style on athletes' moral functioning. In particular, whether coaches are more autocratic rather than democratic, and more ego-rather than task-oriented might be related to the moral judgements and behaviours of athletes, and to the perception of the moral atmosphere of the team.

Other factors relevant to the wider social environment need to be investigated in relation to dimensions of morality. For example, it is worth noting that even though it is generally agreed that the mass media play a major role in shaping individuals' attitudes and behaviours, very little empirical evidence exists to verify the extent and nature of their influence on athletes' moral attitudes and behaviours. Finally, researchers need to move towards a holistic examination of morality considering multiple components, their interrelationships and the factors that influence them. We need to simultaneously consider the impact of both personal and contextual / environmental factors and unravel the relative influence of these variables on dimensions of morality.

References

- Ajzen, I. (1985). From intentions to actions: A theory of planned behaviour. In J. Kuhl & J. Beckmann (Eds.), *Action-control: From cognition to behavior* (pp. 11-39). Heidelberg, Germany: Springer.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice Hall.
- Blasi, A. (1980). Bridging moral cognition and moral action: A critical review of the literature.

- Psychological Bulletin*, 88, 1-45.
- Bredemeier, B. J. (1985). Moral reasoning and the perceived legitimacy of intentionally injurious sport acts. *Journal of Sport Psychology*, 7, 110-124.
- Bredemeier, B. J., & Shields, D. L. (1984). The utility of moral stage analysis in the investigation of athletic aggression. *Sociology of Sport Journal*, 1, 138-149.
- Bredemeier, B. J., & Shields, D. L. (1986a). Moral growth among athletes and nonathletes: A comparative analysis. *Journal of Genetic Psychology*, 147, 7-18.
- Bredemeier, B. J., & Shields, D. L. (1986b). Game reasoning and interactional morality. *Journal of Genetic Psychology*, 147, 257-275.
- Bredemeier, B. J., & Shields, D. L. (1993). Moral psychology in the context of sport: In R. Singer, M. Murphey, & L. L. Tennant (Eds.), *Handbook of research in sport psychology* (pp. 587-599). New York: MacMillan.
- Bredemeier, B. J., Weiss, M. R., Shields, D. L., & Cooper, B. (1986). The relationship of sport involvement with children's moral reasoning and aggression tendencies. *Journal of Sport Psychology*, 8, 304-318.
- Bredemeier, B. J., Weiss, M. R., Shields, D. L., & Cooper, B. (1987). The relationship between children's legitimacy judgments and their moral reasoning, aggression tendencies, and sport involvement. *Sociology of Sport Journal*, 4, 48-60.
- Bredemeier, B. J., Weiss, M. R., Shields, D. L., & Shewchuk, R. M. (1986). Promoting moral growth in a summer sport camp: The implementation of theoretically grounded instructional strategies. *Journal of Moral Education*, 15, 212-220.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Duda, J. L. (1992). Motivation in sport settings: A goal perspective approach. In G. C. Roberts (Ed.), *Motivation in sport and exercise* (pp. 57-92). Champaign, IL: Human Kinetics.
- Duda, J. L. (1993). A social cognitive approach to the study of motivation in sport. In R. N. Singer, M. Murphey, & L. K. Tennant (Eds.), *Handbook on research in sport psychology* (pp. 421-436). New York: MacMillan.
- Duda, J. L., Olson, L. K., & Templin, T. J. (1991). The relationship of task and ego orientation to sportsmanship attitudes and the perceived legitimacy of injurious acts. *Research Quarterly for Exercise and Sport*, 62, 79-87.
- Dunn, J. G. H., & Dunn, J. C. (1999). Goal orientations, perceptions of aggression, and sportspersonship in elite male youth ice hockey players. *The Sport Psychologist*, 13, 183-200.
- Gibbons, S. L., Ebbeck, V., & Weiss, M. R. (1995). Fair play for kids: Effects on the moral development of children in physical education. *Research Quarterly for Exercise and Sport*, 66(3), 247-255.
- Gibbons, S. L., & Ebbeck, V. (1995). The effect of different teaching strategies on the moral development of physical education students. *Journal of Teaching in Physical Education*, 17, 85-98.
- Haan, N. (1978). Two moralities in action contexts: Relationship to thought, ego regulation, and development. *Journal of Personality and Social Psychology*, 32, 255-270.
- Haan, N. (1983). An interactional morality of everyday life. In N. Haan, R. Bellah, P. Rabinow, & W. Sullivan (Eds.), *Social science as moral inquiry* (pp. 218-250). New York: Columbia University Press.
- Hall, E. R. (1981). *Moral development levels of athletes in sport specific and general social situations*. Unpublished doctoral dissertation, Texas Woman's University, Denton.
- Higgins, A., Power, C., & Kohlberg, L. (1984). The relationships of moral judgment to judgments of responsibility. In W. Kurtinez & J. Gewirtz (Eds.), *Morality, moral behavior, and moral development* (pp. 74-106). New York: Wiley.
- Kavussanu, M., & Ntoumanis, N. (2002). *Participation in sport and moral functioning: Do ego orientation mediate their rela-*

- tionship? Manuscript submitted for publication.
- Kavussanu, M., & Rameswaran, R. (2000, May). *The relationship between goal orientations and moral functioning in hockey players*. Paper presented at the Sport Psychology Conference in the New Millennium, Halmstad, Sweden.
- Kavussanu, M., & Roberts, G. C. (2001). Moral functioning in sport: An achievement goal perspective. *Journal of Sport and Exercise Psychology*, 23, 37-54.
- Kavussanu, M., Roberts, G. C., & Ntoumanis, N. (2002). Contextual influence on moral functioning of college basketball players. *The Sport Psychologist*, 16, 347-367.
- Kohlberg, L. (1969). Stage and sequences: The cognitive developmental approach to socialization. In D. A. Goslin (Ed.), *Handbook of socialization theory and research* (pp. 347-380). Chicago: Rand McNally.
- Kohlberg, L. (1971). Stages of moral development as a basis of moral education. In M. Beck, B. S. Crittenden, & E. V. Sullivan (Eds.), *Moral education: Interdisciplinary approaches* (pp. 23-92). Toronto, Canada: University of Toronto Press.
- Kohlberg, L. (1984). *Essays on moral development: Vol. 2. The psychology of moral development*. San Francisco: Harper & Row.
- Kohlberg, L., & Higgins, A. (1987). School democracy and social interaction. In W. Kurtines & J. Gewirtz (Eds.), *Moral development through social interaction* (pp. 102-128). New York: Wiley.
- Nicholls, J. G. (1989). *The competitive ethos and democratic education*. Cambridge, MA: Harvard University Press.
- Nicholls, J. G. (1984). Achievement motivation: Conceptions of ability, subjective experience, mastery choice and performance. *Psychological Review*, 91(3), 328-346.
- Ogilvie, B., & Tutko, T. (1971). Sport: If you want to build character try something else. *Psychology Today*, 5, 60-63.
- Oglesby, C. (1978). The masculinity-femininity game: Called on account of! In C. Oglesby (Ed.), *Women and sport: From myth to reality*. Philadelphia: Lea & Febiger.
- Power, C., Higgins, A., & Kohlberg, L.A. (1989). *Lawrence Kohlberg's approach to moral education*. New York: Columbia University Press.
- Rest, J. R. (1979). *Development in judging moral issues*. Minneapolis MN: University of Minnesota Press.
- Rest, J. R. (1983). Morality. In P. Mussen (Series Ed.), J. Flavell & E. Markman (Vol. Eds.), *Handbook of child psychology: Vol. 3. Cognitive development* (4th ed., pp. 356-629). New York: Wiley.
- Rest, J. R. (1984). The major components of morality. In W. Kurtines & J. Gewirtz (Eds.), *Morality, moral behavior, and moral development* (pp. 356-429). New York: Wiley.
- Romance, T. J., Weiss, M. R., & Bockoven, J. (1986). A program to promote moral development through elementary physical education. *Journal of Teaching in Physical Education*, 5, 126-136.
- Ryan, M. K., Williams, J. M., & Wimer, B. (1990). Athletic aggression: Perceived legitimacy and behavioral intentions in girls' high school basketball. *Journal of Sport and Exercise Psychology*, 12, 48-55.
- Shields, D. L., & Bredemeier, B. J. (1989). Moral reasoning, judgment, and action. In J. Goldstein (Ed.), *Sports, games, and play: Social and psychological viewpoints* (pp. 59-81). Hillsdale, NJ: Erlbaum.
- Shields, D. L., & Bredemeier, B. J. L. (1995). *Character development and physical activity*. Champaign, IL: Human Kinetics.
- Shields, D. L., Bredemeier, B., Gardner, D., & Bostrom, A. (1995). Leadership, cohesion, and team norms regarding cheating and aggression. *Sociology of Sport Journal*, 12, 324-336.
- Stephens, D.E. (2000). Predictors of likelihood to aggress in youth soccer: An examination of coed and all-girls teams. *Journal of Sport Be-*

- havior, 23, 311-325.
- Stephens, D. E., & Bredemeier, B. J. L. (1996). Moral atmosphere and judgments about aggression in girls' soccer: Relationships among moral and motivational variables. *Journal of Sport and Exercise Psychology, 18*, 158-173.
- Stuart, M., & Ebbeck, V. (1995). The influence of perceived social approval on moral development in youth sport. *Pediatric Exercise Science, 7*, 270-280.
- Vallerand, R. J., Deshaies, P., & Cuerrier, J. P. (1997). On the effects of the social context on behavioral intentions of sportsmanship. *International Journal of Sport Psychology, 28*, 126-140.
- Vallerand, R. J., Deshaies, P., Cuerrier, J. P., Pelletier, L. G., & Mongeau, C. (1992). Ajzen and Fishbein's theory of reasoned action as applied to moral behavior: A confirmatory analysis. *Journal of Personality and Social Psychology, 62*(1), 98-109.
- Weiss, M. R., & Bredemeier, B. J. (1990). Moral development in sport. *Exercise and Sport Science Reviews, 18*, 331-378.
- White, S. A., & Duda, J. L. (1994). The relationship of gender, level of sport involvement, and participation motivation to task and ego orientation. *International Journal of Sport Psychology, 25*, 4-18.
- Williams, L. (1994). Goal orientations and athletes preferences for competence information sources. *Journal of Sport and Exercise Psychology, 16*, 416-430.