

After-school sport for children: Implications of a task-involving motivational climate

Duda, Joan; Ntoumanis, Nikolaos

Citation for published version (Harvard):

Duda, J & Ntoumanis, N 2005, After-school sport for children: Implications of a task-involving motivational climate. in *Organised activities as contexts of development: Extracurricular activities, - after-school and community programs*.

[Link to publication on Research at Birmingham portal](#)

General rights

Unless a licence is specified above, all rights (including copyright and moral rights) in this document are retained by the authors and/or the copyright holders. The express permission of the copyright holder must be obtained for any use of this material other than for purposes permitted by law.

- Users may freely distribute the URL that is used to identify this publication.
- Users may download and/or print one copy of the publication from the University of Birmingham research portal for the purpose of private study or non-commercial research.
- User may use extracts from the document in line with the concept of 'fair dealing' under the Copyright, Designs and Patents Act 1988 (?)
- Users may not further distribute the material nor use it for the purposes of commercial gain.

Where a licence is displayed above, please note the terms and conditions of the licence govern your use of this document.

When citing, please reference the published version.

Take down policy

While the University of Birmingham exercises care and attention in making items available there are rare occasions when an item has been uploaded in error or has been deemed to be commercially or otherwise sensitive.

If you believe that this is the case for this document, please contact UBIRA@lists.bham.ac.uk providing details and we will remove access to the work immediately and investigate.

After-school sport for children:
Implications of a task-involving motivational climate

Joan L. Duda

Nikos Ntoumanis

The University of Birmingham

Contact author: Professor Joan L. Duda, School of Sport and Exercise Sciences, The University of Birmingham, Edgbaston, B15 2TT, UK. Tel: +44 121 414 2737, E-Mail: J.L.Duda@bham.ac.uk

Chapter to be published in J.L. Mahoney, J. Eccles, and R. Larson (Eds.), After school activities: Contexts of development. Lawrence Erlbaum Publishers.

It could be argued that youth sport is one of the most pervasive and popular activities engaging girls and boys in their “free time” in contemporary American society. Youth sports are those involving young people between the ages of 6 to 18 years that are adult organized and/or supervised. After-school youth sports encompass extracurricular (interscholastic) athletic activities, agency-sponsored community sports (e.g., Little League), club sports, and recreational sport programs organized by recreation departments.

Less than 20 years ago, it was estimated that 25 million out of approximately 47 million youngsters participated in some type of organized/supervised youth sport in the United States. Today, participation estimates suggest that 47 million boys and girls (from what census data indicate to be a population of close to 52 million) have joined, at one point or another, an after-school sport program (Ewing & Seefeldt, 2002). Although more boys still engage in after-school sport than girls, the greater involvement of females in sport over the past two decades has certainly contributed to the observed increase in overall participation percentages. With respect to other issues of diversity, the world of after-school sport is multi-racial/ethnic with young people from various cultural backgrounds represented among participants. Females of color, however, have been found to be particularly under-represented in both interscholastic and agency-sponsored youth sport programs (Ewing & Seefeldt, 2002).

Only about 14% of all children and adolescents who participate in sport in the U.S. are members of interscholastic athletic teams (which take place before or after classes but within the school setting). The largest number of youth participants are engaged in an agency-sponsored sport program. Indicating a potential growing significance of after-school sport in young people’s lives, this increase in engagement in organized, community sport programs in recent years is coupled with a decrease involvement in spontaneous, unsupervised free-play types of activities (Ewing & Seefeldt, 2002). One cannot help but wonder about the possible

implications of such differential trends for how youngsters are now being socialized via their experiences in the physical domain. Moreover, as those who are more physically able are more likely to “feel at home” in organized sport programs (perhaps due to their more competitive features; Roberts, 1984), the ramifications of the enhanced attractiveness of after-school sport activities (in contrast to the seemingly diminished appeal of informal physical activities and games) for the development and long-term involvement of *all* children has yet to be determined.

Importance of after-school sport in American culture

There is no question that sport is considered to be a valued achievement domain among U.S. youth and in society at large. Further, to be known within one’s peer networks as “a good athlete” is a central contributor to social status, especially in the case of boys. It is believed that involvement in organized sport activities allows young people to learn (in a presumed “safe” environment) many of life’s lessons and develop desired attributes within the mainstream society (Smoll & Smith, 2002). Engagement in after-school sport programs is supposed to promote boys’ and girls’ moral functioning, self-discipline, ability to work with others, and capacity to compete and effectively cope with success as well as failure.

There are those who argue for reducing the opportunity for physical activity within a youngster’s day (particularly during her/his school day) because the academic progress of girls and boys is reduced when children or adolescents spend more time in physical education or after-school sport. (Lindner, 1999; Shephard, 1997). However, although the positive associations that have emerged to date are weak and there are uncertainties regarding cause-effect, evidence does suggest that sport participation (or quality PE curricular offerings) does not necessarily diminish academic performance and is sometimes associated with greater classroom achievement (Lindner, 1999; Shephard, 1997). It has been suggested that any positive interdependencies between sport/physical activity engagement and academic

accomplishment is probably a result of indirect effects of participation on young people's self esteem and physical health (Barnett, Smoll, & Smith, 1992; Tremblay, Inman, & Willms, 2000; Whitehead & Corbin, 1997).

One purported aim of after-school sport involvement is the promotion of children's and adolescents' fitness and health and their adoption of an active lifestyle (Smoll & Smith, 2002). Active youth are less likely to smoke than their inactive peers and more likely to have a lower body-mass index (Tremblay et al., 2000). In contrast, sedentary behavior during childhood and adolescence has been linked to a number of risk factors for cardiovascular disease and the etiology of type II diabetes (e.g., obesity, hypertension, elevated blood lipids; Gutin, Islam, Manos, Cucuzzo, Smith, & Stachura, 1994; Raitakari, Pokka, Taimela, Telema, Rasanen, & Viikari, 1994). Although there is a dearth of longitudinal, methodologically sound studies on this issue, it is assumed that active boys and girls will be more likely to grow into active men and women – especially if their engagement in sport and physical activity is enjoyable and competence enhancing (Trudeau, Laurencelle, Tremblay, Rajic, & Shephard, 1998).

After-school sport: Wondrous possibilities or lost promise?

A perusal of the extensive literature on the psychological and physical implications of youth sport participation, however, quickly calls any uncritical and unwavering advocating of such involvement into question (Gould & Weiss, 1987; Smoll & Smith, 2002). As Martens pointed out a number of years ago (Martens, 1978), there can be joy but also sadness in young people's sport pursuits. For example, at times engagement in after-school sport appears to contribute to character building while, in other instances, youth sport seems to be developing "characters" with heightened aggressive tendencies and lower sportpersonship (Shields & Bredemeier, 1995). For many youngsters, the sport experience brings considerable enjoyment (Scanlan & Simons, 1993) while for others, involvement in after-school sport activities is plagued by debilitating anxiety (Scanlan, 1984).

Theoretical framework: The implications of achievement goals

In essence, the existent literature centered on the psychological implications of after-school sport involvement for young people suggests that arguing that youth sport is good or bad is very simplistic. The answer to such debates, it seems, is “it depends!” That is, the potential consequences of involvement in after-school sport seem to be a function of how the psychological environment in that context is structured and the manner in which young athletes process that environment.

One theoretical framework that can foster understanding of differential interpretations of and responses to after-school sport among young people is achievement goal theory (AGT; Ames, 1992; Dweck, 1999; Nicholls, 1989). Over the past decade, achievement goal theory has become a predominant conceptualization employed by motivation psychologists to investigate the meaning and ramifications of youth sport activities (Treasure, 2001; Duda, 2001; Roberts, 2001). In short, this theory focuses on the antecedents and motivational consequences of task and ego goals.

Concepts of task and ego involvement. It is generally held that the achievement goal framework is applicable to settings in which perceptions of competence are relevant to achievement striving (Nicholls, 1989). A plethora of studies, stemming from a variety of models of motivation, have indicated that one’s level of perceived ability is salient in athletic settings, including the particular context of youth sport (Roberts, 1984, 2001). Achievement goal theory assumes that, besides perceptions of ability, it is critical to consider how individuals judge their level of competence (Nicholls, 1984, 1989). Nicholls (1984), in particular, proposed that there are two major ways of judging ability, which, in turn, underpin task versus ego achievement goals. When in a state of task involvement (i.e., when focused on a task goal), young athletes process their ability in a self-referenced manner: they feel competent and, therefore, successful with respect to goal accomplishment when realizing

learning, personal improvement, task mastery, and/or doing one's best. When ego-involved, a young sport participant would feel a sense of (high) competence and subsequent subjective success when she/he exhibited superior ability compared to others by either outperforming others or performing equivalently but with less effort. Central to the predictions emanating from achievement goal theory is the premise that these states of task and ego involvement entail qualitatively different ways of experiencing achievement endeavors such as after-school sport (Duda & Hall, 2001). This is because the concerns of a task- versus ego-involved young athlete are dissimilar (i.e., developing and improving one's competence versus displaying or proving one's ability).

Achievement goal theory (Ames, 1992; Dweck, 1999; Nicholls, 1989) also assumes that a focus on task-involved goals will correspond to adaptive achievement patterns (e.g., exerting effort in training and competitions, maintaining one's involvement in sport, performing optimally given one's level of sport ability), regardless of whether youngsters are confident of their athletic abilities or question their competence. At least with respect to short-term, achievement-related indices (see Duda, 2001, for further discussion of this issue), an emphasis on ego-involved goals is expected to link to positive cognitions, emotions, and behaviors. When an ego goal focus is coupled with perceptions of low ability, however, maladaptive achievement patterns in after-school programs are hypothesized (e.g., not giving one's best effort, performance impairment, dropping out of sport). Overall, these predictions emanating from AGT have been supported in research conducted in youth sport settings (see Duda, 1996, 2001; Roberts, 2001, for reviews of this literature).

Individual differences. One factor that is presumed to impact whether it is more or less likely that someone engaging in sport is more or less task- and/or ego-involved is their dispositional goal orientation (Nicholls, 1989): Sport participants are assumed to vary with respect to their degree of task and ego orientation. Instruments, such as the Task and Ego

Orientation in Sport Questionnaire (TEOSQ; Duda, 1989; Duda & Nicholls, 1992) and the Perceptions of Success Questionnaire (POSQ; Roberts, Treasure, & Balague, 1998), have been developed to tap individual differences in the criteria underlying subjective success in the sport domain. In general, in any typical after-school sport program, we would find youngsters who are high in both orientations, high in one orientation and low in the other, or low in both orientations (Duda, 2001; Duda & Whitehead, 1998). Being low task- and low ego-oriented implies that an individual is *not* particularly interested in demonstrating competence in sport – whether that competence is self- or other-referenced (Duda, 2001). Thus, we would not expect to find many low task and low ego orientation children and adolescents participating in organized, competitive sport programs. If such young people are currently engaged in after-school sport, we would predict that their participation will *not* be long-standing.

The motivational climate

Children's and adolescents' dispositional goal orientations do not develop in a vacuum. Achievement goal theorists (e.g., Ames, 1992; Nicholls, 1989) assume that the social psychological environments that surround young people “give out messages” that make them more or less concerned about improving/developing (as reflected in an emphasis on task goals) or proving/protecting (as reflected in an emphasis on ego goals) their level of competence. Ames (1992), in particular, spearheaded the conceptualization and our appreciation of the consequences of situationally-emphasized goals or what she referred to as the *motivational climate*. In her view, these climates created by significant others (such as teachers, coaches) can be more or less task- and/or ego-involving (which Ames refers to as a *mastery* or *performance* climate, respectively). Perceived motivational climates, or prevailing psychological atmospheres, are held to be multi-faceted and encompass such situational structures as the standards of and criteria underlying evaluation and the manner in which that

evaluation is carried out, the bases of recognition and the way in which individuals are recognized, the source(s) of decision-making and authority, the presentation and structuring of tasks, and the manner in which individuals are grouped and the type of individual-to-individual and individual-to-group interactions that are reinforced.

Research on achievement goals in sport has examined the motivational climate created by mainly two influential social agents, coaches and parents. With regard to the perceived climate created by coaches, Newton, Duda and Yin (2000) proposed a hierarchical multidimensional model and instrument (Perceived Motivational Climate in Sport Questionnaire-2; PMCSQ-2) to assess perceptions of task- and ego-involving climates. At the apex of this model are two higher-order factors measuring task- and ego-involving climates, each of these underpinned by three lower-order factors. The lower-order factors of task-involving climate are cooperative learning, coaches' emphasis on athletes' effort/improvement, and athletes' feeling that everybody has an important role on the team. With respect to the ego-involving climate, the underlying facets of the psychological environment are intra-team member rivalry, unequal recognition by the coach, and athletes' punishment for mistakes, it is important to examine its psychometric validity with children and adolescents only.

Parents also play an important influential role in youth sport by fostering and encouraging task- or ego-involving criteria for success. Duda and Hom (1993) showed that children's goal orientations were significantly related to those of their parents. Furthermore, White (1996) reported that the task orientation of junior female volleyball players was significantly predicted by a perceived task-involving parental climate, whereas a perceived parental ego-involving climate predicted players' ego orientation. However, one should bear in mind that such correlational findings cannot establish causal links nor can they rule out the possibility that parental climate and athletes' goal orientations correlate because they are caused by common extraneous variables (e.g., media influence).

Coaches and parents are not the only contributors to the motivational climate manifested in after-school youth sport. Peers, sport heroes (Carr, Weigand, & Jones, 2000), and the media also transmit task- and ego-involving criteria for success. Therefore, it is important to broaden the scope of research on the psychological environment surrounding young athletes and examine the impact of other significant social agents, as well as their comparative influence, across different age and gender groups.

Implications of goal orientations in youth sport

Studies of children and adolescent sport participants have provided strong support for Nicholls' (1989) theorizing regarding the cognitive, affective and behavioral concomitants of task and ego goal orientations in achievement contexts. We now summarize research examining the interplay between dispositional goals and young people's: (1) beliefs about the determinants of success, (2) views about the nature of ability, (3) perceptions of the purposes of sport involvement, (4) positive and negative affective responses, (5) achievement strategies, (6) extent of physical activity engagement and physical/sport skill development, and (7) moral functioning and aggressive tendencies.

Beliefs about the causes of success. Task orientation in sport predicts more adaptive beliefs about success than ego orientation: Task orientation is associated with the belief that success requires high effort and collaboration with peers. In contrast, ego orientation is often unrelated to effort beliefs and positively related to the belief that success is the outcome of high normative ability, deception, and impressing the coach and significant others. This pattern of associations between sport-related goals and beliefs has been observed in children (e.g., Duda, Fox, Biddle, & Armstrong, 1992), adolescents (e.g., Hom, Duda, & Miller, 1993; Lochbaum & Roberts, 1993; Treasure & Roberts, 1994) and young people from non-Western cultures (e.g., Biddle, Akande, Vlachopoulos, & Fox, 1996).

The motivational implications of manifesting different belief systems are important. A belief that effort is a precursor of success can help children with both high- and low-perceived competence to realize their full athletic potential. In contrast, the belief that normative ability is a determinant of success would not be conducive to long-term motivation because children have little or no control over their athletic ability (Roberts 2001). Ability beliefs may lead children who are not physically talented to conclude that it is not worth trying hard to learn and improve sport skills as they are not “naturally gifted”. Some children questioning their competence but still wanting to achieve normatively-based success (e.g., being the winner) may engage in deceptive strategies and the moral overtones of this option are obvious. However, even the youngsters who try to cheat and impress their way through sport will probably end up dropping out because at the early stages of sport participation, hard work and persistence are important prerequisites for building solid sport skill foundations necessary to a successful future career.

Normative ability beliefs can prove maladaptive even for highly competent children (Roberts, 2001) who may feel complacent and not try hard to maximize their athletic potential. Furthermore, an emphasis on ability beliefs could be particularly detrimental to those who experience early biological maturation. These athletes are in an advantageous position (e.g., taller, stronger) over other children and may experience success early which will make them feel satisfied and confident. However, early maturers who hold normative ability beliefs may be more prone to experiencing disappointment and lack of confidence in subsequent years when late maturers ‘catch-up’.

Beliefs about the nature of sport ability

Task and ego achievement goals also relate to children’s theories about the nature of their physical ability. For example, Sarrazin, Biddle, Famose, Cury, Fox, and Durand (1996) adapted Dweck’s (1999) work on theories of intelligence to sport. Sarrazin et al. (1996)

postulated that some children may view physical ability as a fixed entity that cannot be changed through effort, whereas other children may view their physical ability as a dynamic and malleable quality. Using a sample of 11- to 12-year-old British children, Sarrazin et al. (1996) found that theories of sport ability were related as predicted to achievement goals: More than half of the children with an incremental belief of physical ability chose a task-involving goal over an easy ego-involving goal or a difficult ego-involving goal. In contrast, more than half of the children with a fixed view of physical ability chose one of the two ego-involving goals over the task-involving goal. In a sample of French adolescents, Sarrazin et al. (1996) found that task orientation correlated with beliefs that sport ability is incremental, unstable and the product of learning. In contrast, ego orientation correlated with the belief that sport ability is a gift as well as with the belief that sport ability generalizes across different sports.

Clearly, divergent personal theories regarding the nature of physical ability can have different implications for children's motivation. A belief that physical ability is a natural "gift" that is not changeable through effort may undermine the value of hard training for both high- and low-perceived competent children. In contrast, a belief that physical ability is changeable through effort and learning may help low competent children to achieve some level of success, and high competent children to advance to higher competitive levels. Unfortunately, there is no empirical evidence in sport to substantiate these arguments despite their importance for program design.

Beliefs about the purposes of sport participation

A last set of beliefs investigated by achievement goal research refers to what children perceive should be the main purposes of sport participation. Consonant with research in academic settings (e.g., Nicholls, Patashnick, & Nolen, 1985), sport researchers have shown that task orientation is related to the belief that sports participation should foster cooperation, the value of striving for mastery, skill development, and lifetime health. In contrast, ego

orientation is positively related to beliefs that sport should enhance social status, self-importance and career mobility, and is negatively related to the view that sport should foster good citizenship (e.g., see Duda, 1989; Treasure & Roberts, 1994). Thus, task-oriented people appear to focus more on the intrinsic and pro-social aspects of sport involvement whereas ego-oriented people have a “what is in it for me” extrinsic approach to sport participation (Duda, 1996).

In conclusion, a convincing amount of evidence shows that achievement goals in youth sport are related, as predicted by Nicholls (1989), to beliefs about sport success, the nature of sport ability and the purposes of sport participation. Studies are needed that: (1) examine the role of parents, coaches, peers and the media in socializing these beliefs, and determine whether these socializing influences vary depending on the age, gender, and other important personal characteristics of young people; and (2) how strongly these beliefs predict young athletes’ achievement strategies and affective responses. Although no direct evidence exists to answer this question, there is abundant indirect correlational evidence linking achievement goals with different behavioral and affective indicators of sport participation. This evidence is reviewed next.

Positive and Negative Affect

Researchers interested in emotion and sport participation have focused mainly on enjoyment, satisfaction, anxiety, tension and boredom. In Nicholls’ view (1989), task orientation is more conducive to the experience of positive emotions in achievement contexts than ego orientation. This is because individuals high in task orientation strive for such achievable goals as personal improvement rather than the less controllable goals of outperforming others. Individuals with high ego orientation should experience positive affect only when they do better than others. Thus, ego-oriented young athletes may become bored or disinterested in situations where they are not given the opportunity to demonstrate their superiority. Similarly, high ego-oriented

individuals who question the adequacy of their ability and are fearful of social evaluation are likely to experience tension and anxiety because their self-worth is under threat (Duda & Hall, 2000).

Mostly, research findings in youth sport support these predictions, although the moderating role of perceived competence has not been tested. For example, Duda and Nicholls (1992) reported that task orientation was positively correlated with high school students' satisfaction and negatively with their boredom in sport. Ego orientation was unrelated to these two types of affect. Similarly, in Fox, Goudas, Biddle, Duda, and Armstrong (1994), children with high task orientation experienced higher levels of enjoyment than children with low task orientation. Finally, in a recent meta-analysis of research on achievement goals and affect in sport, Ntoumanis and Biddle (1999a) clearly showed that task orientation is much more strongly related to enjoyable and satisfying experiences in sport than ego orientation. Perhaps the low relation between ego orientation and satisfaction can be attributed to the fact that research has not differentiated between different *types* of satisfaction. Since task and ego orientation relate to different criteria for success, individuals with high ego orientation should feel satisfied when they do better than others. Indeed, in a study of 11, 13, and 15 year olds, Treasure and Roberts (1994) showed that satisfaction for high ego-oriented athletes was derived from winning and the social approval resulting from outperforming others. For high task-oriented athletes satisfaction was derived from mastery experiences (e.g., learning new skills) and the social approval resulting from high effort and mastery.

Anxiety has been the focal point of research examining the negative affective concomitants of goal orientations in sport. Most findings in this area are based on studies with adults, but a study of junior fencers by Hall and Kerr (1997) has shown that for low perceived ability fencers, ego orientation is positively related to cognitive anxiety two days, one day, and thirty minutes before a fencing tournament. In the same sample, task orientation was negatively

related to cognitive anxiety one day and one hour before the tournament. Some evidence exists in adult sport (e.g., Ntoumanis, Biddle, & Haddock, 1999) to show that certain coping strategies may explain the relation between goal orientations and affect. It would be interesting to determine whether this is the case in youth sport in view of the fact that coping strategies are still developing (Compas, Malcarne, & Banez, 1992). Intervention studies could be designed to teach children how to cope in ego-involving sport situations (e.g., use of rationalization instead of venting of emotions when their ability is challenged) and reduce negative affect.

Achievement strategies, extent of physical activity involvement, and skill development

Individuals with high task orientation should feel competent when they try hard and learn new skills. In contrast, those with high ego orientation should feel competent only when they demonstrate high normative ability (Nicholls, 1989). Therefore, one would expect that young athletes with high task orientation should be more committed to practice and learning, and in general should employ more adaptive achievement strategies than those with high ego orientation. Empirical findings in youth sport settings support these hypotheses. For example, Lochbaum and Roberts (1993) using a sample of high school athletes showed that high task orientation was positively related to self-reported use of skill development strategies (e.g., extra practice) and high effort in competition, and was negatively related to practice avoidance. In contrast, ego orientation was positively related to practice avoidance and demonstration of normative competence. Other studies have shown that persistence in youth sport is positively related to task orientation and negatively related to ego orientation (e.g., Andree & Whitehead, 1996; Duda, 1989). Furthermore, research has shown that task orientation relates more strongly to moderate-to-vigorous physical activity than ego orientation (e.g., Dempsey, Kimiecik, & Horn, 1993; Kimiecik, Horn, & Shurin, 1996; Wang, Chatzisarantis, Spray, & Biddle, 2002; Tzetzis, Goudas, Kourtessis, & Zisi, 2002). In sum, the predicted relations between young peoples' achievement goals and their strategies in practice and competition, as

well as the extent of their involvement in physical activity emerge regularly in cross-sectional and non-experimental studies.

More recent experimental evidence by Cury and his colleagues corroborates the association of task orientation with adaptive learning strategies and skill development in physical education courses. In two experiments with adolescent French students employing a basketball dribbling task, Cury, Biddle, Sarrazin, and Famose (1997) showed that under conditions of free-choice behavior, as well as following failure, students characterized by high ego orientation, low task orientation, and low perceived competence spent the least amount of time practicing the dribbling task than students with high levels of task orientation and/or perceived competence. Cury and Sarrazin (1998) also examined the learning strategies adopted by French adolescent boys under three experimental conditions involving climbing tasks and basketball skills. Again, results showed that the high ego/low task/low perceived competence group did not display adaptive learning strategies since they selected very easy or very difficult tasks, spent less time practicing during a free choice period, and did not choose information that would facilitate skill development. Similar findings were also reported by Cury, Famose, and Sarrazin (1997). In this study, French boys with a high ego orientation, low task orientation, and high perceived competence sought normative feedback to compare their performance to that of others, but were not interested in informational feedback that would facilitate their learning of basketball dribbling. More strikingly, high ego-/low task-oriented boys with low perceived competence rejected any kind of feedback. In total, the results of the experimental studies by Cury and associates indicate that variations in achievement goals (and indirectly beliefs about success) can predict differences in learning strategies and type of feedback sought. Such work underlines the importance of identifying children with low perceptions of normative competence and intervening to alter their achievement strategies.

Moral functioning and aggressive tendencies

Nicholls (1989) argued that there is an association between achievement goals and the perceived legitimacy of certain behaviors leading to goal accomplishment. A preoccupation with outplaying others and demonstrating superiority (i.e., epitomizing someone with high ego orientation) is likely to lead to a lack of concern about fairness and the welfare of the opponent, and to the belief that cheating and aggression are justifiable means to achieve success in competitive settings. In contrast, by emphasizing learning, co-operation and personal improvement, task orientation should relate to pro-social attitudes and sportspersonship behavior. Research in youth sport supports these predictions. For example, Duda, Olson and Templin (1991) found that high school basketball players with high task orientation were less likely to perceive cheating as legitimate and were more likely to endorse sportspersonship behavior than those high in ego orientation. The latter reported that they were more inclined to engage in intentionally aggressive acts to win a game. Dunn and Dunn (1999), in a study of elite Canadian male youth hockey players, found that high ego orientation was positively related to approval of aggressive behaviors, whereas high task orientation was positively associated with respect for social conventions, respect of personal commitment to participation, and respect for rules and officials. In their goal profile analysis (i.e., comparing groups with high/high, low/low, high/low and low/high levels of task and ego orientations), Dunn and Dunn (1999) also showed that athletes with the low task orientation/high ego orientation profile reported the lowest levels of sportspersonship and the highest levels of aggression. In contrast, the athletes with the high task/low ego orientation profile reported the highest levels of sportspersonship.

Lee, Whitehead, Ntoumanis, and Hatzigeorgiadis (1999) investigated the links between achievement goals and morality from the perspective of values. According to this approach, the underlying motivation to behave in a pro-social or antisocial manner essentially reflects the value system of an individual. Lee et al. (1999) proposed that values guide attitudes and

behaviors in achievement situations and that the influence of values on attitudes may be mediated through goal orientations. In a sample of 549 young British sport participants, valuing competence predicted respect for commitment to sport participation and respect for social conventions. This path was mediated largely by task orientation. In contrast, valuing status predicted cheating and gamesmanship (a British term for unacceptable but legitimate behavior such as unsettling the opposition) and this path was partly mediated by ego orientation. Lastly, socio-moral values (e.g., trying to be fair) had a direct positive influence on pro-social attitudes (commitment to participation and respect for rules and conventions) and a direct negative effect on anti-social attitudes (cheating and gamesmanship).

In sum, research in sport settings disputes a commonly held assumption by many educationalists and sport lovers that sport builds character and facilitates pro-social and moral behavior. In fact, what young athletes aim to achieve from their game determines how they play it (Nicholls, 1989). Moral functioning in sport is promoted when athletes are less preoccupied with winning and demonstrating superiority and are more concerned with learning, co-operation and personal progress. Given the high levels of cheating and aggression in youth sport reported in the academic and popular press, it is surprising that there are no published intervention studies designed to promote morality by emphasizing task-oriented criteria for success.

Implications of motivational climate in youth sport

Achievement goal theory research has shown that perceptions of the motivational climate created by significant others has important influences on young people's motivated behavior and the quality of their achievement experiences (Ntoumanis & Biddle, 1999b). In this section, we discuss the relation of the major dimensions of the motivational climate in youth sport with various cognitive, behavioral and affective variables.

Cognitive, behavioral, and affective concomitants of motivational climate

Treasure and Roberts (1998) examined how motivational climate and goal orientations relate to beliefs about success and sources of satisfaction in a sample of female basketball summer campers. A perceived task-involving climate was associated with the belief that success results from high effort whereas a perceived ego-involving climate was related to the belief that success stems from normative ability and deception. Similar findings were reported by Seifriz, Duda, and Chi (1992) with high school male basketball players. In terms of sources of satisfaction, Treasure and Roberts (1998) found that those in a perceived task-involving climate reported that they derived satisfaction from mastery experiences and social approval, whereas those in a perceived ego-involving climate gained satisfaction from winning. Goudas (1998) also reported positive correlations between a task-involving climate and ratings of enjoyment and self-reported effort in a sample of 100 Greek adolescent male basketball players. Ego-involving climate was unrelated to these ratings. Variations in perceptions of motivational climate also have implications for aggressive behavior in sport. Stephens and Bredemeier (1996) showed that girls who reported that they were likely to aggress against an opponent were also likely to perceive their coach as placing greater importance on ego-oriented goals. This work and related studies (Guivernau & Duda, 2000) underline the need for intervening and promoting a task-involving climate and diminishing ego-involving environments in youth sport.

One of the most vivid accounts of the nature and consequences of an ego-involving climate in youth sport was depicted in a case study of a former elite female gymnast (Krane, Greenleaf, & Snow, 1997). Often at an elite level, coaches, sport administrators, and parents place young children under extreme pressures to win, disregarding the long-term impact such demands might have. The motivational climate described by the gymnast in the Krane et al. (1997) study was one which placed constant emphasis on social comparison, external feedback and rewards, and the need for superiority and perfection. The gymnast refused to listen to

medical advice in order to prepare for competitions, practiced and competed while seriously injured, employed unhealthy eating practices, and overtrained. Eventually, her frustration from being unable to realize her ego-involving goals led her to drop out of gymnastics.

Interactive effects of goal orientations and motivational climate

A fundamental precept of achievement goal theory is that dispositional goal orientations and perceptions of motivational climate interact to predict behavior, cognition, and affect in achievement situations (Nicholls, 1989). Recently this hypothesis is beginning to be tested. For example, in a sample of junior female volleyball players, Newton and Duda (1999), found that task orientation and perceptions of a task-involving climate interacted to predict effort beliefs. In essence, they found that a high task-involving climate buffered the detrimental effect on effort beliefs resulting from a low task orientation. This buffering did not occur under a low task-involving climate. In contrast, when task orientation was high, variations in task-involving climate did not result in noteworthy differences in effort beliefs between high and low levels of task orientation. A very similar interaction between task orientation and task-involving climate in predicting mastery experiences in sport (e.g., learning, challenge) was reported by Treasure and Roberts (1998). These authors also found a significant interplay between ego orientation and perceptions of an ego-involving climate in predicting ability beliefs. Specifically, when ego orientation was low, there were no differences in ability beliefs under a perceived high and a low ego-involving climate. In contrast, when ego orientation was high, a high perceived ego-involving climate predicted stronger ability beliefs compared to a low perceived ego-involving climate.

Modifying the motivational climate

Previous work in sport psychology on the implications and modification of coaching behaviors in youth sport settings has shown that the degree of reinforcements, instruction, and punishments provided by the coach impacts young athletes' attitudes toward the sport, their

coach and teammates, persistence in the activity, and self esteem (see Smoll & Smith, 2002). This line of work, which led to the development and testing of Smith and Smoll's Mediation Model of Leadership, has demonstrated that it is the young athletes' perceptions of what their coach does more than the coaches' actual behaviors that best predict the athletes' responses and self perceptions. Coaches who are seen as providing a bountiful amount of instruction and encouragement, and exhibiting limited punitive behaviors have athletes who are more pleased with their sport experience and themselves. When such research has provided the foundation for coach education programs (Smoll & Smith, 2002), experimental examinations of such efforts in youth sport have indicated that it is possible "to teach old dogs new tricks!": the behaviors of the coach can and do change with training.

To date, limited work has pulled from the achievement goal framework in designing intervention programs and testing ensuing modifications of the motivational climate in after-school settings. In attempting to manipulate the psychological environment, these investigations have borrowed from Epstein's (1989) TARGET principles as a guideline. With respect to family interactions, Epstein identified 6 environmental structures that have implications for variations in motivational processes among students; i.e., the design of the Task, the source of Authority, the nature of the Recognition provided, aspects of Grouping, how students are Evaluated, and the pace or Timing of instruction. The research that has been done (Treasure, 1993; Theeboom, DeKnop, & Weiss, 1995) has provided evidence for the efficacy of re-engineering the coach-created youth sport environment so that it is more task-involving. Moreover, the results of such manipulation efforts, in terms of the affective, cognitive and behavioral responses of youngsters, are consistent with the tenets of achievement goal theory (Ames, 1992; Dweck, 1999; Nicholls, 1989). More of such intervention studies in real-world after-school sport programs are needed, especially applied investigations that specifically test the environment – cognitive and affective mechanisms – behavior links

embedded in the achievement goal framework. As the research conducted so far has entailed short-term manipulations of the climate (e.g., across 10 sessions in the Treasure (1993) study and 3-weeks in the Theeboom et al. (1995) investigation), more long-term, longitudinal work is also warranted.

Conclusion

Contemporary participation data make it clear that involvement in after-school sport among children and adolescents comprises a major leisure outlet for young people in the United States. Many youngsters are engaged and many hours are spent running, jumping, kicking, batting, swimming in gyms and pools, on fields and courts. The potential ramifications of such participation for girls' and boys' physical, cognitive, emotional, and social development are impressive. The central premise of this chapter is that the implications of youth sport engagement can be "good", "bad", and, most disturbingly, even "ugly" depending on the ways in which children and adolescents interpret and find meaning in such activities. The literature also suggests that variability in such interpretations and meanings is a function of the achievement goals being emphasized by the youngsters themselves and the achievement goals encouraged in the social environments in which they interact. All in all, sport investigations over the past decade point to the wisdom of strengthening the task orientation of girls and boys and doing all that is possible to make after-school youth sport programs task-involving.

References

- Ames, C. (1992). Classrooms, goal structures, and student motivation. Journal of Educational Psychology, 84, 261-274.
- Andree, K.V., & Whitehead, J. (1995). The interactive effect of perceived ability and dispositional or situational achievement goals on intrinsic motivation in young athletes. Journal of Sport and Exercise Psychology, 17, (Suppl.), S7.
- Biddle, S.J.H., Akande, A., Vlachopoulos, S., & Fox, K. (1996). Towards an understanding of children's motivation for physical activity: Achievement goal orientations, beliefs about sport success, and sport emotion in Zimbabwean children. Psychology and Health, 12, 49-55.
- Barnett, N., Smoll, F.L., & Smith, R.E. (1992). Effects of enhancing coach-athlete relationships on youth sport attrition. The Sport Psychologist, 6, 111-128.
- Carr, S., Weigand, D.A., & Jones, J. (2000). The relative influence of parents, peers, and sport heroes on the goal orientations of children and adolescents in sport. Journal of Sport Pedagogy, 6, 34-56.
- Compas, B.E., Malcarne, V.L., & Banez, G.A. (1992). Coping with psychosocial stress: A developmental perspective. In B.N. Carpenter (Ed.), Personal coping: Theory, research, and application (pp.47-63). Westport, CT: Praeger.
- Cury, F., Biddle, S.J.H., Sarrazin, P., & Famose, J.P. (1997). Achievement goals and perceived ability predict investment in learning a sport task. British Journal of Educational Psychology, 67, 293-309.
- Cury, F., Famose, J.P., & Sarrazin, P. (1997). Achievement goal theory and active search for information in a sport task. In R. Lidor & M. Bar-Eli (Eds.), Innovations in sport psychology: Linking theory and practice. Proceedings of the IX World Congress in Sport Psychology: Part I (pp. 218-220). Netanya, Israel: Ministry of Education, Culture and Sport.

Cury, F., & Sarrazin, P. (1998). Achievement motivation and learning behaviours in sport tasks. Journal of Sport and Exercise Psychology, 20, (Suppl.), S11.

Dempsey, J. M., Kimiecik, J. C., & Horn, T. S. (1993). Parental influence on children's moderate to vigorous physical activity participation: An expectancy-value approach. Pediatric Exercise Science, 5, 151-167.

Duda, J.L., & Hom, H.L. (1993). Interdependencies between the perceived and self-reported goal orientations of young athletes and their parents. Pediatric Exercise Science, 5, 234-241.

Duda, J.L. (1989). Relationship between task and ego orientation and the perceived purpose of sport among high-school athletes. Journal of Sport and Exercise Psychology, 11, 318-335.

Duda, J.L. (1996). Maximizing motivation in sport and physical education among children and adolescents: The case for greater task involvement. Quest, 48, 290-302.

Duda, J.L. (2001). Achievement goal research in sport: Pushing the boundaries and clarifying some misunderstandings. In G.C. Roberts (Ed.), Advances in motivation in sport and exercise (pp. 129-182). Champaign, IL: Human Kinetics.

Duda, J.L., Fox, K., Biddle, S.J.H., & Armstrong, N. (1992). Children's achievement goals and beliefs about success in sport. British Journal of Educational Psychology, 62, 313-323.

Duda, J.L., & Hall, H.K. (2000). Achievement goal theory in sport: Recent extensions and future directions. In R.N. Singer, H. Hausenblas, & C. Janelle (Eds.), Handbook of sport psychology (2nd ed., pp. 417-443). New York: Wiley.

Duda, J.L., & Nicholls, J.G. (1992). Dimensions of achievement motivation in schoolwork and sport. Journal of Educational Psychology, 84, 290-299.

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.

Duda, J.L., & Whitehead, J. (1998). Measurement of goal perspectives in the physical domain. In J.L. Duda (Ed.), Advances in sport and exercise psychology measurement (pp. 21-48). Morgantown, WV: Fitness Information Technology.

Dunn, J.G.H., Dunn, J.C. (1999). Goal orientations, perceptions of aggression, and sportpersonship in elite youth male ice hockey players. The Sport Psychologist, 13, 183-200.

Dweck, C.S. (1999). Self-theories: Their role in motivation, personality, and development. Philadelphia: Psychology Press.

Epstein, J. (1989). Family structures and student motivation: A developmental perspective. In C. Ames & R. Ames (Eds.), Research on motivation in education (Vol. 3, pp. 259-295). New York: Academic Press.

Ewing, M.E., & Seefeldt, V. (2002). Patterns of participation in American agency-sponsored youth sports. In F.L. Smoll & R.E. Smith (Eds.), Children and youth in sport: A biopsychological perspective, 2nd edition (pp. 39-60). Dubuque, Iowa: Kendall/Hunt Publishing.

Fox, K., Goudas, M., Biddle, S., Duda, J., & Armstrong, N. (1994). Children's task and ego goal profiles in sport. British Journal of Educational Psychology, 64, 253-261.

Fry, M.D. (2000a). A developmental analysis of childrens' and adolescents' understanding of luck and ability in the physical domain. Journal of Sport and Exercise Psychology, 22, 145-166.

Fry, M.D. (2000b). A developmental examination of children's understanding of task difficulty in the physical domain. Journal of Applied Sport Psychology, 12, 180-202.

Fry, M.D. (2001). The development of motivation in children. In G.C. Roberts (Ed.), Advances in motivation in sport and exercise (pp. 51-78). Champaign, IL: Human Kinetics.#

Fry, M.D., & Duda, J.L. (1997). Children's understanding of effort and ability in the physical and academia domains. Research Quarterly for Exercise and Sport, 68, 331-334.

Goudas, M. (1998). Motivational climate and intrinsic motivation of young basketball players. Perceptual and Motor Skills, 86, 323-327.

Gould, D., & Weiss, M. (Eds.) (1987). Advances in pediatric sport sciences (Vol. 2). Champaign, IL: Human Kinetics.

Gutin, B., Islam, S., Manos, T., Cucuzzo, N., Smith, C., & Stachura, M.E. (1994). Relation of percentage of body fat and maximal aerobic capacity to risk factors for atherosclerosis and diabetes in black and white seven- to eleven-year-old-children. Journal of Pediatrics, 125, 847-852.

Hall, H.K., & Kerr, A.W. (1997). Motivational antecedents of precompetitive anxiety in youth sport. The Sport Psychologist, 11, 24-42.

Hom, H.L., Duda, J.L., & Miller, A. (1993). Correlates of goal orientations among young athletes. Pediatric Exercise Science, 5, 168-176.

Kimiecik, J.C., Horn, T.S., & Shurrin, C.S. (1996). Relationships among children's beliefs, perceptions of their parents' beliefs and their moderate-to-vigorous physical activity. Research Quarterly for Exercise and Sport, 67, 324-336.

Krane, V., Greenleaf, C.A., & Snow, J. (1997). Reaching for gold and the price of glory: A motivational case study of an elite gymnast. The Sport Psychologist, 11, 53-71.

Lee, M., Whitehead, J., Ntoumanis, N., & Hatzigeorgiadis, A. (1999). The effect of values, achievement goals, and perceived ability on moral attitudes in youth sport. Report for the Economic and Social Research Council, Swindon, England.

Lindner, K.J. (1999). Sport participation and perceived academic performance of school children and youth. Pediatric Exercise Sciences, 11, 129-143.

Martens, R. (1978). Joy and sadness in children's sports. Champaign, IL: Human Kinetics.

Lochbaum, M.R., & Roberts, G.C. (1993). Goal orientations and perceptions of the sport experience. Journal of Sport and Exercise Psychology, 15, 160-171.

Newton, M., & Duda, J. L. (1999). The interaction of motivational climate, dispositional goal orientations, and perceived ability in predicting indices of motivation. International Journal of Sport Psychology, 30, 63-82.

Newton, M.L., Duda, J.L., & Yin, Z. (2000). Examination of the psychometric properties of the Perceived Motivational Climate in Sport Questionnaire-2 in a sample of female athletes. Journal of Sports Sciences, 18, 275-290.

Nicholls, J.G. (1989). The competitive ethos and democratic education. Cambridge, MA: Harvard University Press.

Nicholls, J.G., Cobb, P., Wood, T., Yackel, E., & Patashnick, M. (1990). Assessing students' theories of success in mathematics: Individual classroom differences. Journal of Research in Mathematics Education, 21, 109-122.

Nicholls, J.G., Patashnick, M., & Nolen, S.B. (1985). Adolescents' theories of education. Journal of Educational Psychology, 77, 683-692.

Ntoumanis, N., & Biddle, S.J.H. (1999a). Affect and achievement goals in physical activity: A meta-analysis. Scandinavian Journal of Medicine and Science in Sport (Special Issue: European Perspectives in Sport Motivation Research), 9, 315-332.

Ntoumanis, N., & Biddle, S.J.H. (1999b). A review of motivational climate in physical activity. Journal of Sport Sciences, 17, 643-665.

Ntoumanis, N., & Biddle, S.J.H., & Haddock, G. (1999). The mediating role of coping strategies on the relationship between achievement motivation and affect in sport. Anxiety, Stress, and Coping: An International Journal, 12, 299-327.

Raitakar, O.T., Porkka, K.V., Taimela, S., Telema, R., Rasanen, L., & Viikari, S.A. (1994). Effects of persistent physical inactivity on coronary risk factors in children and young and adults. American Journal of Epidemiology, 140, 195-205.

Roberts, G.C. (1984). Toward a new theory of motivation in sport: The role of perceived ability. In J. Silva & R. Weinberg (Eds.), Psychological foundations of sport (pp. 214-228). Champaign, IL: Human Kinetics.

Roberts, G.C. (2001). Understanding the dynamics of motivation in physical activity: The influence of achievement goals on motivational processes. In G.C. Roberts (Ed.), Advances in motivation in sport and exercise (pp. 1-50). Champaign, IL: Human Kinetics.

Roberts, G.C., Treasure, D.C., & Balague, G. (1998). Achievement goals in sport: The development and validation of the Perception of Success Questionnaire. Journal of Sports Sciences, 16, 337-347.

Sarrazin, P., Biddle, S., Famose, J.P., Cury, F., Fox, K., & Durand, M. (1996). Goal orientations and conceptions of the nature of sport ability in children: A social cognitive perspective. British Journal of Social Psychology, 35, 399-414.

Scanlan, T.K. (1984). Competitive stress and the child athlete. In J.M. Silva & R.S. Weinberg (Eds.), Psychological foundations of sport (pp. 118-129). Champaign, IL: Human Kinetics.

Scanlan, T.K., & Simons, J. P. (1992). The construct of sport enjoyment. In G. C. Roberts (Ed.), Motivation in sport and exercise (pp. 199-215). Champaign, IL: Human Kinetics.

Seifriz, J.J., Duda, J.L., & Chi, L. (1992). The relationship of perceived motivational climate to intrinsic motivation and beliefs about success in basketball. Journal of Sport and Exercise Psychology, 14, 375-391.

Shephard, R.J. (1997). Curricular physical activity and academic performance. Pediatric Exercise Science, 9, 113-126.

Smoll, F.L., & Smith, R.E. (2002). Coaching behavior research and intervention in youth sports. In F.L. Smoll & R.E. Smith (Eds.), Children and youth in sport: A biopsychological perspective (2nd ed, pp. 211-234). Dubuque, IA: Kendall/Hunt Publishing.

Stephens, D., & Bredemeier, B.J. (1996). Moral atmosphere and judgments about aggression in girls' soccer: relationships among moral and motivational variables. Journal of Sport and Exercise Psychology, 18, 174-193.

Theeboom, M., DeKnop, P., & Weiss, M.R. (1995). Motivational climate, psychological responses, and motor skill development in children's sport: A field-based intervention study. Journal of Sport and Exercise Psychology, 17, 294-311.

Treasure, D.C. (1993). A social-cognitive approach to understanding children's achievement behavior, cognitions, and affect in competitive sport. Unpublished doctoral dissertation, University of Illinois.

Treasure, D.C. (2001). Enhancing young people's motivation in youth sport: An achievement goal approach. In G.C. Roberts (Ed.), Advances in motivation in sport and exercise (pp. 79-100). Champaign, IL: Human Kinetics.

Treasure, D.C., & Roberts, G.C. (1994). Cognitive and affective concomitants of task and ego goal orientations during the middle school years. Journal of Sport and Exercise Psychology, 16, 15-28.

Treasure, D.C., & Roberts, G.C. (1998). Relationships between children's achievement goal orientations, perceptions of the motivational climate, beliefs about success, and sources of satisfaction in basketball. International Journal of Sport Psychology, 29, 211-230.

Tremblay, M.S. Inman, J.W., & Willms, J.D. (2000). The relationship between physical activity, self-esteem, and academic achievement in 12-year-old children. Pediatric Exercise Science, 12, 312-323.

Trudeau, F., Laurencelle, L., Tremblay, J., Rajic, A.M., & Shephard, R.J. (1998). A long-term follow-up of participants in the Trois-Rivieres semi-longitudinal study of growth and development. Pediatric Exercise Science, 10, 366-377.

Tzetzis, G., Goudas, M., Kourtessis, T., & Zisi, V. (2002). The relation of goal orientations to physical activity in physical education. *European Physical Education Review*, *8*, 177-188.

Wang, C.K.J., Chatzisarantis, N.L.D., Spray, C.M., & Biddle, S.J. H. (2002). Achievement goal profiles in school physical education: Differences in self-determination, sport ability beliefs and physical activity. *British Journal of Educational Psychology*, *72*, 433-445.

White, S.A. (1996). Goal orientation and perceptions of the motivational climate initiated by parents. Pediatric Exercise Science, 8, 122-129.

White, S.A., Duda, J.L., & Hart, S. (1992). An exploratory examination of the parent-initiated motivational climate questionnaire. Perceptual and Motor Skills, 75, 875-880.

Whitehead, J.R., & Corbin, C.B. (1997). Self-esteem in children and youth: The role of sport and physical education. In K.R. Fox (Ed.), The physical self: From motivation to well-being (pp. 175-204). Champaign, IL: Human Kinetics.

Xiang, P., & Lee, A. (1998). The development of self-perceptions of ability and achievement goals and their relations in physical education. Research Quarterly for Exercise and Sport, 69, 231-241.