Carlos Eduardo Gonçalves
Sean P. Cumming
Manuel J. Coelho e Silva
Robert M. Malina
(Editors)

Sport and Education

Tribute to Martin Lee

IMPRENSA DA UNIVERSIDADE DE COIMBRA
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PREFACE

Opportunities to discuss sport in the context of literal and restrictive interpretations of "sport and education" or other assertions based on historical records and interpretations are always important for the knowledge and evolution of that boundary of civilisation called the contemporary sporting phenomenon.

We all know that education through sport represents one of the paradigms of the societal improvement, and more than a title, we need to establish a new attitude, to draw conclusions in order to act and, above all, to interact in national and international contexts without motivations and dubious statements, without calls to high regulation.

Based on this premise, and in spite of the conceptual positions and sociodemographic analyses, the Olympic Movement considers the contribution of this publication, developed under the coordination of the investigator and Professor Manuel João Coelho e Silva, with the prestigious seal of the Coimbra University Press, as very pertinent.

We must recognize and signal the developed and modern stage of Portuguese sport, which levels us, speaking of results, with the developed nations. At the same time and considering the intersection of sport in education and vice versa, we can not ignore that in some areas the scenarios are still far from ideal, as the school is not the prime tool of teaching and many governmental and non-governmental organisations are not helping in the dialogue.

In spite of several state models already tested and different political/ideological positions, there are goals which were not reached yet and steps that were not taken. Therefore, the role of associated movements can neither be in second place nor be broken. This is a field where structure exists and which refuses to permit governments to be the owners of the intellectual property, as many wish to.

According to the Euro barometer and studies published by the European Commission, coming from a survey hold in 2004 within the fifteen Member States, most European people support a bigger connection between education and sport. The conclusions of the studies also state that Europeans are keen on sport and associate it with positive values, considering that it must be better used as an educational and social instrument.

The expectations about the development of connections between education and sport and the role of the European Union in the promotion of the refered connections indicated that better cooperation between educational systems and sporting organisations

in each country was expected for about 80% of the European population and three-quarters of those surveyed considered that school programmes should include more time for sport.

We believe that the future of sport and education will be auspicious because those committed to their development are improving in quality and increasing in number, as we can see through the editorial initiative of this volume.

Vicente Moura

Portuguese Olympic Committee

FOREWORD

This book has been produced as a tribute to the work of Dr. Martin Lee on the role of sport in the socio-moral education of young people. It is a privilege to be asked to write a foreword. Over the 25 years I have known Martin, as an inspiring colleague and original thinker, he has had a genuine concern for children's welfare in sport. He launched his career in this direction by gaining a teaching diploma at St. Luke's College, Exeter, and degrees from the universities of Leeds (UK), Washington State (USA) and Oregon (USA). Early in his teaching experience he identified a conflict in the values of sport and education; and he has focused on educating others about the issues involved in children's sport participation and the need to improve policy in this area.

Martin has been a leader in this field. After conducting the first UK conference on Children in Sport, at Trinity and All Saints' College, Leeds in 1981, he founded the Institute for the Study of Children in Sport (ISCiS) at Bedford College of Higher Education in 1986 to improve the understanding of children's experience in sport through research, consultancy, and coach education. He then created level 1, 2 and 3 courses on coaching children for the National Coaching Foundation and designed workshops for the UK Government's Champion Coaching project to enhance extra-curricular school sport. His courses were adopted by some National Governing Bodies of Sport and he has given keynote addresses in Europe, Asia, and North America. His edited book on Coaching Children in Sport has a wide international readership, particularly in Botswana, and his course book on Coaching Children in Mini-basketball was produced for international distribution. In 2003, as a Fellow of the Physical Education Association, Martin gave the annual Fellows' Lecture: *Values in Physical Education and Sport: A conflict of interests?*

The study of values has been central in Martin's research – which also embraced such topics as self-concept, leadership, coaching behaviour, and parental influence. In a series of research commissions for The Sports Council (UK) he examined the literature, clarified measurement requirements, identified values activated in sport, and led an international project on fair play under the Council of Europe Committee for the Development of Sport. He then ran a Sports Council project to survey ethical attitudes and values in young competitors. Subsequently, for the Economic and Social Research Council, I joined him in a research team to show how values

influence attitudes directly and through the mediation of achievement goals. Two new instruments arose from this research: the *Attitudes to Moral Decision-making in Youth Sport Questionnaire* and the *Youth Sport Values Questionnaire-2.* These will open up research into gamesmanship, by which competitors seek an unfair advantage without breaking the rules, and into the mechanisms by which moral, competence and status values guide behaviour and create value conflicts.

Martin's broad experience has enabled him to communicate widely and convey the significance of educational issues to those not working with children. He has been an innovative physical education teacher, an elite rugby player, a coach, a parent, a consultant to individuals and international squads, a university teacher and researcher in the USA and UK, a member of international editorial boards, the head of a university department and leader of a degree programme, and a national course evaluator – with a disciplinary breadth that enabled him to teach across a degree course from biomechanics to education. His skill as administrator, consultant and communicator has been in demand, as he is a challenging thinker yet always focused on practical solutions. Nearer home, Martin's enthusiasm converted me from studying motor learning to social psychology and I have learned much from his vision, his tenacity over the years, and his quiet sense of humour. He has been a very supportive colleague, a constructive critic, and an invaluable trusted friend.

I am grateful to Martin for following a lone path in studying values when they drew little interest in sport, and for sharing his insights with others. I am also grateful to his Portuguese colleagues at the University of Coimbra for their initiative in gathering the distinguished international scholars who have contributed to this book. Their collective insights will enhance the understanding of socio-moral education through sport and lead to informed and sensitive policy development in both sport and education.

Jean Whitehead

University of Brighton, Eastbourne, UK

FOREWORD

In 2003 Martin gave the Fellows' Lecture at the Fellows' Day of the *Physical Education Association* of the UK (now the Association for PE) and typically it was about values in physical education and sport. In discussion afterwards he revealed that his health was poor and that it was almost certainly his last public presentation, in which case the choice of topic on such a personally and professionally significant occasion said much about the man and the career. Martin was a much respected academic but what made him special was his deep interest in values in sport and a passionate belief in the need to understand physical education and sport from the perspective of children and young people. From these two standpoints flowed a wide range of research and publications, which helped to define the nature of sport and to drive the agenda for youth sport with a particular focus on meeting young people's needs and interests. Martin was one of those who made a significant contribution to the promotion of pupil centred models of sport and, therefore, to making coaching more appropriate for young people. The course that he wrote on coaching children for the *National Coaching Foundation* was a superb collection of material, which revealed his ability to apply theory to practice in a way that coaches could engage with. He edited *Coaching Children in Sport* in 1993 and led a formidable array of authors with the intention, as was pointed out in the preface, to help coaches better understand the child and not just the sport. It was a text that became a standard reference for students, teachers and coaches alike.

His work on values and fair play in sport was equally strong and notable also for including the values that young people brought to the world of sport; yet another contribution to understanding how young people view the world and what is important to them. This publication is a fitting tribute to Martin's work and the title is most apt because it sweeps up those two intertwined but distinct worlds, physical education and sport, which he seemed to be able to bridge so easily with his breadth of knowledge across a range of disciplines. The ability to span these two very broad fields was also due in no small part to having high credibility in both of these worlds and, therefore, the ability to understand and work with coaches and teachers more effectively. At a personal level I always found him to be an excellent sounding board for ideas and research and he had an uncanny ability to be able to ask the right question. He was much sought after by sporting and educational organisations and received numerous

invitations to speak at conferences and seminars. Indeed the range and quality of those who have agreed to contribute to this volume is itself testament both to his international standing and to the quality of his work. Always interesting to talk to and unfailingly insightful Martin will be missed by many people but leaves a legacy of scholarship, integrity and a much deeper understanding of the values and attitudes of children and young people in sport and physical education.

Richard Fisher
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MORAL-RELATED ISSUES ABOUT PARTICIPATION OF CHILDREN AND YOUTH IN MODERN SPORT - *prologue for a tribute to Martin Lee*

Sport and moral universalism

The issues raised by the mass participation in sport by children and young people were not on the agenda of the "founder" of modern sport. Baron de Coubertin, despite including the concept of fair play in the genetic code of sport, was addressing a quite different public to the children and young people who today account for such a large proportion of the sporting population. However, over the century and half that modern sport has been in existence, the notion that physical activity is of educational value (not only physically but also morally) has always been present (Keating, 2001); indeed, it continues to provide a justification for the promotion and organisation of sport amongst young people. The backdrop to this is of course the enormous media coverage that is given to professional sport around the world; and consequently, tens of millions of children and young people are being encouraged to take up sporting activity at ever younger ages (Ewing & Seefeldt, 2002).

Despite this, sport today is widely perceived as somewhat degenerate in relation to the golden age of Coubertin, when it was engaged in for its own sake, in the pure disinterested spirit of the aristocratic fair play. Today the competitive ethos has won out over the educational aspect of sport, after decades of tense conflict between the two. Morgan (2001) complains: "sport rules have become little more than technical directives that enable participants to acquire the external goods they seek. Any moral power the rules of sports once had has disappeared". For an activity that considers itself as fair and meritocratic, the consequences of this may be the development of attitudes of complacency and cynicism.

Indeed this is the posture that many scholars, coaches and other sporting agents adopt when they concur that sports provide a context for the sanctioned expression of violence. But that same context frequently encourages the unsanctioned expression of violence (in which Lee's concept of *gamesmanship* is rooted). If sports are conducive to violent behavior and aggressive conduct, that is because we want them to be. Spectators expect tough aggressive behaviour from the athletes, which, while not exactly considered violence in its purest form, is often closely connected to it. Furthermore,

Cashmore (2005) argues that "the findings of Bandura are totally at odds with the view of many coaches and players who believe that sports are a good way of letting off steam, or getting our aggression out of our system." Thus, aggressive and tendentially violent behaviour is acquired through the social learning process, in interaction with others.

The emergence of sport for children and youth as a mass phenomenon has once more brought fair play back to the heart of the educational process. Can this tension between competitiveness and education be resolved within sports training? The proliferation of references, so visible in the world of sport, means that these issues have to be negotiated and renegotiated between the various subjects or actors involved in any given sporting encounter. This makes it impossible to distinguish the causes and effects as regards what has been taught in training sessions and what has in fact been learned by the young athletes.

The study of morality in sport clearly reflects this theoretical and methodological problem. Sports morality, as discussed in the studies of Shields & Bredemeier (1995) and Shields, Bredemeier & Powell (2002), has specific characteristics that are not easily transferred to daily life. Bredemeier (1999) following Kohlberg, suggests that sports teams should take on the role of moral communities. But what should be the universal morality adopted? The various moralities existing within the team, resulting from established hierarchies, may not be generalizable or desirable. The initial content of messages may be received differently by different people in accordance with the filters (hierarchical, ethnic, etc) conditioning their perceptions, thereby causing them to multiply into a host of individualized versions (Weiss & Smith, 2002; Gonçalves et al., 2005).

Educational justifications for sport

Viewed from the outside, sport appears to be caught up in the whirlpool of contradictory tendencies that mark postmodern globalization. It is included in the Rights of the Child (David, 2005), is medicalized, and commodified, becoming an article of consumption to be used by the body, but subordinated to it (Anderson, 2006; Beja Santos, 2006).

For some scholars, it seems sport is under siege, surrounded by extrinsic justifications, arguing that sport as human practice is not sustainable when the extrinsic goods of wealth and fame are dominant (Kirk, 2006). From this point of view, physical education and youth sport are viewed as of secondary importance to other social goods such as health or economic and social aspects of life.

In this context, fair play lingers on only as an expression of the politically correct. For this reason, it is of the utmost importance that sport, which is for the wellbeing of young people, is introduced to them as young as possible, so that the effects will be profound and longlasting. After a long period when it seemed to have been extinguished, sport education is returning to reclaim its role as the promoter of virtue and moral education.

On this basis, all training and competition may be considered to have an ethical dimension, as it is oriented towards training the subject for life, alongside the other aspects of general education. Athletes are encouraged to take morally *correct* decisions, which express high levels of autonomous moral judgment.

There are two problems with this argument, however. Firstly, the fact that certain individuals may have high levels of moral judgment does not necessarily mean that they will behave in a correspondingly moral way in training or in competition. Secondly, it may be that the ecological conditions in the club or team are not propitious to the moral stance proposed by the coach, or that unexpected situations come up in the competitive context (concerning the role of the adversary, the uncertainty of the result, interventions by the referee or the public, etc) in which the moral judgments learned may not be applied.

Thinking of sport only in terms of a moral language inevitably leads us to neglect the role played by conflicts, power and vested interests in sports competition. At the same time, failure to take account of the power relationships that exist in decision-making processes in sport will distort the reality, covering it in a veil of rationality that may be accessible to the autonomous individual, perfectly able to exercise his own moral judgment independently, but unsuitable for the child or young person immersed in the highly complex relations of the sporting context.

Martin Lee's studies, though embarking from different methodological assumptions, reveal a close philosophical affinity with Kant's categorical imperative, which postulates perfect homogeneity between a subject's biography and work, as a consequence of the absolute subordination of life to reason.

However, as we have already seen, the young athlete is confronted with a series of constraints and contradictions (power relations, ecological environment, the ups and downs of sporting practice itself, etc) which limit his choices and bring about a rupture between free will/reason and conditioned behaviour. In this situation, the uncritical assumption of the positivist paradigm as a scientific tool may lead to a distortion of reality (Brustad, 2002). This is why multi-method studies are so important, with qualitative research complementing or even orienting quantitative research in the the quest for a better understanding of the phenomenon (Krane & Baird, 2005), and the refusal to separate cognitive values from ethical and political ones.

In both his earlier and more recent studies, Lee (2005; this volume) has always been aware of these difficulties and has demonstrated remarkable intellectual openness to new lines of research and methodologies. His concern remains as to how to transfer the knowledge acquired through research to the agents that work in the field of children's and youth sport, particularly their coaches (Lee, 1998). For this reason, his research has functioned as a stimulus for further study of moral issues in sport, leading to this volume, amongst other developments.

The fears of an ethical drift in the field of sport, caused by unrestrained market forces, bad practices, unhealthy atmospheres in training and competition, or by poor management of certain phases of the training process, are offset by complaints on the part of many coaches and sporting professionals that sport has been hijacked to be used

as a vehicle for the promotion of health or as a tool to prevent or treat social ills. In this context, such epistemologically-open academic research, despite its commitment to sport at the service of child and youth development, provides a vital contribution to our knowledge of the subject and to the potential for change.

Several approaches of the issues raised by youth sport are presented in this volume. The complexity of the themes is discussed by the authors starting from their respective scientific fields, but never forgeting the global perspective, namely that sport can not be reduced to the learning of motor skills and tactics and that education is more than the transmission of knowlegde. The contemporary world presents new problems at an unpredictable rate. Families, coaches, sport organizations, and young athletes face uncertain challenges. The authors' experience and the high quality of the research represent, once again, a strong statement in favor of the vital connection between sport and education.

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Manuel Coelho e Silva; António Figueiredo; Carlos E. Gonçalves
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SPORTS IN A CHANGING SOCIETY – THE CASE OF PORTUGAL: *origins, current statistics and new directions*

1. Introduction

In contemporary society there are few individuals who do not encounter elements of sport in their social lives, often on a daily basis. This is not only illustrated by an increase number of participants during the last decades but also by the expanding variety of sports and ways to pratice them.

The final decades of the monarchy witnessed the introduction of sports into Portugal. The phenomenon was mostly related to aristocrats and foreign communities living in the country while the popularization of sports was favoured by the social and cultural atmosphere emerged in the early XX Century with the Republic. The non-governamental sport expanded in the last quarter of the past century, especially after the end of the dictatorship.

It is difficult to organize chronological statistics for participation in sport in Portugal due to the lack of specific and uniform information. The present article examines the social environments and contexts that favoured the appearance, dissemination and differentiation of sports and attempts to interpret the trends of recently published statistics.

2. Brief notes about the introduction of sports in Portugal

2.1. Involvement of the monarchy in sports in the transition from XIX to XX Centuries

The main sports were introduced into Portugal in the second half of the 19th century (gymnastics) and early 20th century (football, basketball, hockey). This period coincided with the end of the monarchy, whose influence can be seen in reports published in important sports journals of the period ("*Tiro e Sport*"). In December 1906, a sport event was organised by a committee led by the *Infante D. Afonso*. Various awards bore names such as *Her Majesty Queen Amelia or* the *Prince Luíz Filipe Award.* Amongst the winners it was possible to identify *Pinto Basto*, a family also related to the organization of a soccer match in Belas by the end of the 19th century.

The introduction of new sports and creation of new clubs, in fact, were strongly related to the aristocracy. An example is *Herbert Dagge*, founder of a prominent sport organization, "*Real Ginásio Clube Português"* ('*Royal Portuguese Gymnasium Club*'); he is also known as the "father" of Portuguese cycling (Barroso, 2001).

According to Gouveia (2002), after some experimental roller hockey games held in 1905 in *Carcavelos*, due to the influence of the local English community, skating was performed at the *Military College* in 1908, and in a garage at the *Street Alexandre Herculano* belonging to the "*Portuguese Society of Authors"*, where the "blue bloods" used to congregate. In the trophy room of the *Portuguese Skating Federation* is the pair of wooden skates used by the last king of Portugal, *D. Carlos I*.

The aristocrats supported the amateur *ethos*, and their clubs and tournaments were organized within a closed system. Sport started to be popularized after the establishment of the republic. An example of this was the classic Oporto-Lisbon cycling race, an event which was not free of controversy.

In the first year of the Republic, the *Portuguese Cycling Union (União Velocipédica Portuguesa*) received about 20 entries for the race Oporto-Lisbon but only three confirmed their participation. For this reason, the event was held for the first time on 5 November 1911. The first official winner was only recognized in 1912. Of interest, the winner in the previous year was disqualified for cheating. The event was annulled after confirming that three cyclists had been conspiring to commit irregularities with a view to dividing up the prizes.

2.2. The influence of foreign communities in Portugal and of Portuguese living abroad

Several new physical activities appeared in Portugal largely as a result of foreign influence. Examples were the first football matches held in *Funchal* (Island of Madeira, 1873 - Malta & Jacinto, 2002) and in Oporto (1890, idem), both of which may have connections to the fortified wine industry (Madeira and Port, respectively), which was heavily dominated by British families established in Portugal.

In Oporto, the new social practice was widely diffused, leading to the rapid appearance of clubs like the *Futebol Clube do Porto* ("Oporto Football Club") only several years later. In Madeira, on the other hand, the native population contented themselves watching matches played by the crews of the cargo ships that would dock there. This suggests that the diffusion of new practices was largely dependent upon the sociocultural capital of the populations.

In Coimbra, a group of well-travelled university students apparently formed a team about 1876 (Gerardo & Gomes Ferreira, 2002). There are records of a letter addressed to the *Rector of the University of Coimbra* requesting official permission to use a large piece of land for football matches. This suggests the expansion and generally spontaneous popularity of soccer.

It is believed that the younger and more educated groups were more dynamic in the introduction and adherence of new cultural habits. Students of the University of Coimbra played an important and pioneering role in popularizing sports. Further, the event that introduced football into the Lisbon area in 1884 was organized by the Pinto Basto brothers who studied in England and from where they had brought a ball (Malta & Jacinto, 2002).

The available historical data demonstrate the country's receptivity to football, which was introduced into different places independently. The *Univesity of Coimbra* possibly played an important role in spreading different sports around the country since its students came from different backgrounds both social class and geographic origin. Upon completing their degrees, they would often take the spirit of Coimbra back with them to their home towns or to wherever job opportunities would lead them (including overseas), establishing new clubs and thus contributing to the appearance of the numerous sporting organizations that bore the name "Academica".

2.3. The colonization process

Gymnastics was also associated to the academic milieu in Coimbra. In 1852, a student from the Faculty of Law, Pedro Roxa, founded the *Sociedade Gymnastica* ("Gymnastics Society") and set up a gymnasium on the second floor of a building in the centre of the city (Praça 8 de Maio). After this, several gymastics organizations appeared and subsequently disappeared after a short period, indicating that the enthusiasm of the founders was not enough to ensure the survival of the sport organizations, particularly in sports requiring technical supervision.

In fact, a succession of clubs occurred in the city of Coimbra. These included the *Sociedade Gymnástica* ("Gymnastics Society"), which closed in 1854; the *Gymnásio Coimbra* ("Coimbra Gymnasium"), founded in 1883 and closed in 1903 after various interruptions; and the *Gymnásio Recreio* ("Recreational Gymnasium"), founded by two local businessmen motivated to encourage physical exercise amongst the working classes, but which closed because of disagreements between the partners.

Mention should also be made for the *Gymnásio Mouzinho de Albuquerque*. This organization assumed the name of a Portuguese military officer and colonial governor that had won glory by capturing Gungunhana, a fearsome tribal leader in southern Mozambique. The popularity, even glorification, of Mouzinho de Albuquerque reflected efforts to refine the race. During this period, Portugal was a small country oriented toward colonization of territories spread across five continents. This ambitious task was systematically affected by a high incidence of infectious and contagious diseases such as influenza, leprosy and tuberculosis.

At the beginning of the 20th century, gymnastics was believed to have positive properties and was associated to the hygienics of the era. This was exemplified by reports such as that cited by Gerardo & Gomes Ferreira (2002) from the newspaper "O Conimbricense" (10 December 1902), concerning an exhibition of Swedish Gymnastics performed by students from state primary schools. The session involved different gymnastics exercises and military drills that seemed to have pleased the inspector, who was particularly impressed with the precision, elegance and harmony of the movements performed in response to commands issued by the 'patriotic teacher'.

In the Berlin Olympic Games of 1936, the display of the supremacy of the Aryan was, perhaps, at its highest. Attitudes towards race have subsequently changed. Today, Portugal is delighted with the medals won in the European Athletics Championships (held in Sweden in August 2006) by the Nigerian Francis Obikwelu (naturalised Portuguese) or the women's heptathlon winner, Naide Gomes (born in São Tomé).

Analysis of the 20 members of the athletics team chosen for the last Olympic Games (*Olimpo* - Journal of the Portuguese Olympic Committee, 2004) showed that a substantial contingent of the athletes was born outside of Portugal. In addition to Obikwelu and Naide Gomes, the team also included Edivaldo Monteiro (Guinea Bissau), Maribel Gonçalves (Venezuela), Nelson Évora (Ivory Coast), Pedro Martins (Angola), and Carla Sacramento (Afro-Portuguese).

2.4. From enthusiasm to institutionalization

Three stages are commonly observed in the introduction of new sporting habits into a country or community: introduction, diffusion and institutionalization. As regards football, the first two stages happened quite spontaneously. However, institutionalization proved to be more problematic. In 1906, well after the first few matches were played, the *Liga de Futebol* ("Association Football League") was created, changing its name to the *Liga Portuguesa de Football* ("Portuguese Football League") a few years later. In 1910, the *Associação de Futebol de Lisboa ("*Lisbon Football Association") was founded, giving rise to the *União Portuguesa de Futebol* ("Portuguese Football Union"), with counterparts in Oporto and Portalegre, where there were also considerable English communities. The *Federação Portuguesa de Futebol* ("Portuguese Football Federation") appeared only in 1938.

Media reports from the first two decades of the 20th century testify to the appearance of numerous playgrounds in Coimbra: Quinta de Santa Cruz, Quinta da Cumeada, Largo D. Luís, Campo Ínsua dos Bentos, Liceu Nacional de Coimbra, Escola Nacional Agrícola, Jardim Botânico, Campo da parada do Quartel de Santana, Campo da Arregaça, Campo do Arnado, Campo do Loreto. Clubs also sprouted up, such as the *Sociedade de Esgrima e Gymnástica* ("*Fencing and Gymnastics Society*"), *Moderno Futebol Clube* ("*Modern Football Club*»), *Football Coimbra* ("*Coimbra Football*"), *Associação Académica de Coimbra* ("*Coimbra Academic Association*"), *Académico da Universidade* ("*University Academic*"), *Lyceu Football* ("*Football Lyceum*"), *Escola Agrícola Football Clube* ("*Agricultural College Football Club*"), *Sport Club Conimbricense* ("*Coimbra Sport Club*"), *Olivais Futebol Clube* ("*Olivais Football Club*"), *Grupo Sportivo Progresso* ("*Progress Sport Group*"), *Grupo Desportivo da Fábrica Luzitânia*("*Luzitania Factory Sport Group*"). Today, those playing fields have all been built over and the clubs have disappeared, victims of the gradual dehumanization of city centres. Unfortunately, there has been no corresponding creation of new pitches and clubs in the emerging communities.

2.5. The importance of technical supervisors in the promotion of sports

Basketball is an example of the intentional and planned introduction of a new sport into Portugal. It was the *Associação Cristã de Estudantes [ACE* - "Christian Students' Association] that took the initiative. Its aim was to provide students with opportunities for entertainment and leisure, to give them a break from academic pursuits and encourage socialization, bringing important intellectual and physical benefits.

On 20 June 1918, ACE inaugurated its headquarters in Coimbra under the direction of Mr. Myron Clark. Its first anniversary celebration included rounds of

volleyball, basketball, boxing and tennis in the afternoon, and the speech that was given in the evening expressed the hope that it would soon be possible to contract a director of Physical Education. On 18 August 1920, Mr. Arthur Powlinson arrived in Coimbra to be first secretary of Physical Education, and in December 1921, a tournament was held between members, refereed by the directors Orton Clark and William Salling, who had certainly be forewarned about the lack of sportsmanship that usually characterised the city's football matches.

The official regulations of basketball were soon translated into Portuguese and published by the Orton Clark. The volume was considered essential for members, although there was no outside competition until 1924. Then in 1927, the secretary general of ACE called all local clubs to a meeting for the purpose of establishing a Basketball Association.

In less than seven years, basketball was introduced and institutionalized, while football took several decades to achieve the same status. This success was no doubt due to the efforts made by an already-existing organization that was prepared to supervise the sport and regulate competitions, even if the underlying purpose was to control the habits of an important social group, namely university students.

3. Social changes in Portugal

The resident population of Portugal was 5,960,056 in 1910. It rose to 7.76 million in the 1940 census during the Second World War, and increased again to 9.68 million in 1970, when the country was finally democratised. This figure was very close to the 1990 population of 9.86 million.

At the same time, the fertility rate (i.e. the average number of children per woman 15-49 years) changed in the opposite direction, decreasing from 3.9 in 1930 to 2.1 in 1983. A fertility rate of 2.1 is necessary to ensure population renewal. The fertility rate is now well below the renewal value, reaching 1.6 in 1995.

Population growth, then, was mostly due to the increased life expectancy. In 1990, life expectancy for men was 70.2 years, less than the 77.3 years for women. Corresponding estimates in 1920 were, respectively, 35.8 and 40.0 years, and in 1970 were, respectively, 64.2 and 70.8 years. This development was due largely to improvements in health care, reflected, for example, in the ratio of inhabitants per physician, 1,256 in 1960 and 352 in 1990). The sharp increase in life expectancy has inverted the age pyramid so that there are now large areas of the country, particularly in the interior, where the number of people over 65 exceeds the number under 15.

Since the mid-1970s, Portugal began to receive immigrants, first from its ex-colonies in Africa, and more recently, following its accession into the *European Economic Community*, from Brazil and Eastern Europe. This migratory influx has been due, to a large extent, to a growing need for labour created by the application of European funds. At the same time, the economic structure of the country also changed, with a sharp reduction in the agricultural sector. In 1974, 1,287,000 persons were involved in agriculture but by 1994, only 532,000 were so involved. This represents a loss of about 800,000 workers in this sector. This naturally had an effect upon health. The shift from being a country in which 1 in 10 of its inhabitants worked in agriculture,

a physically active occupation, to one in which physical exertion is now largely a residual has meant that increasing levels of obesity and sedentarism have begun to be recorded.

As regards children and youth, there has been a sharp decline in child mortality, while compulsory schooling has increased from 4 to 9 years. The number of individuals attending elementary school increased from 106,998 in 1960 to 410,577 in 1994. This in turn has affected child labour, which was estimated at 84.2/1,000 in 1974 but which is now merely a residual. The economic shift from the primary to the secondary and, above all, tertiary sector of economic activities has also generated the need for a better educated labour force. Consequently, there has been an expansion in higher education in both the public and private sectors. At present, all 18 districts of the country have state higher education with a total of 13 polytechnics and 8 universities.

This demographic pull-factor has also served to accentuate the drain of people from the country to the cities. In 1990, approximately 3.5 million inhabitants (i.e. more than one-third of the population) resided in the demographic basins of greater Lisbon and Oporto alone. If the number of residents in the other 16 district capitals is added (about 1.2 million), it is apparent that one-half of Portuguese population resides in 18 urban centres within in a country of 96,052 km^2.

4. Current participation in organized sports

4.1. Participation in federations

The first data published about the sports system in Portugal (*Portuguese Institute of Sport*, 2005) estimated that 3% of the country (342,717 in a population of 10,355,824) was members of sports federations. For the *Autonomous Region of Madeira*, the figure was 6% (14,090 in a population of 245,012). The corresponding estimate was 8% for the *Autonomous Region of the Azores* (18,816 of 241,762 inhabitants).

While participation in sports such as golf, pigeon racing, fishing and bridge can clearly continue across the life span, activities like gymnastics and swimming have a much more restricted period for participation. Sport-related human performances typically occur during a much shorter interval, usually from late adolescence into the late 20s or early 30s, depending upon the sport and gender. Hence, the figures provided by official statistics for sports participation amongst the total population are limited since they do not take age into account.

4.2. Annual variation of participation in federations

Between 1996 and 2003, the membership of sports federations (a total of 65 federations) increased from 266,000 to 377,000 (Instituto do Desporto de Portugal, 2005), a gain of 42%. More recent data show that the total membership of sports federations in Portugal continued to rise in 2004 to 398,511 (Ricardo, 2005). Closer examination of these estimates for the 2000-2004 Olympic cycle shows that the increase in the number of male participants was due to football (+19,616), volleyball (+17,190), handball (+8,962) and gymnastics (+8245), while that for female participants was due

in volleyball (+7,840), gymnastics (+4,555), handball (+4,159) and football (+2,000). The estimates suggest that there may be still a demand for formal competitive sports that is not totally satisfied by the federations, even amongst traditional sports that date back to the second half of the 19th and early 20th centuries.

4.3. Popularity of different sports in the federated sector

Data for 2003 (Instituto do Desporto de Portugal, 2005) showed that football, which has 110,940 players enrolled in the respective federation, was the most popular sport, followed by handball (21,867 members) and basketball (19,800 members). Other federations with over 10,000 members were pigeon racing, athletics, volleyball, karate, skating and tennis.

4.4. Public funding for sport federations

Public funding for sport federations has largely kept up with the increase in the number of members. It increased from 27.4 million euros in 1996 to 36.5 million in 2003, and was at its highest in 1999, about 37.8 milion euros (Instituto do Desporto de Portugal, 2005). Despite the overall increase in state support via contracts, the amount spent by the state per athlete has dropped from 103 euros/athlete/year in 1996 to 97 euros/athlete/year in 2003. The highest figure recorded was in 1997, 128 euros/athlete/year. If inflation is taken into account, there was a decline from 103 to 78 euros/athlete/year between 1996 and 2003, a reduction of 24%.

Although there appears to be a satisfaction in the political sphere with the increase in sports federation membership evident in the statistics, the data also show that the state budget has in fact failed to keep up with the increase.

5. Participation of youth in sport

5.1. Youth under 16 registered in federations

In 2004, the number of youth under 16 years of age registered in sport federations was 207,034 of whom 157,050 were boys and 49,984 girls (Ricardo, 2005). This represents a 66% increase for girls and 35% increase for boys in the period 2000-2004. This segment accounts for 52% of the total membership, a proportion that is considerably higher than the 45% registered in 2000. This suggests that the increase in sports participation is due mostly to the large-scale provision of sports instruction at early ages, despite a demographic drop of around 9% in youth 10-16 years of age between 1991 and 2001.

The sports which expanded most in the 10-16 age group in terms of numbers of athletes were volleyball (+17,155), football (+16,702), handball (+16,700) and gymnastics (+7980). This may be due to several factors, such as the social impact of events like *Gimnaestrada* or the *Euro-2004*, as well as the appearance of quick-consumption packages with generalised appeal that require little specialized supervision, such as playgym or beach volleyball.

Membership in federations such as for handball and gymnastics has also increased dramatically at this time through the promotion of programmes targeted to primary schools (1st to 4th grades). It is questionable, however, if this is the best way of introducing sports. In the school context, a fun-focused, rhythmic approach that aims to develop the body within a social and affective framework might perhaps yield better results. In this context, it is reasonably well known that early specialization often leads to a high dropout rate and premature exhaustion of individual capacities.

5.2. Promotion and development of organized sports

Given the increase in the number of subjects engaged in organized sport (from 266,000 to 377,000 between 1996 and 2003, and to 399,000 in 2004), it is surprising that there has not been a bigger increase in the number of clubs, instructors and referees. In 1996, there were 10,328 clubs in the competitive subsystem of federations, a figure which stabilized at 9,690 in 2003. The data concerning the number of coaches is even more intriguing. The number increased from 5,541 in 1996 to 13,304 in only two years, and then increased again to 16,353 in 2001, before declining to 10,058 in 2002 and 9,735 in 2003.

An increase in the number of participants by 42% in only 7 years should have been accompanied by a parallel increase in the number of referees and judges; unfortunately this did not happen. Rather, the figure of 13,567 in 1999 decreased to 8,567 in 2003. The data might reflect the lack of reliable sport statistics, but also the inconsistency of sport developmental plans, focused excessively in the number of athletes.

5.3. Transition to competition

The 17-19 age group ('juniors') remained stable in the five years between 2000 and 2004. Increase in this segment was constrained by two important factors, entry into higher education or the work force. The number of males oscillated between 32,190 in 2000 and 31,758 in 2004, while there was a slight increase in the number of females from 7,963 to 10,731 over this interval.

This age segment is active in 55 of 65 sport federations and a decrease in numbers of participants was noted in 31, particularly in traditional sports such as basketball (-2,161), gymnastics (-1,041), table tennis (-330) and handball (-247). On the other hand, an increase in participants was noted in horse riding (+531) and motorcycling (+233). Aikido and taekwondo were among the 10 sports that registered the greatest absolute increases in the number of junior participants.

It would appear that the increase in sport participation was due mainly to the success of large scale or mass sport initiation at the young ages. This inevitably inflates the number of participants but such increases need to be viewed with care. Pre-teens can be viewed as "false athletes" in the sense that they do not progress to specialized training that is more demanding in terms of technical resources, training conditions and competition resulting in a high dropout rate. Further, lifestyle changes in the late teens tend to favor other non-sporting interests. The data may reflect a change in the sporting habits of the Portuguese population, from organized and competitive settings to occasional events (this will be analyzed later in this article).

5.4. Summary of school sports statistics

School sport has been perceived as an under-exploited tool by the sport system. There are some 866,000 young subjects in elementary and high schools (more than double the number of federation members - 399,000 in 2004), while the total number of schoolchildren engaged in school sport is around 119,760 (data from 2001/2002). The number of individuals under 17 years (i.e., not juniors) registered in federations was 185,586 in 2004. If federated sports were confined to juniors and seniors, there would be total of 169,550 athletes. With funding of federations at a level of 36.5 million euros, the nominal amount per member would be 215 euros/athlete (juniors and seniors).

Presently available data suggest that school sport can provide participation for approximately 120,000 young people at a little over 3 million euros, resulting in a figure of 25.3 euros/student/year. About 30 million euros should be added to this figure expenditure due to an increase of around 1,000 Physical Educators for the 5^{th} to 12^{th} years of schooling. In Portugal, sport is voluntary for Physical Education teachers, and those who participate in sport are compensated with a reduction in academic responsibilities. Teachers at the start of their career have a timetable of 35 hours/week, of which 22 are lessons. Previously, school sport was paid as overtime work.

In accordance with data provided by governmental departments, income from the national lottery decreased by 37% from 4.0 million euros in 1999 to 2.5 million in 2002. The dependence of school sport upon the income generated by lottery produces enormous fluctuations in the overall funds available: 3,416,765 euros in 1998; 4,249,478 in 1999; 4,083,213 euros in 2000; 3,182,690 euros in 2001 and 3,032,691 in 2002.

6. Complementary data on sporting habits

Since the 1980s, several European countries have joined to study the sporting habits of their respective populations in projects such as in the COMPASS programme (1999). Marivoet (2002) briefly summarized the results for Portugal showing that the average level of participation remained unaltered at 27% between 1988 and 1998. This figure was similar to other countries in southern Europe, such as Spain and Italy, which registered 31% and 23%, respectively. The highest rates of participation were reported in Finland (81%), Sweden (70%), United Kingdom (67%), Ireland (64%) and Holland (63%).

The Portuguese figure of 27% can be partitioned into 5% in federated sport and 22% in leisure sport. These estimates were calculated from a survey of a stratified proportional sample of the population between 15 and 74 years of age using the following question: "How do you spend your free time?». Responses were based upon a list that included items such as «watching TV», «reading», «doing sport», «going to the cinema», etc. [Note, individuals under 16 years of age account for the largest proportion of participants in organized sports offered by federations in Portugal so that the estimate for sport participation provided by this survey is not free of potential criticism.]

It should be noted that some countries used a different age range for the study so that comparisons need to be made with care. In Sweden, for example, the age range was 7 to 70 years, while in Finland the population above 3 years of age was included.

6.1. The satisfied and unsatisfied demand for sport

The 5th question in the survey reported by Marivoet (op.cit) was the following: «Could you tell me what sports or physical activities you do?» Answers were based upon a list of 63 sports and physical activities. Although the list included activities such as fitness, which involves options like power walking and jogging, a considerable portion of the adult population (particularly the less well-educated or culturally less developed) tend to indicate athletics when they mean going for a run, football when they are merely kicking the ball around, or swimming when they are splashing about in a pool. In Portugal, the term 'gymnastics' is often understood as a synonym for *Physical Education* or even for sport, particularly amongst older people; while riding around on a bicycle is frequently confused with the sport of cycling. Allowing for these limitations, the list of most popular sports is worth noting. Football, swimming, athletics, fitness activities, gymnastics and cycling topped the list.

The survey also asked respondents who did not do any sport if they were considering taking one up, and if so, which one. This provided a universe of potential demand for sport corresponding to 4% of the population, with swimming (36%), gymnastics (15%) and dance (13%) indicated as the most desired activities. It is not known whether the result of this survey would impact the number of public swimming pools nation-wide. In general, facilities are usually of a competitive format to enable them to be used for federations, which means that they are not always suitable for the range of water activities that interest the public at large.

As regards youngsters, occasional studies, such as that carried out by the Cantanhede Council (Coelho e Silva *et al.*, 2002) suggested that there is substantial potential for the promotion of traditional sports such as basketball, football and swimming, as well as a demand amongst adolescents for activities such as aerobics, bodybuilding, outdoor activities (mountain bike, bodyboard) and motor-related (karting and motorcycling).

6.2. Ecological dimension of sport participation

The survey of the Portuguese population also suggested that sports participation was highest in habitats of 5,000 to 10,000 people, due mostly to a lower dropout rate (Marivoet, 2001). Cities of over 20,000 inhabitants had broader coverage (sum of people currently and formerly participating in sports), but also had a higher dropout rate.

It is well known that time-management is among the main obstacles to regular sports participation, particularly when sport has to be reconciled with studies or work. This is the case not only among participants (Coelho e Silva & Garcia Silva, 2003) but also coaches (Coelho e Silva *et al.*, 2006).

Additional studies have shown that children in urban areas are less independent socially and less able to get around autonomously (Colaço, 2006). For this reason, participation in sports requires more family support, even between the ages of 12 and 16 (Auxiliar, 2006). This latter study also showed that average-sized communities

are the most propitious for participation in sport. They are large enough to actually possess sport facilities and also permit friendly mobility between residence, school and sport practice both in terms of time consuming and of safety.

6.3. Sport for adults in non-competitive settings

In alternative to sports federations, the *Instituto Nacional de Tempos Livres ("*National Institute for Leisure and Free Time", INATEL) provides opportunities for sports participation that seem to suit the sporting needs of the population. INATEL offers several programs for participation such as: a) organization of regular competitions, b) regular supervised non-competitive physical activities, c) organization of occasional events within a "Sport for All" perspective, d) non-traditional outdoor activities.

According to recent non-published reports, about 31,000 subjects (mostly males) participated in the first group of competitive sporting activities. This format is much less formal than federated sports. The most popular sports were athletics, swimming, fishing, table tennis, shooting, chess, handball, football, basketball, volleyball and beach volleyball.

A second group involved 14,369 adherents, including a considerable number of women. Aerobics, fitness swimming and hydro-gymnastics were the most prominent activities.

The "sport for all" activities attracted 126,805 participations. Less traditional outdoor activities such as paragliding, climbing, orienteering, mountain biking, involved 45,470 participations. In the last two categories, participants refer to the total number of entries taking part in the programs. It is possible that participants could be represented more than once.

Although specifics of the INATEL budget is not available, it is well known that in this sector of sporting system, the amount of administrative and technical staff is very small. Its activities are largely financed by the participants themselves.

7. New trends for the following decades

7.1. The new hygienism

In a sample of 4,511 Portuguese children 7.0 to 9.9 years, the prevalence of overweight was 20.3% and that of obesity was 11.3% using the criteria of the International Obesity Task Force (Padez *et al.*, 2004). Thus, almost 1 in 3 Portuguese children need to lose body mass.

The *International Obesity Task Force* recommends cut-off values suggested by Cole *et al.* (2000). These correspond to BMIs of 25.0 kg/m^2 and 30 kg/m^2, determined from 2 to 18 years of age, separately for each sex, at six month intervals. This study made use of a database from six developed countries in three continents. European data were from England and The Netherlands where adult populations are, on average, substantially taller than Portuguese adults. Moreover, in these countries, the trend for increased height over generations has stabilized some decades ago while in Portugal there are as yet no signs that the genetic growth potential has been reached.

Although there may be reservations about using cut-off points for overweight and obesity based on from other countries, the statistics on overweight and obesity for Portuguese children are, nevertheless, of concern. Further, a study of geographic variation in sedentary lifestyle in Europe noted that Portugal was one of the countries where people were markedly less active (Varo *et al.*, 2003). By inference, the increase in overweight and obesity may reflect reduced levels of physical activity in the population beginning at pediatric ages.

In the light of these "social alarms" combined with results of studies of health service expenditures related to sedentarism and obesity, the importance of sport has been reiterated in health campaigns, with a view to achieving benefits in the area of public finances.

In the United States, the direct cost of a lack of physical activity was estimated at around 24 billion dollars (Colditz, 1999), while in Canada the estimated cost of physical inactivity to the economy was 5.3 billion dollars and that of obesity was 4.3 billion dollars (Katzmarzyk & Janssen, 2004).

This new medical dimension of sport is also known as the *Neo-Hygienism*. In a sport system where funds are limited, it is not surprising that the extension of the aims of sport (the Sports Act became known as the Sport and Physical Activity Act) should result in even tighter restrictions upon the resources available for the traditional sector (i.e. sports federations).

7.2. Municipalization of sports

It is evident that public funding for sport federations has stagnated at around 40 million euros per year. In parallel, a disinvestment is apparent in school sport. Sport is strongly dependent on incomes generated by lotteries. The vacuum left by the withdrawal of the central government has, in the case of sport, been largely filled by local authorities. In Portugal, of the ten stadiums built to host the European Cup in 2004, four belong to football clubs and six to local councils. The same phenomenon can be seen with the construction of swimming pools and tracks for athletics. The central government in Portugal owns very few sports facilities, even those of national or international importance.

Local authorities presently have the majority ownership of the national sports park. The lack of planning as regards investment in sports facilities is clearly exemplified by the construction of stadiums that are oversized in relation to the importance of their local clubs. Obviously, a town needs to be of a minimum size to justify the construction of facilities that may be costly to run. There may be serious difficulties in maintaining facilities that have been built without concern for the needs of the local populations, such as those constructed in areas where the population is dramatically aging.

7.3. Americanization of sport

Szymanski & Ross (2000) consider that the main difference between the structure of American and European professional leagues has to do with openness. In Europe, access to important leagues such as football is dependent upon sports; on the other

hand, in the United States, the main leagues operate as franchises and teams are formed with a view to conquering the market.

An analysis of the location of NBA (basketball), MLB (baseball), NFL (American football) and NHL (ice hockey) league franchises showed that there were no teams in metropolitan areas with less than 1 million inhabitants (Durant *et al.,* 2006). Moreover, only five cities had clubs in all leagues and more than one club in the same league. These were New York (20.14 million inhabitants), Los Angeles (15.97 million inhabitants), Chicago (8.87 million inhabitants), Washington D.C. (7.36 million inhabitants), San Francisco (6.91 million inhabitants).

The lack of teams representing large cities like Los Angeles, Chicago and New York in the recent finals of the NBA championships is a concern for the league managers. In the constant search for greater profits, the NBA has expanded to include important Canadian cities, while David Stern – NBA general manager - has also studied the potential of certain European cities. Interestingly, the general manager ignored Pau-Orthez, Limoges, Vittoria and Treviso, despite the fact that they have the most powerful basketball teams in Europe. Instead, the expert suggested that teams should be formed in London, Paris and Berlin, where basketball is not yet really established.

The *European Basketball League* (ULEB) has set up a competition in which access is by multi-year invitation in order to attract powerful investors. This compromise between sporting and economic criteria is typical when clubs orient their activities towards international events, where there is large-scale television coverage and sponsors have a much greater impact. In football, this is taken to such an extent that important players are being saved in the internal leagues.

A list of European metropolitan areas ranked by size is led by Paris with 9.32 million inhabitants, followed by Moscow (8.64 million), London (7.69 million) and Istanbul (5.48 million); Lisbon and Oporto rank 18th and 37th, respectively, with 2.32 million and 1.15 million inhabitants (Durant *et al.,* 2006). The authors anticipate that the Soccer Champion's League will increase in importance while national leagues will decline, with the possibility that intermediate leagues may be set up (suggesting a regionalized Europe) to ensure that clubs in the small and medium-sized towns will remain economically viable. Interest of Anderlecht to participate in the French league, and of Glasgow «Old Firm» (fusion of Celtic and Rangers) to compete in the English *Premier League* was mentioned as well as the possible merger of the Swiss and Austrian championships, and even the creation of an «Atlantic League» involving clubs from Portugal, Holland, Belgium and Denmark. In other words, national competitions need to gain scale as a survival strategy, so as not to be overshadowed by the Champion's League.

Access to the *Champions League* creates such an economic dynamic that clubs participating in it are substantially apart from others that compete only in domestic events (Hoehn & Szymansky, 1999). According to these authors, this imbalance is damaging national leagues. It would be preferable for clubs with international aspirations to be separated from internal games, creating more competitiveness and uncertainty, and allowing winners to rotate in domestic leagues.

The entie logic of sport will, therefore, be altered. The results of national leagues, which have always had symbolic value for traditional fans, will also be oriented towards economic interests. Older clubs will no longer be maintained but instead will have to

depend upon the investment and disinvestment strategies of their shareholders. Eclectic clubs offering a range of different sports will concentrate their activities on business areas defined by their shareholders, dropping sports that are not viable economically, even if they are still relevant in social and sporting terms.

8. Concluding remarks

The "sportification" of society is clearly evident in the growing use of sport as a marketing instrument. The traditional concept of sport is changing into a TV entertainment industry based mostly on top athletes of those sports that possess the ability to attract more viewers and therefore to make sport economically more profitable. This process of differentiation into less boring events is termed the "*commodification" of sports*.

Changes are also occuring in the situation of sport as a leisure activity with immediate enjoyment, relaxation and recreation as its main characteristics. These alternative sports have been called "*nonsporting sport"* (Dietrich & Heinemann, 1989). This trend results in increased competition between the growing number of sports, sport organizations and settings in which sports can be practiced and commercialized. This development has been labeled as the "*desportification of sports"* (Crum, 1991). As a result of these trends, the actual content and meaning of sport in general has become less clear and in turn demands ongoing research and analyis.

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YOUTH AND SPORT IN THE USA AND GERMANY - A CROSS-CULTURAL COMPARATIVE STUDY

1. Cross-cultural research as a way out of isolation and parochialism

Globalization, defined by Robertson (1992, 5) as "the compression of the world into a single place", is a major feature of Western industrial societies. This trend is reflected in a worldwide communication network and an increasingly commercialized multi-national leisure culture. Other global changes result from individualization and social differentiation and also cross national boundaries. There are changes in certain aspects of adolescents' life situations, like a greater number of years spent in school and training and the increase in leisure time, the redefining of gender roles, the estrangement of adolescents from the social value systems handed down by adults, and changes in intergenerational relationships, with partial shifting of the balance of power in favour of the young, for example where modern technologies are used or in the spheres of music, fashion, body-related self-representation, and in sport.

Globalization tendencies are to be found in sporting activities of adolescents all over the world. Roller blading endangers pedestrians and vehicles in New York and Berlin alike. Adolescents from Memphis to Cologne are infected by every type of street sport fever. Californian outdoor activities with their fitness-oriented hedonism and East Asian martial arts are climbing the popularity of the young people the world over.

However, in marked contrast to the trend towards internationalization in youth and sport culture(s), scientific research on these social phenomena is largely restricted to the researchers' own countries. Not to put too fine a point on it, large sections of social studies in sport are still nationally oriented, with few exceptions (cf. for example Brandl-Bredenbeck & Rees, 1996; Brettschneider & Brandl-Bredenbeck, 1997; Brettschneider, Brandl-Bredenbeck & Rees, 1996; Naul, Neuhaus & Rychtecky, 1994; Rees & Brandl-Bredenbeck, 1995; Brettschneider & Brandl-Bredenbeck, 1997; Brandl--Bredenbeck, 1999; Brettschneider, Brandl-Bredenbeck & Rees 2001; Brettschneider, Brandl-Bredenbeck & Hofmann 2005). Not only does this restricted orientation conflict with the trend towards globalization in the field; even more problematic is the fact that some sections of sports science have not even reached the standard of international communication that is now customary. It is therefore a major aim of the present paper on adolescent sports culture in the Federal Republic of Germany and the United States

of America to map out the theoretical and methodological terrain of cross-cultural comparative studies and to point out promising new avenues for sports science. At the same time it is also an attempt to break out of the parochial isolation characteristic of social sport studies, and to stimulate international dialogue. To do this, examples and illustrations have been taken from findings that allow sport concepts and sport activities among adolescents in Berlin and New York to be compared. The findings are taken from a comprehensive study by Brettschneider/Brandl-Bredenbeck (1997) entitled "Sports culture and adolescents' self-concept - a cross-cultural comparative study about Germany and the USA".

Since the 1950s there have been a number of social and cultural phenomena and developments which originated in the USA, and most of which were subsequently taken up in German popular culture. Taking as examples the timings of the youth revolt, the start of the conservative backlash in the political system, the height of hedonistic value-orientation, or the popularization of indoor and outdoor sporting activities - from the aerobics craze to rollerblading - it would be easy to identify parallel features in the two countries' socio-cultural developments, occurring first in the one country and then later in the other. Thus it is not surprising that trend research based on modernization theories, which analyses and forecasts changes in popular culture, has discovered a fruitful cultural historical pipeline running from America to Germany over the last 30 years (Horx 1993, 19), whose productivity will doubtless be boosted by the increase in the speed of cultural exchange between the two countries, and between different cultures in general, on the communications superhighway.

A comparative analysis of youth and sport in the context of adolescent life-styles seems particularly pertinent since current developments in Germany appear to be a kind of delayed replication of American youth culture. A search for common features of the two youth sports cultures, for culture-specific differences, and for convergent or divergent trends within the context of adolescent "life worlds" in the USA and Germany may also provide on overview of future sports developments.

2. Cross-cultural research - theoretical problems and methodological implications

2.1. Comparing as an Anthropological Category and a Research Strategy

"In order to know who you are - compare yourself to others!" In his drama "Torquato Tasso", Johann Wolfgang Goethe points to the essential importance of comparisons for individuals. His implicit message is: Our lives are full of comparisons and we need them. Children compare themselves in order to know whether they are stronger, faster or better than other children of the same age. Adolescents tend to compare themselves to their peers with regard to success in school, physical appearance and media which are at their disposal. Comparisons in the adult world often focus on the professional career, the financial well-being and status of health. These examples reveal that on the one side comparing oneself with others is a core element of identity development in children and youth. On the other side the comparative aspect in adults' lives helps to identify and define one's own social position in a complex world. Taking

into account these qualities of the comparative view, comparing might be seen as an anthropological category.

Comparative research encounters problems on different levels. Often the access to the research question on a pragmatic level is the first problem which has to be solved. In this context it is of crucial importance to familiarise oneself with the state of the art and to get hold of the information necessary with regard to the research question. This task can be accomplished with the help of different instruments and information sources. A reliable list of information sources comprising international organisations, international journals, book series, books, monographs, encyclopaedias, international congresses, international workshop proceedings, international data banks, internet sources has been put together by Hardman (2000; 2003).

Comparative research also faces methodological and theoretical problems. In order to solve these problems researchers usually distinguish between two concepts. The diachrone approach looks at how the subject in hand has changed in an historical perspective. The synchronic perspective how two or more cultures deal with the topic simultaneously.

On the background of the idea that comparing can be seen as an anthropological category cross-cultural comparisons are nothing else than specific cases of comparisons. However, these cases require specific scientific treatment in order to overcome the naive perspective and to be able to give answers to the question of how to do comparative research in a decent way. This approach involves both methodological and theoretical aspects.

2.2. Methodology

In the course of the last decades Comparative Physical Education has moved from early ethnographically motivated description to methodologically sophisticated analysis. This has enabled the incorporatation of the body of knowledge into theory-based explanations of the differences and similarities across cultures.

This development has been a multifaceted scientific process that has generated a diverse range of methodological tools. To avoid the so-called "Malinowskian dilemma" which means to compare incomparable (cf. Berry, 1980, 7) a set of criteria to assure comparability has been developed (cf. Brandl-Bredenbeck, 1999, 55-81). These criteria are reflected in the discussion about the different aspects of equivalences.

2.3. Comparing apples and oranges? - The need of equivalences

There is broad agreement that functional, conceptual, linguistic and sample equivalences are essential categories for cross-cultural comparative studies. Only if these criteria have been taken into account, valid comparisons can be made (cf. Brandl-Bredenbeck, 1999; Brettschneider & Brandl-Bredenbeck, 1997).

- Functional Equivalence of the categories chosen for a comparison is generally seen as a basic precondition for any meaningful comparison. Equivalence is fulfilled when the phenomena studied in the cultures included in the comparison are "reasonably familiar features" (Silvennoinen, 1986, 73). If functionally equivalent

spheres such as school and physical education are viewed as constructs that map reality, they have to be appropriately operationalised by means of multiple indicators.

- Closely linked to the problem of functional equivalence is the problem of differing significance and of cultural variation in concepts, values and behaviour. Conceptual equivalence concerns the problem that members of different cultures may not necessarily attach the same significance to the same social phenomenon. Thus in some cultures, the idea of achievement is seen in a positive light as it does not disrupt the harmony of the group. However, if the performance of one group member sticks out from that of the rest, this is seen in a negative light and may in some circumstances be subject to social sanctions. This becomes very clear in Japanese interpretations of American baseball, which do not tolerate "stars", whilst in other cultures or ethnic groups, standing out from the crowd may even be the dominant aim of sporting activities, as it is frequently the case in occidental cultures (Galtung, 1991).
- A further equivalence criteria, aimed at meeting the precondition of a fair instrument, is linguistic equivalence. This form of equivalence is fulfilled when the wording of items in the questionnaires in multi-lingual studies has been checked by the re-translation method.
- Problems of equivalences can also arise with respect to the selection of samples. Only if there is correspondence at the macro level as far as for e.g. age, gender and socio-economic status of the population under scrutiny is concerned can sub-aspects on the micro level be usefully compared with one another.

2.4. Theory

The unanimous view in the relevant literature is that cross-cultural comparisons must be theory guided. General theories provide a framework for observing, comparing and recording phenomena, and for classifying findings. They supply the criteria that allow common features and differences to be detected and interpreted.

In cross-cultural comparative research covering at least two differentiated national cultures in one study, the problems of the theoretical basis are very profound. Since the object under study can basically be approached both from the perspective of the first culture, and from that of the second, researchers often continue to resort to their familiar national store of theoretical concepts, problems are analysed through culturally tinted spectacles, and researchers design their tools from the point of view of one of the cultures under study or attempt to decipher the strange culture in terms of their own, the central problem will remain unsolved. Thus, even where the intention to carry out cross-cultural comparative research has been proclaimed, scientific ethnocentrism is perpetuated, hampering any possible progress in knowledge.

There is not a canon or a recipe which describes how to solve the problem. But there are a some general considerations that might help to cope with the problems. These considerations refer to the topics of the "emic/etic-debate", the "tertium comparationis" and the "a-priori" vs. the "a posteriori" decision (cf.Brandl-Bredenbeck, 1999; Brettschneider & Brandl-Bredenbeck, 1997; Brettschneider et al., 1996).

2.5. The emic/etic-debate

The emic/etic-debate deals with the differences in the understanding of "cultures" and the implications for theoretical considerations in the comparative research process. Of central importance is the dichotomous understanding of cultures. On the one side cultural patterns are described as relative from culture to culture. On the other side cultural patterns are interpreted as being universal across the cultures.

Table 1: Criteria for Etic/Emic-research strategie (cf. Lonner, 1979, 19-20)

	ETIC	EMIC
Research Unit	all (or selected group of) cultures	one culture at a time
Structure of the system	world-wide system (created in advance)	structure of the (particular) system must be discovered
Perspective of the analysis	external view	internal view
Absolute/relative criteria	criteria are absolute and directly measurable	criteria are relative to the internal characteristics of the system and measured relative to each other
Evidence for differences/similarities	units are different/similar etically when instrumental measurements can show them to be so	units are different/similar emically when they elicit different/similar responses from people acting within the system

The emic-approach refers to cultural relativism. This research strategy tries to develop sets of criteria which are specific to one culture and focuses on differences between the cultures. Since this approach is based on the idea of cultural relativism there is a probability to over-emphasize similarities which are identified in the research process.

The etic-approach is based on the idea of cultural universalism. This approach aims at establishing criteria common to all cultures and to use them as the folio for comparisons. Research in the tradition of cultural universalism tries to identify similarities across cultures. This way the etic-approach tends to over-emphasize differences (cf. Table1).

2.6. The "tertium comparationis"

On the basis of the theoretical considerations a "tertium comparationis" has to be found. The "tertium comparationis" can be described as a tool that enables us to compare diverse aspects. For example, if I want to compare apples and oranges theoretical considerations concerning healthy nutrition, within these considerations the category fruit can serve as a "tertium comparationis". If a study does not have a concept based soundly on a specific theory, it is impossible to obtain more than purely chance results, descriptive observations, meaningless impressions and speculative interpretations. It is the underlying concept which changes a descriptive juxtaposition into a real comparison.

2.7. The "a priori" vs. "a posteriori" - decision

Although the "a-priori" consideration of equivalences helps to avoid to compare apples and oranges in a naive way, part of the problem remains unsolved. The question whether e.g. physical education is functional equivalent in the different countries under scrutiny can not be answered in a convincing way unless it has been empirically verified. In other words: Though there is a strong demand for an "a-priori"-consideration of functional equivalence, the final decision on the question can only be made "a posteriori", which means on the basis of cross-cultural research (cf. Brandl-Bredenbeck, 1999).

3. Globalization, adolescence, and sport – theoretical frame and main focus

3.1. Globalization, adolescence and sport – a theoretical frame work

There can be no doubt that adolescence and sport are examples of global phenomena. As Csikszentmihalyi and Larson (1984, 41) have said, what is universal about adolescence seems to outweigh by far that which is unique, while a rapidly developing literature on the globalization of sport demonstrates the popularity of the issue among sociologists interested in sport.

The debate in sociology of sport has focused on how best to theorize globalization. What might be called "battle lines" were originally drawn between the supporters of modernization theory (e.g. Guttmann 1991) who tended to see the spread of sport as part of a general process of cultural diffusion, and the followers of a more economic-based approach in which globalization was seen as a uni-directional process through which "American style" capitalism was spread around the world as an example of a modern form of cultural imperialism (e.g. Kidd, 1991; McKay & Miller, 1991). These approaches have been criticized by Maguire (1994) as oversimplified because there are many global flows falling under the rubric of sport, and because what he called the "monocausal logic" behind the Americanization theories which he saw as too economically deterministic. Maguire offered what he called the "twin figurational concepts of diminishing contrasts and increasing varieties" (1994, 402) to explain the global spread of sport at the macro level.

In a recent review of globalization research Donnelly (1996, 247) describes what might be called a "softening" of these earlier positions, suggesting common ground around the concept of cultural hegemony as a way of understanding conflicting global flows. However, he also cites research by Cantelon & Murray (1993) who warn against an overly homogenized model of global culture, and by Rowe, Lawrence, Miller & McKay (1994) which is critical of the whole concept of globalization for underestimating differences in how groups experience sport.

From this preliminary research is emerging a more complicated picture of the global nature of sport, one which is consistent with more general theorizing about global issues. For example, Robertson (1995) has warned against conceptualizing globalization as either homogenization or heterogenization, and has argued that both these processes are going on simultaneously. We believe that the current macro-level

approach to globalization research in sport and the generally non-empirical nature of that research underestimates the complicated way in which sport perceptions and activities comprise "global flows" of sport within and across nation-states. For example, Bairner's (1996) study of the idiosyncrasies of "sportive nationalism" in the cases of Scotland, the Republic of Ireland and Sweden demonstrate the complicated nature of globalization research. Particularly interesting in Bairner's case studies was the finding that differences in the historical developments of the three societies make problematic global generalizations about sport.

3.2. Adolescent Sports Culture as the Main Focus

Our interest is to focus on a more micro-level approach to globalization. Our analysis empirically examines the degree to which there is a global sports culture, concentrating on the perspective of American and German youth.

In order to analyse what has been called global sports culture, we examine different aspects of youth and sport in Germany and the USA. First, we examine the relative importance adolescents put on sport in the context of leisure time activities. Secondly, we take a closer look at the adolescents' understanding of sport in the two cultural contexts. Analysing sport concepts from inside each cultural context is of central importance. Such an analysis not only enables to grasp the diversity of meanings attached to sport but at the same time serves as a basis for further cross-cultural analysis when youth and sport in Germany and the USA is under scrutiny. Thirdly, we use our findings concerning the sport concepts to assess the culturally influenced interpretation of soccer and basketball in Germany and the USA.

4. The design of the study

In both the Federal Republic of Germany (about 2200) and the USA (about 1800), data were collected by means of a questionnaire and through the institution of schools. In Berlin, Brandenburg, and Northrhine-Westphalia the survey was of school students in the 7th, 9th and 12th years of various types of school, and in New York and Memphis, it covered the 7th, 9th and 12th grades of High School.

4.1. The samples

The subjects were selected by means of a stratified or layered sampling procedure, i.e. a combination of systematic and random sampling. The schools were selected according to the criteria of socio-structural factors in the parts of town concerned and their location within their city.

According to requirements of cross-cultural methodology we compare the adolescents' understanding of sport and the sporting activities of two equivalent samples, that is of New York and Berlin adolescents. This procedure aims at minimizing obvious confounding effects. Since we know that intra-cultural differences due to ethnicity might be confounded within cross-cultural differences (Rees/Brandl-Bredenbeck 1995; Brettschneider/Brandl-Bredenbeck/Rees 1996) the following analysis is based on the

members of the white main stream culture in New York and on those adolescents in Berlin with German nationality. Black adolescents in the USA as well as Turkish adolescents living in Germany will be included in future analysis. Thus, for our purposes here it is legitimate to talk about a Berlin and a New York sample.

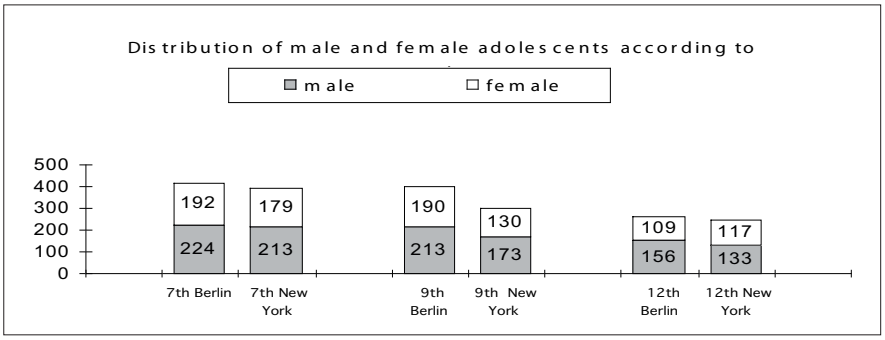

Figure 1: Distribution of male and female adolescents in Berlin and New York according to grades

As Figure (1) shows, the samples include comparable numbers of male and female adolescents across the age groups. In Berlin, the stratified school system was taken into account. Students from the three secondary school streams (Hauptschule, Realschule, Gymnasium), from comprehensive schools (Gesamtschule) and from vocational college (Berufsschule) are represented. In New York, differentiation according to school type is not relevant. All the students attended High School, either Junior High or Senior High depending on their ages.

5. Results

5.1. The importance of sport as a leisure time activity

In order to take a closer look at the importance of leisure time activities in general and at the importance of sport in the subjective evaluation of the adolescents in both countries, we developed a list of 16 leisure time activities and asked the adolescents in both countries to rate the importance of these activities.

The results are the following: As far as the subjective evaluation of the importance is concerned we find significant differences in the two cultures for twelve out of sixteen activities! This result can be interpreted in such a way that for the overwhelming majority of these activities the relative importance is seen in a different light in the specific cultural context. One of the few leisure time activities which seem to be of equal importance in both countries, is sport. In other words, sport as a leisure time activity is as important for adolescents in the New York area as it is for adolescents in Berlin. At first sight these results seem to support the assumption that sport is a universal phenomenon highly valued by adolescents around the world. This first

analysis is based on the concept of a global sports culture and deduces similarity from the "a-priori" assumption of comparability.

Table 2. Importance of leisure time activities Berlin/New York.

Please go through the following list and check how important each activity is to you!	Level of significance (* p<.01;** p<.001)
Listen to music	**
Watch TV/ video	**
Hang around with friends	**
Doing crazy things	*
Computer / videogames	**
Reading(e.g. books, magazines, comics)	**
Sport activities	.493
Playing an instrument	**
Extra work for school; follow up on homework	**
Going to parties, dances	**
Arts and crafts (e.g. photography, making things)	.042
Being by yourself (relaxing, day dreaming)	.036
Go shopping	*
Going to movies, concerts, theatre	.178
Volunteer work, social work	**
Other	*

A detailed analysis which uses the comparison itself for an "a-posteriori" assessment of equivalence shows intra-culturally inconsistent gender and consistent age effects (cf. table 3). In New York sport as a leisure time activity is more important for boys than it is for girls. With regard to the Berlin adolescents there is no significant gender effect. In both cultural contexts the importance of sport as a leisure time activity - independent of gender - decreases with age.

Table 3. Importance of sport as a leisure time activity. All values are mean values. Answers on a scale: *This leisure time activity is very unimportant (1) to very important (5).*

	New York					
	total	male	female	7th grade	9th grade	12th grade
	n=552	n=297	n=255	n=222	n=180	n=152
Doing Sports	3.86	4.12 **	3.58	4.16 **	3.87	3.42
	3.82	3.87	3.76	4.02 **	3.71	3.68
	total	male	female	7th grade	9th grade	12th grade
	n=939	n=512	n=427	n=349	n=345	n=246
	Berlin					

Level of significance: * p<.01; ** p<.001

This analysis reveals that sport as a leisure time activity shows similarities but also differences across the cultures. In order to further examine these differences and similarities we try to answer the following question: What do young people in the different corners of the world actually mean when they talk about sport?

5.2. The adolescents' sport concept: The problem of conceptual equivalence

Sport is indeed an expression of that socio-cultural system in which it occurs (Lüschen 1976). As a consequence of this tenet, adolescents' subjective sport concepts are approached by means of the association method (cf. Mrazek/Schäfer 1988). This procedure allows both subjective interpretations and the conceptual background that is deeply embedded in each individual's external socio-cultural factors to be recorded.

The following request was made to the respondents: "Think for a moment and then write down three things that come to your mind when you think of sport". The replies then underwent a bi-lateral work process, with their contents first being analysed and sorted according to logical categories in order to record, compare and analyse adolescent sport concepts in detail. Analysing sport concepts from inside each cultural context in this way not only enables the diversity of meanings attached to the sport concepts to be included in the interpretation, but also avoids ethnocentric perspectives when they are compared.

When all the associations, ideas, rational and emotional value judgements that adolescents express when asked what they think sport means are collected under the term sport concept, the result is a wide diversity of different meanings. As each concept is primarily linked to the experiences an individual has had in the course of his or her biography, there are both inter- and intra-individual differences. The assumption is that despite the diversity of meanings of sport, it ought to be possible to identify elements which form the core of the adolescent sport concept, as it were. Does this core have the same outlines among New York adolescents as among their Berlin counterparts, or are there context-linked variations?

Categorization of the associations on the basis of a contents analysis shows both common features and differences in the two youth cultures. The sport concept of young Berliners has the following major features:

(1) Association with a relatively large number of sporting activities, with institutionalised sports disciplines dominating, but supplemented by more informal sporting activities. The numbers of team and individual sports disciplines are balanced; leisure activities (e.g. skateboarding, roller blading, free climbing) play a considerable role in the sport concept.

(2) Dominance of positive associations, with fun so to speak as the omnipresent and at the same time rather vague super category. Negative judgements (e.g. stupid, silly, waste of time) are the exception rather than the rule.

(3) Importance attached to physical effort (e.g. sweat, hard work) and the promotion of fitness.

(4) Social reasons (e.g. friends, team mates) are important whereas career orientation (e.g. scholarship, money, pro athletes) is marginal to the understanding of sport.

New York adolescents present a slightly different picture with regard to their sport concept. When they think of sport, the associations are with:

(1) A relatively small number of institutionalised team sports (e.g. basketball, American Football, baseball), which dominate all other sporting activities. Both individualised sporting disciplines (e.g. track and field, tennis) and informal leisure activities are named relatively rarely;

(2) An almost unrestrictedly positive view of sport;

(3) Career orientation, winning competitions, and victory. The opposite terms clustered around losing and defeat are very rare.

Independent of the cultural context, sport has a virtually untarnished positive image among the young, and this is decisive in shaping their sport concept. In the everyday consciousness of New York youth, the team sports baseball, basketball and football dominate the activities named. The significance of these among a broader American public and in the education system has been convincingly explained by Guttmann (1979) in particular. Among the motives and gratifications connected with sport, the presence of ideas of competition and victory is striking among American adolescents. Berlin adolescents, on the other hand, emphasize a broader concept of sport. For them, physical activity can still be sport - and moroever, fun - if competing and wanting to win have a subordinate role, an idea that New York adolescents have difficulty with. This facet of sport concept is reflected in common sayings such as "If you can't win why play?", "Winning is not everything, it is the only thing" and "Defeat is worse than death, because you have to live with defeat", all to be found as mottos in many school gymnasiums and changing-rooms. There are also distinct differences in the associations connected with fitness and health. The idea of physical effort in sport, and its implicit potential to promote but also to impair good health, plays a considerably greater role among adolescents in Berlin than among those in New York.

One surprise is the greater frequency of school-related associations among Berlin adolescents as compared with young New Yorkers. This is surprising because sport has far stronger roots in the American school system and in school life than is the case in Germany. Pep rallies, in which both active participants and spectators psych themselves up for the school teams' matches, make school sport the dominant weekend topic. In view of the methodological peculiarities of cross-cultural comparative studies, this result suggests a problem of equivalence. In the everyday school life of young New Yorkers, sport has two different and widely divergent facets. On the one hand, there is competitive sport in the varsity system, which is presumably what adolescents think of when they are asked about their sport concept; and on the other hand there is physical education, which has only limited significance in the formation of a sport concept and so is hardly mentioned by the New York respondents (cf Rees 1997, in press, for the relationship between athletics and physical education in the context of American high schools). As the surveys were carried out in schools, it is reasonable to assume that the answers on sport-related associations given by German adolescents also reflect their experiences in school sport.

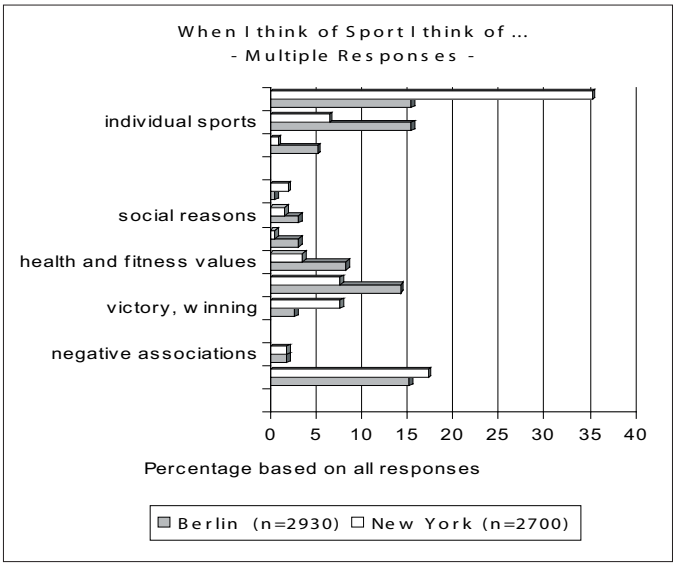

Figure 2: "When I Think of Sport, I Think of ...."; Analysis of associations; Cross-cultural comparison Berlin / New York; Selected categories

In addition and extension of the association analysis a slightly modified version of the measurement used by Brettschneider/Bräutigam (1990) to analyse adolescents' sports concepts has been used. The Berlin and New York adolescents were asked to respond to nine statements concerning their view of sport. In a first step a factor analysis (varimax rotation) of these responses was conducted. The results of the factor analysis confirm that there are both differences and similarities in the sport concepts of Berlin and New York adolescents.

In the Berlin sample a two factor solution explained 46.3% of the variation. The two factors correspond with two extremely diverse perceptions of sport. The first factor focuses on training, performance and competition - the traditional sport concept. The second factor focuses on the idea of including a lot of things and having fun - the new trend towards a wider sport concept.

Sport concept - Factor solution Berlin (n=1045)	
Factor I:	Sport which is oriented towards training, performance and competition (e.g. "Regular practice is an essential part of sport"; "In sport you need to be ready to practice even if you don't feel like it"; "Competition undoubtedly belongs to sport.")
Factor II:	Sport which includes everything: mainly fun, no competition (e.g. "The definition of sport can be very broad. The important thing is to move around and to do for your body."; "Being successful or unsuccessful in sport does not matter. The important thing is to have fun.")
	Explained variance: 46,3%

The factor solution for the New York adolescents presents a somewhat different structure. Three factors were identified which accounted for 48.4% of the variation. Whereas in the Berlin sample, training, performance and competition belonged to the same factor, sport which is oriented towards performance and competition is a separate factor in the sport concept of New York adolescents.

Sport concept - Factor solution New York (n=910)	
Factor I:	Sport which is oriented towards training and physical activity (e.g. "Regular practice is an essential part of sport"; "You cannot be in sports unless you are ready 'to push yourself' physically.")
Factor II:	Sport which is oriented toward competition/performance (e.g. "Generally speaking, improving performance belongs to the meaning of sport", "Competition undoubtedly belongs to sport.")
Factor III:	Sport which includes everything: mainly fun, no competition (e.g. "The definition of sport can be very broad. The important thing is to move around and to do for your body."; "Being successful or unsuccessful in sport does not matter. The important thing is to have fun.")
	Explained variance: 48,4 %

This emphasis on performance and competition seems to be deeply rooted in the tradition of the Muscular Christianity movement (cf. Eitzen/Sage 1993, 47). This tradition the American Dream of success in society is closely linked to the individuals' own performance. Performance in sport too, can help the individual to internalize socially accepted norms and values. By doing so these values can be transferred into other spheres of life and enhance the individual's position in society. "The essence of muscular Christianity was the belief that physical activity made a significant contribution to the development of morality and patriotism, and these values learned in sport at school would be transferred to other situations later in life" (Miracle/Rees 1994, 32).

So far the results of the association analysis and the divergent structures revealed by means of the factor analysis confirms the qualitative findings of both differences and similarities. The Berlin data reflects a concept of sport which can be characterized by the oscillation between a new hedonistic orientation focusing on fun, well-being and relaxation, and a traditional sports image of training, performance, and competition. The New York data show a stronger emphasis on the performance aspect, and also show competition as a separate component of sport.

Taking into account these differences in the sport concepts of Berlin and New York adolescents, the functional equivalence of the same sport activities in the respective countries can no longer be taken for granted. In order to get further information about the adolescents' sport concept in New York and Berlin selected items - each of them belongs either to the training-, performance/competition-, or fun -dimension - were analysed. The results of an analysis of covariance's (covariate: age) treating cultural context and gender as independent variables are shown in table (4).

Table 4: Analysis of covariance's of selected items; male and female adolescents from Berlin and New York; (co-varied for age).

ITEMS	mean-values					F-values		
	Total	Boys		Girls		Culture	gender	cu X ge
		Berlin	New York	Berlin	New York			
	(n=1991)	(n=582)	(n=509)	(n=482)	(n=418)			
1) Regular practice is an essential part of sport.	3.39	3.22	3.74	2.94	3.71	311.95**	21.89**	13.38**
2) Competition undoubtedly belongs to sport.	2.85	2.86	3.21	2.57	2.69	28.40**	82.66**	6.82*
3) Being successful or unsuccessful in sport does not matter. The important thing is to have fun.	3.48	3.51	3.27	3.66	3.50	46.76**	27.14*	1.63

Significance ** p<.001; * p<.01;

These results confirm traditional gender stereotypes (cf. Brettschneider/Bräutigam 1990, 100). Fun is more important for girls and young women than for boys and young men. This pattern of relationship is true across cultures even though Berlin adolescents (boys and girls) generally score higher on the "fun-dimension" (cf. figure 3).

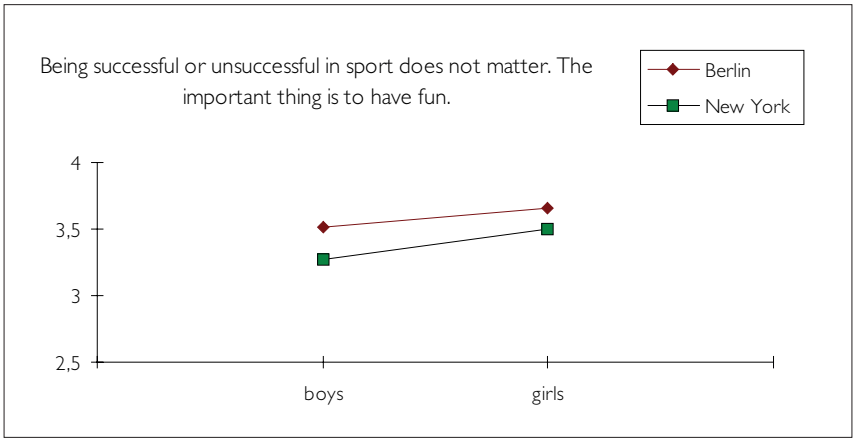

Figure 3: Mean-value difference on the "fun-dimension" for adolescent boys and girls in Berlin and New York.

With regard to the training- and performance / competition-dimensions the results are less unequivocal. The selected items in these dimensions show statistical interaction effects (cf. table 3); therefore one should be cautious when interpreting the main effects (Bortz 1999).

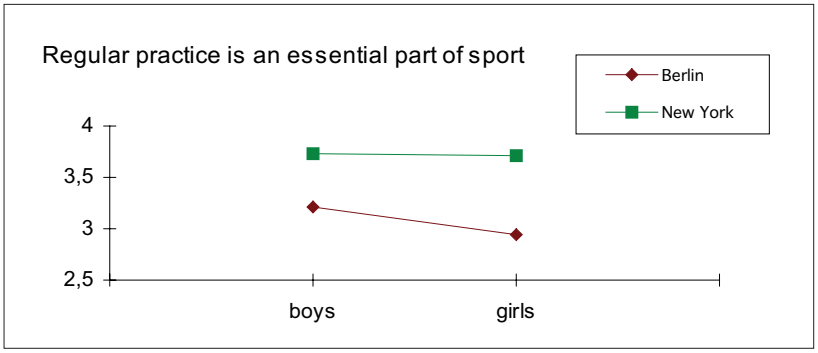

Figure 4: Mean-value difference on the "training-dimension" for adolescent boys and girls in Berlin and New York.

As far as the training-dimension is concerned earlier research in the German context has found traditional gender stereotypes. According to these findings boys are more oriented towards training in sports than girls (cf. Brettschneider/Bräutigam 1990, 100). In the present study gender differences on this variable occur only in the Berlin sample and not in the New York sample (cf. figure 4). A generalization of this gender specificity across cultures is not possible.

Somewhat different are the results concerning the performance/competition-dimension (cf. figure 5). Generally speaking, this aspect of the sport concept is more of a concern among male than among female adolescents. The importance of performance and competition is particularly high in the case of New York males.

Figure 5: Mean-value difference on the "performance/competition-dimension" for adolescent boys and girls in Berlin and New York.

The results of the association analysis as well as the finding on the basis of the factor analysis and the selected items can be summarized as follows:

Fun is of central importance in the sport concepts of Berlin and New York adolescents.

Regular training is more important in the sport concept of the New York adolescents. This is particularly true for male adolescents in New York.

Adolescents from both countries share the belief that sporting activities need to be strenuous. Performance and competition are more salient features in the New York adolescents sport concept than in the Berlin adolescents' sport concept. .

Berlin adolescents have a broader definition of what belongs to sport than their New York counterparts.

These results show: a globalized sport concept is more fiction than fact. Overall, there are both similarities and differences in the sport concepts of New York and Berlin adolescents. Depending on the specific socio-cultural context, the norms communicated by the school culture seem to have a greater influence on New York adolescents, while the increasing significance of subjective meanings may well lead to greater openness and diversity in the sport concept of Berlin adolescents. Despite these "small but important" differences, there are a large number of identical associations in the sport concept among both German and American adolescents, which mainly draw a positive picture of sport in both countries. Furthermore, some aspects of adolescents' sport concepts, specifically the emphasis on fun and competition, tend to be gender specific in both samples, providing evidence to support the idea of sport as a number of "global flows" (Maguire 1994) which transcend national boundaries.

5.3. Sport as a universal language - soccer, basketball and the problem of functional equivalence

These findings show that the problem of comparability in cross-cultural comparative studies requires particular attention. The question of whether equivalence should be checked before a study is made and regarded as a pre-condition for the study, or whether the ensuing comparison is itself a means of judging equivalence as it were a posteriori, must not be underestimated. This fundamental methodological decision has a not inconsiderable influence on the analysis and evaluation steps performed, and can systematically show findings and interpretations in a different light.

The possible consequences of particular equivalence decisions will be illustrated by the example of two sports that are popular in both German and American youth culture - European football or soccer, and basketball. When asked what sports they regularly took part in 1994, about equal proportions of adolescents in both New York and Berlin answered soccer and baseball. In New York, soccer was sixth in the list of activities with 5.9 % of the total sports named, in Berlin it was fifth at 6.5 % of sports regularly played. Basketball was the most frequently named sport in New York, with 12 % of the total, while in Berlin it was third most frequent at 9 %. In view of the trend towards internationalization and universalization, it could be argued that these findings are only logical, assuming a-priori the equivalence of these sports in the two countries. However, the differences in sport concept found by means of the association analysis are a reminder that interpretations of quantitative findings

need to be meticulous and detailed. Even where adolescents take part in sports that are identical at a phenomenological level, a glance at their respective socio-cultural backgrounds may lead to a more structured view. As the example of football shows, equivalence requires more than mere identical surface phenomena.

In Germany, football is not only the national sport, it is also, according to statistics issued by the Deutscher Sportbund, the German Sports Federation - number one among the sports played by adolescent males. The statistics produced by the Deutscher Sportbund (1994) show that 1.4 million children and juveniles (up to 18 years) are members. Of these, approx. 1.3 million are male adolescents, and 100,000 female. Though football is increasingly being played by adolescent females in Germany, the game can still be regarded as largely the preserve of men.

"Why is there no soccer in the US?" This question asked by Markovits (1990) seems not to reflect reality. According to Martens (1986, 28), 3.9 million American children and juveniles (up to 18 years) play soccer, 2.2 million of them male and 1.7 million female juveniles. The figures quoted by Martens are estimates of the degree of participation outside of school, making a direct comparison with the German DSB statistics extremely difficult, but the findings do nonetheless enable the contribution and status of football in the two youth sport cultures to be assessed. Despite its popularity among young people, soccer in the USA has a different significance from that given it in Germany. "The US wins by not losing" was the "NEWSWEEK" headline (1994) when the USA tied against Switzerland in the first match of the football world cup in the USA in 1994. To see a draw as a victory contradicts the way most US Americans view sport. Their view is, "A tie is like kissing your sister". This description of football makes it clear that soccer is something for children and girls. Soccer has been attributed with a non-American status and as being anti-masculinist (Sugden/Tomlinson 1996, 239). In contrast to American football or baseball, there is something missing, without which soccer cannot be seen as a real all-American sport. Values held in high regard in American culture, such as masculinity, decisiveness, competitiveness and winning are evidently either not present or not sufficiently communicated (cf. Miracle/Rees 1994, 17). The structure of the game is not compatible with the ideas of sport prevalent in the USA. There is a lack of action, not enough moments of decision or success, and too few events that count in the statistics.

Guttmann (1979) uses the examples of baseball and American football to demonstrate that quantification, specialization and record-breaking are elements of modern sport that have fallen on particularly fertile soil in the USA. A high degree of specialization is not possible to the same extent in European football, and indeed is not particularly desirable. The high degree of cooperative and un-standardized playing action gives little scope for producing interesting statistics.

Thus in the USA, playing football is something for children, adolescent females and young women. Football is not (yet) "real" sport, and cannot become real sport, as the organizational infrastructure necessary for holding competitions is only in place for younger adolescents, but not for older youth and most especially not for adults.

The game of basketball is another example that shows how sporting activities that are similar on the surface are not therefore automatically equivalent constructs in the different cultural contexts. As the rapidly increasing membership figures in the Deutscher Basketball-Bund (German Basketball Federation) (1994: 81,000 and 2005: 202,000) (DSB 1994, DSB 2006), and the rise in competitors in the major street ball

competitions show, basketball is enjoying ever-rising popularity among young Germans. According to the results of the present study, adolescents in Berlin named basketball as a sport regularly played almost as frequently (9 %) as did adolescents in New York (12 %). What is making basketball so successful in Germany at the moment, and what are the differences between it and American basketball? The popularity of this game in Germany, particularly among children and juveniles, cannot be explained without reference to current trends in our society. Basketball is a symbol of a modern lifestyle, imbued with the spirit of the 1990s, that reaches far beyond the boundaries of the court and is emphasized by its own clothes and language. It is the same in feel as the young generation's basic attitude to life. There is constant action, it is geared to "sink or swim" situations. Everything is either attack or defence. Fast break, slam dunks, fade away jump shots and hook shots alternate continually with spectacular defence actions that only serve to heighten the intensity and drama of the game. Victory and defeat are side by side, dramatized in the dynamic process taking place on the court. Basketball and street ball, the sub-cultural variant preferred by the young, are two sports that can stand as symbols of a modern lifestyle in which body dramatization plays an important part.

Despite the fact that basketball is an important component in the Berliners' popular sport culture, there are considerable differences between how it is experienced by youth in New York and youth in Berlin. In the USA, institutionalized basketball does not represent the spirit of the times in the same way, but rather, it reflects basic features of modern sport (Guttmann 1979, 61 and 1994, 2-3): rationalization and quantification produce a plethora of statistical information on the course each game takes; scoring averages are almost as important as the state of play; all aspects of the players are measured uphill and down, and analysed and compared before, during and after the game. Moreover, there is a high degree of specialization that makes it possible to link success or failure directly to the performance of individual players. As Guttmann (1979) shows, it is these characteristics of modern sport that ultimately help to decide the success or failure of a particular discipline. But above all, in the USA basketball is associated with dynamics, strength and skill, sometimes even with aggressive, "typically masculine" behaviour patterns. Basketball, including its adolescent variant, represents cherished American values such as masculinity, decisiveness, courage, competitiveness and team spirit, which can easily be attributed to the philosophical tradition of "muscular Christianity" (cf. Miracle/Rees 1994). Identification with values held dear in American society applies to passive fans as well as to active players. Thus the success or failure of a college team (no matter whether basketball or American football) can have repercussions far beyond the bounds of a particular sports event, influencing the life of an entire small American town (cf. for example Bissinger's novel "Friday night's light" 1990). Basketball in particular seems to be a good example of the "cultural borrowing" that goes on as a result of globalization, in that the "street games" of Berlin may have much more in common with the informal, "pick-up" type games popular in American inner cities among black youth (cf. Frey 1994), than with basketball played as part of the inter-scholastic sports program in schools. These observations are conjectural in the face of no empirical data, but they do reinforce the need to study "local responses" to global flows in sport (Donnelly 1996; Wilson/Sparks 1996).

The divergent socio-cultural situations in which soccer and basketball are played, and the resultant differences in the way each game is viewed in Germany and the USA, make it plain that functional equivalence assumed on the basis of identical surface phenomena cannot be left unquestioned.

6. Conclusion

The examples of results from our cultural comparison must be regarded as provisional in this de-contextualized form. Nevertheless, they do allow preliminary conclusions with regard to empirical findings and theoretical issues.

The empirical data show that sport and popular culture among adolescents in Berlin and New York have common features, but also differences (cf. Csikszentmihalyi/Larson 1984, who find more common features than differences in the structures of adolescent "life-worlds" in their intra-American study). Sport has an unrestrictedly positive image in both cultural contexts. However, individual interpretation seems to have a greater emphasis in the sport concept of Berlin adolescents. Traditional meaning patterns such as competition and performance preferred by sport institutions are less important. The sport concept of young Berliners must therefore be characterized as tending towards openness and diversity. The answers given by young people in New York, on the other hand, are more strongly oriented towards an image of "all-American sports". Culturally imposed values and attitudes are more strongly expressed in their sport concept. To this extent, the sport concept of young people in New York appears on the whole to be narrower and less varied than that of their counterparts in Berlin.

As the analysis of specific sports has shown - soccer and basketball were the examples given here - identical surface phenomena, including similar statistics on adolescents' participation, are not sufficient for an assessment of cross-culture equivalence. Only a precise analysis of each of the cultures involved can provide enough of the necessary conceptual background for appropriately assessing issues of comparability and globalization. As the results show, it is hard to view basketball in New York and basketball in Berlin as functionally equivalent, and any equivalence of soccer in America with football in Germany can be questioned. The socio-cultural contexts of the two countries are too different. On the other hand, it might be argued that football in Germany has the same or at least a comparable function to basketball in the USA.

Our analysis shows how cross-cultural research on sport can contribute to the wider debate on globalization, recently theorized as comprising both "homogenization" and "heterogenization" tendencies (Featherstone/Lash 1995; Robertson 1995). For example, in the research on the globalization of sport, one theme in the homogenization issue has been the spread of "achievement" sport (cf. Galtung 1991; Kidd 1991; Mc Kay/Miller 1991) where victory and winning are emphasized. Our results show that "achievement concepts are indeed part of how New York and Berlin adolescents think about sport, but this is not the whole story. There are differences, particularly in what characteristics can legitimately be included as part of the sport concepts, which separate Berlin and New York adolescents. Likewise different sports, in this case football (soccer) and basketball, are interpreted differently depending upon the culture in which they are practiced, although even here "local" environments (e.g. school versus street) may also

have an important effect on interpretation. There are also differences in how girls and boys perceive sport that transcend the "local" boundaries of Berlin and New York. This finding suggests that gender may be an important factor in what has been called the global flows of sport (Maguire 1994).

Future research on globalization and sport can extend our analysis to other samples within Germany and the United States and to other societies, to test the degree to which "local" responses to sport vary within and between cultures. The degree to which categorical variables such as gender, race (cf. for example Andrews et. al. 1996; Rees/ Brandl-Bredenbeck 1995), and age have similar effect on sport concepts independent of culture or nation is also important. In these ways cross-cultural research can help to delineate what Robertson (1995, 27) has called the empirical problem of how "homogenization and heterogenization tendencies are mutually implicative".

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BENEFITS AND RISKS OF PARTICIPATION IN ORGANIZED YOUTH SPORTS

1. Introduction

Participation in sport is perhaps the primary form of physical activity for youth of both sexes. Indeed, youth often identify physical activity with sport (Malina, in press). Sport participation by youth also has high social valence in many societies throughout the world. Given the value placed upon sport, questions often arise about the place of organized sport in the lives of youth. This is often reflected in commentaries in the print and electronic media, which often focus on the negative. To this end, this report offers a synopsis of evidence on the **benefits** and **risks** associated with participation in organized youth sports. Participation statistics, age trends, and the place of sport among the many demands of childhood and adolescence are initially reviewed.

2. Participation Statistics

According to the National Council on Youth Sports (2001), approximately 38.3 million youth ~6-18 years of age participated in organized sports in the United States in 2000. About 63% of the participants were male and 37% were female. Using enrollment estimates for American schools (US Department of Education, 2005), the total number of participants represented about 72% of school age youth (kindergarten through 12th grade) in 2000. The Sporting Goods Manufacturers' Association (2001) estimated that about 54% of United States youth 6-17 years of age participated in organized team sports in 2000; this represented about 29 million youth based on national school enrollment estimates. Variation by team sport is summarized in Table 1. About 54% of participants in team sports were males and 44% were females. Of interest, 44% played only one team sport, 30% played two sports and 26% played three or more sports. These figures are likely overestimates since many youth participate in more than one program or in more than one sport. Nevertheless, they highlight the involvement of United States children and adolescents in organized sport programs.

Data for other countries use different estimating strategies. Sport England (2003) surveyed a sample of 3028 youth in school years 2-11 (approximately 6-16 years of age).

Parents completed a questionnaire for those in years 2-6, while youth in years 7-11 completed the questionnaire. Frequent participation in sport out of school lessons was defined as at least 10 times per year. Results are summarized in Table 2. Sport out of lessons was done in several settings: youth clubs or other organizations (55%), sport club outside school (43%) and extracurricular school programs (42%).

Table 1. Estimated numbers of participants (in millions) 6-17 years of age in the most popular youth sports in the United States in 2000.[1]

Sport	Boys	Girls	%Age Group[2]
Basketball	6.231	3.790	20.7
Soccer	5.400	4.192	19.8
Baseball	6.836	0.647	15.4
Slow-Pitch Softball	0.772	2.791	7.3
Tackle Football	2.867	—	5.9
Swimming/Diving	1.165	1.548	5.6
Track and Field	1.328	1.220	5.3
Volleyball	0.363	2.033	4.9
Cheerleading	0.086	1.787	3.9
Touch football	1.218	0.221	3.0
Fast-Pitch Softball	0.18	1.339	2.8
Tennis	0.573	0.696	2.6

[1] Adapted from the Sporting Goods Manufacturers Association (2001).
[2] Percentage of all youth 6-17 years involved in the specific sports.

Among Australian youth, about 1.6 million children 5-14 years of age participated in school-, club- or association-sponsored sport outside of school hours in 2000 (Australian Bureau of Statistics, 2003). More males participated than females, and the most popular sports were soccer, swimming, Australian rules football and cricket among boys and netball, swimming, tennis and basketball among girls.

Table 2. Percentages and estimated numbers (millions) of school youth in years 2-11 (approximately 6-16 years) reporting frequent participation in sport out of lessons in England in 2002.[1]

Sport Activity	Boys		Girls	
	%	number	%	number
Team games	68	2.3	39	1.7
Racket games	33	1.1	28	0.9
Swimming, diving	48	1.6	55	1.8
Dance, ice skating	6	0.2	26	0.8
Athletics, gymnastics	43	1.4	48	1.5
Outdoor, adventure	62	2.1	57	1.8

[1] Adapted from Sport England (2003). Frequent participation: sport out of lessons at least 10 times in the past year.
[2] Estimated numbers are based on children 6-16 years in all schools, August 2002 (Statistics of Education, 2003, www.dfes.gov.uk).

3. Age Trends in Participation

Trends in sport participation with age during childhood and adolescence vary among surveys. This variation reflects in part problems related to measurement and definition. Among United States youth in the late 1980s, there was a steady decline from 10 to 18 years in participation or the intention to participate in organized sport outside of school (Ewing and Seefeldt, 1989). The trend for team sports also suggested a decline in later adolescence (Sporting Goods Manufacturers Association, 2001): 6-8 years (24%), 9-11 years (27%), 12-14 years (28%), 15-17 years (21%). Among Finnish youth, daily participation in sport club training declined from 9 to 21 years, while participation twice per week declined from 12 to 18 years (Telama and Yang, 2000). Among Australian youth, participation in organized sport peaked at 11 years and then declined through 14 years of age (Australian Bureau of Statistics, 2003). In contrast, a sport participation score (based on the Backe questionnaire) increased from 10 to 18 years in a national sample of Portuguese boys and girls (Seabra et al., 2007). And, in the small sample of adolescents followed longitudinally in the Amsterdam Study, there were no age differences in participation in organized sport from 13 to 16 years and then at 21 years of age; on the other hand, participation in non-organized sport declined over this interval (Van Mechelen et al., 2000).

4. Tasks of Childhood and Adolescence

All children and adolescents have three primary tasks – "the business of growing up": to **GROW** - increase in the size of the body as a whole and of its parts and systems, to **MATURE** - progress towards the biologically mature state, which is an operational concept because the mature state varies with the body system, and to **DEVELOP** – learn the appropriate cognitive, social, affective, moral, motor and other behaviors expected by society. Growth and maturation are biological processes, while development is a behavioral process often subsumed in the term socialization specific to a culture. The three processes are distinct though related and interacting tasks that dominate the daily lives of youth for approximately the first two decades of life (Malina et al., 2004a). The processes are also characterized by a wide range of inter-individual differences, especially during adolescence. Interactions among growth, maturation and development vary during childhood and adolescence, among individuals, and within and between cultural groups.

Organized sport is one of many demands placed upon children and adolescents. Indeed, time spent in organized activities – hobbies, sports, arts – by American children 3-12 years of age has increased between 1981 and 1997; in contrast, free time and time in unstructured activities have declined over this interval (Sturm, 2005). A question of relevance is the following: Where does sport fit into the process of "growing up"? The overview of benefits and risks of participation in sport provides some insights.

5. Potential Benefits of Participation in Organized Sports

5.1. Physical Activity on a Regular Basis.

Organized sport provides opportunity for physical activity on a regular basis and in a safe environment. However, information on the activity status of youth involved and not involved in sport is somewhat limited. Among youth 12-14 years of age, boys and girls involved in organized youth sports expended, on average, more overall energy (TDEE, absolute and per unit body mass) and energy in moderate-to-vigorous activities (≥ 4.8 METs) than non-participants (Katzmarzyk and Malina, 1998). Youth sports participants also indicated less television viewing time. Though limited to a single community in mid-Michigan which was surveyed in January and February (there may be variation by season of the year), the results suggest a greater level of physical activity and less time in one form of inactivity in participants compared to non-participants. Adolescent athletes 16-19 years of both sexes also had greater daily energy expenditure and energy expenditure in physical activity than non-athletes (Ribeyre et al., 2000). Sport participants were also more physically active than non-participants among rural South Carolina youth primarily 11-12 years (Trost et al., 1997), South Carolina girls about 13-18 years (Pfeiffer et al., 2006) and Finnish twins 16-18 years (Aarnio et al., 2002).

5.2. Transfer to Adult Physical Activity.

Participation in sports during adolescence tends to track at higher levels than other indicators of physical activity (Malina, 2001a). Sport club membership (by inference, participation), for example, tracks at a higher level than other indices of physical activity among Finnish adolescents and young adults (Telama et al., 1994, 1997). The higher inter-age correlations for participation in sport clubs suggest that more attention should be given to this context of physical activity among adolescents. Moreover, frequency of participation in sports at 14 years of age (Tammelin et al., 2003), membership in sport clubs at 16 years of age (Barnekow-Bergkvist et al., 2001) and sport club training and competition during adolescence (Telama et al., 2006) significantly predict physical activity in young adults of both sexes (late 20s-early 30s). The process of how participation in sport during adolescence translates into an active lifestyle in young adults needs study. An association between sport participation during adolescence and "psychological readiness" for physical activity in adulthood has been proposed (Engstrom, 1986, 1991).

The preceding data are from Scandinavian countries. Sport clubs vary among countries, in accessibility and cost, and in degree of sport specialization and participant selectivity (Heinemann, 1999). In addition, many European countries have adopted a "sport for all" theme that contrasts youth and interscholastic sport programs in the United States which become quite exclusive during adolescence. Sport offerings for youth with lesser skill or with less interest in elite competition are often limited in many communities in the United States. However, in the Michigan Study of Adolescent Life Transitions which sampled subjects at 12, 17 and 25 years of age, sport participation in childhood (time spent on sports) and adolescence (time in sports, kinds of after

school activities) was a significant predictor of sport and physical fitness activities in young adulthood (Perkins et al., 2004).

5.3. Skill Acquisition and Development.

Improvement of motor skills in general and sport-specific skills is often a primary objective of youth sports programs ranging from those at the community level to more advanced sports schools and academies that ordinarily focus on a single sport. Improvement in sport skills is also a major motivation of children and adolescents for participation in sport. Given the importance placed upon skill acquisition, improvement and refinement, it is somewhat surprising that the youth sport literature that deals with these issues is not more extensive. By contrast, there is more focus on young adults and the development of expertise.

Nevertheless, evidence indicates a beneficial role for instruction and practice on skill acquisition in early childhood and during the transition into middle childhood (Malina, 2008). More data are necessary in this area, and other variables need consideration, especially those related to the environment of sport programs, e.g., instructional and practice protocols, quality of coaches and parental involvement.

With few exceptions, data dealing with skill acquisition at older ages are set within the framework of cognitive psychology and relate to relatively simple, discrete movement tasks in contrast to more complex tasks of a sport. Three stages in acquiring a skill are commonly recognized: cognitive, associative and autonomous (Williams et al., 2003). In the first stage, the basic mechanics of the performance of a skill are learned, and conscious evaluation and information processing are primary. Issues related to methods of improving performance highlight the associative stage. Performance is characterized by a reduction in variability and consistency as the individual progresses through the second stage. In the autonomous stage, the essentials of the skill are in place and performance becomes largely automatic; the individual performs the skill either without thinking or with a different manner of thinking compared to the novice (Williams et al., 2003).

General guidelines for instruction in soccer skills in the framework of the three stages of the learning process highlight the needs of learners at different stages of the sport skill learning process (Williams et al., 2003; see also Williams and Hodges, 2005). Individual differences in age, size, maturity status, fitness, skill, and motivation of young athletes (internal constraints) present a challenge in applying these principles to youth players. In adolescent soccer players 13-15 years of age, for example, age, experience, body size and stage of puberty contribute significantly to indicators of functional capacity (aerobic, power, speed), but considerably less to soccer-specific skills (Malina et al., 2004b, 2005). The challenge is to incorporate individual differences in internal constraints into the instructional and practice situations (environmental constraints) to facilitate the acquisition and refinement of soccer skills.

5.4. Improved Physical Fitness.

Youth who are regularly active tend to have higher levels of aerobic fitness compared to less active youth (Strong et al., 2005). Aerobic fitness is especially well

developed in many adolescent athletes, especially those in sports with a high endurance component, e.g., distance running, swimming, cycling, soccer, ice hockey (Malina et al., 2004a). Although data are not based on young athletes, experimental resistance training programs, which may be a component of sport programs, are associated with significant gains in muscular strength and endurance (Malina, 2006).

5.5. Regulation of Body Weight and Composition.

Regular physical activity has the potential to favorably influence body weight and composition. Much of the focus, however, is on adiposity and there are more data for elite young athletes in contrast to youth sport participants. Youth who are relatively high in physical activity tend to have less adiposity although the data are not entirely consistent across studies (Strong et al., 2005), whereas young athletes in a variety of sports, however, tend to have less adiposity (Malina et al., 2004a). The contrast between athletes and non-athletes is more apparent among females than males. There is variation among sports and some positions or disciplines within a sport, e.g., linemen in American football, throwing events in track and field.

Bone is a feature of body composition that is currently a focus of attention. Regular physical activity has a beneficial effect on bone mineral content and bone mineral density. This is apparent in a variety of studies in youth: experimental, case and correlation studies; comparisons of the active and less active; and comparisons of athletes and non-athletes; and in retrospective studies of childhood and adolescent activity, including sport, relative to adult bone mineral content (Strong et al., 2005). Retrospective studies of athletes in racket sports highlight the beneficial effect of early onset of training on bone mineral content (Kannus et al., 1995).

5.6. Psychosocial Outcomes.

Although there is considerable discussion of psychosocial outcomes associated with participation in youth sports, a good deal of the literature does not deal with outcomes per se. Much of the emphasis is on social influences – parents, coaches, peers – in contrast to the influence of sport on aspects of psychosocial development.

Self-concept and its different domains is a behavioral outcome that has received most attention. Self-concept refers to the perception of self, whereas self-esteem refers to the value placed on one's self-concept. Self-concept comprises several domains-academic, social, emotional, physical, sport competence and appearance. The structure of self-concept changes with age and becomes more clearly differentiated in the transition into puberty and during adolescence. In cross-sectional studies, physical activity is positively correlated with global and physical self-concept, but weakly correlated social, emotional and academic self-concepts. Quasi-experimental studies indicate strong positive effects of physical activity on physical self-concept, appearance and sport competence and also global self-concept, but weaker positive effects on social and academic self-concept (Strong et al., 2005). Although sport activities are positively associated with global self-concept, they have the potential for negative influence. Outcome of sport is a factor (i.e., winning or losing), while coaching styles are particularly relevant (Smoll and Smith, 2003).

Identifying other psychosocial outcomes associated with participation in youth sports is more challenging. A good deal of the research has focused on potential influences of adults – coaches and parents – in contrast to the potential influence of sport per se on behavioral development. Less research has focused on peers as important agents in psychosocial outcomes associated with sport. This may be expected given the degree of adult involvement in youth sports and the quality of adult-youth interactions in the context of sport. Research on parents has focused on expectations and pressures, perceptions of competence, goal orientation, responses to performances of their child, degree of involvement, role modelling, and son on (Brustad, 2003; Weiss, 2003). Research on coaches has focused on the coach as a source of information about sport competence, the frequency and types of feedback to young athletes and the effects of coach education on the quality of youth sport experiences (Weiss, 2003; Smoll and Smith, 2003). An additional concern, specifically in North America, is the dual role of the parent-coach. The earliest sport experiences of many youth occur under the guidance of parent-coaches.

Coaches who are supportive and who emphasize learning and improvement (a mastery-oriented climate) facilitate beneficial psychosocial outcomes, e.g., perceptions of competence, sport enjoyment, positive friendships, and so on. Similar outcomes are associated with coaches who undergo a coach effectiveness training program (Smoll and Smith, 2003). Nevertheless, much needs to be done to better understand and specific psychosocial outcomes of sport participation among youth. The complex interactions among young athlete, parents, coach and peers in the context of a sport highlight the need for creative methodology to better understand the process and potential outcomes.

5.7. Moral/Ethical Behaviors.

Participation in sport can be a vehicle for moral or ethical development. This is generally subsumed in the generic terms sportsmanship, fair play, being a "good sport" and character development, among others. Progress toward the development of morally competent behaviors includes the ability to recognize right from wrong, abiding by the rules of the game during practices and competitions, and respect for teammates and opponents. The potential influence of sport participation on the development of moral reasoning needs to be established (Bredemeier, 2003; Bredemeier and Shields, 2006). Some evidence indicates that much remains to be done! A recent survey of 5th to 8th grade sport participants (~10-14 years) noted that 9% acknowledged cheating, 13% reported attempts to injure an opponent, 27% noted behaviors associated with being a "bad sport", and 31% reported arguing with game officials. Moreover, 7% of the youth also reported encouragement from their coaches to cheat while 8% reported encouragement to injure an opponent (Shields et al., 2005).

Presently available evidence highlights the central role of coach behaviors, specifically deliberate attempts to teach ethical/moral values (Bredemeier and Shields, 2006). The role of the media and high level sport needs careful consideration in this context. One wonders what message is sent to youth by "professional fouls" in soccer and the fact that virtually all fouls towards the end of a basketball game are deliberate. More recently, during a nationally telecast professional American football match (20

November 2006, Chicago Bears vs New England Patriots), a situation focused on ball position and measurement for a first down. A player nudged the ball slightly with his foot to alter its position. One of the commentators noted that this was "…a smart player, any advantage you can get." Why not note that this is a violation of rules and essentially cheating? The line that separates strategy and cheating to gain an advantage in sport is indeed fine.

5.8. Other Social Outcomes

Other benefits have been attributed to sport participation, especially interscholastic sport, though the evidence is variable in quality. These include greater likelihood of staying in school and fewer absences from school (Marsh, 1993), reduced likelihood of being involved in delinquent behavior (Segrave and Hastad, 1982), and fewer risk-taking sexual behaviors and pregnancies (Sabo et al., 1998; Savage and Holcomb, 1999). Sport participation among youth is associated with a reduction in suicide ideation and suicide attempts (Oler et al., 1994; Women's Sports Foundation, 2000; Sabo et al., 2005). Of interest, higher rates of injury appeared to be a characteristic of male athletes who actually attempted suicide (Sabo et al., 2005). These associations, though interesting, need to be more critically evaluated in the context of the many factors known to influence adolescent behaviors.

6. Potential Risks of Participation in Organized Sports

6.1. Compromised Growth and Maturation.

As emphasis on elite sport for youth has increased, so has concern for potentially negative influences on growth (size attained) and maturation (timing and tempo of progress to the mature state). The concern is often expressed for young athletes at elite level and more so for girls than for boys. The number of youth who train at elite levels, of course, is a negligible, though highly visible, fraction of the large numbers who participate in youth sport programs.

It has been suggested that intensive training during childhood and puberty may stunt growth and delay sexual maturation of girls (American Medical Association, American Dietetic Association, 1991; Theintz et al., 1993; Tofler et al., 1996; Daly et al., 2005). On the other hand, potentially negative influences of training for sport on the growth and maturation of boys is rarely expressed, usually in the context of young wrestlers who may severely modify their diets to meet specific body mass criteria (Malina et al., 2004a). Concern for disordered eating among teenage athletes in aesthetic sports is a related factor.

Although compromised growth and maturation as a result of intensive sport training during childhood and adolescence is suggested, the presently available data are not adequate to establish causality. The evidence overwhelmingly indicates no negative effects of training for sport on growth in height and indicators of biological maturation (Malina et al., 2004a). If there is a potential risk, the environments of specific sports, specifically interactions among compromised nutrition, coaching

environment, unrealistic expectations and associated stresses, need closer examination and systematic study.

Gymnastics for girls has received most attention (Theintz et al.,1993; Tofler et al., 1996; Daly et al., 2005), but the data are not sufficiently longitudinal to fully capture the adolescent growth spurt, have major methodological limitations (Beunen et al., 1999; Malina, 1999) and do not control for other factors associated with the sport (selection, coaching and nutritional climate, differential drop-out, etc.) and growth and maturation (Malina et al., 2004a). Moreover, male gymnasts are also short and later maturing, and the events of males gymnastics (floor exercise, pommel horse, vault, parallel bars, rings, horizontal bar) are likely more strenuous than those of female gymnastics (floor exercise, vault, balance beam, uneven bars).

6.2. Injury

Children and adolescents incur injury in organized and unorganized sport, in addition to many other activities. Most data are case series based on convenience samples from emergency departments or sports medicine clinics; other data are from accident reports, insurance records, interviews, and retrospective questionnaires. Descriptive longitudinal studies that involve direct monitoring of injuries as they occur are an exception. These studies have a known denominator, relatively accurate exposure data, immediate access to treatment by an athletic trainer, and a well-designed data collection system.

Nevertheless, injuries occur in sport, but variation in definition, inadequate exposure data, and lack of description of the population at risk limit comparisons. Estimated rates per athlete exposures for different sports have been recently summarized (Caine et al., 2006; McGuine, 2006).

The injury-related clinical literature in youth sports focuses largely on risk factors that can be viewed as related to the sport environment and to the athlete (Table 3). Risk factors related to the sport environment are potentially manageable and modifiable, especially those related to training, equipment and playing conditions. Coach and parent education interventions and sport/rule modifications may serve to reduce risk.

Risk factors associated with participants need careful evaluation. Perhaps the most significant is injury history and rehabilitation. Previous injury and/or inadequate rehabilitation from the injury is a risk factor for subsequent injury. Some of the proposed risk factors change with normal growth and maturation, especially in the context of individual differences in timing and tempo. It is essential to critically evaluate player risk factors for a better understanding of injury risk. For example, what is unique about the growth spurt that places a young athlete at risk for injury? Is it the spurt per se or associated performance and behavioral changes? The same can be asked of late maturation as a potential risk factor.

The discussion of risk of injury can be extended to the team, especially since team sports dominate youth participation. What is the role of opponents, especially in contact team sports, as factor in injury? Can the team (players and coaches) be a risk factor?

Table 3. Suggested risk factors for injury in sport among youth.[1]

Internal risk factors related to **participants**: • Injury history • Physique, structural alignment • Lack of flexibility • Strength deficiency, imbalance • Marginal/poor skill development	• Behavioral factors – risk taking, inability to cope with stress • Adolescent growth spurt • Maturity mismatches in size and strength • Late maturation
External risk factors related to the sport **environment**: • Training errors • Equipment and playing conditions • Age groups – size, maturity • Inadequate rehabilitation from prior injury	• Coach behaviors – inappropriate techniques and drills, poor instruction, participation after injury experience mismatches • Parent behaviors – having a child "play up", unrealistic expectations • Sport organizations – increased tolerance for aggression and body contact in some sports

[1] Collated from several sources, see Malina (2001b).

6.3. Psychological Risks

Discussions of potential psychological risks associated with sport for children and adolescents are usually set in the context of competitive stress. In fact, there has been concern for stress in organized youth sports since their inception. Stress is a physiological state and as such is beset with problems of measurement – physiological measures per se (heart rate, galvanic skin response, hormonal levels) and lack of correlation between paper and pencil scales commonly used in surveys of youth sport participants. Individual differences in perception or lack of perception of stress are considerable.

It is generally accepted that stress is accentuated in individual sports such as gymnastics, figures skating, diving, and distance running, sports in which athletes compete and perform as individuals, often in a one-on-one format. On the other hand, the greater number of athletes involved and the highly interactive nature of activities in team sports tend to diffuse responsibility so that the performance of any individual athlete is generally less conspicuous and performance evaluation is less of a threat. The buffer of team members may alleviate stress associated with mistakes and losing.

Potential consequences of competitive stress, and negative outcomes associated with it, include low self-esteem, elevated anxiety, aggressive behavior, increased risk for injury, "burnout" and perhaps others, including premature drop-out from sport. Factors associated with stress include failure; negative performance evaluations by coaches, parents and peers; and unrealistic expectations by self, parents and coaches.

The influence of biobehavioral interactions in potential psychological risk associated with sport is apparent in social physique anxiety and disordered eating, especially among girls. Puberty and the adolescent growth spurt include significant changes in size, physique, proportions and composition. These major physical and physiological alterations often occur at a time when there is considerable emphasis on sport selection and specialization.

Social physique anxiety refers to feelings of anxiety that an individual experiences when there is a prospect or presence of interpersonal evaluation of her/his physique (Hart et al., 1989). Social physique anxiety increases during adolescence and is associated with a decline in self-esteem. It is a concomitant of negative self-perceptions (Crocker et al., 2001; Monsma et al., 2006), which are precursors to dieting, smoking and eating disorders among adolescents (Friestad and Klepp, 1997; Hausenblaus and Mack, 1999; Thompson and Chad, 2002). Young females involved in the so-called "aesthetic sports" – gymnastics, figure skating and diving, and though not a sport, ballet – are probably more at risk for social physique anxiety and disordered eating than participants in other sports. Among young female figures skaters, for example, social physique anxiety was a significant predictor of risk of disordered eating (Monsma and Malina, 2004). Further, appearance-related physical self-perceptions of young figure skaters were related to biological (age at menarche, physique) and psychological (social physique anxiety) characteristics (Monsma et al., 2006).

Premature drop-out from sport is occasionally indicated as a potential psychological risk. It is often discussed in the context of the age-associated decline in sport participation which is evident in many, though not all, studies (see above). Drop-out is a risk that has an associated problem of definition. Does it refer to complete cessation of participation in a sport? Does it include youth who leave one sport only to begin participation in another? A potentially confounding issue is behavioral change with puberty and adolescence which include changing interests (sport and non-sport) and changing and often conflicting demands of home, school, sport and social activities.

This is normal development! Sport-related factors associated with drop-out include lack of playing time, lack of success, injury, limited progress in development of sport skills, lack of enjoyment, coach behaviors, poor training environment, unrealistic expectations, too much emphasis on competition, among others. These are commonly indicated motives for cessation of participation in sport (Ewing and Seefeldt, 1988; Siegel et al., 2004). A relevant question is the following: How can we modify sport to meet the interests of youth and permit broader participation, especially during adolescence? Issues related to selection versus exclusion also need to be considered. Does "cutting" represent premature drop-out?

"Burnout" is a concept that is commonly used in the context of high performance sports. It refers to withdrawal from sport due to chronic stress frequently associated with perceptions that the young athlete cannot meet the physical and/or psychological demands placed upon him/her. Reduction in accomplishment in sport and associated rewards (i.e., no longer receiving them) are additional factors. Signs of chronic stress include behavioral alterations such as agitation, sleep disturbances, and loss of interest in practice. Other manifestations include depression, lack of energy, skin rashes and nausea, and frequent illness (Weinberg and Gould, 1995; Gould, 2003).

The prevalence of burnout is not known with certainty. Data are based largely on small samples, case series and retrospective surveys of participants in individual sports – golf, tennis, swimming. Lack of information on the population at risk limits the value of much of the available data in drawing valid conclusions about the risk and prevalence of burnout among young athletes. In a survey of young swimmers (145 males, 86 females), for example, about 3% reported signs of burnout (Raedeke, 1997).

Many factors are involved in competitive stress and "burnout" which are distinct concepts. Two especially important factors are negative performance evaluations, which are usually critical rather than supportive, and inconsistent feedback from coaches and officials, which often translates into mixed messages for the young athlete. A contributing factor is overprotection by coaches, trainers, parents and sport officials, which limits exposure of young athletes to new situations and thus opportunities to develop coping mechanisms and social relationships. Overprotection may foster feelings of lack of control, dependency and a sense of being powerless. Self- perceptions of not being able to meet expectations imposed by self and/or others are additional factors (Gould, 2003). Injury is often a contributing factor to burnout. It should be noted that sport-related conditions conducive to burnout are superimposed on and interact with normal biological and behavioral demands of adolescence.

7. Overview

Involvement in organized sport has the potential for both positive and negative experiences and outcomes. The line between potential benefits and risks may be quite fine. Nevertheless, benefits outweigh the risks and participation in sports is a satisfying experience for most children and adolescents. The charge of those who work with youth in the context of sport is to maximize the benefits and reduce the risks. Like all youth, young athletes also have the need to be a child or adolescent.

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BODY IMAGES AND SELF-IDENTITIES

1. Introduction

Diet is a cultural practice that regulates the quantities and types of food for specific categories of people. The process of dieting involves the control of emotions and expression through changes in expectations, table manners and the regulation of desire. The dieting process has, however, undergone an important transition in social significance from the eighteenth-century to the world of mass consumption. In today's modern consumer culture, the body has also assumed new individual and social significance. The body has become a major focus for personal strategies of balance, and improving physical health and quality of life. Jogging, slimming, keep-fit, and dieting plans are all activities designed to manage body size, composition and/or physique. The management and molding of the body has become increasingly central to the presentation of self-image, and this as been backed up by a growing industry catering for dieting and general body care. The age at which people experience anxiety about their body shape and weight appears to be getting younger, and research suggests that a substantial number of young girls and boys are unhappy with their bodies. The stress placed on appearance by advertising, diet industries, fashion and sport icons put forward strong and limited images of what bodies should be. This pressure mainly affects women and is, nowadays, connected with the association between beauty, health and status.

The unprecedented amount of attention given to the personal construction of healthy bodies promotes a self-care regime designed to prevent the onset of numerous degenerative diseases, such as diabetes or heart disease. Many such diseases are increasingly portrayed as avoidable through the combination of appropriate diet and sufficient quantities of exercise. These new regimes of self-responsibility promote an image of the body as an island of security and are increasingly associated with appearance and the *presentation of self*. Concerns about body image and presentation have been facilitated by the production of a great number of self-help books, magazines and television programs, dietary supplements and exercise plans. Eating and dieting are topics of a global agro-industry complex which connects, through advertising and fashion, personal status, sociability and appearance.

2. Crisis of the Body

Life in the 21st century is dominated by a crisis of the body. The search for an immediate and present meaning to human life is one of its principal signs. The pressure to remain young and attractive, and an increased obsession with health, fitness, diet and self-therapy programs and the expansion of the nutritional supplement industry are all signs of an increased desire for self-knowledge and self-fulfillment. However, greater self-knowledge does not necessarily afford the actor with the capacity to rule the external situation. On the contrary, a greater knowledge of science and medicine does not necessarily equate to a greater understanding of the self or a greater degree of control over our destiny. Such incapacity is the result of excess reflexivity, a strict environment, and the immobility of the society as a whole. Society seems protected to all changes while a permanent turn makes way to the own individual and its body. The body has become the last refuge of development.

3. Body Discourses

On this cultural context, there was an unprecedented growth of discourses about the body. Among other domains, the sociology of the body emerged as a separate area of study and research. However, as Mirzoeff (1995) suggested, the body became central in academic studies in such a way, that it started to be the spinning plate of the direct contact between scientific areas that were traditionally separated. From medical studies to cultural studies, from feminism to *gender and gay studies*, from pharmacology to dietetics, from cybernetics to art history, from the human performance study to surgery, from biophysics to dance, from cultural criticism to body imagery, all confirms that an amplification of the body is happening and this is, above all, a proliferation of discourses about the body.

Our current representation of the body is the result of a multifactorial historic process. Scientific, cultural and technical conditionings have contributed to how we perceive the body. Mauss (1973) proposed the notion of *body techniques* to underline the social nature of body practices, a kind of body *habitus* which varies according to social factors as education, wealth, fashion and status. Mauss (1979) considers the modern notion of person as a resulting symbol of a particular way of personality elaboration and, as a specific model of attribution of subjectivity to individuals. That is the result of the invention of the technologies of subjectivity (Foucault, 1988) which lead the individuals to relate with themselves while subjects of their own behaviors and capacities. Both Mauss and Foucault refuse an original subjectivity, an ontological essence of each subject. The subject doesn't exist out of the social processes, mainly the ones of discursive order that produce them like free and autonomous beings. That is precisely the meaning of the expression *technologies of subjectivity*: a set of ethical techniques about itself which has in the *subjectivity* its own effect.

Here, the perspective of the body, like a unitary being, should be abandoned. Instead of speaking about an entity intrinsic to the body it is suggested that the body is the result of a specific body regime that leads a certain relation with the embodied individual and of this with the notion of body totality. In other words, the agency is

itself an effect, the result of the technologies of the self which invoke human beings as body reality. Thus, we need to think the historical conditions which made possible for man to build himself as an object of reflexivity. This relation of control of the self over the self, or of the knowledge of the self by the self, has been established in different ways. Confession, care, body care, self-esteem are only some of the proposed or prescribed procedures to individuals trying to give themselves an identity. In any case, the body itself is present as property of subjectivity from which life and death depends.

Nowadays the body seems to be gaining in both dignity and valorization because it implies caring for its good performance. Meanwhile, medicine develops a technical-scientific complex that presents predictive medicine, based upon genetic knowledge, as the perfect health platform. Thus, the discourses about the body cannot be understood outside the progress and human perfection ideology that has been leading to the progressive medicalization of society.

The literature on consumer culture examines consumption in relation to the construction of distinct lifestyles. The emphasis is upon the consumption of goods and services which contribute to various aspects of body maintenance and image such as diet, sport, clothes, and health clubs. Thus, the images of health are akin to body images promulgated by the cosmetic and fitness industries. Exercise and diet management becomes a response to control image and health.

These messages promote the myth of moral strength and will as a way of building the contemporaneous subjectivities. Biological perfection it is the counterpoint of moral perfection. But the other side of theses perfectionist presumptions hides contradictory practices and representations: on the one hand, the compulsion to work out (vigorexia) and the refusal of nourishment (anorexia); on the other hand, the orgiastic bodies, excessive in nourishment (bulimia) and the refusal of physical exercises. The former suggest a large tolerance to body suffering and exhaustion. Eating disorders have the tendency to grow amidst a cultural environment based upon diets which frequently propose caloric restrictions (Bordo, 1993). The later refuse body normalization and suggest excess.

As Turner (1996) reminds us we are again in the face of a pendulum that swings between Dionysus and Apollo. A great part of the cultural history of the western Christian civilization can be epitomized by the two extremes, orgy and fasting, that have in the Dionysian cult the expression of excess, marginality and protest of the low social groups and, in the apollonian the expression of rational control, restriction and dominion.

Underlying this new healthy ideology is the free choice and personal autonomy rhetoric. On this context, we can identify two types of speech, with apparently contradictory values:

a) The defense of an ascetic lifestyle, devoted to hard work, self-restraint, and discipline. Framed by a representation of a thin but muscled body, middle and upper classes strive to physically distinguish themselves as capable of clean living and obtain a healthy life. Through self-control, fitness programs and regular training, frequently with personal trainer, they try to demonstrate their own moral and physical superiority, differentiating themselves from lower class groups.

b) The proliferation of practices built upon a new «prudentialism» (O'Malley, 1992). Through sales techniques and marketing the technologies of consumption exacerbates both individual and collective anxieties concerning each one's future, encouraging the investment on the quality of life. The ethics of lifestyle maximization, coupled with new technologies of lifestyle management generates a ruthless imperative of self-government. From this point of view, training and sportive practice are not socially neutral activities but rather ways of social regulations.

Narcissism can be understood as a neurotic version of a new lifestyle centered on jogging, healthy diets, weight control and physical maintenance. Anorexia as an extreme version of narcissism (Turner, 1996) has, in a sport context, some interesting reflective elements. The data about the prevalence of eating disorders among athletes is well illustrative of the normative power of numerous biological signs. The American College of Sports Medicine suggest that 65% of the women who compete in ice skating, synchronized swimming and endurance sports suffer (I would look into this statement, I'm thinking it should be 'are or have previously', even still this statement will need a reference)from eating disorders. The connection between food, health and physical appearance is particularly important to women, especially in a society that gives so much importance to self image. On this perspective, the social value of women is associated to her body, represented nowadays by an ideal of thinness. Being thin, or being fit, became not only a seductive and attractive image but also a symbol of self-control, moral integrity and high social status (Marzano-Parisoli, 2001). This orthodoxy tends to produce an ascetic approach to both body and sports, convincing more and more people that everyone can modify and build the body they really want. This attempt to achieve perfection and virtue through the subordination of will and «flesh» is a behavior frequently found in anorectic individuals. Similarly, some male athletes tend to use extreme methods so they can lose weight, but these behaviors are more common in sports that need a slim female body. Finally, there is a bigger and bigger evidence of compulsive behaviors in sport activities.

4. Methods

A documental *corpus* of an advertisement campaign for bran flakes was used, from which some relevant semiotic materials, including images, concerning the body and health were selected. We proceed to the discursive analysis. We have selected three broad topics: What are the main themes of advertising, health promotion programs and images of sport in relation to the creation of body identities? What is the impact of food information and vigilance in the creation of a health promoting self? What attention is paid to the social and environmental contexts in which people live out their lives?

Advertising is considered as part of the changing social, economic, and cultural environment, and its visuals can be created in a way that can reflect changes that people would want to adjust themselves to. However, advertising cannot be seen as a rhetorical signature. It needs to be taken as a text that redefines subjectivities and

identities that ascribes rules and meanings; as a system that constitutes rather than reflects that prescribes as well as it describes.

In order to analyze selectively the presence of body and health discourses we have designed a form for extracting content. This form provides context, and formal and content information about the product and how it is advertised. It contains five sections, each one with its codes:

- The first section refers to the technical characteristics of advertisement: support, format, medium, and product.

- The second deals with the characteristics of the product: requirements for consumption, nutritional information, ingredients, etc.

- The third analyses the structure of the advertisement and refers to the written message and the visually message. The formal characteristics of the language are analyzed: communicative resources, denotation/connotation, functional attributes, etc

- The fourth refers to the intended communication and takes into account the content of the advertisement. The practical and symbolic representations and the predominant themes of the message are recorded (values, metaphors and body images).

- The fifth defines the real and potential target audiences of the product deduced from references in the advertisement.

The form was used to analyze written and visually transmitted messages in three types of bran packaging, magazines advertisements, the three booklets attached to the packaging and the CD *Virtual Trainer.*

5. Results and Discussion

The marketing of health by commercial organizations is about the creation of wants, needs and desires. But that promotional activity is most effective if they work into a corpus of existing meanings. Advertisements incorporate everything that the consumer finds significant. Food advertisements therefore use several different arguments that update the coexistence of two kinds of knowledge in food choices, one scientific, the other common sense knowledge. The main themes of the campaign are: a) Product's functional attributes; b) Benefits to health; c) Benefits to beauty and appearance; d) Benefits to body shape; e) Benefits to wellness.

Food advertisements use several different arguments like nutrition, aesthetics, hedonism, tradition, identity, and elitism to promote goods and desires that encourage consumption. Of these, the food/health theme, with its related medical/nutritional discourse is one of the most important. Because of the institutional and social

recognition of the biomedical sciences, which run parallel to the medicalization of the daily diet, the nutritional argument and scientific referents are recurring themes in food advertising, helping medicine and «healthy» products to progressively exert its influence on people daily diet. Through plays on words and images that are full of connotations, advertisements proclaim healthy benefits and attributes through scientific reasoning:

- A *cause-effect relationship* between the consumption of the product and health (e.g.: whole cereals = less cholesterol).

- *Natural products* are comparable with high quality products like fiber, fruit, vegetable, and water irrespective of any industrial processes to which they have been submitted.

- A *preventive and therapeutic function* is mentioned (e.g.: obesity prevention or the regulation of the intestinal function).

- *Body shape and aesthetic function* is also proposed by means of food management and physical exercise (e.g.: the booklets propose that women exercise during work on household or shopping).

Advertisements now try to link goods to individual satisfaction placed within a certain lifestyle. The images they deployed identified the person through the commodities they purchased. The commodities appeared to have the power to transform consumers into certain kinds of person living a life that is both personally unique and socially normal.

Contemporary «healthism» produces a medicalization of everyday life in such a way that two main groups of people can be identified: (1) those whose main goal is to construct and present themselves to others as healthy, and (2) those who cannot, or who refuse, to come close to the healthy ideal. In this regard, Blaxter (1993) writes that for the contemporary era, exposure to health risks has become a central marker of social class. While most will blame themselves for their health, only some enjoy a social position that allows them a viable measure of real control over their lives. The author reports that regardless of class and education, respondents notice voluntary behaviours as the cause of diseases: «my life is unhealthy because I can't control my weight, because I smoke; it is healthy because I take exercise, because I watch my diet» (Blaxter, 1993, p. 125). These orthodoxie tend to result in victim-blaming approaches to body images, illness and health, and promote the view that individuals, not institutions, are responsible for their health. The linkage of health, personal virtue, and self-sufficiency mystifies the structural bases of inequality. By focusing on individual lifestyle as a major determinant of health, «sporting healthism» creates the illusion that people are equally able to make free choices about their health.

At the core of this new brand of health management is the socially pervasive association between health and lifestyle (Gomes, 2005b). Health promotion obscures peoples' differential capacities to purchase goods that involve healthy behaviors. When

access to sporting goods is unequally distributed by class, the real winner of the ideology of «healthism» is the educated middle class. Lifestyle and self-improvement are components of a predominantly middle-class *habitus* that contributes to acquiescence to the logic of inequality (Gomes, 2004). It also exemplifies the replacement of public concern with individual choice as a form of legitimate spread of disciplinary body techniques. Previously confined to disciplinary institutions such as the school in the form of physical education, contemporary individuals are encouraged to live as if they are making a project of themselves. They are encouraged to take responsibility of their bodies, to work on them as a health guardian, and to invest in a lifestyle that will maximize the worth of their existence to themselves.

While the public educational politics of European states have depreciated physical education in the schools, the marketplace alternative goes on: increase in the number of gymnasiums as a direct result of the body consumer culture; and/or the domestication of physical activities by means of personalized machine forms of exercise (Gomes, 2005a). The co-option of fitness by the marketplace has displaced several physical activities, like aerobics, to the isolation of DVD's and videos that are used in the home. Evidence suggests that the implementation of such private projects is constitutively linked to the rise of expert languages and the media through which to spread them. The proliferation of new magazines, self-help packages, and exercise videos has resulted in a new alliance between professionals, claiming to provide rational answers, and individuals, seeking to shape a lifestyle in the hope of personal recovery. State bureaucracies are no longer needed to enjoy healthy exercise habits. The ethic of lifestyle has infused a private domain that long appeared resistant to the population rationale. This new relationship operates through the cultural technologies of advertising and marketing that have employed a constant and intense self-scrutiny in terms of images of the self. Contemporary self-identities are largely constituted through image construction of goods and services with varying identity values located in the spheres of culture, leisure and consumption. The plasticity demanded by the role-playing and the images of health are, however, strongly mediated by other cultural sources of self-identity which emphasize contrasting values like the danger, risk, toughness, and unhealthy products.

In a medicalized society, physical activity is presented as the best way to control the body and in turn life. Bodies in control and bodies out of control become not only a physical marker, but also an ethical focus, the only way to reach self-responsibility. The attribution of social responsibility to the proactive pursuit of health has moved forward since the healthism of the early 1970s when themes of individual effort, discipline and will came together with the deregulation of public health programs. Experts have indicated how to be healthy by means of exercise and prudent behavior. The normalizing ethical power of the model is proposed by rhetoric of free choice and personal autonomy. Such thinking is typical in countries which are attempting to replace old models of regulating health. Instead, individuals are encouraged on the assumption that they want to be healthy and can freely choose the ways of living most likely to promote their own health. Part of this political reasoning is based on the social body metaphor, the view that social illness may be repaired by disciplinary action on the individual body.

6. Conclusions

The *techniques of the self* are voluntary reflection practices through which individuals try to change themselves, establishing behavior rules, and modifying their unique form of being. It is a self-government device used by individuals, carried out continuously without the necessity to directly govern their own behavior. To this government mentality it is enough that there are some who feel governed and therefore act as if they ruled themselves. That demands a particular way of building new subjectivities.

Body education and the search for physical shape are suitable contexts to the expression of pedagogical ways which spread a certain set of experiences of the self. This experience has in the body practices context, being that of self care, self maintenance, self recovery, self activation, self dominion or self knowledge, an especially important way of development of the contemporaneous subjectivities built upon a specific medical sensibility.

Many of the physical exercise practices suggested nowadays, including those promoted by means of food advertisements, concern getting to the bottom of the conscience exam and to the use of registry techniques. Sports practices include pedagogical devices, understood to this effect as the means which contribute to set up or transform one's own experience. If we take as an example the physical maintenance practices proposed by the advertisements analyzed we will verify that theses include : 1) optical devices oriented to self-observation and self-vigilance on which is determined what is visible from the subject to him- or herself; 2) discursive devices oriented to establish what the subject should say about him- or herself; 3) moral devices where the ways on which a subject should judge him- or herself are given according to a rule; 4) self-regulatory devices that establish what a subject can and should do with him- or herself.

1) *Self observation*: Using mirrors and technical instruments which measure cardiac frequency, caloric consumption, distance covered and exercise intensity, are examples of optical devices made for the individual to see, be seen and see him- or herself; the use of individual registry cards, where the individuals should make a certain balance of the frequency, intensity and quality of exercise is a example of the self vigilance mechanism. Centered in the autonomy of the sportsman, the evaluation and, specially, self-evaluation assumes a nuclear role in this autonomy regimen. The suggested training practices concern the use of registry techniques which make the individual to face himself. Confronting himself and of submitting to his own will is the obvious purpose of the evaluation technique.

2) *Discursive devices*: The contemporaneous techniques of expression, concentration and relaxation imply a self-reflexivity and a speech of the own body. We use the notion of psy-activities as ways of aggregating very dissimilar activities which have as common point the self-knowledge techniques that are built upon a therapeutic sensibility such as bioenergy, tai chi, yoga, body expression, massages, psychophysical, anti-stress therapies, gestaltherapy, etc. We are looking at the rediscovery of the "conscience movement" through the body as way of intensification and incorporation of the world in us. This body

appropriation by the conscience implies learning to unveil its emotions, express intimate feelings, exposing in its primary corporeity. It is about a quest for personal truth which has in the concept of the self the articulation knot of all remaining discourses: a internally regulated construction, that takes the shape of each one's a explicit narrative about the self.

3) *Moral devices*: The present interest about the body also obeys to aesthetics, dietetics and hygienic imperatives which establish rules. Side by side with the self-control techniques, there is an instance that induces, incites or imposes. So, for example, in stress management programs «*there is the need of a frequent reflexivity about the used thought strategies*», «*stimulating the sense of self-overcoming*» «*accompanying the practicer on his reflexivity about existential problems that worries him*». On this conscience exam, the relation between the subject with himself suffers a folding so that the discovery of the real self can be possible, not as much as a moral punishment relation but as appreciation of a completed work. On this device, the performing self is in front of is intimate self; the acting self is exposed to the scrutiny of the self which reflects throughout and after the action.

4) *Self-regulatory devices*: Physical exercise, through the scrupulous attention that it gives to the body and through its permanent worry with optimized functionality, makes the old ascetic logic fall and reveals a new culture of the Self, in the modern version of the progressive control of the «true» being. The body is available to all experimentations (the slogan *Just do it* from the Nike advertisement is in regard to this very significant) in the quest for the means to really be itself, healthy, slim and eternally young. The authoritarian rule is replaced by the indicative rule in which each one seems to be the origin of options that would only take some practical advices, sensitization campaigns or made to measure exercises. As such, the proliferation of magazines and self-help books with advices and prescription about food, exercise, health and sex is very important.

Taking care of oneself can be useful to appearance, but it has its limitations. In the future, everyone will hope to determine themselves by acting over the causes of appearance. But nowadays, these causes can only be found in the genetic and molecular projects. Genetic and neurosciences, surgery and the biophysics of new materials enlarged by far the possibilities of redesigning the body. From the psychological "essence" we pass to the biological "essence", and so, it seems to overcome the true obsession of decadence. Target of deep transformations, the body is a place of both dreams and nightmares, and gives signs of obsolescence as any other object of consumption.

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SELF-EFFICACY, PHYSICAL COMPETENCE AND SELF-ESTEEM IN ATHLETES WITH AND WITHOUT DISABILITY

1. Introduction

The concept of self-efficacy was introduced by Bandura (1977) to explain the effects of self-referent thoughts on psychological functioning and refers to the way people judge their capabilities to organize and execute the courses of action required to attain designated types of performance.

Self-efficacy beliefs are said to influence not only the courses of action pursued but also the effort expended, endurance when facing difficulties, the nature of thought patterns and affective reactions (Bandura, 1977). Perceived Self Efficacy is defined as a judgement of individual's potential ability to carry out a certain task, rather than an effective measure of whether or not that individual can or does perform that specific task.

In exercise and sport contexts, the Exercise and Self-Esteem Model (Sonstroem & Morgan, 1989) is used as a self-system to explain how the effects of physical training generalise to Global Self-Esteem (Sonstroem, 1997). This model is based on dimensions of Perceived Physical Competence and Self-Acceptance that are referenced in the literature as the foundations involved in the establishment of a favourable self--esteem (Harter, 1985).

The hierarchical and multidimensional organization of the self in the physical domain suggested by Fox and Corbin (1989) when developing the Physical Self--Perception Profile (PSPP) offered the opportunity to replace the unidimensional perceived Physical Competence level of the EXSEM model with a multidimensional physical self-concept profile providing an example of how improved instrumentation in combination can offer a more comprehensive and systematic framework for the study of self-perceptions through exercise (Fox, 2000). The baseline of the model consists of objective evaluations of physical performance that might be enhanced through training. A Self-Efficacy statement based on objective measures of physical performance such as game statistics represents the first self-perception variable and provides the bridge from the physical to representations of the physical within the mind of the person (Sonstroem, 1997).

Within this model Self-Efficacies are believed to be closely related to perceived physical competence as well as to present moderate to large associations with Global Self-Esteem (Fox, Corbin & Couldry, 1985). This relationship found in the review of the literature among sport and exercise participants are not deeply analysed in athletes with physical disabilities. Recently Ferreira and Meek (2001), Ferreira and Fox (2004, 2005) and Ferreira (2006) used a standardized instrument – the Portuguese version of the PSPP - to assess physical self-perceptions is wheelchair sport participants but no associations with self-efficacy or performance were studied.

The purpose of this study is to describe and analyse the hypothesised hierarchical relationship between perceived self-efficacy, perceived physical competence and global self-esteem variables both in basketball athletes with and without disability. The second purpose of the study is to analyse hypothetical differences in perceives self-efficacy, perceived physical competence and global self-esteem between athletes with and without disability.

2. Methods

Participants

Participants were 139 male basketball athletes, 59 with disability (32.80 ± 11.64 yrs) and 80 without disability (21.48 ± 4.69 yrs). All participants were competing at different levels of the National Competition (professional league, 1st division and 2nd division).

Instrumentation

Participants received a test battery containing a Portuguese version of the Physical Self-Perception Profile - PSPP (Fox & Corbin, 1989), a Portuguese version of the Rosenberg Self-Esteem Scale - RSES (Rosenberg, 1965) and an adaptation of the Self-Efficacy for Walking Scale (Sonstroem *et al.*, 1991).The PSPP consists of five sub-scales with six items displayed in a structured alternative format with a possible range of scores from 6 to 24. Subjects are presented with two contrasting descriptions of people and they are asked to select the description most like themselves and afterwards the intensity of the agreement with that description, i.e., to choose whether this description is "sort of true to me" or "really true to me". This structured alternative format was developed by Harter (1985) and has been shown to overcome socially desirable responding (Fox, 1990). Validity and reliability of the instrument for the Portuguese population has previously been analyses in a series of studies with different Portuguese groups (Fonseca & Fox, 2002; Ferreira & Fox, 2002a, 2002b; Ferreira & Fox, 2004).

The Rosenberg Self-Esteem Scale (RSES) is a uni-dimensional ten-item instrument using a four-point Likert Scale to which participants respond from strongly agree to strongly disagree. Global Self-Esteem is represented by the sum of all item scores providing a possible range of 10 to 40 with higher scores indicating higher self-esteem (GSE). RSES has been validated in different studies. Silber and Tippett (1965) reported

a test-retest reliability value of .85. Recently Batista (1995) and Ferreira and Fox (2003) using this instrument in the Portuguese youth population reported a test-retest reliability coefficient of r=.74. and r=.72 respectively.

Perceived Self-Efficacy was assessed using an adaptation of the Self-Efficacy for Walking Scale (Sonstroem *et al.*, 1991). Participants expressed in percentage values from 0 to 100% their individual degree of confidence about their perceived ability to perform offensive and defensive actions in the game in each statistical item used to calculate MVP (most valuable player) score. The percentage value for perceived self-efficacy was calculated based on the average obtained for all items analysed.

Procedures

Participants were tested in small groups ranging from 5 to 12 individuals after training sessions, with previous consent from coaches and from the National Organisation. Test batteries were administrated by the same research assistant after a short briefing about the purpose of the study. Standardized instructions were used and for athletes with language difficulties questions were read to them. Standardised instructions were given to all participants as well as encouragement to ask for help.

Data analysis

All statistical analyses were performed using SPSS for Windows - version 13.0 with an alpha 5% significance value. Persons product correlation analysis (Persons r) was used to describe relationship between variables and multiple regression (using stepwise and enter method) was used to explain the percentage of the variance explained for each relationship. Comparisons between samples were done using independent t-tests.

3. Results

Descriptive mean score values from self-efficacy, physical competence (physical confidence, body attractiveness, physical strength and physical self-worth domains) and global self-esteem were analysed by status (see table 1).

Table 1. Mean score and standard deviation values for physical self, global self-esteem and perceived self-efficacy in basketball athletes with and without disability

	With disability			Without disability		
	n	M	SD	n	M	SD
Physical Confidence	59	17.24	4.01	80	18.03	2.94
Body Attractiveness	59	15.00	3.30	80	16.06	2.92
Physical Strength	59	16.37	3.06	80	16.08	2.93
Physical Self-Worth	59	16.59	3.63	80	16.91	2.67
Global Self-Esteem	59	18.46	4.71	80	19.28	4.43
Self-Efficacy	59	46.44	10.30	80	48.25	8.96

Athletes without disability showed higher mean score values for all domains of the physical self than athletes with disability but not for physical strength. Athletes with disability reported higher levels of satisfaction with their physical strength and felt more confident in situations requiring strength than athletes without disability. Athletes without disability also presented higher mean score values for both global self-esteem and perceived self-efficacy than athletes with disability. However perceived self-efficacy scores found both in groups with and without disability are very low and below 50%.

Figure 1 presents Pearson's **r** coefficients and multiple regression analysis values (in brackets) of basketball athletes without disability (n=80).

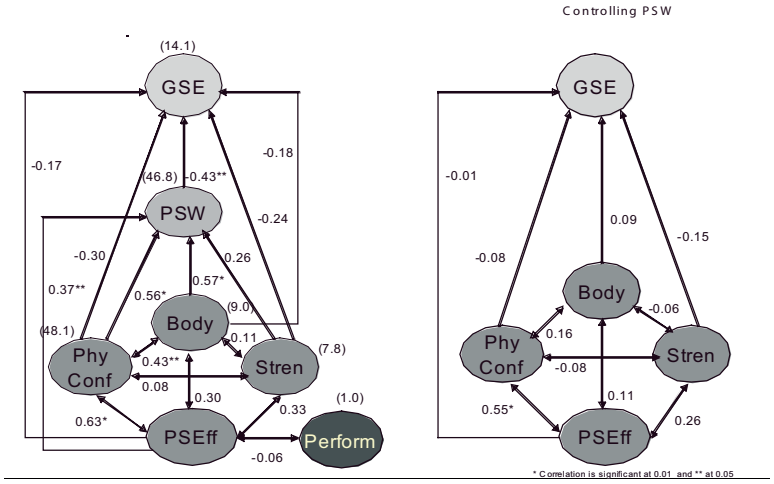

Figure 1. Standardized and expanded solution of the EXSEM model – basketball athletes without disability

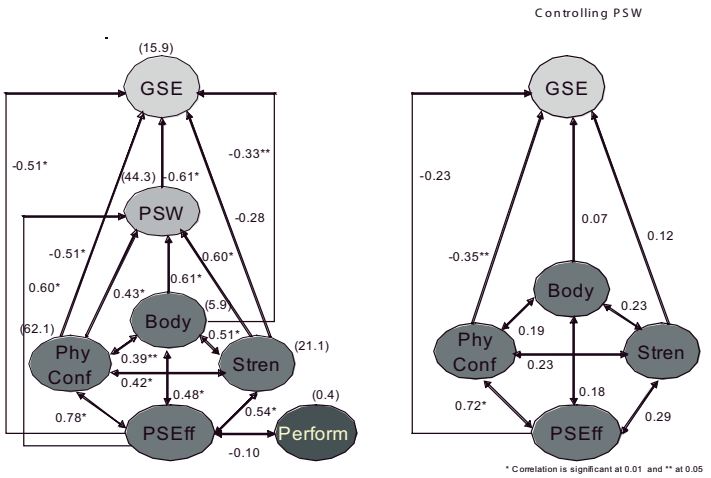

Figure 2. Standardized and expanded solution of the EXSEM model – basketball athletes with disability

Physical self-worth showed the strongest relationship with global self-esteem of all PSPP subscales. All PSPP subscales presented stronger relationship with PSW than with global self-esteem. Relationships between the sub-domain scales and global self-esteem was greatly reduced or even extinguished when effects of PSW are statistically removed by partial correlation. Finally, relationships among sub-domain scales are weaker when the effects of PSW are statistically removed.

Negative correlations among constructs were found between self-perception subscales and perceived self-efficacy both with global self-esteem suggesting that for basketball athletes without disability physical self-perceptions and self-efficacy are perceived as not relevant to introduce significant changes on the way these athletes perceive themselves as persons.

Figure 2 presents Pearson's r coefficients and multiple regression analysis values (in brackets) of basketball athletes with disability (n=59). The pattern of relationships found in basketball athletes with disability is similar to the one found for athletes without disability for all PSPP subscales, for perceived self-efficacy and for global self-esteem. Results also suggest a strong relationship among constructs in the baseline of the model and support its hierarchical organization and the existence of PSW as a mediating variable between specific self-perceptions and global self-esteem. Results also support the existence of a moderate to strong relationship between physical confidence and perceived self-efficacy, leading to the possibility that athletes with higher positive feelings about their ability to maintain high levels of stamina and fitness as well as an high ability to learn and perform sport skills, in different sport and exercise settings, perceive very positively their potential ability to perform certain sport and exercise tasks, whether or not they will be able to perform them correctly. However the correlation coefficient between perceived self-efficacy and performance was negative suggesting that both athletes with and without disability have a very critical opinion about their own level of performance and participation in the game.

Multiple regression analyses revealed that perceived self-efficacy was able to explain 48.1% of the variance in Physical Confidence for athletes without disability and 62.1% of variance in Physical Confidence for athletes with disability. In athletes with physical disability self-efficacy was also able to explain 21.1% of the variance in physical strength. Multiple regression results also revealed that the three sub-domain scales (physical confidence, body attractiveness and physical strength) were able to explain 46.8% of the variance in PSW for athletes without disability and 44.3% of variance for athletes with disability, providing further evidence that they adequately represent self-perception content in the physical domain for both Portuguese basketball athletes with and without disability. On the other hand, multiple regression analysis also revealed that PSW was able to explain 14.1% of the variance in GSE for athletes without disability and 15.9% of the variance in GSE for athletes with disability.

To investigate whether disability influenced perceived self-efficacy, self-perceptions in the physical domain variables as well as global self-esteem, an independent t-test was conducted using status as independent variable and perceived physical self, self-perception in the physical domains and global self-esteem as dependent variables. Results showed significant statistical differences for body between athletes with and without disability ($p \leq .05$). Athletes with disability expressed lower mean score values than their peers without disability.

To investigate whether disability influenced performance among groups with and without disability, a independent t-test was conducted using status as independent variable and MVP value as dependent variables. Results showed significant statistical differences for MVP between male athletes with and without disability ($p \leq .05$). Athletes with disability expressed lower mean score values than their peers without disability.

4. Discussion

The first aim of this study was to describe the level of perceived physical competence, perceived self-efficacy and global self-esteem variables in basketball athletes with and without disability and to analyse the hypothesised hierarchical relationship between these variables in both groups. The present study revealed that perceived physical competence based on individual perceptions in the physical domain, perceived Self-Efficacy and Global Self-Esteem are much similar both in Portuguese basketball athletes with and without disability as fewer differences were found between the two groups. This study also supports the idea that physical disability can adversely impact on feelings of physical and sexual attractiveness, causing strong negative feelings towards the body as a consequence of shame, discomfort and lack of acceptance of disability as well as unhappiness and stress towards the body (Taleporos & McGabe, 2001) as athletes with physical disability showed lower mean score values for all domains except for Physical Strength. Physical Strength was identified as an important component of physical self of basketball athletes with physical disabilities as this dimension was highly valued by this group probably because Physical Strength can be empowered through regular sport and exercise but has also very important effects in every days life, making daily routines easier to achieve and providing the opportunity for active people with physical disabilities to make the difference in attitude and will when compared with other sedentary groups with and without disability. Similar results were previously reported by Ferreira (2006) in a study with Portuguese wheelchair basketball players. Autonomy and ability to perform in different levels and contexts provides a good opportunity to reduce social stigma (Goffman, 1968), to promote individual and professional skills and to reduce disadvantage, promoting alternative ways of thinking and viewing disability in social context and providing important opportunities for both social and professional integration.

Basketball athletes with and without disability perceived low levels of Self-Efficacy suggesting that they are very critical about their own performance and perceiving individual participation in the game and team members contribution to team success as something much less positive than it appears to be in reality.

Zero-order correlation coefficients and partial correlation coefficients (figures 1 and 2) of Portuguese basketball athletes with and without disability provide evidence for the proposed hierarchical organisation with Global Self-Esteem. GSE correlated highly, however negatively, with the PSW sub-domain than all the other sub-scales. Each of the sub-domain scales showed a stronger relationship with PSW than with GSE. Partial correlation coefficients showed that the significant relationship between GSE and the three sub-domain scales is almost extinguished when the effects of PSW were statistically removed. Evidence was also found for the hypothesis that hierarchical organization among constructs would include perceived Self-Efficacy

at the baseline of the model as suggested by Sonstroem *et al.* (1991) e Sonstroem, Harlow, e Josephs (1994).The hierarchical structure is therefore confirmed in these correlational analyses.

The present study provided further support for the negative correlation between physical self and Global Self-Esteem in Portuguese samples with and without (Ferreira & Fox, 2004; Ferreira & Fox, *in press*). These results do not support those found in the review of the literature for groups without disability (Atienza, Balaguer & Moreno, 1997; Fox & Corbin, 1989; Page, Ashford, Fox & Biddle, 1993; Hagger, Ashford & Stambulova, 1998) as this relationship is usually described as moderate to high (0.5 to 0.7). Perceived Self-Efficacy seemed to associate rather well with Physical Confidence and Physical Strength and not so well with Body Attractiveness, specially in the group with physical disability. Unexpectedly the relationship between Self-Efficacy and performance turned to be inconsistent and very weak.

A second aim of the study was to assess the hypothetical differences in perceived Self-Efficacy, perceived Physical Competence and Global Self-Esteem between athletes with and without disability. Body Attractiveness proved to be a sensitive issue among athletes with disability. In spite of being very active and healthier athletes with physical disabilities tend to express less positive feelings about the ability to maintain their bodies attractive and to feel confident in appearance when compared with other male basketball athletes without physical disability.

In summary, the present study documents a strong association between perceived Self-Efficacy and Physical Competence through strong feelings of physical strength for athletes with disability and through strong feelings of Physical Confidence in both athletes with and without disability, supporting the role of the physical self as a mediator to Global Self-Esteem. The results of this study may contribute to further understanding of the psychological benefits of sport participation in groups with disability.

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YOUTH SPORT AND EDUCATION FOR ACTIVE LIFESTLE

1. Introduction

Promoting life-long physically active lifestyle is one of the main aims of school physical education in many countries. The rationale for this aim is that physical activity has many health benefits and therefore it is important to create basis for active lifestyle starting from childhood and youth. Actually we know rather little about the impact of physical education on active lifestyle in adulthood. Physical education is given by many institutions, such as family, sport clubs, and schools, either as scheduled PE or extracurricular sport. It is difficult to make distinctions between the impacts of these institutions on the later active lifestyle. In general, the information about the connection between youth physical activity and physical activity in adulthood is rather scare. However some reliable longitudinal studies have shown that there is a statistically significant relationship between childhood and youth physical activity with adult physical activity, and that youth sport participation in particular predicts physical activity in adulthood.

The majority of young people in most Western countries participate in organized sports at some phase of their lives. In many countries the number of participants has increased during recent decades (De Knop et al. 1996). Much research has been done on children and youth sport from the pedagogical, psychological, sociological, pediatric, and even legal, viewpoints but less attention has been paid to how children and youth sport is related to a life-long physically active life style (Cahill & Pearl 1993; Malina 1988; Weiss 1986; Zermatten 1999).

The aim of this paper is to present empirical evidence for the relationship between youth sport participation and active lifestyle in adulthood, to introduce theoretical explanations of this relationship and to discuss features of youth sport system best promoting an active lifestyle.

2. Theoretical approaches to the relationship between youth sport and active lifestyle in adulthood

In principle socialization into sport and into active lifestyle follow the same model. The process is influenced, among other things, by individual attributes, significant

others or socialization agents, and socialization environment. On the other hand, socialization into competitive sport happens mainly in childhood and youth while socialization into active lifestyle is much longer process going on almost during the whole life. How the relationship between youth physical activity and adult active lifestyle can be explained. There are at least three hypotheses.

Carry over hypothesis suggests that people continue to participate in those activities they have participated in childhood and youth. Therefore it is important that children are taught activities which adult people usually like to do (Green 2002; Haywood 1991). A problem of carry over hypothesis is that typical physical activities of children and youth are different from those of adult people. It can be expected that skills learnt in an activity, such as swimming or skiing increases the probability to participate in the same activity in adulthood. Otherwise the empirical findings of longitudinal studies have not given much support to the carry over hypothesis.

Ability and readiness hypothesis suggests that the influence of youth physical activity and youth sport develop motor skills and abilities and give experiences which increases the readiness and willingness to participate in physical activity and also to learn new activities in adulthood. What is important for this hypothesis is that young people have opportunity to learn well some motor skills, and have possibilities to experience different kinds of activities and develop intrinsic motivation for sport participation in childhood and youth. According to ability-readiness hypothesis the type of youth sport is not so important as regular persistent participation and good skills and motivation.

Self-selection hypothesis says that there is no causal relationship between youth sport and adult physical activity but the correlation is explained by a third factor, such as personality, or hereditary disposition to good motor performance. The fact that fitness is rather much determined by genetic factors gives some support to the selection hypothesis (Bouchard et al. 1992; Pancrazi 2000). A dimension of type A behaviour, responsible leadership, has been found to account for physical activity at both youth and adulthood but , however, it did not explain the correlation between youth and adult physical activity (Young et al. 1998; 2000).

3. Empirical findings on the connection between youth sport participation and adult physical activity

Several longitudinal studies have shown that participation in organised sport in childhood and youth predicts adult physical activity (Barnekow-Bergvist et al. 1998; Engström 1991; Malina 2001; Tammelin et al. 2003; Telama et al. 1997). Results obtained from retrospective studies confirm this (Curtis et al. 1999; Frändin et al. 1995; Hirvensalo et al. 2000; Laakso 1981; Paffenberger et al. 1984; Powell & Dysinger 1987). The findings on the relationship between youth sport participation and adult physical activity have been statistically significant but rather weak Thus, we know that youth sport participation may be a good predictor of adult physical activity, but we know less about the specific characteristics of youth sport participation which are important for later active lifestyle. According to recent research results at least the persistence and frequency of youth sport participation and participation in

sport competitions seem to be important elements of youth physical activity from the viewpoint of adult physical activity.

Most of previous studies have used only one measurement in childhood and adolescence when comparing youth physical activity with adult physical activity. A recent Finnish study showed that a persistently high level of activity at a young age considerably improved the prediction of adult physical activity as compared with cross-sectional data (Telama et al. 2005). The same strong influence of persistent participation was also found when studying the effect of youth sport participation on adult physical activity (Telama et al. 2006). To study the effect of persistent participation in youth sport on adult physical activity the subjects were divided into those who participated in sport club training in neither 1980 nor 1983 (Outsiders), those who participated in 1980 but not 1983 (Drop-outs), those who did not participate in 1980 but did in 1983 (Beginners), and those who participated in both measurements (Actives). The active males, i.e. persistent sport participants, belonged to the active adult group (third tertile) 9 times more often than the outsiders who did not participate at all in youth sport, but who may have been physically active in other ways. Respectively the active females were 4 times more often active in adulthood as compared to non-participating females. Also a shorter participation (Beginners and Drop outs) increased the probability of adult physical activity as compared with non-participants in males but much less than the persistent participation. In females participation which was ended by drop out did not differ from non-participation.

Also the frequency of participation in sport club training sessions is an important predictor of adult physical activity. Among females participation once a week did not increase the probability for adult physical activity as compared to non-participation but among males those who participated once a week belonged to the active group of adults almost three times more often than non-participants. Participation many times per week raised the respective probability to six in females and five in men. (Telama et al. 2006).

Participation in sport competitions was very powerful predictor in males but less important in females. The probability to be active in adulthood increased with increasing level of competitions. The gender difference was remarkable. Those females who participated in youth sport competitions at national level belonged to active adult group three times more often than non-participants, but national level male competitors belonged to active adult group 12 times more often than non- participants. (Telama et al. 2006).

There is rather little information about the effect of type of organized sport on adult physical activity. In a Finnish study participants were divided in to six groups according to the most favorite type of sport in age-gender groups. There were significant differences in physical activity index between the types of sport in 1980 when the participants were 9 – 18-year-old. However, in follow-up in 2001, only significant difference was among 30- and 33-year-old men. Physical activity was higher among those whose favorite sport had been in 1980 soccer or ice-hockey than among those who participated in running, cycling and other activities (Telama et al. 2005). Also another Finnish study showed that participation in soccer and ice-hockey at age 14 predicted high physical activity at age 31. In the same study also participation in volley ball, cross-country skiing, orienteering, track and field and combat sports predicted

high adult physical activity (Tammelin et al.2003). There was some evidence for the carry over hypothesis. The participation in some endurance sport, such as cross-country skiing, running, or orienteering in youth was related with the participation in endurance sport in adulthood. Females' participation in gymnastics at age 14 was associated with frequent participation aerobics or gymnastics at age 31. (Tammelin et al. 2003). It is possible that an inherited disposition for good endurance performance is at least partly explaining this kind of relationship and thus supporting self-selection hypothesis.

4. Back to the theory

In the light of empirical findings it seems that all the three hypotheses presented above are at least partly supported. According to empirical results, the most powerful predictors of adult physical activity were frequent participation in sport club training, persistent, for example three year long or longer participation in organized youth sport, and particularly among males participation in high level sport competitions. Participation in competitions as such hardly is important for adult physical activity but meaningful is what is behind competitions. A young athlete who is capable to participate in, for instance national competitions, must have trained hard many years. This kind of exercise usually is also vigorous and results in good fitness and high level of skills at least in one sport discipline. Long lasting training provides high intrinsic motivation. Sport participation may also teach goal setting and develop strong mind and determination. All this may help a person to start again exercising in later life even having stopped training earlier. Also experiencing a hard strain of one's body at young age may help a person to start exercise later.

The continuation of some activities, such as female gymnastics, from youth to adulthood may explain a part of the relationship between youth and adult physical activity. Also the association between endurance sport participation in youth and in adulthood may support the carry over hypothesis but may also mean inherited disposition for endurance performance and thus support self-selection hypothesis. Carry over hypothesis does not explain much of the relationship between youth and adult physical activity. For instance, soccer and ice-hockey were among the most common activities among boys and they predicted high activity in adulthood, but rather few men played those team sports as adult. Playing soccer and ice-hockey means usually participation in frequent, regular and intensive training and therefore youth soccer and ice-hockey predict adult physical activity but not so that playing continues to adulthood. Carry over hypothesis cannot be very good explanation for the tracking of physical activity because youth and adult people participate in different kinds of activities.

The fact that frequent, intensive and persistent participation in youth sport best predicts adult physical activity evidently indicates that young people adopt in youth sport emotions, motivation, experiences, and skills which help them to learn new physical activities or start again exercising in adulthood. We cannot totally exclude the explanation that persistent participation in sport training is also influenced by an inherited disposition to sport ability. However, although the carry over theory and

self-selection may explain a part of the relationship between youth sport participation and adult physical activity, the ability and readiness hypothesis is the most probable explanation. This means that the influence of youth sport participation on later active lifestyle depends mainly on the quality of youth sport and characteristics other than just sport discipline. The promotion of active lifestyle is a great challenge for youth sport.

5. Promotion of active lifestyle as a challenge for youth sport

How ready is youth sport system to accept the challenge of promoting active lifestyle? The promotion of healthy lifestyle has been mentioned in public discussions and in ceremonial speeches. However, promotion of active lifestyle has not belonged to the main aims of youth sport. According to ability and readiness hypothesis and to the empirical research results important issues in youth sport are frequent, regular and persistent participation which results in learning motor skills and how to exercise, development of high perceived competence and intrinsic motivation. Keeping this in mind, high drop out rates in youth sport are against promotion of active lifestyle. The empirical results presented above emphasized persistent long lasting participation as predictor of adult physical activity while short experience of participation ending to drop-out had not more effect than staying outside youth sport.

High drop-out rates have been found in youth sport of many countries (DeKnop et al 1996; Telama et al 2002), but they may vary from country to country depending youth sport systems, sport cultures and other factors. In this connection the Finnish youth sport is in the focus. In Finland the main organizers of youth sport are sport clubs which belong to some national sport federation. Also some other organizations offer youth sport opportunities. There is also some sports organized by schools but it has a minor role in youth sport. In 2005 about 50 % of boys participated organized sport at least once a week, 12-year-olds more than 60, 18-year-olds less than 40%. Among girls the rate of participation was about 40%, 12-year-olds over 50% and 18-year-olds less than 30%. In both genders participation in organized sport was increased during 28 years, among girls more than among boys (Laakso et al. 2006).

A majority, about two thirds of boys and more than a half of girls, participate in organized sport at some phase of their childhood or adolescence, but the number of those who continue to be in sport long enough, for instance three years, is much smaller. This means that although youth sport attracts big numbers of young people only minor part of them stay in sport long enough in order to develop their skills, perceived competence and motivation to the degree which can influence their later active lifestyle. Big numbers drop out from sport before getting positive effects regarding active lifestyle.

According to a Finnish longitudinal study 52 % of the girls who participated at age 12 had dropped out at age 15. For the boys the respective percentage was 37 (Telama et al. 2006). Because the participation in organized sport is started very early, in Finland in 1995 at age 8 in average, many have already dropped out at age 12 (Telama et al. 2002) There seems to be cross-cultural differences in drop out rates and in ages of drop out. For instance, in 1995, 24 % of German boys were still playing soccer and 19 %

had stopped playing, whereas in Finland only 10 % were still playing and 30 % had stopped (Telama et al. 2002).

The results of empirical longitudinal tracking studies let suggest that the length of youth sport experience is an important predictor of adult physical activity. Another important factor is the quality of youth sport and evidently the quality of youth sport experience is also associated with the length experience. What are the main factors influencing the quality and length of youth sport experience? Answers can be found from drop out research in one hand, and sport socialization studies on the other hand.

Lindner et al. (1991) have proposed three categories of reasons for drop out: sport related, milieu-related, and developmental. The high drop out rates, in part, are explained by natural psychological development of young people which can be seen as normal trial-and-error sampling procedure that the youngsters employ in trying to find out those activity or achievement domains they enjoy the most (Burton 1988). Typical expressions of the drop out reasons related with development are such as "other things to do", "other interest" or "conflict of interest" (Jons et al 1990; Lindner et al. 1991; Molinero et al. 2006). On the other hand a large number of young people would like to continue competitive sport but do not do so because of many sport related reasons.

The most usual sport related reasons of drop out seems to be connected with self concept and self-perceptions of young athletes, such as perceived competence in relation achievement expectations, or high perceived competitive expectations (Burton 1988) The competence-related reasons have been expressed in statements like "lack of success", "I was not as good as I wanted to be", and "my skills did not improve" (Lindner et al. 1991; Molinero et al. 2006). This kinds of self-perceptions usually lead to loss of enjoyment and "no fun" experiences. Behind these perceptions and feelings are usually certain characteristics of youth sport system and goals or expectation set by adults. Another group of drop out reasons is related with the problems in social interaction and socio-emotional atmosphere of sport illustrated by statements such as "did not like coach", "no team work", and "did not like to compete" (Molinero et al. 2006). Important features of youth sport regarding drop out vs. persistent participation are, among other things, competition system and the role of screening, age of specialization, and the type of motivational climate in coaching.

Regarding persistent participation or drop out in one hand and screening and early specializing on the other hand, the socialization model presented by Coté and Hay (2002) is interesting. The model describing the progress in sport socialization consists of three phases: a sampling phase, specializing phase and investment / recreational phase. The main features of sampling phase are that children participate in many sports, that their main motivation is fun and enjoyment, and that the emphasis is on structured or deliberate play rather than training or deliberate practice. In this connection deliberate play means activities providing enjoyment through active and pleasurable participation. From the sampling phase, or sampling years, young people may move to the second phase, specializing years. Specializing phase involves more deliberate practice and a reduction in the range of sport activities fun and enjoyment still being central elements of sport experience. Deliberate practice means the development of sport specific skills specifically designed to improve current levels of performance.

Specializing phase (approximately 13 years of age) also includes encouragement to work harder and more seriously than at the sampling phase. Regarding sport career young people may move from specializing phase to investment phase or investment years. Entry into the investment phase usually means focusing on one activity and a commitment to intensive training and competitive success. (Coté & Hay 2002)

The model also includes the fourth key concept, recreational years, which means regular sport participation without aspiring to reach an elite level of performance. Thus, in addition to moving ahead on competitive career from sampling years to specializing years and further to investment years, young people has at each phase two other options. She can drop out of sport or move to recreational years in order to continue sport participation without any achievement expectations.

From the viewpoint of a sport career or an active lifestyle the sampling years are interesting in particular. In order to know which sport activities are really interesting and in which sports a child feels that she can develop her skills, it is necessary to have experiences in many sport disciplines. If a child is offered an opportunity to participate in one sport discipline only, the probability for drop out is high if she feels that this particular sport is not good for her. In Finland, and perhaps also in other countries often parents take a child to sport club, for instance, to play ice-hockey or to train figure skating only, not other sports. Therefore a multi-sport club is better regarding a longer sport career or participation in recreational sports. The younger children are taken to the sport clubs, the more important it is to guarantee good opportunities for sampling years. The sampling years also must last longer if children are very young when starting to participate. It has been found that parents may have important role concerning the transition from sampling years to specializing years or to recreational sport (Macphail & Kirk 2006). On the other hand it is important that children themselves are able and capable to make decisions on those transitions. In order to be capable to make those decisions children should understand, among other things, that abilities, effort, and practice affect the results of their own and others. The level of understanding is reached at age of about 12 (Lintunen 1999).

In Finland where high rates of drop out have been reported the main aim of youth sport system widely started on 1960's was searching athletic talents. On 1960's majority of sport clubs, and in particular the clubs under Workers' Sport Federation, were multi-sport clubs thus being able to offer to young people opportunity to participate in more than one sport at the same time without a rivalry between clubs. Already on 1980´s majority (60 to 70%) of sport clubs were specialized in Finland (Heinilä & Koski 1991, 66; Vuolle 1986, 137). Nowadays most sport clubs are focused only one sport discipline and the clubs are jealous to each others if children want to participate also in other sport in some other club. Kirk (2005) has proposed that the multi-sports club already common in German and other continental countries may be a means of facilitating young people's sampling behavior.

In addition to providing opportunities for multi-sport experiences for children psychological and social atmosphere is important in sampling phase in order to prevent early drop out. Fun and enjoyment in children sport are based on activities where challenge and ability are in balance, effort and learning are emphasized more than outcome or winning.

6. Conclusions

In the light of empirical research results the participation in youth sport seems to be beneficial for an active lifestyle in adulthood provided that participation is frequent, intensive and persistent lasting at least some years. A short experience of youth sport ending in early drop out does not predict physical activity in adulthood. A part of the relationship between youth sport participation and adult physical activity may be explained by self-selection, in other words, those who has an inherited disposition to good sport performance participate in sport both in youth and in adulthood. However, because the most adult physical activity is recreational and fitness-health-oriented, and not focusing to competitive performance, the self-selection cannot be the main explanation for the association between youth sport and adult physical activity. Thus it can be concluded that persistent youth sport participation really affects young people in a way which is beneficial for an active life style in later life.

Important issues in youth sport regarding active life style are long time for sampling and having experiences of different sport activities, not too much emphasis on competition and winning too early, and possibilities for good social relationships and interaction. It seems that in multi-sport club these aspects can be better taken into account than in specialized club. In multi-sport club it is easy for a young people to change from a sport discipline to another during sampling years.

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SOCIO-PERSONAL DEVELOPMENT IN THE CONTEXT OF SPORT

The sport system should have a decisive role in personal and social development and in moral and character education. This implies that the philosophy and practices that promote personal and social education need to be aligned in developing the potentials of youth. The Sport system should assume its position as an instrument serving this dimension of human development. The personal development of youth should be facilitated at the different stages and spaces of the developmental processes. This theme has been historically linked with the objectives of Physical Education and Sport. The philosophy and values which are present in Physical Education and Sport, although only generally expressed through the "occult curriculum", underlie the domains of sport skill acquisition, physical development, and an integrated education including civic and ethical education and the development of life competencies, with applications outside of sport and physical activity.

Personal and social education involves historic, cultural, aesthetic, social, political, moral, economic and philosophical dimensions. This can be achieved through disciplinary or interdisciplinary means, but also through trans-disciplinary approaches. In fact, education is always an integrative process. This responsibility should also be shared by the sport system.

Among the educational values which are important in the sport environment, the pan-human objectives, such as freedom, honesty, friendship, peace, self-knowledge, discipline, tolerance, fraternity and cooperation should be highlighted. More than physical improvement and the adoption of a healthy lifestyle, sport education involves social, civic and intercultural education against discrimination based on nationality, ethnicity and gender. On the other hand, sport education emphasizes the development of fundamental life competencies and skills: self-knowledge, self-control, respect of effort, perseverance, self-improvement and personal harmony. Sport education also emphasizes the transfer of these values to other spheres of life, forming not only the Sportsman/woman, but also, the Man/Woman.

The professional practice of physical education teachers, fitness instructors, coaches and other professionals are the focus of the formative and educational goals. Sport Education, involving its trans-disciplinary objectives and contents and broad applicability, compromises not only Physical and Sport Education, but also all other educational areas and spaces where this can be materialized.

It is important to highlight that this is not an educational objective exclusively for adolescents, students or athletes. It is a project for people of all ages no matter their status or condition. It should take place in schools, with visible presence in the Physical Education and School Sport programs; it should also have an important place in clubs, associations, federations and in the governmental structures of sport management. It should likewise affect sport management and administrative criteria, sport and event organization, rules of competition, professional ethical codes, and the behaviors of directors, coaches, sportsman and other individuals involved.

Sport education is not characterized, in essence, by a body of content or subject matter that is more or less codified, by a didactic or concrete methodology and by the existence of professionals or spaces exclusively devoted to the development of sport. It is, to some extent, a "de-schooling" education project, which demands the active cooperation of the family, school, media and various sport and social organizations. It is a project which is also directed at spectators and sport consumers and, generically, to all people regardless of age. Its objective is to create the basis for the implementation of a lifetime project, which not only materializes individual socialization, but also develops critical and responsible citizens, aware of the faults and limitations of the present, promotes a more civilized world.

The didactics, strategies, methods and procedures of sport education need to be studied in detail in order to permit implementation of the personal and social educational objectives that a sport program can produce.

Over the past two decades many studies have illustrated the contributions of sport to the psychosocial development of children and adolescents (e.g., Danish et al., 1990, 1993; Blair & Morrow, 1998; Sallis & Owen, 1998; Shields & Bredemeier, 2001; Culos-Red et al., 2001; Hausenblas et al., 2004). Shields & Bredemeier (2001), for example, have noted that from the writings of Plato through contemporary times, many important thinkers - educators, theologians, politicians, among others - have referred to sport as a factor in building character. And, a good deal of scientific evidence has been produced in this domain (Gauvin, Lévesque & Richard, 2001; Hausenblas et al., 2004; Sanmartim, 1995).

The relevance given to the role of sport in child and adolescent development seems to be consensual among authors who study this theme, even though many studies have difficulty in isolating and quantifying the unique contribution of sport to psychosocial development (Biddle & Chatzisarantis (1999); Petitpas, Cornelius, Van Raalte & Jones (2005).

Character is determined by a number of factors and their interactions, including heredity, childhood experiences, modeling by significant adults, peer influences, physical and social environments, media, a variety of organizations (family, school, church, and others), and the specific situations and roles that the individual assumes in life (Campbell & Bond, 1982). Neverthless, professional intervention may be a necessity in character education and in the moral quality of decisions and individual behaviors.

Many programs have been recently designed in the perspective of influencing the development of moral values. Many have highlighted the potential contributions of sport in character education (Shields & Bredemeier, 1995). Although there is some

empirical support on the value of sport in character development, there is also evidence that contrary effects might occur (Danish, Petipas & Hale, 1990, 1993).

It appears that the effect of sport on the personal and social development of the athlete is not so much related to the practice of sport itself as it is to the philosophy of the sport organizations, the quality and orientation of the training processes, the nature of parental involvement, and the personal experiences and resources of the participants (Smith & Smoll, 2002).

Several strategies appear to have significant impact on character development. Activities should be structured and directed by adults who carry out their authority in a firm, sensitive and imaginative manner, revealing themselves as committed not only with the development of sport specific competencies but, also, with the development of character. Adults need to be demanding in all these domains, not only with the participants but also with themselves. This direction of activity should be accomplished in a context which maintains discipline through codes that are clear and accepted as legitimate (Wynne, 1989). On the other hand, the environment should be structured so that the participants have opportunities to practice pro-social behaviors. The suggested practices should involve the creation of situations where participants experience a variety of roles in a supportive group and in environments where there is acceptance by the peers and a feeling of belonging (Petipas & Champagne, 2000). The perception of the emotional climate perception and its effective management represent the structural basis for the potential to affect the development of positive values.

Another fundamental element is involvement in voluntary activities which assume objectives and incentives of an important intrinsic nature. The motivational strategy to support this development should integrate the athletes in activities that are challenging and are perceived as sufficiently important to deserve considerable levels of time and effort.

There is also evidence for a learning environment that promotes self-confidence and persistence and development of life competencies (Duda, 1992). This evidence suggests that parents and coaches who place the emphasis on external motivations such as winning, comparisons with others or public recognition, can contribute to an ego orientation or an environment focused on performance which is less propitious for psychosocial development. On the other hand, parents and coaches who place emphasis on effort, self-improvement and intrinsic motivation, create a task orientation environment and a mastery climate which presents better conditions for work ethics, persistence, and commitment as well as the development of positive life competencies (Larson, 2000). Moreover, secure environments are more predisposed to incentive participants for taking risks and learn from their mistakes (Danish et al., 1993).

Overall, psychosocial development appears to be facilitated if participants are involved in a desired activity; are guided by caring adults and belong to a group or positive community that is not afraid of challenge, demands excellence and has high positive expectations. A system of symbols, ceremonies and activities which favors the development of collective identities is an additional and perhaps fundamental factor in personal and social development.

Values education is only possible in an environment that provides opportunities for the athletes to gain confidence in their capacities to use them in other contexts than sport. It is essential that sportsmen and sportswomen are helped to identify

the competencies demanded in the world of sport that can be transferred to other environments. Opportunities to use these competencies in different contexts should be provided along with support and encouragement. Personal and social education demands the creation of a moral environment. The strength of this moral environment results from the quality of relationships, behaviors and expectations of adults and mentors, in particular parents and coaches. Parental involvement has clear benefits in psychosocial and moral development through sport (Perkins, 1997). To guarantee the strength of this contribution, parents should demonstrate an active interest in the activities of adolescents.

Interpersonal relationships are an important support in learning situations for moral education demanding exposition to social values, interaction between peers, reflections and discussions of moral topics, understanding of others, empathy, and an interest to improve continuously until excellence is reached.

The moral education of the young sportsman/woman cannot be founded exclusively on declarative moral knowledge and on other ethical rules. Rather, moral education results from the creation of a familiar environment, a secure affective climate and a shared ethical environment. Character involves knowledge, affection and action (Ryan & Lickona, 1987). Accordingly, moral knowledge involves the knowledge of moral values, moral reasoning (promoting the criticism of the values), decisional strategies, moral imagination and judicious judgment. On the other hand, the affective dimensions of morality are determined by personal identification with these values, by attraction for these values, and by compromise, loyalty and existence of feelings of guilt for infidelity to them.

Moral development demands moral reasoning, behavior control, affection and care for others (Cunha, 1996). Habits and tradition should also be considered as essential factors in the formation of conscience. In actuality, moral education includes the knowledge of consensual values of the sport community (e.g., the Olympic values), personal identification with these values and acceptance of habits and socially relevant attitudes. In relation to moral education, it is important for educators to develop the following specific competencies: (1) acceptance of himself/herself as a model, (2) compromise with the moral domain, (3) knowledge of how to morally argue and assist the participants in that process, (4) knowledge of how to express their moral vision, (5) knowledge of how to promote empathy, (6) knowledge of how to promote a moral climate in the group, and (7) knowledge of how to involve participants in moral actions (Ryan, 1987, as cited by Cunha, 1996).

The development of these competencies should always be based on personal autonomy, accepting the fact that in many areas there is no moral consensus and that people live in cultural and intercultural environments of moral relativism. It is important to contradict indoctrination practices and unique thoughts, accepting that some ideological relativism and some neutrality of the coach might be necessary to facilitate not only the clarification of values, but also the discussion of moral dilemmas. This didactic position seems to be decisive in the clarification of personal values to the extent that it will help the development of a critical, autonomous spirit.

However, this neutrality should not be a decisive foundation for the intervention in values education. The coach cannot be a simple facilitator in this process. Moral education also demands clear and direct value transmission, and the proclamation of

values and ideas that are based on rationality and emphasize not only the reasoning process but also the content (Cunha, 1996). Explanation and rational demonstrations, use of examples, dialogue, and rational and free environments are decisive factors in the formative strategies.

However, the clarification of personal values cannot overcome the fact that some values are more just and balanced than others. If it is difficult to defend the thesis of the universality of values, it is also true that there is reasonable consensus throughout civilization about a significant group of these values.

Stages of moral development (Kohlberg, 1971) highlight educational processes that support the development of reasoning appropriate for the stage of moral development.

Education of Sport Agents

The knowledge already available in this area should be quickly exported to the world of sport and, in particular, to the education of sport agents. Teachers, coaches and other agents of sport education are involved in the development of moral competencies and in the personal and social development of athletes. It is not enough for teachers to have high levels of technical proficiency and for coaches to have high levels of technical expertise in their respective sports without reflection on basic concepts of teaching and training, and without consideration of ethical values in sport. These are significant dimensions of their professional responsibility and should also be significant dimensions of their life. Understanding of the processes of moral development and education must be emphasized in the preparation of teachers and coaches.

It is thus important that coach and teacher education be directed not only to competencies linked to knowledge of technical, tactical or methodological aspects, which are more related to the sport results, but also to professional competencies related to moral education and development of life competencies. This will demand a personal education centered on their attitudes, values and believes, as well as on their own conceptions of Man, life and mission. The same imperative should extend to the formation of other professionals connected to the world of sport: sport directors, judges and referees, doctors and paramedics, reporters, sport psychologists, etc.

Final Words

Sport is a practice in the service of Man and as such, it demands from its different agents much more than a technical intervention. It demands an intervention founded simultaneously on philosophy and science, which clarify and make more effective intervention at the ethical level and the potential formative effects on moral development, character education, and personal and social education.

In fact, what can be learned can be taught and in the context of moral education, such evidence cannot be forgotten. The intervention of sport professionals is defined in a conceptual framework, which not only permits but also demands, an intervention on the personal identity, the development of life competencies (independence, autonomy,

self-confidence, perceived competence, self-achievement, self-challenge, personal and social responsibility,). These will be achieved in many environments of sport as well as in enlarged context and circumstances. Attempts to affect value development demand a deep knowledge of developmental and educational processes related to motivation, setting objectives, desire and ambition, affecting values appropriate to the demands of competition, learning respect for the rules and fair-play, ethical behaviors, relationships with others and respect for individual differences, learning to win and lose. Several basic questions need further research. How to promote integrity and commitment? How to promote respect for other's rights? How to promote the sense of justice and the care for others?

In many ways, practicing sport is a moral experience. Hopefully, as a result of involvement in sport, there will be cooperation, friendship, generosity, magnanimity, compassion, a sense of justice, authenticity, transcendence and, ultimately, Humanity.

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MORAL EDUCATION IN THE PRACTICE OF SPORT AND PHYSICAL EDUCATION

1. Prelimany and introduction

Martin Lee dedicated himself to the study of sport and moral education. This volume honors his work by exploring the state of the art of sport and physical activity in the moral development of youth. Given the range of theoretical-philosophical moral education orientations, this task is particularly daunting.

For our contribution and in line with our backgrounds, we have narrowed the scope of this task to one physical activity-moral education approach, Teaching Personal and Social Responsibility (TPSR), and the implications we can draw from our experiences in the development, implementation, and spread of this approach. Although conceptualized as a holistic developmental approach for working with underserved youth (i.e., youth who live in low income, violence-prone communities), the model's relevance for moral education is well known, as reflected in an invitation to present at the National Conference of the Association for Moral Education (Hellison, Martinek, & Walsh, 2004) and by references in the literature to TPSR as a "moral craft" (Kirk, 1991, pp. 246-248) and as one of several "sport and physical education intervention programs for moral development in children" (Vealey, 2006, p.150). The history, conceptual framework, and research related to this approach are described below, followed by a consideration of the problem of implementing moral education beyond the realm of academic discourse to broad-based practice. But first, some contextual remarks.

2. Moral education and physical activity

There is no dearth of promulgations, claims, and arguments regarding the physical activity-moral education relationship. The sport and physical education literature is replete with references to moral education, as well as character education, fair play, and other related constructs. Shields and Bredemeier (1995) did an admirable job of reviewing much of this literature within the context of moral theory. Another example, in the Journal of Physical Education, Recreation, and Dance, is a three issue series on character development (e.g., Docheff, 1997) directed toward teachers,

coaches and teacher educators in physical education and physical activity. Both of these examples indicated a strong interest in the US about moral education in the context of physical education, sport and physical activity, from both theoretical and practical points of view.

From the theoretical point of view, issues in the literature center around differentiating moral issues from personal preferences and conventional behavior (Nucci, 1982); and resolving conflicts among various theories and philosophies, including social learning (Bandura, 1977), cognitive/constructivist development (Kohlberg, 1981), interaction morality (Haan, 1991), and the more social-emotional dimensions of empathy (Hoffman, 1984) and caring (Gilligan, 1982; Noddings, 1984). In this chapter, we focus instead on the practical aspects of moral education for youth in physical education and physical activity programs. Such programs can be grouped as two types: theory-into-practice and practice-into-theory.

3. Theory into practice

Much has been written about the physical activity-moral education relationship. Most of this work consists of borrowing, modifying, or creating a conceptual framework that is then tested in a practical setting, such as youth sport, in-school physical education, or other physical activity programs. Some examples of theories that have been tested in practice are:

- Kohlberg's constructivist theory of moral development with preadolescent school children in play settings (Horrocks, 1977).
- Giebink and McKenzie's (1985) behaviorist-oriented pro-social conceptual framework in a residential camp setting.
- The combination of interaction morality and structural developmental moral education in an elementary school physical education program (Romance, Weiss, and Bockoven, 1986).
- A comparison of social learning and structural moral development in a children's sports camp (Bredemeier, Weiss, Shields, and Shewchuck, 1986).
- An in-school physical education experimental study of the constructivist-based Fair Play for Kids model (Gibbons, Ebbeck, and Weiss, 1995).
- A conceptual framework for promoting life skills through sport implemented in sports clinics for youth (Hodge and Danish, 1999).

These sample studies show how theories can be developed into practical programs or experiences for children and youth and yield positive outcomes that approach the ones intended. Too often, however, these programs have limited impact other than on the groups of youth and practitioners who are directly related to the original research project. When the researcher moves on to new initiatives, the program and its principles often become difficult to sustain. Furthermore, unless effective materials and trainers become available, few additional groups can take advantage

of the innovation. To combat this problem, theory-into-practice research sometimes includes published guidelines or manuals so that practitioners can put the approach into practice. Examples include:

- The Fair Play for Kids curriculum guide for elementary classrooms and gyms (Commission for Fair Play, 1990).
- Specific recommendations for physical education teachers, coaches, athletic administrators, players, and parents by Shields and Bredemeier (1995).
- The SUPER sports clinic program manual (Danish, 1998).
- Ennis and her associates' (1996) Sport for Peace model.

Despite these efforts, theory-into-practice approaches have yet to show sustained implementation by practitioners outside of a research setting and little dissemination or further development beyond the first initiative. These theory/research-based approaches are presented in research journals and academic conferences, and thus appear to be most valuable in developing the literature base and expanding understanding of moral development and moral education strategies. They have less influence on large numbers of youth or practitioners. This may be explained in several ways. First, access by practitioners to this information as well as to training for implementation and technical assistance appears to be limited. Professionals who work daily with students and youth generally do not have easy access to the academic journals or discourse on moral development. Furthermore, youth sport leaders and physical education teachers tend to be more interested in ideas and programs that address the real problems and issues they experience daily. They are less interested in the validation of theoretically driven educational approaches or the production of rigorous research results. To complicate matters, if moral development programs, theories and philosophies do not in some way connect with practitioners' current beliefs about children and youth, or beliefs about teaching, sport, or physical activity, they are easily ignored or dismissed as irrelevant. Even when programs do appeal to practitioners, additional barriers hinder sustained implementation, which will be discussed in a section below.

4. Practice-into-theory

We argue that the models of physical activity-moral education most frequently adopted by practitioners are those that begin in practice and gradually build a conceptual framework that can be disseminated. We call these initiatives practice-into-theory. Examples include:

- Teaching Personal and Social Responsibility (Hellison, 1978; 2003)
- Adventure education (Rohnke, 1977; Rohnke & Butler, 1995)
- Cooperative learning in physical education (Grineski, 1989; 1996)
- Sport Education (Siedentop, Mand and Taggart, 1986; Siedentop, Hastie & van der Mars, 2004).

The development of these educational approaches has been, for the most part, a trial and error process in practice, initiated by a single originator and close colleagues. When the original ideas seem to "work" with youth, a conceptual framework or set of principles is established and presented to teachers, coaches and youth leaders through conferences, workshops, and publications. When perceived as credible and feasible, practitioners replicate or, more often, adapt the approach to their contexts, students, and pedagogies. In addition, if they appeal to teachers' beliefs and/or pedagogical practices, and appear to work with children and youth, these approaches earn devoted followers who also present and publish their interpretations of the approach in practitioner conferences and publications.

In this way, practice-into-theory moral education approaches spread from one practitioner to others, with variable degrees of fidelity, but also expanding and deepening the original principles (and sometimes distorting original principles beyond recognition). Nevertheless, these practice-into-theory approaches have been successfully "scaled-up" (Coburn, 2003) to many teachers, coaches and youth workers because they offer practical solutions to real problems as well as feasible strategies that appear likely to produce the desired outcomes. They sometimes lack sound theoretical credentials and/or a rigorous research base until much later in the process, if at all.

Similar to theory-into-practice approaches, the impact of these models on participants is difficult to determine, because such research is notoriously difficult to conduct, and because quality control showing fidelity to the original approach is problematic. With this disadvantage, however, comes an advantage: Research may be less important in implementation because practitioners are less concerned about program efficacy as determined by research results than they are by finding alternative ideas and strategies that, from their experience, appear to enrich their programs or improve their own practices. TPSR is one practice-into-theory moral education approach that has been widely adopted and adapted since it was developed in the 1970's. By examining this approach, its past and present, our intention is to address sustained implementation of moral education programs in practice.

5. Teaching Personal and Social Responsibility

TPSR has one of the longest legacies and a substantial and growing research base that makes it worth studying to understand the implementation process. It is a practice-into-theory moral education approach that has been widely disseminated and continually sustained for several decades in school physical education, extended day physical activity programs, and a few organized sport programs in many states in the US, some Canadian provinces, and in Spain and New Zealand. Of the practice-into-theory approaches identified above, it is the one that most deliberately aims for moral education, with sport or physical activities viewed as the vehicle for personal and social development with young people.

TPSR began very simply as one program leader's search for a way to convert physical activity into a medium for helping youth from low income, violence-prone communities. The earliest written accounts of TPSR reflect its rudimentary beginnings. In 1973, just one paragraph out of an entire book titled Humanistic Physical Education was

devoted to a pre-TPSR program for underserved youth (Hellison, 1973, p. 94). By 1978, an entire book was devoted to describing TPSR in practice in an "inner city" secondary school physical education program (Hellison, 1978). Based on continued practice with underserved youth and augmented by physical educators who learned of this approach and developed their own adaptations, TPSR gradually became more substantive and nuanced (Hellison 1985; Hellison & Templin, 1991; Hellison, 1995; Hellison, 2003) and began to be recognized as a curriculum model (Jewett & Bain, 1985; Silverman & Ennis, 2003; Metzler, 2005) and a moral education approach (Kirk, 1991; Vealey, 2006). Various scholars from the subdisciplines began to recognize the contribution of TPSR, for example, sport sociology (Rees, 2001; Harris, 2006), sport psychology (Solomon, 1997; Vealey, 2006); sport pedagogy (Ennis, 2006), and adapted physical education (Winnick, 2000; Sherill, 2004). TPSR was also a part of the youth development field as it evolved into its own specialization (Hellison, Cutforth, Kallusky, Martinek, Parker & Stiehl, 2000; Kahne, Nagaoka, Brown, O'Brien, Quinn, & Thiede, 2000).

Traditional qualitative and to some extent quantitative research studies trailed behind the development of this practice-into-theory model but eventually strengthened the model's claims. The bridge between practice and research began with a practice-based research approach, service-bonded inquiry (Martinek & Hellison, 1997; Martinek, Hellison & Walsh, 2004), which broadened curriculum research beyond its more typical data-based positivist design toward reflection, imagination, and philosophy. Studies through more traditional methods followed, for example, Hellison & Walsh's (2002) literature review of 26 studies, a longitudinal study by Hellison and Wright (2003), Watson and her associates' (2003; Newton et al, 2006) psychometric investigations of TPSR, and Mrugala's (2002) practitioner testimony documentation.

In its current form, TPSR utilizes strong instructor-participant relationships based on specific guidelines accompanied by gradual empowerment and group and self-reflection as tools to help youth take more personal responsibility - conceptualized as self-motivation and goal-setting - and more social/moral responsibility - conceptualized as respect for others and helping others - as well as transferring these responsibilities to other aspects of their lives. Strategies have been developed to integrate these responsibilities into physical activity and to deal with problems that arise, such as conflicts and accountability, and applications outside of physical activity are routinely discussed. Although moral education only focuses on TPSR's social/moral components, this program/curriculum model is intended to be holistic and therefore includes self-development.

Although the beginnings of TPSR predate the following conceptual developments, TPSR received belated support from deCharms' (1976) early motivation work as well as Conrad and Hedin's (1981) social responsibility framework, which consists of attitude (sense of responsibility), competence (ability to help), and efficacy (knowledge that one can make a difference). Two recent orientations from the emerging field of youth development, positive youth development and relational youth work (Edginton & Randall, 2005), promote values and concepts similar to those of TPSR. Positive youth development emphasizes developmental stages and personal growth, while relational youth work focuses on development through youth-youth worker relationships.

6. Toward widespread implementation of physical activity-moral education programs

While originally one teacher's attempt to address issues in his work with youth in a single program, TPSR has been implemented and developed by many others due at least in part to several factors that affect the spread of educational innovations generally. Scaling-up any educational program or initiative implies that the change is intended for many more youth than one person or program can reach. If "reaching out broadly" is intended by the developers, they must be concerned not only with developing and testing their theories, publishing guidelines, describing programs, and researching impact in single cases. They must also consider "what it really means for an external reform to be successfully implemented" by others in their own unique contexts (Coburn, 2003, p.4). As Coburn and others theorize, innovations become authentically adopted and sustained by practitioners when they reflect certain characteristics. The program or approach needs "depth" to connect with existing beliefs and to have the potential to expand or change those beliefs; "sustainability" to continue after the initial impulse through networks of like-minded colleagues or through available workshops and publications; "spread" beyond one context or person to others, especially to others in authority or toward institutional and policy levels; and "shift in ownership," giving practitioners flexibility and encouragement to interpret the approach to suit their unique context or constituents' needs. TPSR is a good example of a moral education program that has been successfully implemented on a large scale, and shows how these characteristics support implementation.

Depth: Unlike other innovations TPSR has been under development throughout its 30 year history, a continual tinkering of a few goals and strategies primarily through practice, but also informed by literature. The model persisted perhaps because the fundamental goals and principles are simple and presented in relatively commonsensical terms. Goals are defined as observable behaviors in a developmental frame, and are persuasive to both practitioners and scholars. The strategies presented are structurally similar to those already in use by teachers and coaches. Thus, the TPSR model is congruent with the beliefs and pedagogical structures held by many teachers and youth workers and thus easy to adopt. The model appeals to practitioners because it provides a relatively straightforward response to common "behavior" problems first, but then the principles can be explored and more sophisticated strategies can be employed as experience or commitment increases. In essence, this model has been sustained in practice perhaps because the goals and strategies are simple, but rich.

Sustainability: The original ideas have been continually presented primarily to teachers, coaches, and youth workers for over thirty years. Additionally, materials and publications have been aimed at practitioner audiences first, and scholarly audiences secondarily. Within the presentations and publications, variations designed by practitioners and researchers have been presented as valid contributions to the model, and passed on to others as possibilities to consider. In short, rather than designing and delivering a packaged program and then abandoning it for a new project, TPSR has been presented as a collective work in progress that may have something in it worth trying for professionals in many different physical activity contexts. Scholars and practitioners who adopt or adapt TPSR for their own use often extend the model to new contexts or groups of youths, rather than abandoning it for a completely new idea or research agenda.

Shift of ownership: With widespread implementation, quality control becomes an issue. As Mrugala's (2002) study points out, many people who believe they are implementing TPSR do so only superficially as a management tool, and miss essential aspects of the original intent. But there is also ample evidence of thoughtful adaptation and practices consistent with the fundamental principles in program descriptions and research studies published by experienced practitioners in some settings (see for example Stiehl & Galvin, 2005; practitioner Jeff Walsh's adaptation in Hellison, 1983; practitioner descriptions in Hellison, 2003). These adoptions and adaptations have developed because throughout the development of TPSR, practitioners have been encouraged to take ownership of the model by adopting parts of the model that "fit" and adapting the language and strategies to work in their unique contexts. Shifting ownership of the approach from the original developer to the people engaged with youth has the advantage of many people trying the model, with the disadvantage that many may in fact be implementing something completely unrecognizable to the original developer.

Spread: In addition to live presentations and discussions with in-service teachers and coaches, published materials have been written in ways that are easily accessed by people engaged day-to-day with students, athletes and youth. Articles about TPSR continue to be published, and it appears in many textbooks intended for initial and graduate study in physical education curriculum and instruction (e.g., Graham, Holt-Hale & Parker, 2004; Lund & Tannehill, 2005; Metzler, 2005; Rink, 2004; Siedentop & Tannehill, 2000). With this presence in professional physical education literature, TPSR has become established as an alternative curriculum or instructional approach, familiar to many novice and experienced teachers. From textbook to policy is not a difficult process. With the development of content standards by the national professional associations and by state level education policy making bodies, TPSR goals and principles are now becoming obvious influences in policy documents.

New York State's recent initiative to include personal and social responsibility not only in curriculum documents, but also into state assessments is an example of spread beyond single practitioners and toward large-scale institutional mandates. The New York State Physical Education Profile (University of the State of New York, The State Education Department, in press) assessments for competence in physical activities include a required component of the student's demonstrated personal and social behavior while engaged in the activity. The rubric used to score this is directly designed from the TPSR's levels of personal and social responsibility. TPSR was chosen not only because it reflected the intent of the state learning standards to teach personal and social responsibility, character, civility and citizenship in physical activity settings, but because of the model's familiarity and appeal to physical education teachers in New York State. Together with a written assessment of moral reasoning, physical education teachers will be expected to address both moral behavior and moral reasoning in sport and physical activity settings.

With the publication of the New York State Physical Education Profile, and through a series of statewide workshops designed to assist teachers and administrators with using the assessments and with implications for their programs, TPSR will be featured as a recommended resource for curriculum development and instructional strategies that can help teachers and their students understand and act in ways that

are consistent with "personal and social responsibility", and "character, civility and citizenship" providing high level authority for physical activity based-moral education in physical education for New York State's students, and the potential to reach more than two million public school children in the context of physical education programs. This begins a new phase for TPSR and moral education programs.

TPSR studies thus far have been micro studies; i.e., investigations of a single program with applications to theory-in practice rather than populations (Patton, 1990), or cross case analysis of single programs (Merriam, 1998). The few large scale policy documents that include TPSR (Hellison & Martinek, 2006) do not mandate implementation and assessment procedures. Thus, adoption of the TPSR principles and now assessments designed from the TPSR goals in the New York State Profile offers an opportunity to study TPSR and moral education on a macro scale. It will be interesting to study the impact of a large-scale implementation of this moral education program and to see what effect such exposure will have on the TPSR model, and perhaps on moral education more generally.

7. Concluding remarks

The purpose of this chapter was to draw implications from our experiences in the development, implementation, and spread of one physical activity-moral education approach in order to move the problem of implementation beyond the realm of academic discourse to broad-based practice. While theory-into-practice studies in this area are plentiful, their adoption and sustainability in practice have not been clearly substantiated and so far remain problematic. On the other hand, practice-into-theory, although attracting less attention, may offer more promise for sustainability, spread, and the shift in ownership (or "buy-in") necessary to accommodate local modifications and practitioner perspectives.

TPSR was chosen to examine practice-into-theory more closely because of its long history and recognition in the literature. In addition, we have professional stakes in this approach. The first author (Don) created the conceptual framework through fieldwork with underserved youth and continues this work today, while the second author (Sarah) currently co-directs the New York State Physical Education Profile project in which TPSR is a prominent feature.

In terms of scaling up moral education approaches for widespread use in practice, TPSR has evolved from a single teacher's innovation and gradual spread to large numbers of practitioners by word of mouth, workshops, and publications. Most recently TPSR has been scaled up to state-level policy initiative. This process has evolved not through a systematic theory/research driven development, but through practical appeal to practitioners who work with students. The model consists of a set of goals that are easy to understand and hard to dispute, practical instructional strategies, and clear expectations for the relationships necessary for positive impact with students. It is a model that encourages teachers, coaches, and youth workers to adopt and adapt, but one that has enough potential "agreed upon personal and social characteristics" as well as "structural arrangements" (Sage, 1998) and specific educational process (Stoll

& Beller, 1998) to give it an identity. Over time, TPSR has developed substance and credibility to change practitioners' deeply held beliefs and pedagogies. It lends itself to adaptation both horizontally to a breadth of teachers, programs and students, and also vertically from single groups to high-level policies. This flexibility delivers the sense of ownership essential to the sustained adoption of any innovation.

While TPSR and moral education policy work is in its infant stages, the New York State example holds some promise for examining the effects of "scaling up" physical activity-moral education approaches. This example of moral education is one that will have both bottom-up (practitioner driven) and top down (policy driven) support, adding a new dimension to the field of moral education for youth.

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MOTIVATION IN PHYSICAL EDUCATION:
the differentiated effect of gender, age and sport's involvement

1. Introduction

Motivation is probably one of the most studied topics in the context of sports (Edmunds, Ntoumanis & Duda, 2006), particularly in Portugal. However, research in this domain can be characterized, to some extent, by a lack of focus which limits understanding about the relationship between motivation and participation in sport and exercise. This situation is due, on one hand, to the lack of a clear definition for motivation, and on the other hand, the multitude of theories trying to explain it. Further, much of the published research has been based on physically active groups which represent a very small percentage of the population. In the case of Portugal, only about 12% of the population is active (Fernandes, Lazaro & Vasconcelos-Raposo, 2005).

The study of motivation for sport participation has been a major research topic in sport psychology since the early 1980's (Frederick & Ryan, 1993, 1995; Harwood & Biddle, 2002; Vasconcelos-Raposo, 1996). However, much of the theory guiding this research emerged from the field of education, specifically cognitive activities (Vasconcelos-Raposo, 1996). Consequently, the results may not be clear because the nature of the motivation to participate in cognitive activities may not be the same as that to participate in physical activities.

The need to develop efficient strategies to motivate children to participate in physical activities and sports is widely recognized (World Health Organization, 1995; Strong *et al.*., 2005). Positive experiences in the context of physical education are generally assumed to influence children and youth to adopt healthy lifestyles in adulthood (Sallis & McKenzie, 1991; Shephard & Trudeau, 2000). It is also believed that such practice may promote and improve public health. Accordingly, it is suggested that programs of sport and physical activity should be specifically designed and implemented for children and young people in order to avoid the eventual development of attitudes of indifference towards physical activity at older ages (Fox, 1991).

Evaluation of the association of a variety of demographic, biological, psychological, behavioral, social and/or contextual variables with physical activity levels of children and youth shows that perceptions of competence, intention to practice sport and enjoyment

in the attending physical education emerged as positively related with physical activity (Sallis *et al.*, 2000; Trost *et al.*, 2002). In a related perspective, task orientation and higher intrinsic motivation tend to promote the most effective behavioral patterns for a higher level of persistence in sport activities and a lower occurrence of drop-out (Deci & Ryan, 1985; Markland & Hardy, 1997; Nicholls, 1984; Ntoumanis, 2001; Steinberg & Maurer, 1999; Wong & Bridges, 1995; Xiang & Lee, 2002).

Physical education is an obligatory discipline in the national educational curricula of many countries. This might be perceived as a positive measure, but it might not be so since it does not allow for the development of intrinsic motivation, given that students do not exercise the element of choice (Coakley & White, 1992). It is also suggested that the long-term benefits of this motivational form can be promoted when students have the possibility to choose the type of physical activities they prefer for their class (Coakley & White, 1992). It is also possible that some students may not have previous experience in sport activities which are relevant to the physical education context. Perceptions of incompetence might thus be one of the more important negative elements in the process of becoming physical active at older ages (Papaioannou, 1994).

One of the main characteristics of modern industrialized societies is the regular and systematic appeal that adults make for the involvement of youth in physical activity and sports. The proposed activities can be either integrated into the school curriculum or as a complement to it, and in the structure of club athletic programs (Fonseca, 2000). In order for appeals to be successful, it is important to know the motives of children and young people who would like to become involved. The knowledge of their motives allows for better planning which in turn can influence levels of the youth participation. Once motives are identified, teachers and other involved individuals may intervene in order to encourage youth to persist in sport activities. However, motivating children is not simply a process of strategically applying theories (Carvalho, 2001).

Emphasis on the sport and physical activity involvement of children and youth is based on health, fitness and behavioral benefits (Strong *et al.*, 2005). However, levels of participation on physical activity programs are very low with a high number of individuals – children, adolescents and adults – with a sedentary life style (Ryan, Frederick, Lepes, Rubio & Sheldon, 1997; Fernandes, Lazaro & Vasconcelos-Raposo, 2005). The present epidemic of obesity, with it consequences for health problems at more advanced ages, has been related to the sedentary behavioral pattern (Duda, 1996; Standage *et al.*, 2003).

1.1. The influence of physical education in the definition of active lifestyles

Relatively little research has focused in the psychological aspects of participation in physical education. Its potential as a significant influence in promoting public health is recognized (Goudas, Biddle, Fox & Underwood, 1995; Goudas, Dermitzaki & Bagiatis, 2001; Haywood, 1991; Sallis & McKenzie, 1991). Accordingly, the school is viewed as the *"... setting with most promise for having a public health impact … because virtually all children can be reached in school, and an existing infrastructure is devoted to physical education and health education…"*(Sallis & McKenzie, 1991, p. 131).

However, physical activity and in particular sport participation takes place in many other contexts among which sport clubs are especially relevant. Treasure (2001, p. 79) notes that *"The number of children and adolescents who regularly engage in adult organized sport outside the school system makes this activity one of the most popular achievement contexts among young people to today. Understanding and enhancing motivating in this context therefore constitutes a very meaningful topic of research for those interested in child and adolescent development."* Although it is important to study motivation for participation in sport in general, special emphasis should be placed on the context of physical education classes for several reasons. First because physical activity can be beneficial to health if associated with the promotion of proper values as in an educational setting; otherwise the risk of creating facilitative conditions for adherence to less desirable behaviors is possible (Vasconcelos-Raposo, Silva & Teixeira, 2005). It is logical, therefore, to assume that the programs of physical activity in the school context will have a positive influence when students are motivated and perceive positive benefits at the cognitive, affective and physical levels as a result of that participation. Unfortunately, many youth who do not participate in sufficient physical activity in physical education to derive obtain health benefits (Armstrong & Biddle, 1992; Papaioannou & Theodorakis, 1996). Moreover, many youngsters do not participate in physical education presenting as an excuse health problems, physical incompetence and others.

When promoting physical activity, it is necessary to consider the interests of children and adolescents to participate. Among school age youth, age, gender and student interest in physical education interact (Van Wersch *et al.*, 1992). Girls in the youngest groups demonstrated higher interest in physical education classes than boys, while boys in more advanced age groups showed higher interest than girls. However, when the boys and girls were considered together across ages, there was a decline in interest in physical education. It was suggested that physical education was a non-significant course, even though it was considered a favorite class.

Understanding motivation in the context of the school system is an important topic, in particular those interested in health and physical activity. Such study should focus on the relationship between motivation and intention to participate in sport and physical activity (Biddle, Soos & Chatzisarantis, 1999; Goudas *et al.*, 1995). The purpose of the present study is to identify perceptions of students regarding a group of motivational variables proposed by the Hierarchical Motivational Model.

1.2. Self-Determination Theory

According to Edmunds, Ntoumanis and Duda (2006, p. 2241), self-determination theory (SDT) *"…proposes that human motivation varies in the extent to which it is autonomous (self-determined) or controlling. Behaviors and actions that are autonomous are initiated freely and emanate from within oneself (…). In contrast, when behavior is controlled, it is regulated by external force. The individual in this instance feels pressured to engage in the behavior. Based on these distinctions, SDT proposes that there three forms of motivation exist; namely, intrinsic motivation, extrinsic motivation, and amotivation, which, based on the level of autonomy associated with them, lie on a continuum ranging from high to low self-esteem."*

Biddle *et al.* (1999) suggest Self-Determination Theory does not take into consideration how success is defined (Is something missing here?). According to them, success can be viewed as the means of any given behavior qualitatively regulated through the different reasons presented by the individual. This is an autonomy centered perspective. This view has been the primary theoretical paradigm applied in the motivation in the sport context, in particular intrinsic motivation (Duda, Chi, Newton, Walling & Cley, 1995). Evidence from the education and sport contexts has demonstrated the importance of the multiple roles that motivation can play in the promotion of cognitive, affective and behavioral benefits (Ntoumanis, 2001). The results also highlight the importance of choice in the development human behavioral autonomy. This approach allows for the definition of the intensity and direction of behaviors in sport and physical education contexts given that the participation of students in the choice of tasks are quite limited; variation in physical abilities is an additional factor. This can reduce levels of student self-determination, not overlooking the importance of perceived competence in the definition of different motivational levels (Ntoumanis, 2000).

Standage and Treasure (2002) suggest the use of the motivational continuum model proposed by Ryan and Deci (2000). Intrinsic motivation in a given activity varies according to the perception of personal control, choice (self-determination) and ability (competence). Further, any event or factor that influences perceptions of competence or self-determination will function to modify intrinsic motivational levels.

Motivation	Amotivation	Extrinsic motivation				Intrinsic motivation
Regulatory style	Non-regulation	External	Introjection	Identified	Integration	Intrinsic
Perceived locus of causality	Impersonal	External	Somewhat external	Somewhat Internal	Internal	Internal
Behavior	Non-self-determined ←				→ Self-determined	
Relevant regulatory processes	Lack of: Competence Contingency Intention	Presence of: - External rewards - Punishments	Focus on approval Ego involvement	Activity valued Consciously pursued	Synthesis of identified regulations to self	Enjoyment Pleasure Satisfaction

Figure 1. The self-determination continuum

1.3. Hierarchical Motivational Model

Given the complexity of human motivation, Vallerand (1997) emphasized the need for more concrete understanding and analysis of the dimensions of motivation as they vary in type and level and called for a theoretical model in which all these aspects are integrated, the hierarchical motivational model. The proposed motivational sequence of the model can be applied to the sport and physical education contexts

(Vallerand & Losier, 1999). Social factors play a key role in the differentiation process. Cooperative learning, self-referenced improvement and perceptions of choice are several factors that increase self-determined motivational levels (Condon & Collier, 2002; Ntoumanis, 2001). Task and ego orientation are additional factors; the former is positively associated with intrinsic motivation (Standage *et al.*, 2003).

Deci and Ryan (1985) suggest that these social factors are exercised through the satisfaction of three psychological needs: *Autonomy* – the individual's perception of being the origin of his own behaviors, revealing an internal perceived locus of causality; *Competence* – accomplishing activities in an effective way, originating mastery sensations; and *Relatedness* – the individual's sense of acceptance by others, e.g., belonging to a group (social inclusion) the felt need for friendships (Ntoumanis, 2001).

In addition to the motivational types that are influenced by psychological needs (Figure 1), the last level of the model considers the consequences at a cognitive, affective and behavioral level. The theory suggests that intrinsic motivation usually predicts positive consequences, while amotivation predicts negative results (Biddle *et al.*, 1999; Hagger, Chatzisarantis & Biddle, 2002; Ntoumanis, 2001; Vallerand, 1997, 2000, 2001).

On average, interest and participation in physical activities decrease with age, beginning perhaps during the transition from childhood into adolescence (Malina, Bouchard & Bar-Or, 2004). Moreover, non-physically active individuals tend to adopt a sedentary lifestyle, ignoring the health, fitness and behavioral benefits of regular physical activity. Of relevance to the present discussion, self-determination profiles are more evident during childhood, while amotivated profiles increase during adolescence, a time when the influence of peers is perhaps highest (Ntoumanis, 2001). A major priority for sport and health policy makers is the identification, promotion and implementation of models/programs that optimize the motivation of youth to participate in a variety of physical activities. A related aspect is the evaluation of the impact of physical activity on the physical and psychological well-being of the population. Understanding of motivational processes that determine the level involvement in physical activity, including sport and physical education, may facilitate this process (Standage *et al.*, 2003).

The Self-Determination Theory (Deci & Ryan, 1985) and the Hierarchical Motivational Model (Vallerand, 1997, 2000, 2001) are the two theoretical models used to study motivation for physical activity and sport. The present study attempts to analyze several determinants of motivational processes in the context of physical education, including age, gender and sport involvement. It does not attempt a structural validation of the models. The primary focus is an understanding of the process that leads to the development of intrinsic motivation for physical activity and sport and consequently the promotion of a healthy life style.

2. Methodology

The sample consisted of 1099 adolescents (544 girls and 555 boys), 14 to 16 years (14.7±0.7 years), selected from 11 schools from the northern and central regions of Portugal. The initial size was 1127; 28 students (2%) were eliminated

because the questionnaires had unanswered items or their ages did not satisfy the inclusion criteria. By whole year age groups, students were distributed as follows: 14 years, 561; 15years, 348; and 16 years, 190. Across all ages, 568 individuals did not participate in sport activities, while 405 were involved in team sports and 126 in individual sports.

Table 1. Sample characterization considering independent variables

Number of individuals n = 1099		
Male n = 555 (50.5%)		Female n = 544 (49.5%)
14 years n = 561 (51.0%)	15 years n = 348 (31.7%)	16 years n = 190 (17.3%)
Non-athletes n = 568 (51.7%)	Team sports n = 405 (36.8%)	Individual sports n = 126 (11.5%)

2.1. Instruments

A translation and linguistic adaptation of the questionnaire used by Ntoumanis (2001) was used. The questionnaire was translated by the authors and an independent translation was performed by a professional. An experienced English/Portuguese teacher evaluated the words so that youngsters would have no difficulty in comprehending what was requested in each item. The questionnaire was completed in the presence of one of the researchers and no feedback was received from the students that would raise suspicions about the interpretation of individual items.

Social factors

Students rated their perception of whether they have a choice of behaviors and tasks using three items. These items are the same found in Biddle and colleagues (1995) Perception of choice subscale of the Physical Education Class Climate Scale. The Cooperative Learning and Improvement subscales of the Perceived Motivation Climate in Sport Questionnaire-2 (Newton, Duda & Lin, 2000) was used to assess students' cooperative learning and self-referenced improvement. Each of these subscales consisted of four items that were rated on a 5-point Likert scale anchored by strongly disagree (1) and strongly agree (5).

Social factors include perception of choice, cooperative learning and self-referenced improvement. Perception of choice was evaluated with three items of the choice perception dimension of the Physical Education Class Climate Scale (Biddle *et al.*, 1995). Cooperative learning and teacher emphasis on self-referenced improvement were evaluated with the scales of Perceived Motivation Climate in Sport Questionnaire-2 (Newton *et al.*, 2000). Items were rated in a 5 point Likert scale (1=disagree and 5=agree).

Psychological mediators

The psychological factors were assessed by three subscales: perceived competence, autonomy and relatedness. Perceived competence was assessed using the five items from the perceived competence subscale of the 18-item Intrinsic Motivation Inventory (MacAuley *et al.*, 1989). Students' perception of autonomy and relatedness were assessed with four items (two items per measure) developed by Ntoumanis (2001). Responses on all scales were indicated on a 7-point Likert scale.

Psychological mediators included perception of competence, related and autonomy. Perception of competence was evaluated using five items of the Intrinsic Motivation Inventory (McAuley *et al.*, 1989). Two sets of items developed by Ntoumanis (2001) were used to estimate perceptions relatedness and autonomy.

Motivational forms

Motivational forms were measured using a questionnaire developed by Goudas and colleagues (1994) which was based on the work of Ryan and Cornell (1989). The questionnaire subdivided into four subscales measuring intrinsic motivation, identified regulation, introjected regulation and external regulation. In addition, students responded to an amotivation subscale of Goudas and colleagues (1994) instrument which it was adapted from the Academic Motivation Scale (Vallerand *et al.*, 1992). Responses were made on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Previous work has supported the psychometric properties of the scales (Goudas *et al.*, 1994; Ntoumanis, 2001).

Different motivational forms were assessed with questionnaires used by Goudas *et al.* (1994). Four items for each of five subscales of the Self-Regulation Questionnaire (Ryan & Connell, 1989) and the Academic Motivation Scale (Vallerand & Bissonnette, 1992) were used.

Consequences

Four consequences of the motivational styles were assessed with 7-point scales: effort, enjoyment, boredom and intention. Effort was measured with three items from the Intrinsic Motivation Inventory (McAuley, Duncan, & Tammen 1989). Enjoyment and boredom were assessed with three and four items, respectively, developed by Duda, Fox, Biddle and Armstrong (1992) to measure children's affective responses in physical activity. Finally, intention was evaluated by using a single item. Support for the internal reliability of these scales has been shown in previous physical education based research (Ntoumanis, 2001, 2002).

Cognitive, affective and behavioral consequences as suggested by the model of Vallerand (1997) were also considered. These included boredom, evaluated with three items developed by Duda *et al.* (1992); effort, based on the subscale of the Intrinsic Motivation Inventory (McAuley *et al.*, 1989); and intention of being physically active in the future, based on a single item (Ntoumanis, 2001) developed from several examples in previous studies (Biddle & Goudas, 1996; Biddle *et al.*, 1999; Goudas *et al.*, 1995).

Psychological mediators, motivational forms and consequences were rated on a 7 point Likert scale (1=disagree a lot and 7=agree a lot).

Social factors, psychological mediators, motivational forms and consequences were the dependent variables, while gender, age and extra-curricular sport involvement were the independent variables. Since the number of students practicing individual sports was small (n = 126, 11.5%) the two sport subgroups (team and individual sport athletes) were combined to facilitate the comparisons those involved in sport (athletes) and those not-involved in sport (non-athletes).

2.2. Procedures

After obtaining permission of school authorities and informed consent from parents and students, the questionnaires were administered under the supervision of the research team. The questionnaires were completed in a calm environment and took about 10 to 15 minutes.

Descriptive statistics were calculated. The symmetry of the distribution of frequencies (normality) was evaluated via skewness and kurtosis (Maroco, 2003). When comparing two groups, the t-test for independent samples was used; when there three groups or more groups, one-way ANOVA was used, followed by the Scheffé post-hoc test. Cronbach (1951) alphas of all subscales were calculated. According to Cronbach (1951), the values obtained should vary between 0 and 1, while Nunnaly (1978) defined 0.7 as the minimum for a scale to be considered acceptable. A significance level of 5% was used for all statistical procedures.

3. Results

The results are presented following the temporal sequence proposed by Vallerand´s model. Descriptive statistics and the symmetry analysis are presented in Table 2. Self-referenced improvement as defined by the teacher (4.18±0.68) was the most important social factor. Among psychological mediators, relatedness (4.85±1.56) was followed by perceptions of competence (4.41±1.44). There was some evidence for the importance of the social-affective domain and the possibility of demonstration of abilities in physical education classes. Autonomy scores were lower, suggesting that students had little possibility to participate in task choices (3.49±1.50) for physical education classes.

Table 2. Preliminary analysis of dependent variables

	M	SD	Skewness	Kurtosis	Cronbach alpha
Social factors:					
Choice	3.16	0.95	-0.10	-0.60	0.67
Cooperative learning	3.31	0.84	-0.17	-0.44	0.71
Improvement	4.18	0.68	-1.01	1.20	0.74
Psychological mediators:					
Competence	4.41	1.44	-0.13	-0.65	0.86
Autonomy	3.49	1.50	0.31	-0.51	0.38

Cont.

Cont.

Relatedness	4.85	1.56	-0.38	-0.59	0.58
Motivational forms:					
Intrinsic motivation	5.28	1.28	-0.74	0.33	0.82
Identified regulation	5.78	1.22	-1.29	1.67	0.83
Introjected regulation	4.26	1.53	-0.16	-0.80	0.80
External regulation	3.80	1.56	0.10	-0.77	0.69
Amotivation	2.63	1.58	0.88	-0.04	0.82
Consequences:					
Effort	5.38	1.32	-0.79	0.36	0.73
Boredom	2.60	1.55	0.95	0.06	0.77
Intention	4.67	2.14	-0.40	-1.21	—

NOTE: A correlation coefficient is given for autonomy and relatedness, because they both consist of only two items. No alpha value is presented for intention subscale because it's a single-item variable.

The students, in general, exhibited a self-determined motivation profile, presenting a high mean for identified regulation (5.78±1.22), a type of extrinsic motivation. There was a low score for boredom and a favorable score for the intention to practice sport in the extra-curricular context in a future situation (4.67±2.14).

Table 3. Comparative analysis of dependent variables by gender

	Male	Female	t	p
Social factors:				
Choice	3.18±0.96	3.14±0.93	0.59	0.554
Cooperative learning	3.39±0.84	3.23±0.84	3.31	0.001***
Improvement	4.17±0.70	4.20±0.66	-0.85	0.395
Psychological mediators:				
Competence	4.79±0.70	4.03±1.33	9.11	0.000***
Autonomy	3.67±1.57	3.31±1.40	4.04	0.000***
Relatedness	4.84±1.57	4.86±1.56	-0.29	0.774
Motivational forms:				
Intrinsic motivation	5.49±1.30	5.07±1.24	5.50	0.000***
Identified regulation	5.85±1.26	5.70±1.18	2.03	0.042*
Introjected regulation	4.48±1.59	4.04±1.44	4.83	0.000***
External regulation	3.89±1.65	3.71±1.46	1.89	0.060
Amotivation	2.79±1.74	2.47±1.38	3.35	0.001***
Consequences:				
Effort	5.39±1.36	5.36±1.28	0.42	0.673
Boredom	2.66±1.69	2.53±1.40	1.42	0.157
Intention	5.13±1.99	4.20±2.19	7.40	0.000***

*p<0.05; **p<0.01; ***p<0.001

Dependent variables are compared by gender in Table 3. Scores for boys and girls differed significantly for level of cooperative learning, competence, autonomy, intrinsic motivation, identified regulation, introjected regulation, amotivation and intention to become involved in sports in the future. Boys valued all of the constructs more so than girls with the exception of emphasis on improvement; however, mean scores on the latter variable did not differ significantly.

Comparisons by age are summarized in Table 4. Only three variables differed significantly by age group: cooperative learning -14 > 16 (3.37±0.85 and 3.16±0.86); improvement -14 > 15 (4.24±0.68 and 4.09±0.70); intention to become active in physical activity -16 > 14 (4.96±2.02 and 4.50±2.15).

Table 4. Comparative analysis of dependent variables by age

	14 years	15 years	16 years	F	p
Social factors:					
Choice	3.18±0.94	3.10±0.96	3.22±0.95	1.30	0.27
Cooperative learning	3.37±0.85	3.30±0.81	3.16±0.86	4.30	0.01
Improvement	4.24±0.68	4.09±0.70	4.19±0.65	5.08	0.01
Psychological mediators:					
Competence	4.39±1.48	4.43±1.39	4.43±1.40	0.12	0.89
Autonomy	3.50±1.51	3.52±1.48	3.41±1.51	0.37	0.69
Relatedness	4.84±1.58	4.80±1.58	4.96±1.48	0.61	0.54
Motivational forms:					
Intrinsic motivation	5.28±1.25	5.25±1.35	5.35±1.27	0.40	0.67
Identified regulation	5.82±1.17	5.69±1.35	5.81±1.15	1.36	0.26
Introjected regulation	4.25±1.54	4.30±1.53	4.19±1.52	0.34	0.71
External regulation	3.80±1.52	3.89±1.62	3.64±1.54	1.53	0.22
Amotivation	2.55±1.62	2.73±1.54	2.68±1.52	1.52	0.22
Consequences:					
Effort	5.43±1.31	5.31±1.34	5.36±1.32	0.85	0.43
Boredom	2.57±1.55	2.65±1.59	2.59±1.51	0.33	0.72
Intention	4.50±2.15	4.78±2.18	4.96±2.02	4.00	0.02

*p<0.05; **p<0.01

Athletes and non-athletes differed significantly in10 of the 14 variables. Athletes scored significantly higher in cooperative learning; perceptions of competence, autonomy and relatedness, intrinsic motivation, identified regulation, introjected regulation, effort, and intention, while non-athletes scored significantly higher in boredom. Choice, improvement, external regulation and amotivation did not differ between athletes and non-athletes.

Table 5. Comparative analysis of dependent variables by sport involvement

	Non-athletes	Athletes	t	p
Social factors:				
Choice	3.15±0.95	3.18±0.94	-0.52	0.604
Cooperative learning	3.25±0.85	3.37±0.82	-2.47	0.014*
Improvement	4.15±0.66	4.22±0.71	-1.51	0.132
Psychological mediators:				
Competence	4.07±1.37	4.78±1.42	-8.39	0.000***
Autonomy	3.39±1.47	3.59±1.52	-2.19	0.029*
Relatedness	4.67±1.59	5.04±1.52	-3.93	0.000***
Motivational forms:				
Intrinsic motivation	4.97±1.33	5.62±1.14	-8.76	0.000***
Identified regulation	5.58±1.33	5.98±1.06	-5.53	0.000***
Introjected regulation	4.08±1.50	4.45±1.54	-3.96	0.000***
External regulation	3.82±1.54	3.78±1.59	0.43	0.665
Amotivation	2.68±1.49	2.58±1.67	0.99	0.320
Consequences:				
Effort	5.22±1.36	5.54±1.26	-4.02	0.000***
Boredom	2.69±1.55	2.50±1.56	2.11	0.035*
Intention	4.08±2.19	5.30±1.90	-9.82	0.000***

*p<0.05; **p<0.01

4. Discussion

The present study contributes to our understanding of motivational processes that define the intention of being physically active. Boys perceived higher levels of cooperative learning, competence, autonomy, intrinsic motivation, identified regulation, introjected regulation, amotivation and physical activity intention than girls. This would suggest that boys should work in groups in physical education settings so that they could learn from peers. Accordingly, this type of experience promotes higher levels of self-perceived competence which, in turn, will enhance intrinsic motivation and consequently the intention to participate in physical activity and sport in the future.

Among the social factors, only cooperative learning differed significantly between boys and girls. Ames (1992) has suggested that contexts that stimulate cooperative learning, allow students to interact and help themselves in the mutual learning and improvement processed. Further, cooperation turns a sport into an inherently more interesting and entertaining activity, while competition among students can reduce the intrinsic motivation in the same activity. In the Ames study, boys gave more importance to the relatedness among friends as a way of promoting learning and improvement. However, the present research seems to contradict what is presented in the literature.

Teacher feedback during group activities can sustain cooperative learning experiences in the physical activity; traditional practices associated with gender socialization are a related factor in cooperation (Deci & Ryan, 1985). Awareness of contrasting situations may better reveal discrepancies between competences and abilities (Papaioannou, 1994). Such situations may lead girls to perceive teacher feedback as more controlling and, consequently, reduce intrinsic motivation. It has been argued that feedback under such situations operates as a source of control for girls (Deci, 1975). On the other hand, in team sport situations, the impact of feedback on cooperative learning loses its effect. Further, team sports tend to be labeled as "masculine" and activities such as dance and gymnastics are labeled as "feminine" (Lee *et al.*, 1999). Such stereotypes influence the perceptions and thoughts concerning sport activities practiced in physical education, and may limit the effort and persistence of girls to be successful in activities labeled as "masculine" (Clifton & Gill, 1994; Csizma *et al.*, 1988).

Available evidence tends to show that boys generally reveal higher scores in the psychological factors considered (Papaioannou, 1994). It is also argued that physically active youth perceive themselves as more competent and tend to be more easily accepted by their peers (Weiss & Duncan, 1992). And, boys, on average, tend to be more active and to perform better in a variety of sport-related activities than girls (Malina *et al.*, 2004). This may explain why boys, who perceive themselves more competent, also tend to present higher abilities that appeal for cooperative learning. On the other hand, girls may try to avoid activities in which they may demonstrate low levels of competence or ability to be successful. However, when activities fall into the "feminine" type, girls generally reveal higher levels of competence than boys (Lenney, 1977). By inference, it important that physical education classes consider student participation in the selection of the activities (Wang *et al.*, 2002).

The higher level of autonomy in boys compared to girls is consistent with the premises of Deci and Ryan (1985). It is also argued that the teacher is the most important factor in shaping the environment of the class and in the development of an internal perceived locus of causality among students (Ferrer-Caja & Weiss, 2000; Vallerand *et al.*, 1987). Greater autonomy, in turn, may facilitate development of higher levels of perceived competence. On the other hand, a class environment that does not promote normative evaluation may maximize student self-determination and lead to higher perceptions of autonomy (Ntoumanis, 2000). Given these arguments, boys may develop positive opinions about their behaviors in particular in situations where they perceive themselves as being the initiating source of the activities in question (de Charms, 1968).

Boys who perceive themselves as competent and autonomous show higher levels of intrinsic motivation since intrinsically motivated activities tend to be freely chosen and involve self-determination (Deci & Ryan, 1985). Students who perceive themselves as more competent also consider physical education interesting and enjoyable and show higher levels of intentions to participate in classes where they can develop their physical abilities (Ntoumanis, 2000).

There does not appear to be a consensus on the validity of the other constructs considered in this study, specifically identified regulation, introjected regulation and amotivation. Deci and Ryan (1985) suggest that identified regulation consists in the acceptance of the regulation of a behavior so that it allows the perception of control

and the possibility of individual choice, even if that choice is based on extrinsic reasons. It is thus argued that identified regulation is a self-determined, though extrinsic, form of motivation and can be influenced by autonomy and perceptions of competence, as is the case for intrinsic motivation.

Observations dealing with introjected regulation and amotivation are controversial and not consistent with Self-Determination Theory (Deci & Ryan, 1985). According to the theory, individuals who perceive themselves as being more competent and autonomous will show higher levels of intrinsic motivation and lower levels of external regulation and amotivation. This relationship was not confirmed in the present study.

For the behavioral consequences considered, boys and girls differed in the intention to become physical active; boys scored higher than girls. It is postulated that more positive consequences are related enhanced intrinsic motivation and perceptions of competence (Deci & Ryan, 1985). Consistent with this view, boys in the present study were more capable and had higher intrinsic motivational levels. They also had higher intention of demonstrating their capacities in an extra-curricular sport context. These results are generally in agreement with other studies (Markland & Hardy, 1997; Ntoumanis, 2001; Vallerand, 1997, 2000, 2001).

Age variation in the present sample was relatively limited (Table 4). One of the variables that varied with age was level of cooperation, which was higher in 14 compared to 16 year old youth. The result is consistent with the observations of others (Chaumeton & Duda, 1988; Xiang & Lee, 2002) and with the suggestion that contexts which promote cooperative learning, allow students to interact and help each other in the learning and improvement processes (Ames, 1992). On the other hand, when students participate in the same physical activities but with a competitive emphasis, there is a tendency for reduce intrinsic motivation for involvement.

In contrast, 16 year old youth (16 years) show a higher level of intention to become physically active in sport in extra-curricular contexts compared to 14 year olds. Older youth likely have greater possibilities to exert a choice and thus have a higher sense of autonomy. Higher levels of perceptions of competence and intrinsic motivation are predictive variables of the intention of becoming physically active (Biddle *et al.*, 1999; Ntoumanis, 2001; Pelletier *et al.*, 1995; Standage *et al.*, 2003).

Participants (athletes) and non-participants (non-athletes) in sport differed in 11 of the 14 variables considered, with athletes scoring higher (Table 5). Non-athletes obtained higher values in external regulation, amotivation and boredom.

Athletes reported higher perceptions of choice, cooperative learning and emphasis on self-referenced improvement which is consistent with limited evidence that sports participation enhances the motivation to participate in physical education. In general, students with more sport experience demonstrate more favorable attitudes towards physical education than those with less sport experience (Anderssen, 1993). The beneficial effects of these social factors are reflected in higher perceptions of competence, autonomy and relatedness demonstrated by athletes.

Extra-curricular sports practice also allows the development of physical abilities and self-referenced comparisons of capacities, and promotes a learning process based on the interactions between peers (Ames, 1992). The perception of exercising the choice to participate is another consideration, which may explain the high levels of

autonomy observed among athletes (Ferrer-Caja & Weiss, 2000, 2002). It should be noted that 405 students were involved in team sports. These students also attribute a high level of importance to the interactions and relationships in physical education classes. Of relevance, individuals who are physically more competent also tend to be more easily accepted by their peers (Weiss & Duncan, 1992).

Students with higher perception of competence are those who also show a self-determined motivational pattern (intrinsic motivation and identified regulation). These students consider physical education classes more interesting and intend to participate as form of developing their physical abilities (Ntoumanis, 2000). Adherence to physical education classes also tends to be associated with a more positive attitude towards physical activity (Goudas *et al.*, 1995, 2001; Papaioannou & Theodorakis, 1996).

Students who present higher levels of intrinsic motivation and perceived competence demonstrate a more positive outlook on the consequences of participation in physical activities (Deci & Ryan, 1985; Vallerand, 1997, 2000, 2001). They also have higher effort and lower boredom with participation in sport activities offered in physical education classes. They express higher levels of intention to become involved in physical activities, which may be associated with higher probability of continuation in sport. This argument is consistent with several studies that have concluded that intention to become involved is sport is the most important determinant for future participation physical activities (Biddle & Goudas, 1996; Chatzisarantis *et al.*, 1997; Ntoumanis, 2001; Papaioannou & Theodorakis, 1996; Standage *et al.*, 2003).

5. Conclusions

Adolescent boys perceived higher levels of cooperative learning, competence, autonomy, intrinsic motivation, identified regulation, introjected regulation, amotivation and intentions to become physically active in the future than adolescent girls. The results are consistent with observations that boys are more physically active than girls due likely to the culturally prescribed norms.

Younger students preferred cooperative learning activities, self-referenced improvements and the possibility to participate in the process of choosing the physical education activities.

Based on the results obtained, it is recommended that physical education teachers should plan and provide feedback designed to promote perceptions of competence and intrinsic motivation. It is believed that such a practice will enhance the likelihood of persisting in a physically active lifestyle into adulthood.

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NEW DIMENSIONS IN UNDERSTANDING ETHICAL ATTITUDES OF YOUNG COMPETITORS

This chapter illustrates how two questionnaires, developed by Martin Lee and his co-workers to measure (a) attitudes and (b) values in sport, can open up the study of ethical and unethical behaviour in young competitors. Sport participation is popularly supposed to develop character, yet the media carry daily reports of unsporting actions, cheating, and aggression. Research into moral behaviour has mushroomed in the last decade, and its findings help coaches, teachers, parents, and sport administrators to understand the problems. One approach has been to use self-report questionnaires to gather information quickly from young competitors. I will summarise the current position with respect to the prediction of sportspersonship from goal orientations and the motivational climate, and then describe a study illustrating how the new instruments can extend this work and provide new information for researchers and coaches

1. The current position

1.1. Measuring sportspersonship

For some ten years, sportspersonship has been measured by the Multidimensional Sportspersonship Orientation Scale (MSOS) developed by Vallerand, Brière, Blanchard, and Provencher (1997). This questionnaire has scales to measure *Commitment to Sport Participation* (henceforth called commitment), *Respect for Social Conventions in Sport* (conventions), *Respect for Rules and Officials* (rules), *Respect for the Opponent* (opponent), and a *Negative Approach to Sport* (negative approach). However, the last scale has often proved unreliable; hence studies using the MSOS have focused on the four positive features of sportspersonship (*pro-social* attitudes).

1.2. Influences on sportspersonship

Many different factors can influence sportspersonship in young competitors. However, because sport provides a competitive context it is regarded as an *achievement situation*, hence researchers have logically looked first at the influence of *achievement goals* and *perceptions of the motivational climate*.

1.3. Achievement goal theory

The achievement goal theory of Nicholls (1989) and others indicates that, although people think very differently about what success means to them, there are two common dimensions. Sometimes people focus on learning new skills, trying hard, or improving themselves. In this state they are *task-involved.* Other times they focus on showing more ability than others – for example by performing better than others, or by using less effort than others for a similar result. In this state they are *ego-involved.* These states may arise from personal dispositional tendencies (*task and ego goal orientations*) or they may be prompted by features of the environment. For example when coaches focus on helping everyone to do their best and praising people for their effort they create a *mastery climate* which is *task-involving*. When they focus only on the best players and praise players only for winning they create a *performance climate* that is *ego-involving*.

This theory suggests that when people are ego-involved and want to be the best, they are less likely to be concerned about justice or fair play than when they are task-involved and simply want to improve themselves. Thus the most ethical attitudes are likely to be associated with task orientation rather than ego orientation. When ego orientation is high, ethical attitudes are expected to be low – particularly when players think they don't have enough ability to do better than others.

1.4. Research findings and implications

Three major predictions of the theory have been tested using the MSOS to measure sportspersonship.

(i) Achievement goal orientations. *Sportspersonship should be predicted by task orientation, not by ego orientation.*
This was confirmed in studies of 143 Canadian elite male ice hockey players aged 11 to 13 years (Dunn & Dunn, 1999) and 511 Norwegian male soccer players aged 13-16 years (Lemyre, Roberts and Ommundsen, 2002). However, the combination of task and ego orientations within different individuals is also important. In the soccer players, there was more respect for rules, officials, and the opponents when high task orientation was combined with low rather than high ego orientation.

(ii) The perceived motivational climate. *Sportspersonship should be predicted by perceptions of a mastery climate, not a performance climate.*
This was confirmed in a study of 279 Norwegian male soccer players aged 12 to 14 years (Ommundsen, Roberts, Lemyre, and Treasure, 2003) and a study of 512 male and 202 female Norwegian soccer players aged 12 to 14 years (Miller, Roberts & Ommundsen, 2004). In the first study, perceptions of a high mastery and low performance climate were associated on a canonical function with high scores on all MSOS scales. In the second study, only the mastery climate was associated with high scores on all scales. The performance climate was indeed associated with low respect for conventions and rules but, unexpectedly, it was associated with high respect for opponents. The unusual result might arise from the very high level of competition in this study, in which all opponents merited respect.

(iii) Combinations of achievement orientations and motivational climate. *These two dimensions may interact: a strong motivational climate should over-ride a weak goal orientation.*

A study of 440 Norwegian male handballers aged 14 to 16 years (Stornes & Ommundsen, 2004) first showed that, as expected, task orientation or a perceived mastery climate was associated with high sportspersonship on the pro-social MSOS scales. This study also included the MSOS *negative approach* scale and a new *instrumental aggression* scale to evaluate *anti-social* components of sportspersonship. Ego orientation or a perceived performance climate was associated with these dimensions. The over-riding effect of climate was shown in players with *strong* ego orientation, who showed more respect for opponents *when they perceived a strong rather than a weak mastery climate.*

In a study of 202 female USA volleyballers aged 12 to 18 years, Gano-Overway, Guivernau, Magyar, Waldron and Ewing (2005) combined the MSOS scales for commitment, conventions, and rules in a single factor representing respect for the game, as distinct from the opponent. An over-riding effect of a mastery climate was suggested because, in athletes with strong ego orientation, task orientation was associated with high respect for the game only *when they perceived a strong, rather than weak mastery climate.* Thus in each study a strong mastery climate reduced the negative outcomes of a *strong* ego orientation. However, the authors of the second study concluded that other personal and situational factors should be examined to provide fuller explanations.

1.5. Summary and implications

These studies show that the dimensions of sportspersonship which are measured by the MSOS pro-social scales (commitment and respect for conventions, rules, officials, and the opponents) are predicted by task orientation and by perceptions of a mastery climate. It is therefore important for coaches and teachers to create an environment that encourages participants to focus on learning, trying hard, and improving their own skills without reference to others. However, the studies in section (iii) also show a need to supplement the MSOS with measures of anti-social attitudes, and to supplement achievement orientations and climate with measures of other variables. The two new questionnaires do exactly this.

2. Some new dimensions

2.1. New dimensions in measuring ethical attitudes

A new instrument, the Attitudes to Moral Decision-making in Youth Sport Questionnaire (AMDYSQ; Lee, Whitehead, & Ntoumanis, 2007), measures *Acceptance of Cheating* (cheating), *Acceptance of Gamesmanship* (gamesmanship), and *Keeping Winning in Proportion* (winning). Cheating is a violation of the rules, whereas gamesmanship is a violation of the spirit of the game and concerns a player's intention to gain an unfair psychological advantage over an opponent without actually breaking the rules. These

two scales permit a wider study of moral behaviour. They meet the need identified by Stornes and Ommundsen (2004) for measures of anti-social attitudes, yet they do not overlap with the negative approach and instrumental aggression scales that were used by these researchers. Moreover the winning scale meets the criticism that the MSOS does not embrace a measure of winning at all costs (Shields & Bredemeier, 1995).

2.2. New dimensions in influences on ethical attitudes

Values have been described as the most important psychological variables. They are general beliefs that certain goals or behaviours are preferable to others. People form their own hierarchy of values and their relative importance guides behaviour across a variety of situations (Schwartz, 1992). The study of values has been relatively neglected in sport, but Martin Lee pioneered the development of a questionnaire to measure 18 independent sport values (Lee, Whitehead & Balchin, 2000). This has been further developed to form the Youth Sport Values Questionnaire-2 (YSVQ-2: Lee, Whitehead, Ntoumanis, & Hatzigeorgiadis, under review). The new questionnaire has scales to measure values in the *Moral Domain* (moral), the *Competence Domain* (competence), and the *Status Domain* (status).

3. A new study

The purpose of the study was to use achievement orientations, perceptions of the motivational climate, and the new measure of sport values, to predict the ethical attitudes measured by two MSOS pro-social scales and the two new AMDYSQ anti--social scales.

3.1. Method

Procedure

The 128 participants (male = 14, female = 113) competed in hockey, basketball or netball. Age ranged from 12 to 16 years (*M* = 14.2*7, SD* = 1.18*)* and most participants (70%) had at least five years of experience. They completed 4 short questionnaires during a sport talent course under the supervision of a qualified researcher, and were assured of anonymity.

Instruments

Ethical attitudes were measured by selected AMDYSQ and MSOS scales. The two anti-social AMDYSQ scales comprised three items to measure cheating, (e.g. *I cheat if I can get away with it*) and three items for gamesmanship (e.g. *It is not against the rules to 'psyche' people out, so it's OK to do*). The two pro-social scales from MSOS included five items for commitment to sport participation (e.g. *I go to every practice*) and four items for respect for conventions (e.g. *I congratulate the opposition after I've lost*). These MSOS items formed an acceptable 4-factor model with the AMDYSQ scales in an earlier study (Lee, et al., under review). Responses

on this questionnaire, and the two following questionnaires, were made on a 5-point scale anchored by *Strongly Agree (5)* and *Strongly Disagree (1).*

Achievement orientations were measured by the adolescent version of the Perceptions of Success Questionnaire (POSQ; Roberts, Treasure, & Balague, 1998) To this 12-item questionnaire, we added an extra task orientation item (*I learn something new to me*) and an extra ego orientation item (*I do things more easily than others*) to cover facets that were not already in this instrument.

The perceived motivational climate was measured by the Perceived Motivational Climate in Sport Questionnaire (PMCSQ; Seifriz, Duda, & Chi, 1992). This includes 9 items for a mastery climate (e.g. *The coach wants us to try new skills*) and 12 items for a performance climate (e.g. *The coach pays more attention to the 'stars'*). This instrument was preferred to the more recent PMCSQ-2 (Newton, Duda, & Zin, 2000) because the latter includes social variables and we preferred to focus on achievement goals (See Appendix, Whitehead, Andrée, & Lee, 2004).

Sport values were measured by the YSVQ-2. This has 5 items for moral values (e.g. *I try to be fair*), 4 items for competence values (e.g. *I set my own targets*) and 4 items for status values (e.g. *I look good*). In accordance with the values models of Rokeach (1973) and Schwartz (1992), the competence items are self-referenced in nature. This questionnaire has a 7-point scale anchored by *This idea is extremely important to me (5)* and *This idea is the opposite of what I believe (-1).*

Analysis

Three stepwise multiple regression analyses were performed on the data, to predict each of the four ethical attitudes from (a) achievement orientations, (b) perceptions of the motivational climate, and (c) sport values. A composite analysis was then undertaken which included all the predictor variables from the three previous analyses. In Table 1, the probability values (*p)* show the significant results and the R^2 values indicate the amount of variance in the ethical attitudes that is accounted for by the achievement orientations, perceived motivational climate and sport values.

3.2. Results and discussion

Descriptive statistics for the ethical attitudes showed high mean scores for commitment (4.43 ± .49) and conventions (4.58 ± .49), a low mean for cheating (1.51 ± .64), and an intermediate mean (2.51 ± .93) for gamesmanship. Means for the achievement goals and the motivational climate were consistent with previous research, notably high for task orientation (4.70 ± .41), moderate for ego orientation (2.98 ± .91), high for a mastery climate (4.25 ± .40), and moderate for a performance climate (2.42 ± .60). Means for the new values scales were high for moral (4.01 ± .72) and competence values (4.22 ± .75) but low for status values (1.25 ± .1.23).

Overall, these data show that this sample of young competitors displayed a constructive and ethical approach to their sport participation. However, it is important to understand how the ethical attitudes were predicted by achievement orientations, motivational climate, and sport values.

Table 1. Multiple regression analyses showing predictors of sportspersonship

Predictor	Commitment		Conventions		Cheating		Gamesmanship	
	β	*p*	β	*p*	β	*p*	β	*p*
Achievement goals								
Task	+0.38	***	+0.27	**	- 0.26	**	- 0.19	*
Ego					+0.27	**	+0.28	**
Total R^2	*+0.15*		*+0.07*		*+0.12*		*+0.10*	
Motivat. climate								
Mastery	+0.33	***	+0.23	*	- 0.18	*		
Performance					+ 0.35	***	+0.37	***
Total R^2	*+0.11*		*+0.05*		*+ 0.17*		*+0.14*	
Sport values								
Moral	+0.28	**	+0.44	***			- 0.27	**
Competence					- 0.24	**		
Status					+0.37	***	+0.28	**
Total R^2	*+0.08*		+0.19		*+0.16*		*+0.13*	
All predictors								
Task	+0.37	***			-0.23	*		
Ego								
Mastery								
Performance			- 0.18	*	+0.37	***	+0.31	**
Moral			+0.41	***			- 0.22	*
Competence								
Status								
Total R^2	*+0.14*		*+0.23*		*+0.21*		*+0.16*	

* (p<0.05); **(p<0.01); *** (p<0.001). Note: **This table shows the significant predictors that were in the** equation after the final step of four independent step-wise multiple regression analyses.

Achievement orientations. Task orientation significantly predicted all attitudes. It related positively with the pro-social dimensions and negatively with the anti-social dimensions. Thus competitors who focused on self-improvement were likely to be committed to sport and respect its conventions, while those who gave little attention to self-improvement were likely to cheat and seek an unfair advantage. Ego orientation was a significant predictor of cheating and gamesmanship. In previous MSOS studies, ego orientation has been important only in its combinations with task orientation but here, when anti-social attitudes were of concern, it was important in its own right.

It is therefore important for coaches to be sensitive to the degree of ego orientation in their competitors, to know what it can lead to and who is at risk.

Perceived motivational climate. As in previous studies, a mastery climate was a positive predictor of commitment and conventions. It also negatively predicted cheating, but not gamesmanship. A new finding was that perceptions of a performance climate positively predicted cheating and gamesmanship, the two anti-social dimensions. This parallels the results for achievement orientations, but the performance climate explained 40% more anti-social variance than was explained by ego orientation. This finding is important because coaches and teachers can influence the climate quite quickly and directly, whereas more time is needed to modify dispositional goal orientations. It implies that coaches and teachers can make cheating less attractive by giving less emphasis to achieving superiority over others.

Sport values. Moral values positively predicted commitment and conventions, and negatively predicted gamesmanship. Thus, these values (which include trying to be fair, helpful, and obedient, and to play properly and be sporting) lift pro-social attitudes and lower the acceptance of gamesmanship in which players attempt to upset their opponents. Such values should be encouraged by coaches.

The competence values are self-referenced in nature and might be expected to parallel results for task orientation and a mastery climate by predicting commitment and conventions, the pro-social attitudes. Instead they negatively predicted cheating. However, this is in accordance with the predictions of task orientation and the mastery climate. It is clear that if competitors do not value self-improvement or notice their teacher's encouragement of it, they are likely to seek unfair advantages. The status values were strong predictors of both anti-social attitudes. This echoes the findings for ego orientation and the performance climate and shows that competitors who value looking good and gaining high status are more accepting of cheating and gamesmanship to achieve these outcomes.

Overall. When all predictors were entered into the analysis together, fewer significant predictors emerged than in the separate analyses for the three types of variables. This is because some of the predictors were correlated so their effects overlapped. Only one variable of each type was significant overall: task orientation, a performance climate, and moral values. However, this shows that each type of variable is important and none can be dispensed with. Strong sport commitment was predicted by achievement orientation (high task); respect for conventions was predicted by values (high moral) and climate (low performance); acceptance of cheating was predicted by climate (high performance) and achievement orientation (low task); and acceptance of gamesmanship was predicted by climate (high performance) and values (low moral).

It is noteworthy that when all variables were entered, the mastery climate did not predict any of the ethical attitudes, while the performance climate predicted three of the four dimensions: cheating, gamesmanship, and (negatively) respect for conventions. This differs from previous research with the MSOS, which has focused on pro-social attitudes. Hence the use of the AMDYSQ anti-social scales for cheating and gamesmanship has demonstrated that it is not enough for coaches to focus only on creating a mastery climate. They should also actively reduce the features of a performance climate. These negative influences include comparing players with their team-mates, praising them only for winning, giving most attention to the best performers, punishing players for mistakes, and criticising them in public.

It is also noteworthy that each of the YSVQ-2 value domains was significant in predicting one or more of the ethical attitudes; hence each type of value provided new information. Moreover, in the separate analyses, values explained more of the variance than achievement orientations for three of the four ethical attitudes. The analysis of achievement orientations has provided much important information in the study of motivation and moral behaviour. Now that an instrument is available to measure sport values, these important psychological constructs can begin to take a similarly central role in studies of moral behaviour and other aspects of sport psychology.

This study has focused on providing basic preliminary information for researchers and practitioners. It has related only to studies which have employed the MSOS. More complex analyses, of changes over time and of interactions between variables, are left for future researchers. The AMDYSQ scale for keeping winning in proportion was not used in this study but merits future analysis. The gamesmanship scale is novel, and its essence is difficult to capture in three items, because the diversity of ways in which players may seek to put off their opponents is limited only by their ingenuity. The short AMDYSQ scales were chosen here because they are invariant across gender. Supplementary analyses, not reported, showed that the prediction of gamesmanship improved by some 40% if a longer gamesmanship scale was used (See Lee et al., 2007). This was not the case with the cheating scale which, although brief, captures diverse dimensions.

In conclusion, this study demonstrated that the AMDYSQ and the YSVQ-2 should have an important role in increasing our understanding of moral behaviour and attitudes in youth sport. Specifically, the new measures of the antisocial attitudes, cheating and gamesmanship, related to all 7 predictors, whereas the MSOS pro-social attitudes related to only 3 predictors, hence the AMDYSQ scales improve the prediction of ethical attitudes. Moreover the new measure of moral values improved the prediction of respect for sport conventions, and all three value scales related to the anti-social attitudes. An understanding of the role of these variables can lead to more effective coaching and improved moral behaviour.

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LOOKING INTO COACHING CHILDREN FROM AN INSTRUCTIONAL PERSPECTIVE

1. The mission first: purposes and values

In a context-free definition, instructional capacity will be devoid of meaning. It cannot be defined in a vacuum; it has to be related to places and times, to particular social, institutional, and historical contexts. Therefore, the first task of any coach is to examine his/her situation, what society expects of him/her, what should be done in benefit of participants' life or what could be done to improve sport practice.

Answering those critical questions would enable the coaches to clarify their mission within the organization they work for, and help their organization to set down its unique mission in a so complex and multidimensional world of sport, pervaded by an array of individual purposes, meanings and aptitudes.

Aiming at excellence in sport and providing a positive sport experience are two crucial goals pursued by sport programs, but whereas the first one is more markedly elitist and selective, the second is more inclusive and approachable. As Kretchmar (1994) emphasizes, meaning and pleasure are rather more democratic values, because they are within the reach of all participants, and they have no request for a high level performance.

On the other hand, the very idea of sport practice, as much inclusive as it could be, can never be deprived of requirements of challenge, effort, commitment, improvement, and achievement.

It seems evident that between striving for excellence and providing a positive experience for all participants there is always a tension that tends to confound coaches and sport organizations in the statement of their missions. Contradictory discourses and practices are fruit of a sport culture whose sense of mission is neither understood nor assumed by those who are directly implicated in the sports practice for children and youth and also by those who have general public responsibility (Kirk, 2004).

It is not fair to speak about the educational values of youth sports for all children, and then to organize it only according to the rules of selectivity and exclusion. Sport for all children is completely misconceived when we take it as singular building guided by noble well intentioned principles, in theory, but governed by the "winners in, losers out" rule, in practice. As Kirk and Gorely (2004) explained, the elite sport

model is not suited to frame the entire youth sport programs or physical education. Because of its pyramidal configuration elite sport inevitably produces exclusion. The authors presented an alternative model for lifelong involvement in sport, which is a truly inclusive model, displaying space either for those who wish and can pursuit excellence. This means that the pursuit of excellence has not to be unfair to sport children programs. However it must be a path track among other tracking alternatives. Excellence is a seminal goal of sport, as well as of any other human theoretical or practical domain. Excellence in sport, as in dance or music, is a long term pursuit and the preparation process has to begin early in the childhood years (Ericsson, 2003; Ericsson et al 1993). If it is true that excellence is restricted to a minority of gifted candidates, it is no less true that it does not discard years of strong willed dedication to a specific high demanding preparation.

Nevertheless, it is always necessary to affirm that excellence should never fail to respect any athlete as a person, and that being involved in a high demanding training program should not impede the attainment of a positive sport experience. As Martin Lee (1993) never gives up to advise us, put the child before sports; and children rank "pleasure" much more higher than "win".

All this to say that youth coaches should try to clarify their goals, their priorities, the guidelines that direct their intervention in order to be able to act coherently and succeed in their educational mission.

2. Influence of social context on the instructional capacity of coaching programs

The intent of sport training is to develop, consolidate and refine knowledge, skill and disposition that sustain the quality of participation and performance in sport. The training of quality will be the one that will exhibit better instructional capacity, i.e. better capacity to enhance athletes' learning and growth.

The instructional capacity is neither exclusively a consequence of personal and technical attributes of coaches, nor the result of particular characteristics or potentialities of athletes. It is also influenced by several factors of physical, social and cultural contexts, which appear either as opportunities, resources, sources of incentive and support, or as constraints, obstacles, sources of discouragement and criticism.

Material resources and available conditions for training and competition, namely the quality and number of spaces, facilities and training tools; the time available for training, are seen as beneficial or detrimental for the success of the training programs. It is noteworthy, however, that the resources per se do not make the difference, in so for that two coaches with exactly the same resources and having athletes with identical potential can implement very different training processes, and produce clearly distinct results, which can be endorsed to the ability to optimize the allocated time for training, and the available resources. At last, in matter of resources, being them material, human, financial, or of any other nature, it is not a mere question of availability, but rather a question of use; and the important thing is to make good use of them.

Also the organization of the club, its traditions and norms; the expectations of coaches and directors, their orientations towards the training process, their standards and mechanisms of performance appraisal, value ascribing and merit acknowledgement

establish a social and cultural context that can either be encouraging or detrimental to the development of instructional capacity of coaches and sport education programs.

Another factor with a significant impact on the instructional capacity of sport training programs is the attitude of parents of young athletes towards their practice. Parents condition the participation of children in training sessions and competition. Many parents take interest and follow closely the sport practice of their children. A few parents volunteer to coach, or to help in some way the program of their children.

Parents hold goals and expectations for their children's practice, which may or may be not in accordance with coaches' orientation and evaluation. As a consequence, similarity of perspectives makes easier and reinforces collaboration, while divergence tends to set parents against coaches' work and defy decisions concerning their children.

There are parents who encourage their children, and parents who push excessively hard over their children or assume abusive, unacceptable behaviour during sport contexts; as there parents who purely ignore the practice of their children. All of these stances affect the development of the training process, in so far that they affect the activity of coaches and athletes, the quality of interpersonal relationship and coaching climate.

The instructional capacity of the coaching program will be enhanced with a sound partnership between coaches and parents, if there is a good co-ordination of goals, efforts and willingness between coaches and parents of young athletes.

3. Instruction as interaction between coaches athletes and contents of coaching

Definition of instruction is commonly restricted to the activity of teachers or coaches, or yet more specifically to the verbal activity related to information delivery. A completely different conception is that advanced by Cohen and Ball, which views instruction as an interactive process between teacher (coach), students (athletes), and content. In the instructional process (1) coaches figure out the needs, interests, and responses of athletes during training and competition; (2) coaches design, select, and modify the tasks of training programs; (3) coaches present tasks, give explanations, communicate expectations and criteria about what to do, and how to do in the practice and competition; (4) coaches supervise, direct, manage, and support athletes activity during training and competition.

If you go no further in the definition of instruction, you will put athletes in the position of mere object of the coaches' activity, even if you take care to configure instruction as an activity sensitive to the particularities of athletes and contents.

The instructional process is not uniquely confined to the coaches' action, but rather involves the joint action of coaches and athletes on a specified content in a given setting, during a certain period of time. Athletes are not passive elements in the development of coaching activities. Athletes bring with them knowledge, skills and dispositions, expectations and motivation that necessarily influence what could happen, and what actually take place in training and competition. Athletes attend to, interpret, and respond to coaches' interventions and demands, or to tasks requirements, in such a way that will act upon both the development of coaches' action and the content actually activated on training and competition. It is therefore clear that the coaching is a joint construction of coaches and athletes.

Coaches who seek to improve the instructional capacity of their coaching programs do not concentrate all the responsibilities of instruction; they allow for and stimulate other sources of instruction, namely the athletes. They want that their athletes explore and find productive solutions; they make use of small group work and cooperative learning; they nurture a self accountability climate in which athletes may commit to the goals and tasks of training, share each other's experiences and knowledge, do not keep waiting for coaches to tell them what they must do. More advanced and more experienced athletes can model behaviours and skills, and can amplify the sources of feedback and scaffold the learning activity for their peers.

Coaches and athletes work on training contents chiefly trough movement tasks (i.e. exercises and exercise series), which mean that the success of training relies, in large measure, on the quality and efficacy of the movement tasks coaches introduce (Queiroz, 1986). Being able to select and organize appropriate movement tasks is therefore a critical aspect of the coaches' instructional capacity. From the past experience as an athlete; from seeing and hearing other coaches at work; from consulting books, reviews, or retrievals on electronic sources; from coach education programs, or by attending workshops and clinics coaches amass exercises or ideas to delineate exercises to design and refine their own coaching practice.

However, even the best conceived exercises for the instruction, the best aligned with the logic of the training program will attain the desired effect if coaches are knowledgeable and use that knowledge conveniently in order to coordinate instruction, support and correct athletes' execution; and, on the other hand, if athletes commit themselves to working towards the instructional goals.

4. Improving the instructional capacity of youth coaching programs

Even if barely acknowledged by coaches, athletes are one of the most important sources of learning for coaches. We dare say that are the athletes who make the coaches, as they proportionate them the experience they need, the material for reflecting and improving their practice. If coaches' explanations are confuse, verbose, inconsistent, contradictory, or flawed the way athletes respond will be also rather informative. If tasks are poorly designed, misconceived, unfocused, inadequate in terms of duration, intensity or difficulty level, athletes' ineffectual responses will become more and more evident along the time. If the coaches are not able to establish challenging requirements and a feasible accountability system, the way athletes will respond will rest far below the desired expectations.

At this point it could be wise to say that experience and even reflection on experience, being indispensable, do not generate necessarily desired learning outcomes. It is also possible that dull experience can reinforce a kind of managerial, unchallenging training. Worst yet, it is also possible to refine a kind of coaching orientation and personal interaction antithetical to a sound sport culture and educational values.

The improvement of the instructional capacity is a result of coaches' individual efforts in matters of acquisition and renewal of knowledge, careful preparation, monitoring and reflection on training and competition processes and outcomes. However, the potential of improvement would be fairly limited if experience were not

shared, if it did not open to a context of ideas interchange, looking for innovation of coaching practice. Any sport that wants to progress should increment mechanisms of interchange of knowledge and experiences suitable to construction and consolidation of the instructional capacity of coaches and training practices.

Each sport constitutes a community of practice. Its competitive events are an important barometer for coaches, enabling them to make the evolution of their athletes discernible, and allowing the community to infer about the merit and shape of athletes, coaches, programs, and the respective instructional capacity.

Besides, even in youth sport programs oriented to excellence the evaluation criterion should not be uniquely confined to results. It is rather more interesting to put results into perspective and scrutinize the quality of performance in what they could hint the anticipation of future performance.

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BEHAVIOURS RELATED TO FAIR-PLAY IN ENGLISH AND SPANISH PROFESSIONAL FOOTBALL PLAYERS[*]

1. Introduction

In professional competitive sports, every player or team tries to be superior to the opponent, following a set of written rules which define how the game has to be played. These rules have been labelled as Constitutive rules, and are accepted by every player to play fairly the competition. Moreover, there are also a second type of rules labelled Normative rules that may differ across the different sports and reflect the values' system established by players, coaches, managers and fans. Some normative rules, such as kick the ball off to help a player on the ground in a soccer match, favour fair play. However, other normative rules imply intentional violations of constitutive rules to achieve some benefits for the team, such as, in soccer, to stop an opponent in the midfield, when he has the opportunity of creating a dangerous opening. These behaviours are called "useful" or "tactical" fouls, and some sport scientists have suggested that some of rule violating behaviours, including aggressive player behaviour, are normative behaviours perceived as legitimate by participants (e.g., Silva 1981, 1983; Vaz 1979). Consequently, socialisation process in sport will legitimate rule violating behaviour in professional and youth sports, unless sports leaders modify sport rules to state that rule violating behaviour will become dysfunctional to sport success. In this chapter, contact faults, behaviours against fair play, and behaviours in favour of fair play were assessed in 24 football matches of English Premiere League (PL) and the Spanish Liga de Futbol Profesional (LFP).

Studies about violence and aggression, specially violence between spectators of a professional contact sports like football, prevailed in the eighties in Sport Psychology and Sociology as a result of serious riots produced by football hooligans (Dunning, Murphy, & Williams, 1988; Goldstein, 1983; Murphy, Williams & Dunning, 1990; Rimé & Leyens, 1988; Smith, 1983). In fact, some authors like Russell (1993) suggested that outside wartime, sport is perhaps the only setting in which acts of interpersonal aggression are not only tolerated but enthusiastically applauded by large segments of society.

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Violence in sport, both on and off the field, has come to be perceived as a social problem as Tenenbaum, Stewart, Singer and Duda (1997) have outlined in an *International Society of Sport Psychology -ISSP-* position stand about aggression and violence in sport. As a result of these trends, commissions have been created in different countries to investigate violence in the athletic setting and studies about attitudes, values and behaviours related to fair play and moral development of youth athletes have received greater attention in Sport Psychology (e.g., Bredemeier, 1994; Lee & Cokman, 1995; Shields & Bredemeier, 1994).

As Lee (1996) pointed out, the bulk of research into fair play have been attitudinal studies, (e.g., Blair 1985; Boixadós & Cruz, 1995; Case, Greer & Lacourse, 1987; Goodger & Jackson, 1985; Lee & Williams, 1989; Pilz, 1995). The results of these studies suggest that instrumental attitudes are more commonly associated with older athletes, higher level of organised sport participation, amount of physical contact and males rather than females (Pilz, 1995; Silva, 1983).

Although the value systems of sports participants are fundamental for an adequate understanding of fair play, there had been few studies about values in sport, until the research initiative of the Council of Europe and the Sports Council, coordinated by Professor Martin Lee, in the late 1980s stimulated interest in this area (Cruz, Boixadós, Valiente & Capdevila, 1995; Lee, 1993; Lee & Cokman, 1995; Lee, Whitehead & Balchin, 2000; Mielke & Bahlke, 1995; and Torregrosa & Lee, 2000). Results of the aforementioned studies provide further evidence to doubt about the positive influence that simply playing sport has in fair play, sportsmanship and character development (see Shields & Bredemeier 2001 for a review). Hence more research has to be done in the social environment in which sport is presented to young athletes in order to assess its potential for promoting desirable ethical standards.

Since youth sport is often derived from professional models, it is reasonable to assume that the behaviours of professional players would affect junior practice. So in this chapter an observational register of behaviours related to fair play in football matches is presented, in order to assess these behaviours in a sample of matches of the *Premiere League-PL-* and the *Liga de Fútbol Profesional -LFP-* (Spanish Football League).

The observational tool used in this research comes from a multidimensional definition of fair play incorporating: (a) Respect for rules, (b) Good relationships with opponents, (c) Equality of opportunities and conditions, (d) Avoidance of victory at all costs, (e) Honour in victory and defeat, and (f) personal commitment to do one's best (Boixadós & Cruz, 1995). In essence, we agree with Lee's definition of fair play as: *"particular behaviours characterised by the principle of justice for all, in which there is no attempt to gain an unfair advantage over an opponent either purposefully or fortuitously"* (Lee, 1996). According to the previous definition, we have elaborated an observational register with different behavioural categories grouped in 3 main blocks: contact faults, behaviours against fair play and behaviours in favour of fair play (see Table 1 and 2).

2. Method

2.1. Sample

Twenty-four football matches, 12 of the *Liga de Fútbol Profesional -LFP-* (Spain) and 12 of the *Premiere League -PL-* (England). The reason why the sample is composed

by matches and not persons is that they are the main information units, that is, when we study behaviours related to fair play, we analyse what happens in every match, without emphasising who have done it. As a consequence, we have data about player's behaviours related with fair play of 24 football matches and data about referees' performance in those matches (faults, cards, etc.).

2.2. Procedure

The main instrument used in this research is the observational register of behaviours related with fair play in football matches designed by our research team (Cruz *et al.*, 1996) and used in previous works (Cruz, Boixadós, Valiente & Torregrosa, 2001; Palou, Borràs, Ponseti, Garcia-Mas & Cruz, 2003; Torregrosa & Cruz, 1999; Torregrosa, Mimbrero, Boixadós & Cruz, 1996). The observational register allows the registration of 18 behaviours grouped in three blocks: contact faults, behaviours in favour of fair play and behaviours against fair play. Moreover, the observational register allows the registration of the minute in which behaviour takes place and the order of occurrence. Table 1 shows an example of the observational register and Table 2 presents the operational definitions of the eighteen categories.

Table 1: *Observational register.*

Categories	Minute 0		Minute 1		Minute 2		Minute 3		Minute 4	
	H	G	H	G	H	G	H	G	H	G
1. Kick/Trip										
2. Push/Hold down										
3. Block										
4. Hit										
5. Dangerous Play										
6. Deliberate hands										
7. Protest										
8. Lose time deliberately										
9. Don't return the ball										
10. Trick										
11. Aggression										
12. Don't accept excuses										
13. Accept excuses										
14. Apologise										
15. Kick out the ball										
16. Return the ball										
17. Jump over the goalkeeper										
18. Encourage the opponent										
19. Others										
Incidences (goals, cards,...)										

Football matches were recorded on video tapes and three independent observers watched them after. At the moment of behaviours' notation in the observational register tapes were stopped in order to prevent the lost of reactive behaviours.

Table 2*: Operational definition of the categories.*

Contact Faults
1. ***Kick/trip:*** Contact fault done with the inferior half-length, that means cause to fall or try to knock down the opponent with the legs.
2. ***Push/Hold down:*** Contact fault done with the superior half-length, that means to push or to hold down the opponent.
3. ***Block:*** To stop the opponent's run by means of length and forgetting ball's trajectory.
4. ***Hit (with the fist, elbow, head,…):*** To hit the opponent during the fight to get the ball. (Different of aggression)
Behaviours against fair play
5. ***Dangerous Play:*** Fault done when the player try to play the ball with risk of hurt or injury for the opponent in case of contact (for ex.: to rise the leg too much, try to play the ball when is in goalkeeper's possession,…).
6. ***Deliberate hands:*** Fault that take place when the ball is played (touching, pushing,…) with the hand or the arm.
7. ***Protest:*** To show openly and repeatedly (by means of pejorative gestures, screams,…) disagreement with the referee's decision (as for presence as for absence).
8. ***Lose time deliberately:*** Deliberate player's behaviour with the aim of losing time, when game is stopped, in favour of his own team.
9. ***Don't return the ball:*** To keep ball's possession when not written but accepted by consensus rules say that the ball has to be returned to the opponent (for ex.: when the ball has been kick out to attend to a player).
10. ***Trick:*** All kind of behaviour done to confuse the referee's judgement (for ex.: to simulate a penalty, to ask for the ball when it seems clear that the ball is for the other team,…).
11. ***Aggression:*** To hit or try to hit the opponent, also spit or insult him, forgetting the ball when it is played or when the game is stopped.
12. ***Don't accept excuses:*** To refuse orally or by means of gestures the opponent's apologies, usually after have received a fault.
Behaviours in favour of fair play
13. ***Accept excuses:*** To accept orally or by means of gestures the opponent's apologies, usually after have received a fault.
14. ***Apologise:*** To ask for excuse to the opponent player orally or by means of gestures, generally after have committed a fault.
15. ***Kick out the ball:*** Kick the ball out of play when an opponent is injured.
16. ***Return the ball:*** To return ball's possession when not written but accepted by consensus rules say that this one has to be returned to the opponent (for ex.: when the ball has been kick out to attend to a player).
17. ***Jump over the goalkeeper:*** Behaviour to avoid the impact against the goalkeeper of the other team when there is a high risk of hurt or injury if the contact is produced.
18. ***Encourage the opponent:*** To support the opponent orally or by means of gestures, congratulate him in a case of a good play, help to him to stand up after a fault,…
Other behaviours
19. Behaviours related with fair play which have not seen clearly.
Incidences: goals, cards,…

3. Results

Figure 1 shows means of blocks of behaviours (contact faults, behaviours against and behaviours in favour of fair play) for the *LFP* and the *PL*. For each block appear more behaviours in case of *LFP* than in case of *PL*. Moreover, in all cases the difference is statistically significant (p<0,001). In our sample, more contact faults, more behaviours against fair play and more behaviours in favour of fair play were observed in case of *LFP* than in case of *PL*.

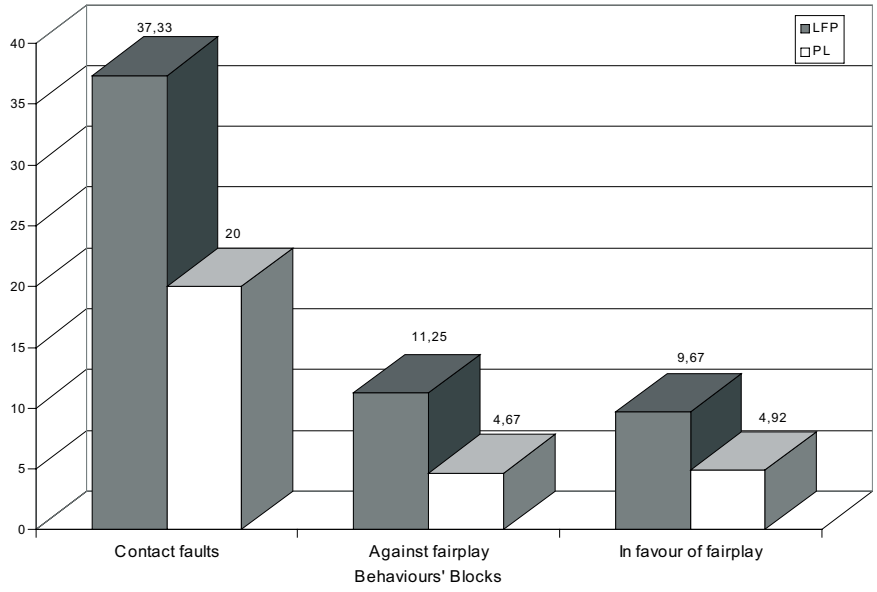

Figure 1: *Means by match of behaviours* blocks *for the LFP and the PL.*

Table 3 shows in which categories are significant the differences observed in the blocks. Behaviours grouped as contact faults (Kick, Push, Block and Hit) present all of them differences in the sense indicated by blocks of categories. That is, significant more behaviours of those categories are observed in the *LFP* than in the *PL*. Referring to behaviours against fair play, differences are centred in the categories Dangerous play (p=0.042), and Protest (p<0.001). The means by its own are illustrative data if we take into account that in the *LFP* appears a mean of nearly 6 protests every match while in the *PL* appears less than 2. Referring to favourable to fair play behaviours, significant differences are concentrated in the categories Kick out the ball and Return the ball. These behaviours are in fact a sequence of behaviours in a fair play environment (always the first appears, appears also the second). Moreover, although

they are framed in the block of behaviours favourable to fair play, the appearance of a higher mean can not always be interpreted positively for two reasons. On the one hand, the behaviour of Kicking out the ball is produced generally when a player needs assistance, that is, usually after a fault or behaviour against fair play. On the other hand, every time that ball is off the field the game is stopped and the real time of play decreases. Therefore, there are not significant differences in the categories Jump over the goalkeeper and Encourage the opponent, those categories with less possibility of a negative antecedent.

Table 3: Means by categories of behaviours related with fair play and statistical significance of the differences

	LFP	*PL*	*Significance*
Kick/Trip	19.42	10.17	p<0.001
Push/Hold down	16.00	9.42	p<0.001
Block	1.33	0.33	p=0.039
Hit	0.58	0.08	p=0.008
Dangerous play	0.92	0.33	p=0.042
Deliberate hands	1.42	1.50	p=0.832
Protest	5.92	1.83	p<0.001
Lose time deliberately	1.08	0.25	p=0.090
Don't return the ball	0	0	
Trick	0.33	0.17	p=0.514
Aggression	1.50	0.58	p=0.289
Don't accept excuses	0.08	0.00	p=0.328
Accept excuses	1.08	0.50	p=0.147
Apologise	2.33	1.33	p=0.088
Kick out the ball	1.00	0.17	p=0.005
Return the ball	1.00	0.33	p=0.028
Jump over the goalkeeper	0.33	0.50	p=0.544
Encourage the opponent	3.91	2.08	p=0.097

In our research, we began also to assess the role of referees maintaining and/or promoting fair play. Table 4 shows means and statistical significance of the differences in yellow and red cards between the *LFP* and the *PL*. When differences are calculated in each league, we can see that the mean of yellow cards shown by the Spanish referees is statistically higher than the mean of yellow cards shown by the English referees (M=6.5 vs. M=4; p=0.023). This means that results of referees are consistent with those of the player's behaviours. Therefore, if we have found first that Spanish players make more faults and more behaviours against fair play, is consistent to find that Spanish referees shows more cards than the English ones. Referring to red cards, no significant differences between leagues were found.

Table 4: Means by match of yellow and red cards and statistal significance between both competitions.

	LFP	*PL*	*Significance*
Yellow Cards	6.5	4	p=0.023
Red Cards	0.58	0.25	p=0.167

The differences found in player's behaviours, suggest the possibility that apart of appearing more cards in the *LFP* the cause for showing them can be different in each league. For this reason we have analysed the cause of each card. In case of the *LFP*, 60 of the total 78 yellow cards (that is 77%) were shown after a contact fault committed by some player, and 18 yellow cards (that is the 23%) were shown as a consequence of behaviour against fair play. In case of *PL*, 37 of the 48 yellow cards (that is 77%) were shown after a contact fault committed by some player, and 11 yellow cards (that is the 23%) were shown as a consequence of behaviour against fair play. In summary, we can appreciate that significant more yellow cards are shown in the *LFP* comparing with the *PL*, but the cause of these cards is distributed equally in both leagues.

4. Discussion

Quantitative analysis of behaviours related with fair play has shown that *LFP* players have done more faults (M=37.33 vs. M=20), more behaviours against fair play (M=11.25 vs. M=4.67) and more behaviours in favour of fair play (M=9.67 vs. M=4.92) than *PL* players. If we consider the results of contact faults and behaviours against fair play, we could think that in *LFP* the matches are played with less fair play than in *PL*. However, considering the behaviours in favour of fair play we could conclude the opposite. How can we explain these results that seem contradictory? Does it mean that the play is rougher in *LFP* than *PL*? Or is it softer? Certainly, to answer these questions more researches are necessary but, from our point of view we adventure two possible explanations. The first one comes from our observational instrument and the second one arises from the qualitative analysis of the matches.

Due to the categorisation some of the behaviours in favour of fair play (Apologise, Kick out the ball, Return the ball) are linked with contact faults. In fact, these are the categories in which differences between *LFP* and *PL* are statistically significant. This means that with the appearance of more contact faults also appears more behaviours in favour of fair play. However, this doesn't allow us to conclude that matches in one of both competitions are played with more or less fair play. In future researches, we plan to separate behaviours in favour of fair play into 2 groups: those ones with a positive or neutral antecedent (for example Encourage the opponent) and those ones with a negative antecedent (for example Apologise after a fault).

The number of contacts between football players is basically the same in both leagues. The main difference is player's reaction after receiving the contact. Whereas in *LFP* players usually ends on the field, in *PL* players try to go on playing. This could be related with the difference between constitutive and normative rules (Silva, 1981).

Due to the fact that constitutive rules are equal for both competitions (there is only one official rules), the difference has to be in the normative rules, those ones not written but accepted by participants' consensus (players, referees, coaches and spectators). For example, it seems more accepted in the *LFP* to gain ball's possession using all kind of tricks, simulations, etc. to take advantage from the opponent. However, in the *PL* this kind of tricks or simulations are less usual. This one could be an example which, added to other differences, let us consider the existence of different 'cultures' in the world of football or different ways of understanding football in different countries.

Analysis of referees' performance is a first step to go deeper in the understanding of fair play as a global matter which depends of all participants in sportive situation (Cruz, et al., 2001; Torregrosa & Cruz, 1999). In this sense, we plan also in the future to investigate coaches, managers and media role in fair play exhibited by players in football matches and the pressure they put on referees. Results of this study show that in *Liga de Fútbol Profesional* referees admonish statistically more than in *Premiere League* (*PL*), but referees are not the unique responsible of this fact. The faults marked during a professional football match and its consequent admonitions are responsibility of players and referees. As a consequence of the major number of faults in the *LFP* than in *PL* is quite normal to find more admonitions in the Spanish league (*LFP*=6,5 vs. *PL*=4) and this difference is statistically significant. Moreover is interesting to confirm that distribution of admonishes antecedents are the same in both leagues, about 77% after a contact fault and 23% as a consequence of a behaviour against fair play.

Our results show that winning at all costs has become an essential part of modern professional sport everywhere, but results obtained from *PL* players are more favourable to fair play that those obtained in *LFP*. However, there is always room for improvement in the models offered by both leagues and some actions should be taken in the future in order to improve not only fair play and sportsmanship but also the sportive spectacle by its own. These measures will be important to ensure a better fair play in professional sport and to offer better models for youth sports.

In summary, our belief is that in professional sport, there exists a so called "informal system of norms" which allows players rule violations in the interest of success in sport. Pilz (1995) points out that rule violations are legitimated and expected by fans, so a dangerous circle, difficult to interrupt, starts. Players commits faults in the interest of winning the match. Spectators expect players commit some kind of fouls and reinforce them by making "useful or tactical" faults. Expectations of players and spectators could by different in the studied leagues depending on the differences between football's "culture".

In conclusion, two kinds of actions are needed to promote fair play and sportsmanship. First of all changes in rules in order to avoid transgressors advantage during the game. Actually, professional players don't behave according to a principle of justice for all, but they act within a simple cost-profit calculation principle. So, as long as the costs for unfair behaviour are less than the profits obtained, they will use these behaviours to attain their goals of success, as Pilz (1995), Silva (1981) and Stornes (2001) have outlined. In second place, a long term educational measures for all the participants (players, coaches, referees, managers, etc.) in youth football -such as those summarised in different codes of sports ethics- have to be initiated (e.g., Borras, 2004). These two kinds of measures are necessary to prevent the increase of utilitarian behaviours in

top level football players and the imitation of negative models in youth sports, due to the influence that significant others have in the shaping of the moral atmosphere of youth sport teams, as have been outlined by different research teams (Boixadós, Cruz, Torregrosa, & Valiente 2004; Guivernau and Duda ,2002; Ommundsen, Roberts, Lemyre & Treasure, 2003; Shields, Bredemeier, LaVoi & Power (2005), Stephens & Bredemeier, 1996).

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COACHING BEHAVIORS, MOTIVATIONAL CLIMATE, AND YOUNG ATHLETES' SPORT EXPERIENCES

1. Introduction

Youth sports are a firmly established part of societies around the world, and they directly touch the lives of many people (De Knop, Engstrom, Skirstad, & Weiss, 1996). In the United States alone, approximately 41 million youngsters are actively involved in agency-sponsored programs (e.g., Little League Baseball), and another 6 to 7 million participate in interscholastic athletics (Ewing & Seefeldt, 2002). These programs have become extremely complex psychosocial systems in which many topics of interest to behavioral scientists can be studied. Indeed, an increasing number of sport psychologists have focused on the impact of competition on athletes' personal development (see Brustad, Babkes, & Smith, 2001; Malina & Clark, 2003; Smoll & Smith, 2002a; Weiss, 2004). Their research consistently has shown that an important determinant of participation lies in the interpersonal dynamics between coaches and athletes. This is understandable, for coaches occupy a central and influential leadership role within the athletic environment, and their influence often extends beyond the sport domain into other areas of athletes' lives.

As research has accumulated on coach-athlete interactions, it has become clear that coaches can either positively or negatively impact the lives of their athletes. A positive coach-athlete relationship can enhance athletes' psychological and social well-being, foster the development of self-efficacy, positive values, and coping skills, and promote continued involvement in healthy physical activity. In contrast, negative coach-athlete relationships create distress, foster the development of dysfunctional attitudes toward achievement and competition, and contribute to sport attrition (e.g., Cote', 2002; Ewing, Seefeldt, & Brown, 1997; Martens, 2004; Smith & Smoll, 2002). In a research program that has spanned three decades, we have focused on interactions between coaches and young athletes. This chapter begins with an overview of the theoretical model and research paradigm that guided our work. We then describe the measurement of coaching behaviors. Next, we present results from basic research relating coaching behaviors to athletes' evaluative reactions. The chapter concludes with a discussion of achievement goal theory and its implications for coach-athlete interactions. It should be noted that our purpose is not to address the extensive literature on achievement

goal theory in sport (see Chi, 2004; Duda & Hall, 2001; McArdle & Duda, 2002). Rather, in this chapter, we review our recent work on coach-initiated motivational climate and its relation to youngsters' sport experiences.

2. Mediational Model of Coaching Behavior

In the early 1970s, recognition of the potential impact of coaches on athletes' psychological welfare prompted us to develop a mediational model of coach-athlete interactions: Coach Behaviors → Athlete Perception and Recall → Athletes' Evaluative Reactions (Smoll, Smith, Curtis, & Hunt, 1978). The model is based on a social-cognitive framework that emphasizes interactions between situational and individual difference factors that relate to important cognitive-affective processes (Bandura, 1997; Mischel & Shoda, 1995). It suggests that the effects of a coach's actual behaviors on the athlete's evaluative reactions (attitudes toward the coach, the sport experience, etc.) are not direct, but are instead mediated by the athlete's recall and the meanings ascribed to the behaviors. In other words, cognitive-affective processes serve as filters between overt coaching behaviors and youngsters' attitudes toward their coach and other aspects of their sport experience.

Measures derived from the basic three-element mediational model allowed us to study empirical relations between overt leader behaviors, perceived behaviors, and consequences at a rudimentary level. Although the preliminary model underlying our early research did incorporate both overt and athlete-perceived behaviors, it was quite limited in scope, and it required greater elaboration to delineate the characteristics and processes that influence coaching behaviors and mediate their effects on athletes. We therefore expanded the model to include situational and individual difference factors in coaches' behaviors and on athletes' reactions to these behaviors (Smoll & Smith, 1989). An updated treatment of the role that these variables might play in enhancing the explanatory, predictive, and heuristic power of the model appears elsewhere (Smith & Smoll, 2007).

3. Behavioral Assessment of Coaches

Within the social-cognitive perspective, behavioral assessment in naturalistic and laboratory environments has long been a favored methodological approach. Building on this tradition, we developed a method for assessing actual coaching behaviors. The Coaching Behavior Assessment System (CBAS) permits the direct observation and coding of coaches' leadership behaviors during practices and games (Smith, Smoll, & Hunt, 1977a). The behavioral categories of the CBAS were derived from content analyses of numerous audio taped play-by-play reports of coaches' practice/game actions. The CBAS contains 12 categories divided into two major classes of behaviors. *Reactive* (elicited) behaviors are responses to immediately preceding athlete or team behaviors, whereas *spontaneous* (emitted) behaviors are initiated by the coach and are not a response to a discernible preceding event. Reactive behaviors are responses to positive athlete behaviors or effort (reinforcement, nonreinforcement), mistakes and errors (mistake-contingent encouragement, mistake-contingent technical instruction,

punishment, punitive technical instruction, ignoring mistakes), or misbehaviors on the part of athletes (keeping control). The spontaneous class includes general technical instruction, general encouragement, organization, and general communication. The system thus involves basic interactions between the situation and the coach's behavior. Use of the CBAS in observing and coding coaching behaviors in a variety of sports indicates that the scoring system is sufficiently comprehensive to incorporate the vast majority of overt leader behaviors, that high interrater reliability can be obtained, and that individual differences in behavioral patterns can be discerned (see Smith, Smoll, & Christensen, 1996).

Our theoretical model emphasizes the role of athlete perceptions as causally mediating relations between overt coaching behaviors and athletes' reactions to their sport experience. Because of this, we developed a parallel measure of athlete-perceived coaching behaviors, the CBAS Perceived Behavior Scale (CBAS-PBS; Smith, Smoll, & Curtis, 1978). We used a definitional approach in which a narrative description of each CBAS category was derived from the descriptors and coding criteria in the CBAS observer training manual (Smith, Smoll, & Hunt, 1977b). For each of the 12 definitional items, the athlete indicates the frequency with which the coach behaved in that manner. The CBAS-PBS can be used to measure both athlete perceptions of coaches' behaviors and coaches' perceptions of their own behaviors.

4. Coaching Behaviors and Young Athletes' Evaluative Reactions

Following development of the CBAS and CBAS-PBS, a systematic program of research was carried out over a period of several years (Curtis, Smith, & Smoll, 1979; Smith & Smoll, 1990; Smith et al., 1978; Smith, Zane, Smoll, & Coppel, 1983; Smoll et al., 1978). In accordance with our model, field studies were conducted to determine how observed coaching behaviors, athletes' perception and recall of the coach's behaviors, and athlete attitudes are interrelated. We also explored the manner in which athlete and coach individual difference variables might serve as moderator variables and influence the basic behavior-attitude relations.

Our results indicated that the typical baseball or basketball coach engages in more than 200 coded actions during an average game. By collecting observational data on four or five occasions, we were thus able to generate behavioral profiles of up to several thousand responses for each coach over the course of a season. In large-scale observational studies, we coded more than 85,000 behaviors of some 80 male baseball and basketball coaches, then interviewed and administered questionnaires to nearly 1,000 of their athletes after the season to measure their recall of their coaches' behaviors and their evaluative reactions to the coach, their sport experience, and themselves. We also obtained coaches' postseason ratings of how frequently they engaged in each of the 12 CBAS behaviors.

4.1. Coaching behaviors and youngsters' attitudes

At the level of overt behavior, three independent behavioral dimensions were identified through factor analysis: Supportiveness (comprised of reinforcement and mistake-contingent encouragement), Instructiveness (general technical instruction

and mistake-contingent technical instruction), and Punitiveness (punishment and punitive technical instruction). Relations between coaches' scores on these behavioral dimensions and athlete measures provided clear evidence for the crucial role of the coach. The most positive outcomes occurred when youngsters played for coaches who engaged in high levels of reinforcement (for both desirable performance and effort) and who responded to mistakes with encouragement and technical instruction. Not only did the athletes who had such coaches like their coaches more and have more fun, but they also liked their teammates more.

There were some interesting surprises in the data. First, punitive and hostile actions occurred less frequently but had more devastating effects than we had anticipated. Although only about 3% of the coded behaviors were punitive and critical in nature, they correlated more strongly (and negatively) than any other behavior with athletes' attitudes. Second, general encouragement bore a curvilinear relation to athletes' attitudes; either very low or very high levels were linked to negative attitudes toward the coach.

In a recent study, 645 male and female athletes on 63 high school teams completed a 13-item version of the CBAS-PBS following the sport season (Cumming, Smith, & Smoll, 2006). The enhanced scale included a reinforcement plus instruction category introduced by Horn (1985), and we used three attitudinal items from our previous research to assess specific evaluative reactions of the athletes to their coach: "How much did you like playing for your coach?" "How much does your coach know about your sport?" and "How good is your coach at teaching your sport?" Pearson product correlations revealed that most of the CBAS-PBS scores were significantly correlated with the athlete evaluations of their coach. Moreover, to compare the overall ability of the CBAS-PBS measures to predict evaluative attitudes toward the coach, we conducted multiple regression analyses, regressing the attitude scores onto the CBAS-PBS categories. On "like playing for the coach," "coach's knowledge of your sport," and "coach's teaching ability," the CBAS-PBS behaviors accounted for 39%, 26%, and 40% of the variance, respectively. The substantial amounts of variance accounted for confirmed that the CBAS-PBS measures tap behavioral phenomena that are both theoretically meaningful and related to athletes' attitudes toward the coach.

4.2. Coach and athlete perceptions

Another important issue concerns the degree of accuracy with which coaches perceive their own behaviors. Correlations between CBAS observed behaviors and coaches' ratings of how frequently they performed the 12 behaviors were generally low and nonsignificant (Smith et al., 1978). The only actions on their self-report measure that correlated significantly (around .50) with the observational measures were the punitive behaviors. Overall we found that youngsters' ratings on the CBAS-PBS correlated much more highly with CBAS measures than did the coaches' own reports. It thus appears that coaches were, for the most part, blissfully unaware of how they behaved and that athletes were more accurate perceivers of actual coach behaviors. Because behavior change requires an awareness of how one is currently behaving, this finding clearly indicated the need to increase coaches' self-awareness when developing

an intervention program designed to enhance the manner in which coaches relate to athletes (see Smoll & Smith, 2006).

4.3. Coaching behaviors and youngsters' self-esteem

Because of our interest in self-esteem as a moderator variable that might influence responses to coaches' behaviors, we examined the reactions of athletes who scored either low, moderate, or high on a measure of general self-esteem to coaches who were either quite high or quite low on the Supportiveness behavioral dimension (the tendency of the coach to reinforce desirable performance and effort and to respond to mistakes with encouragement) (Smith & Smoll, 1990). Attraction responses toward the coaches revealed a significant interaction between coach supportiveness and athletes' level of self-esteem. Young athletes with low self-esteem were more responsive than other youngsters to variations in supportiveness, and the pattern of their responses favors a self-enhancement model of self-esteem development (e.g., Swann, 1996; Tesser, 1988). Specifically, rather than liking the nonsupportive coaches, these athletes reacted especially negatively to them, presumably because the coaches fustrated their need to enhance their self-evaluations by being nonsupportive. This finding extends a body of results derived from laboratory studies to a naturalistic setting. Collectively, these results suggest that self-enhancement motivation causes people who are low in self-esteem to be especially responsive to variations in supportiveness (Dittes, 1959; Swann, Griffin, Predmore, & Gaines, 1987; Tesser, 1988).

4.4. The importance of winning

"Winning isn't everything. It's the only thing." Or is it? In the case of attitudes toward the coach, is it indeed true that everyone loves a winner? In our early research, we compared the won-lost percentages of the 9 best-liked and the 11 least-liked coaches in a sample of 51 Little League Baseball coaches (Smith et al., 1978). A notable finding was that the best-liked coaches actually had a slightly lower winning percentage than did the least-liked coaches (.422 versus .545). In another analysis, we compared the attitudinal responses of players who played for very successful teams (won-lost percentage > 66.7%) against those of players who played for less successful teams (won-lost percentage < 33.3%). Discriminant analyses revealed that winners and losers did not differ in any of their attitudes toward the coach. There were, however, differences on other measures. Specifically, players from winning teams reported that they liked playing baseball more, liked their teammates more, felt that their coaches liked them more, and felt that their parents liked the coach more. Additionally, on measures of perceived coaching behaviors (the 12-item CBAS-PBS), the players on winning teams rated their coaches as being more likely to engage in positive reinforcement in response to good performance and effort, and with mistake-contingent encouragement and mistake-contingent technical instruction in response to poor performance. Coaching behaviors consistently accounted for more postseason attitudinal variance than did the team's won-lost percentage. It is worth noting, however, that winning assumed greater importance beyond age 12, although it continued to be a less important attitudinal determinant than coach behaviors.

Because the sport environment is inherently a competence and achievement context, motivational factors play an important role in determining the ultimate effects of participation on psychosocial development. As a theoretical framework, achievement goal theory provides an appropriate vantage point from which to explore factors (e.g., coach behaviors) that might affect motivated behavior in youth sports. Achievement goal theory (Ames, 1992; Dweck, 1999; Nicholls, 1989) focuses on understanding the function and the meaning of goal directed actions, based on how participants define ability and how they judge whether or not they have demonstrated competence. The two central constructs in the theory are individual *goal orientations* that guide achievement perceptions and behavior, and the *motivational climate* created within adult-controlled achievement settings.

5.1. Goal orientations

Nicholls (1989) identified two different ways of defining success and construing one's level of competence, labeling them *task involvement* and *ego involvement*. When an individual is *task involved*, subjective success and perceived competence are processed in a *self-referenced* manner. Task-oriented people feel successful and competent when they have learned something new, witnessed self-improvement in skills or performance, mastered a task, or given their utmost effort. Importantly, even if people perceive themselves as possessing lower ability than others, they can still feel competent and successful if focused on task-involved criteria. There is considerable empirical evidence that task involvement fosters adaptive achievement behaviors, such as persistence in the face of failure, exerting effort, and selecting challenging goals, regardless of one's level of perceived competence (see Chi, 2004; Duda & Hall, 2001; Roberts, Treasure, & Kavussanu, 1997).

On the other hand, individuals are *ego involved* when their definition of personal success and demonstrated competence is *other-referenced*. The goal is to show that one is superior to relevant others, or to avoid appearing inferior to others. Ego-involved individuals feel successful when they outperform their peers or do as well as others without concerted effort. They are also more inclined to engage in strategies or behaviors, whether appropriate or inappropriate (e.g., cheating), designed to increase the chance of winning (see McArdle & Duda, 2002).

5.2. Motivational climate

Achievement goal theory also addresses environmental factors that foster task or ego involvement. Chief among these factors is the motivational climate produced by significant adults. Historically, several different research groups have identified and labeled two distinct classes of climate-initiating adult behaviors, variously labeled *task* and *ego* (Duda, 1993; Roberts et al., 1997) or *mastery* and *performance* (Ames, 1992; Dweck, 1999), respectively. In the development of the scale used to assess motivational climate in our research, we chose the terms *mastery* and *ego* as the most semantically meaningful labels for the climate subscales, given their item content

(Smith, Cumming, & Smoll, in press). We shall therefore employ these terms when describing the motivational climate in the remainder of this chapter.

To obtain the most valuable experience for athletes, coaches are advised to create a mastery-involving motivational climate that encourages athletes to focus on their own personal development (Ames, 1992; McArdle & Duda, 2002). Coaches can do this by reducing the ultimate importance of winning relative to other prized participation motives (e.g., skill development, effort, and affiliation with teammates) (Gould, Feltz, & Weiss, 1985; Smith, Smoll, & Cumming, 2006; Smoll, Smith, & Cumming, 2007). In contrast, an ego-involving climate occurs when the coach promotes intra-team rivalries, favors the most talented players, and punishes players for making mistakes (Newton, Duda, & Yin, 2000). Consistent with achievement goal theory, mastery-involving climates are associated with greater sport enjoyment and intrinsic motivation, whereas ego-involving climates are associated with lower enjoyment and intrinsic motivation (see Chi, 2004). Similarly, Treasure and Roberts (1998) found a positive association between perceptions of a mastery-involving climate and the belief that effort is integral to success. In contrast, individuals who perceived the motivational climate as more ego involving were more likely to endorse the beliefs that ability and deceptive tactics are viable antecedents for success.

5.3. Coach-initiated motivational climate and youngsters' attitudes: Is winning everything?

What are the relative contributions of motivational climate and winning toward youngsters' evaluations of their coach and sport experience? We recently examined the comparative roles of coach-initiated motivational climate and team success, defined in terms of won-lost percentage, on young athletes' evaluative reactions (Cumming, Smoll, Smith, & Grossbard, 2007). The participants were 268 male and female athletes, 10 to 15 years of age, playing on 50 basketball teams (29 boys and 21 girls teams) in three community center basketball programs. The athletes completed a new age-appropriate measure of motivational climate, the Motivational Climate Scale for Youth Sports (Smith, Cumming, & Smoll, in press); and we used attitudinal scales to assess the players' evaluations of their coach, their enjoyment of their sport experience, and their perception of their parents' liking for the coach.

Consistent with predictions based on achievement goal theory and with previous research on coaching behaviors, hierarchical linear modeling revealed that coaching practices exerted a strong influence on the participation outcome variables. Creation of a mastery-involving motivational climate was positively and significantly associated with athletes' global evaluations of their coach. Basketball players who perceived the coaching climate as mastery-involving (a) liked playing for their coach more, (b) rated their coaches as more knowledgeable about the sport of basketball, (c) thought their coach was better at teaching kids how to play basketball, and (d) had a greater desire to play for the coach again in the following year. They also enjoyed their team experience more and believed that their parents liked the coach more. As expected, an ego-involving climate was negatively related to athlete evaluations of the coach, though the magnitude of the associations was more modest than for mastery climate.

By comparison with coach-initiated motivational climate, winning was more weakly related to the outcome measures. Winning did not relate to enjoyment, but it

positively predicted athlete evaluations of the coach's teaching ability and knowledge of the sport, as well as a composite coach-evaluation measure. It was unrelated to perceived parental liking for the coach. Additionally, no significant interactions involving winning and motivational climate were found.

The contribution of won-lost percentage to the athletes' evaluations of the coach was of particular interest. Consistent with our earlier research conducted in Little League Baseball (Smith et al., 1978), won-lost percentage was unrelated to attitudes toward the coach, as indicated by ratings of liking and desire to play for the coach in the future. Won-lost percentage was, however, significantly related to the athletes' evaluations of the coach's knowledge and teaching ability and the composite coach evaluation score. Youngsters who played for more successful teams believed that their coach was more knowledgeable about the sport of basketball and was better at teaching kids how to play basketball.

As noted earlier in the chapter, Smith et al. (1978) reported that winning exerted a stronger influence on attitudes toward the coach at older ages than at younger ones, but that coaching behaviors continued to account for appreciably more attitudinal variance at all ages. It seems likely that the importance of winning and losing would increase with age and/or level of competition. However, for 10 to 15 year old boys and girls competing in community center basketball programs where the emphasis reflected a recreational orientation, age analyses did not reveal differential effects of winning in the younger (10 to 12 year old) and older (13 to 15 year old) athlete groups.

In summary, our findings support the contention that "winning isn't everything," but it is clearly associated with certain outcome variables. Overall, however, the strongest and most consistent predictor of enjoyment in youth basketball was the motivational climate established by the coach. Athletes who perceived their coaches as engaging in more mastery-involved behaviors that focus on effort and personal development, viewed their coaches in a more positive light. In contrast, ego-involved behaviors were negatively related to all outcome measures. This supports the position derived from the developmental model of youth sports (Martens, 2004; Smoll & Smith, 2005) that the key to a successful athletic experience (defined in terms of positive psychosocial outcomes) rests solidly on the ways in which the coach relates to athletes and on the achievement standards that he or she emphasizes.

5.4. Modifying coaching behaviors and motivational climate

Research based on our mediational model of coaching behaviors has demonstrated significant and replicable relations between adult leadership behaviors and young athletes' evaluative reactions. Both the model and research results have provided the conceptual and empirical basis for developing a coach training intervention. Coach Effectiveness Training (CET) is a workshop that has proven to be an economical and effective way of altering coaching behaviors in a desirable fashion and thereby has positive psychosocial effects on youngsters who play for them. Five classes of outcome variables have been significantly influenced by CET: coaching behaviors, young athletes' attitudes, self-esteem, performance anxiety, and attrition (see Smoll & Smith, 2002b). Recently, CET has evolved into an intervention called the Mastery Approach to Coaching (MAC). The new program incorporates achievement goal theory

content on goal orientations and motivational climate and includes specific guidelines on how to create a mastery-involving motivational climate. Empirical evaluation of the MAC intervention revealed that (a) trained coaches engaged in more mastery-initiating behaviors and fewer ego-initiating behaviors than did untrained coaches, and (b) these motivational climate differences were accompanied by salutary changes in achievement goal orientations and sport performance anxiety in young athletes who played for the trained coaches. Over the course of the season, these athletes became more mastery-oriented and less ego-oriented, and they showed significant decreases in anxiety (Smith, Smoll, & Cumming, 2007; Smoll, Smith, & Cumming, 2007).

Several other coach training programs have been designed to enhance the instructional and interpersonal competencies of coaches so that they are capable of providing a positive athletic experience and environment. Some of the programs are national in scope, whereas others are far more limited in their range of application (see Smith & Smoll, 2005). It is our hope that researchers will continue to investigate the nature of coach-athlete interactions, and that the findings will be used to update the content of coach training programs. We are also hopeful that previously untested training programs will be subjected to formal evaluation to determine their effects on coaches and young athletes.

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THE INTERPLAY BETWEEN MOTIVATION, WELL-BEING AND CHARACTER DEVELOPMENT IN SPORT: *possible implications for responsible citizenship*

1. Introduction

For those who love sport for its own sake or look to this institution and life domain for its functional value, there are assumptions and aspirations regarding sport's potential for adding something to people's lives and society at large. This chapter explores the quality of the sport experience as a possible antecedent to civic engagement. One major premise is that sport can play a role in contributing to civic responsibility when the sport participation is linked to enhanced well-being and positive moral functioning among those involved. A corresponding thesis is that the character building and welfare promoting promise of sport is dependent on the motivational processes underlying participation. That is, the reason(s) why individuals partake in sport and the manner in which they judge their competence and interpret their goals are fundamental to understanding variability in the psychological, emotional, *and* society-related consequences of sport involvement. Within this treatise, we also argue that the social environments created by significant others (such as the coach) shape the motivation and optimal functioning of participants operating within such environments. Thus, these environments hold implications for the correspondence between sport engagement and the development of responsible citizenship.

We first briefly review the central constructs and tenets of the theories of motivation undergirding our arguments and cited evidence. Research examining the links between motivational processes and indices of well-being among sport participants is then summarised. We turn next to a brief account of work on motivation and moral functioning in sport. The following section centres on a synopsis of research suggesting that variability in sport motivation at the person level is relevant to individuals' values toward others and society at large and views regarding the part that sport can play in promoting "good citizenship". The proposed association between personal well-being and responsible citizenship is provided preliminary support in the subsequent section. We then present research taking an exploratory look at assumed sequential relationships among motivation – moral functioning – civic responsibility. We end with some final thoughts for the reader's consideration.

2. Models of motivation

It has been said that the study of motivation begins and ends with the study of behaviour. As pointed out by Ryan and Deci (2000), "to be motivated means to be moved to do something" while motivational issues also come into play when we do "nothing." In discussing the repercussions of motivational factors for understanding differences in civic responsibility, we pull from two contemporary models of motivation, namely the achievement goal frameworks (AGT; Dweck, 1999; Elliot, 1999; Nicholls, 1984, 1989) and Self Determination Theory (SDT; Deci & Ryan, 1985). Central to both is the assumption that, in achievement activities such as sport, the meaning of our behaviour is fundamental to how we respond to the activity and how we interpret our experiences. Both also recognize that there are a variety of reasons why people can be motivated; in essence when engaged, individuals have different motivational concerns. Finally, AGT and SDT place importance on variation in the level or *quantity* of motivation (i.e., how much) *and* the orientation or *quality* of motivation (e.g., what type, what is the focal point) (Ryan & Deci, 2000). Primary to the present chapter, individuals are seen to exhibit *quality* of motivation when their athletic engagement adds to their lives – physically, psychologically, emotionally, morally, etc. – and has the potential to contribute to a common and greater good that is beyond the person per se and his or her immediate sport involvement.

2.1. Achievement goal theories

At the heart of contemporary achievement goal frameworks (e.g., Dweck, 1999; Elliot, 1999; Nicholls, 1984, 1989) is the assumption that individual differences in achievement goals provide the perceptual lens for how achievement endeavours are interpreted. The achievement goals reflect different ways to define success, judge what is important, and construe competence in an activity and are held to correspond to differential patterns of cognitions, affect, and behaviour.

Drawing from the seminal work of Nicholls (1984, 1989) which has had the most significant impact on the achievement goal literature as applied to sport, there are two major achievement goals; i.e., a task (or mastery) and ego (or performance) goal. Perceptions of competence and success are self-referenced when task goals prevail. In this case, the experience of learning, hard purposeful work, and/or personal improvement occasion a sense of demonstrated competence and feelings of success. On the other hand, when focused on ego goals, perceived competence and subjective success are tied to the demonstration of superiority. When ego-involved, individuals are motivated by possibilities to show their high competence and avoid indicating low ability (Nicholls, 1989).

According to contemporary achievement goal frameworks (Ames, 1992; Dweck, 1986, 1999; Elliot, 1999; Nicholls, 1989), the degree to which someone emphasises task and ego goals in a particular achievement setting is dependent on individual differences and situational characteristics. In terms of the former factor, individuals tend to vary with respect to their degree of task and ego orientation (Nicholls, 1989). These orientations capture dispositional tendencies regarding the criteria used to define success in the setting in question (Duda, 2001). The social psychological environments created by significant others (e.g., coaches) also are held to impact achievement goal

adoption. More specifically, features of the environment (e.g., the bases and nature of evaluation and recognition) can be considered more or less task- and ego-involving. Ames (1992) was the first to refer to individuals' overall appraisals of the social psychological environments manifested in achievement settings as differences in the *perceived motivational climate*.

In terms of theoretical predictions, achievement goal frameworks uniformly point to the benefits of a strong task goal focus for achievement processes and outcomes (Ames, 1992; Dweck, 1999; Elliot, 1999; Nicholls, 1989). That is, a task orientation and a task-involving motivational climate are supposed to translate into positive achievement striving. Sport research to date has supported such suppositions (Duda, 2005; Duda & Balaguer, 2007; Roberts, 2001).

Results concerning the implications of a strong ego orientation have been more equivocal (Duda, 2001). It is theoretically expected that a pronounced ego orientation coupled with low perceived ability can be motivationally problematic (Dweck, 1999; Nicholls, 1989). When perceptions of competence are high and/or the individual is also characterized by a strong task orientation, an emphasis on ego goals is expected to correspond to positive achievement outcomes. Consonant with such complexity, the sport literature has provided support for both positive and negative concomitants of an ego orientation (e.g., Biddle, Wang, Kavussanu, & Spray, 2003; Duda, 2001; Roberts, 2001).

Aware of the inconsistent findings for ego orientation across different achievement settings, Elliot (1999) has argued for taking into account an approach and avoidance dimension of ego/performance goals. When focused on the former, the aim is the demonstration of comparatively high competence. If oriented toward an ego avoidance goal, the concern is with avoiding the demonstration of comparatively low ability. Elliot and McGregor (2001) further argued for a differentiation of an approach versus avoidance dimension of task or mastery goals. In essence, their 2 × 2 multiple goal framework proposes that positive processes and outcomes will correspond with approach goals (task/mastery or ego/performance). The reverse is predicted for avoidance goals (task/mastery or ego/performance). The sport research grounded in Elliot and McGregor's 2 × 2 model is in its infancy but, to date, has been generally aligned with theoretical predictions. An intriguing exception is that such work still points to a vulnerability associated with an emphasis on ego/performance approach goals (Nien & Duda, 2006) – similar to the pattern for ego goals in research based on dichotomous goal models (e.g., Dweck, 1999; Nicholls, 1989).

In contrast to what has been the case for ego (approach or otherwise!) goals, more consistent results have emerged in regards to perceptions of an ego involving motivational climate as particularly shaped by the coach. More specifically, a perceived coach-created ego involving motivational climate tends to correlate with negative cognitions, affective responses, and behavioural patterns (see Duda & Balaguer, 2007, for a review).

2.2. Self-determination Theory

Self-determination theory (SDT; Deci & Ryan, 1985; Ryan & Deci, 2000) is concerned with the determinants and implications of behaviour that is regulated by personal choice and volition in contrast to behaviour engaged in for controlling

reasons. SDT distinguishes between reasons for our motivated action, namely intrinsic motivation, extrinsic motivation and amotivation, which vary along a self determination continuum.

As the individual participates in the activity because s/he wants to and enjoys the activity, intrinsic motivation represents the most self-determined regulation (Ryan & Deci, 2000). In the case of extrinsic motivation however, the impetus of engagement is tied to the consequences of one's involvement and thus separate from the inherent appeal of the activity in question. Deci and Ryan (1985) propose that there are different types of extrinsic regulations which differ in their degree of self endorsement, ranging from external regulation (participate for extrinsic, instrumental reasons), introjected regulation (participate for internalised external regulations or self-imposed sanctions) and identified regulation (participate out of choice to reach some valued outcomes but activity not deemed inherently enjoyable or interesting). When amotivation is evident, feelings of self determination are absent and there are no intrinsic or extrinsic reasons underpinning behavioural engagement (Deci & Ryan, 1985).

Deci and Ryan (1985, 2000) have proposed that intrinsic motivation and more self-determined forms of extrinsic motivation (e.g., identified regulation) correspond to adaptive motivational processes and psychological functioning, and thus lead to positive achievement outcomes. Motivational regulations low in self-determination (e.g., external regulation and amotivation), on the other hand, are expected to link to negative responses.

Similar to achievement goal frameworks (Ames, 1992), SDT (Deci & Ryan, 1985) gives significance to the potential influence of environmental factors on motivational processes. In particular, the autonomy-supportive [i.e., the degree to which choice is given, extrinsic contingencies are minimized, and the perspectives, values and goals of the individual are considered by the significant other(s)] and social-supportive [i.e., the degree to which the significant other cares for and respects the individual] are assumed to be positive predictors of self-determination. The influence of the social environment on motivational regulations is assumed to work through the satisfaction of three basic psychological needs, namely people's needs to feel competent, autonomous, and related to others in a meaningful and respectful way (Ryan & Deci, 2000).

3. Motivational processes and well-being

We now turn to work on the relationship between motivational processes and well-being in sport. This literature suggests that whether or not athletes' welfare is advanced or compromised via sport engagement is dependent on the *quality* of their sport motivation.

The concept of well-being is indeed very complex as it incorporates both optimal experience and optimal functioning (Ryan & Deci, 2000). Contemporary understanding of well-being appreciates that not feeling bad (e.g., experiencing negative affect) is *not* simply the opposite of feeling well (e.g., experiencing positive affect) and distinguishes two perspectives. First, there is a hedonic perspective on well-being, which revolves around the obtainment of happiness and pleasure and avoidance of physical and/or psychological pain. A second conceptualisation of well-being is termed eudaimonic. Eudaimonic well-being is witnessed when the individual is fully functioning, self-

-actualised, and experiencing personal growth (Ryan & Deci, 2000). This facet of well-being has been captured in studies examining self perceptions and affective/ cognitive responses such as level and stability of self-esteem and subjective vitality (i.e., a "positive feeling of aliveness and energy"; Ryan & Frederick, 1997, p. 529).

The concern in our sport research has been on the interplay between the subjective coach-created environment (pulling from both AGT and SDT), ensuing motivational processes, and the prediction of hedonic and especially eudaimonic well being among athletes. For example, grounded in achievement goal theory (Nicholls, 1989), research has indicated that an over-emphasis on ego goals or a pronounced ego-involving climate are associated with physical and mental health problems in sport such as steroid use, the aetiology of disordered eating, and exercise addiction (see Duda, 2001, for a review). Reinboth and Duda (2004) examined the relationship of the perceived motivational climate (in terms of its task- and ego-involving features) and perceptions of ability to indices of psychological and physical well-being among 265 male adolescent football and cricket players. We found contingent self-worth (i.e., basing one's overall evaluations of self worth on athletic achievement), physical and emotional exhaustion associated with one's participation (which is endemic to burnout), and reported physical symptoms (e.g., reported colds, stomach aches) to be positively predicted by perceptions of an ego-involving climate. Satisfaction/interest in sport was positively related and physical symptoms negatively linked to perceived ability and perceptions of a task-involving atmosphere. Reported self esteem was lower among the low perceived ability athletes participating in an environment that was perceived to be high in its ego-involving features.

In a laboratory experiment involving a physical coordination task, Standage, Duda, and Pensgaard (2005) examined the effect of manipulated outcome (win/loss) and situationally-emphasised achievement goals on indices of hedonic and eudaimonic well-being. Participants in this study were 106 female and 74 male British university students (*M* age = 19.99; *SD* = 1.60) and each was assigned to one of four competitive conditions; (1) an ego-involving single competition, (2) an ego-involving 2-person team competition, (3) a task-involving single competition, and (4) a task-involving 2-person team competition. Results revealed that participants in the ego-involving individual competition setting revealed significantly less positive affect and subjective vitality and greater negative affect than the other groups.

Deci and Ryan's Self Determination Theory (2000) has laid the major foundation for other work addressing the interdependencies between environmental factors, motivation, and indicators of the welfare of athletic participants. Reinboth, Duda and Ntoumanis (2004) examined the relationship of dimensions of the coach-created environment (i.e., perceived autonomy support, task-involving, and social support) to intrinsic need satisfaction and indices of psychological and physical well-being among male adolescent athletes. The targeted dimensions of the coach environment differentially predicted satisfaction of the needs for autonomy, competence, and relatedness. When the athletes felt more autonomous and, in particular competent, they reported greater subjective vitality and satisfaction/interest. Satisfaction of the need for competence was negatively associated with reported physical symptoms. Similar findings have been reported in the case of Spanish youth and adult sport participants (Balaguer, Castillo, Álvarez, & Duda, 2005).

Recent research by Adie, Duda, and Ntoumanis (2006), involving adult athletes, extended this line of work be providing evidence for gender invariance of the hypothesized linkages between the social environment, basic need satisfaction, and well-being. In a longitudinal study of British university athletes, Reinboth and Duda (2006) examined the relationship between changes in perceptions of the motivational climate to changes in athletes' need satisfaction and reported well-being over the course of a competitive sport season. Controlling for Time 1 scores on the measure of the perceived motivational climate and the respective need, an increase in perceptions of a task-involving climate positively predicted an increased satisfaction of the needs for autonomy, competence and relatedness. Consonant with the tenets of the Self Determination framework (Deci & Ryan, 2000), changes in the satisfaction of the needs for autonomy and relatedness emerged as significant predictors of changes in subjective vitality.

4. Motivational processes and moral functioning

Past research on athletes' perspectives on achievement (as reflected in their dispositional achievement goals) has found lower sportspersonship and greater perceived legitimacy of aggressive and cheating behaviours to correspond to lower task orientation and/or higher ego orientation (e.g, Duda, Olson, & Templin, 1991; Lee, Whitehead, Ntounanis, & Hatzigeorgiadis, 2001). That is, motivational processes seem to be relevant to whether sport involvement may be character-conducive or correspond to lower moral functioning. Other work, considering the potential influence of the social environment, has shown perceptions of a coach-created ego-involving motivational climate to correspond to heightened aggressive and rule-violating tendencies (e.g., Kavussanu, Roberts, & Ntoumanis, 2002; Ommundsen, Roberts, Lemyre, & Treasure, 2003).

In a recent study, Sage, Kavaussanu, and Duda (2006) determined the associations of task and ego goal orientations and moral identity to antisocial *and* prosocial judgements and reported behaviour among adult male footballers competing at recreational and semi-professional levels. Moral identity has been conceptualized as a self-schema or principle of self-regulation that provides an impetus to moral action (Blasi, 1984). This individual difference factor is assumed to hold implications for "when and why people act in the service of human welfare" (Aquino & Reed, 2002). Results revealed a task orientation to be positively associated with prosocial judgment only at low levels of ego orientation. Ego orientation emerged as a positive predictor of antisocial judgment and behaviour, whereas moral identity negatively predicted these variables.

5. Motivational processes and concerns for society and the welfare of others

Potential interdependencies between motivational processes and indicators of athletes' wider concerns for society and others' welfare have been examined in two ways. One approach has been to determine the associations between achievement goals

and values. Rokeach (1973) has argued that values are grounded beliefs. According to Schwartz (1994), values reflect trans-situational (and universal) goals that serve as guiding principles for people's attitudes and ensuing behaviour.

Lee, Whitehead, Ntoumanis, and Hatzigeorgiadis (2001), in a study of young adolescent male and female athletes, examined whether achievement goal orientations (task and ego) mediated the relationship between values and ethical attitudes in sport. Lee and colleagues employed the Youth Sports Value Questionnaire to tap the young athletes' moral values ("I try to be fair"), competence values ("I use my skills well"), and status values ("I win or beat other people"). The ethical attitudes that were examined included commitment to one's sport engagement, respect for the conventions of the sport (e.g., rules, officials, opponents), cheating or attitudes toward breaking the rules, and gamemanship or trying to take an advantage over your opponent that is within the rules (Lee et al., 2001). Lee and colleagues (2001) found that the relationship of status values to attitudes toward cheating and gamemanship was mediated by the athletes' degree of ego orientation. Task orientation emerged as a mediator of the link between competence values and the pro-social attitudes of commitment and convention. Moral values emerged as direct and positive predictors of pro-social attitudes.

Balaguer, Duda and Castillo (2003), among a large sample of Spanish athletes, examined the interrelationships between sport and classroom goal orientations (and associated beliefs about the causes of success; i.e., task and ego theories of achievement) and students' life values. A task perspective on academic achievement was positively associated with the value of self-transcendence (i.e., comprised of benevolence and universalism). An ego goal emphasis in the sport setting corresponded negatively to an emphasis on this life value.

With respect to implications for our understanding of the motivation and concerns for the wider good, another direction in the research has been to ascertain the links between achievement goals and athletes' perceptions of what the purposes of sport engagement should be. A number of studies (e.g., Duda, 1989; Balaguer, Duda, & Castillo, 2004) have revealed a task orientation to be positively associated with the view that an important function of sport is to foster an active lifestyle, work ethic, and "good citizenship". The beliefs coupled with an ego orientation regarding the desired socialisation effects of sport are quite different; namely, this goal perspective has been associated with the views that sport participation should lead to greater social status and feelings of personal worth.

6. Well-being and civic responsibility

According to Aristotle, "true happiness (which in Aristotle's thinking seemed to reflect eudaimonic more than hedonic well-being) is found in the expression of virtue – that is, doing what is worth doing" (Ryan & Deci, 2001, p. 145). Thus, it is reasonable to expect a synergy between the experience of well-being and responsible citizenship. If broken in body, mind, and/or spirit, it would seem difficult for an athlete to reach beyond his or her immediate troubles and try to actively engage in society and make the world a better place.

In a study of Swiss citizens, Frey and Stutzer (1999) found economic wealth to be a poor predictor of eudaimonic well-being. Pertinent to the present issue though, they also reported a positive link between well-being and citizens' engagement in the democratic process (e.g., voting). Duda, Balaguer, and Castillo (2006), in research on an elite sample of Spanish athletes, found that indices of well-being (i.e., self esteem and life satisfaction) corresponded to greater reported civic responsibility.

7. Motivation, well-being, moral functioning and concerns about society: Pulling it all together

In a study based on achievement goal frameworks (Dweck, 1999; Elliot, 1999; Nicholls, 1989), Duda, Balaguer, and Castillo (2004) determined the interrelationships between goal orientations (task, ego approach and ego avoidance) and active citizenship among elite Spanish sport participants. We also considered the possibility that moral motivation (i.e., empathy and moral identity; Schulman, 2002) may be relevant to athletes' attitudes regarding citizenship and reported engagement in civic matters. The former variable was tapped via items such as "It's no use worrying about current events/public affairs; I can't do anything about them anyway (score negatively) and It is my responsibility to get involved to make things better for society". Athletes reported involvement in community service, awareness of and concern about current events, political active, etc. reflected greater civic engagement. Based on structural equation modelling, we found individual differences in empathy and moral identity to positively predict athletes' degree of task orientation. Empathy emerged as a negative predictor of ego goal orientation. A positive and negative path respectively linked a task and ego orientation to attitudes toward civic responsibility. Finally, attitudes toward civic responsibility corresponded positively to reported civic engagement.

8. Some final thoughts

In the views of Ryan and Deci (2001, p. 161), "perhaps the concern of greatest importance for humanity, [are the] relations between personal well-being and the broader issues of the collective wellness of humanity and this planet" (Ryan & Deci, 2001, p. 161). Based on the work highlighted in this chapter, we would argue that an extrinsic, hedonic desire for pleasure and ego-involved concerns for superiority may compromise athletes' personal welfare and their concern for the well being of others in sport and society at large. This research, however, also suggests that self determined sport engagement, in which athletes desire to improve their capacities rather than prove superiority, can maximise their psychosocial development, personal growth, and eudaimonic well-being. We propose that such a sport involvement allows people to be freely agentic, to see beyond their own concerns, and be able physically, psychologically, and emotionally consider the welfare and try to act in behalf of others. It is our hope that a more task-involving and autonomy supportive sport experience can play an important role toward this larger collective goal and contribute to a shared humanity.

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MOTIVATION AND ACHIEVEMENT GOALS:
After 25 years, where are we, where are we going?[1]

1. Introduction

In 1978, those of us in the Institute for Child Behaviour and Development at the Children's Research Center of the University of Illinois (John Nicholls, Marty Maehr, Carole Dweck, Carol Ames, Russ Ames, Ken Hill, Carol Farmer, and myself) decided to have a seminar series in the Spring to talk about our individual research thrusts into motivation processes. It was John Nicholls's idea not to have our graduate students present so that we could say "silly things without worrying about what our students will think". Each of us chatted about our research data and ideas and where we were going in the future. It was John Nicholls who first introduced us to the concepts that we now recognize as integral to achievement goal theory-ego and task involvement. John presented his ideas about having equality of motivation through task involvement and the ideas eventually became a publication in the *American Psychologist* (Nicholls, 1979). We all had our input, and gave our ideas. It was the most stimulating and exciting academic experience of my life. It reflects something in science that we often fail to recognize, but experience all the time-serendipity! For me, it was serendipitous that I was a colleague of these scientists at that place and time at Illinois. It was serendipitous that all these young scientists (with the exception of Marty Maehr, who may disagree with my categorization!) were at the same University at the same time. That seminar series changed the research of all of us involved and directly led to the first article where the concepts were first introduced in the form that we would recognize today (Maehr & Nicholls, 1980). We all became achievement goal people in one form or another after that seminar series. Each of us who were there has acknowledged the importance of the seminar in the development of achievement goal theory. We all

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[1] Portions of this paper have been drawn from an upcoming chapter in the *Handbook of Sport Psychology* where the author was the first author: Roberts, G.C., Treasure, D.C. & Conroy, D. (2007). Understanding the Dynamics of Motivation in Sport and Physical Activity: An Achievement Goal Interpretation. In G. Tenenbaum & R. Ecklund (Eds). *Handbook of Sport Psychology* (p. 3-30). NY: Wiley.

contributed, some more than others, but the intellectual leader for achievement goal theory, in my opinion, was clearly John Nicholls.

My own research was changed (from causal attribution work) and I became an achievement goal researcher from that point in time. I immediately set about preaching the gospel of achievement goals to my own doctoral students to conduct research in the area. Indeed, the first ever research study conducted in achievement goal theory per se (unpublished unfortunately) was by a doctoral student of mine in sport psychology, Martha Ewing (1981). And another of my students at the time totally embraced achievement goals and for her dissertation did a study using achievement goal concepts in a cultural context (Duda, 1981), and has since become a research superstar in achievement goals. Rather than following the pack in psychology as is usually the case in sport psychology research, sport psychologists were in the forefront in conducting research on achievement goals.

The first publications using achievement goal theory in sport were in 1981, mostly from the University of Illinois. Since then, there are over 200 refereed publications in sport psychology (Roberts, Treasure & Conroy, 2007). Motivation papers in congresses of sport and exercise psychology over the past 20 years have been hugely biased in favour of constructs emanating from achievement goal theory. However, Self Determination theory research is becoming popular these days.

So, how do we define the process of motivation from an achievement goal perspective? Motivational processes can be defined by the psychological constructs that *energize, direct and regulate* achievement behaviour. Motivation theories are on a continuum ranging from deterministic to cognitive. Deterministic and mechanistic theories view humans as being passive and driven by psychological needs and/or drives. Organismic theories include innate needs but also recognize that dialectic occurs between the organism and the social context. Cognitive theories view humans as being active and initiating action through subjective interpretation of the achievement context. Achievement goal theory is a social cognitive theory based on dynamic and sophisticated conceptions that assume the human is an active participant in decision making and in planning achievement behaviour (e.g., Maehr & Nicholls, 1980; Nicholls, 1989).

2. Achievement Goal Theory in Sport and Physical Activity

Achievement goal theory has been reviewed in several publications (e.g., Duda, 2005; Duda & Hall, 2001; Roberts, 2001; Roberts *et al,* 2007), so the present paper will briefly review the basic tenets to facilitate the discussion later in the paper. Achievement goal theory assumes that the individual is an intentional, goal-directed organism that operates in a rational manner, and that achievement goals govern achievement beliefs and guide subsequent decision making and behaviour in achievement contexts (see Roberts, 2001). It is argued that in order to understand the motivation of individuals, the function and meaning of the achievement behaviour to the individual must be taken into account, and the goal of action understood. Individuals give meaning to their achievement behaviour through the goals they adopt. It is these goals that reflect the purposes of achievement striving. Once adopted, the achievement goal determines the integrated pattern of beliefs that undergird approach and avoid strategies, the differing engagement levels, and the differing responses to achievement outcomes.

An individual will approach a task or activity with certain goals of action reflecting his/her personal perceptions and beliefs about the particular achievement activity in which he/she is engaged and the form of ability he/she wishes to demonstrate (Nicholls, 1989). The conception of ability employed, and the ways performance is interpreted can be understood in terms of these perceptions and beliefs. These perceptions and beliefs form a *personal theory of achievement* at the activity (Nicholls, 1989; Roberts, *et al*, 2007; Roberts, 2001), which reflects the individual's perception of how things work in achievement situations. Therefore, people will differ in which of the conceptions of ability and criteria of success and failure they use, and in how they use them, based on their personal theory of achievement.

There are two conceptions of ability that have become popular in motivation research. They have become the source of the criteria by which individuals assess success and failure. The goals of action are to meet the criteria by which success and failure are assessed. Nicholls identifies achievement behaviour as being *task involved* or as being *ego involved*. When task involved, the goal of action is to develop mastery, improvement, or learning and the demonstration of ability is self-referenced. Success is realized when mastery or improvement has been attained. The goal of action for an ego-involved individual, on the other hand, is to demonstrate ability relative to others, or to outperform others, making ability other-referenced. Success is realized when the performance of others is exceeded, especially when expending less effort than others (Nicholls, 1984, 1989).

In this paper, when we refer to the motivated state of involvement of the individual, we use the terms ego and task involvement to be consistent with Nicholls's use of the terms. In addition, when we refer to individual differences (e.g., self-schemas, personal theories of achievement, dispositions), we use the terms *task* and *ego orientation*. Other motivation theorists (e.g., Dweck, 1986; Elliot, 1997; Maehr & Braskamp, 1986) have used different terms to describe the same phenomena. When we refer to the situational determinants of motivation, to the achievement cues inherent within the context, and to the cognitive schemas emerging from achievement situations, we will be consistent with Ames (1992) and refer to the task involving aspect of the context as *mastery* criteria and the ego involving aspect of the context as *performance* criteria. Finally, when we refer to the competence goals defined by Elliot and colleagues (e.g., Elliot, 1997), we use the terms *mastery* and *performance* goals.

3. The Future of Achievement Goals?

3.1. The hierarchical model of achievement goals

There are two major trends in the research using achievement goals. One major trend in achievement goal research has been the attempt to expand the theory into a larger conceptual framework (e.g., Maehr & Braskamp, 1986). One of the most provocative attempts at revising and extending achievement goal theory in the past decade has emerged from work on the hierarchical model of achievement motivation (e.g., Elliot, 1999). Elliot and colleagues (e.g., 2005) have integrated achievement goal theory with more traditional concepts of achievement approach and avoid needs. The

argument is that achievement goals should consider both the *definition of competence* and the *valence of the striving*. The two definitions of competence (i.e., mastery/task vs. performance/ego) and two valences of strivings (i.e., approaching competence vs. avoiding incompetence) yield a 2×2 model of achievement goals comprising mastery approach, mastery avoidance, performance approach, and performance avoidance goals. The hierarchical model differentiates goals based on their valence or the degree to which the focal outcome is pleasant or unpleasant. The argument is that achievement goals should consider both the definition of competence and the valence of the striving. It is assumed that the goals are the manifestation of "needs", or at least the "motivational surrogates", as Elliot and Church (1997) state, of the needs of achievement motivation (approach) and of the fear of failure (avoid). This suggests that achievement goals are based on the satisfaction of approach and avoid needs that are evoked by situational cues. There is much data supporting the hierarchical model, but I am suggesting in this chapter that the data is not as convincing as some researchers suggest (e.g., Conroy *et al,* 2003), and that hierarchical model proponents ignore fundamental tenets of the original theory.

3.2. Hierarchical motivation: An extension, or another theory?

The introduction of the hierarchical model has challenged many of the tenets and underlying assumptions of what may be referred to as traditional achievement goal theory. One of the most important challenges and differences between the respective perspectives pertains to the energisation of the motivational process. As we have noted above, the hierarchical model differentiates goals based on both the definition of competence (a similarity, but not identical to competence being considered as a conception) and on their valence or the degree to which the focal outcome is pleasant or unpleasant (a difference between the models). I argue that in the hierarchical model we seem to be defining achievement goals as discrete goals based upon a definition of competence and strategies aimed at fulfilling some particular objective. In the hierarchical model, goals are mid level constructs that mediate the effects of a host of individual differences (e.g., achievement motives, self-perceptions, relational variables, demographic characteristics, neurophysiologic predispositions) and situational factors (e.g., norm-based evaluation) on specific motivated behaviours and serve as proximal predictors of achievement related processes and outcomes (Elliot, 1999). But it is the appetitive (approach) and aversive (avoid) valence of competence striving that energizes the motivational process. It is assumed that the goals are the manifestation of "needs". This suggests that achievement goals represent approaches to self-regulation based on satisfying approach and avoid needs that are evoked by situational cues.

We have briefly discussed traditional achievement goal theory earlier, and it is clear that it is the goals themselves that are considered to be the critical determinants of achievement cognition, affect and behaviour. It is the goals that give meaning to the investment of personal resources because they reflect the purposes underlying achievement actions in achievement contexts. Once endorsed, the goal defines an integrated pattern of beliefs, attributions, and affect that underlie approach and avoid strategies, different levels of engagement, and the different responses to achievement outcomes (Kaplan & Maehr, 2002; Roberts *et al,* 2007). Achievement goals refer to

achievement-oriented or achievement-directed behaviour where "success" is the goal. Nicholls (1989) argued that these beliefs and perceptions form a personal theory of achievement in the activity that drives the achievement process, and that a conceptually coherent pattern of relationships should therefore exist between an individual's achievement goals (the subjective meaning of success) and his or her achievement striving. In the achievement goal approach, it is not how one defines competence with its attendant valence; it is how one defines success and the *meaning* of developing and/or demonstrating competence. Thus, the hierarchical approach presents energizing constructs that are different to the hierarchical model, and is clearly not an extension of achievement goal theory as claimed (e.g., Conroy *et al*, 2003).

One other conceptual difference has emerged from the development of measures for the hierarchical model. Duda (2005) has argued that because the interrelationships between the performance-approach, mastery-avoidance and performance-avoidance goals is low to moderate (e.g., Conroy *et al*, 2003), and only the mastery-approach and performance-avoidance goals have demonstrated independence, then this creates conceptual problems for the hierarchical approach. What are the expected relationships between the goals? Should they demonstrate greater independence to be recognized as extending the range of goals? And how does this relate to the evidence that task and ego goals have been demonstrated to be orthogonal in the traditional achievement goal approach? These aspects are ignored by the proponents of the hierarchical model.

In addition, as I have argued elsewhere (Roberts *et al.*, 2007), there is evidence that the hierarchical model may have different assumptions underlying performance approach and avoidance goals. Performance approach tendencies may be based on defining competence in normative terms, but recent research has suggested that performance avoidance may be based on one of three facets; impression management - that of "saving face" as Skaalvik (1997) argues, a focus to avoid demonstrating low ability (Middleton & Midgeley, 1997), or a fear of failure as argued by Elliot (e.g., Elliot & Church, 1997). A recent study illustrates this where Smith, Duda, Allen and Hall (2002) wished to determine whether the different measures used were measuring the same constructs. They found that impression management (Skaalvik) explained the most variance (40%), with fear of failure (Elliot & Church) and avoiding demonstrating low ability (Middleton & Midgeley) only explaining 9.4% and 8% of the variance respectively. Given the findings of Smith and colleagues (2002), perhaps it is more important for performance avoid people to protect self esteem (save face) rather than being motivated to avoid failing. Does protecting self worth have a greater role to play than avoiding failure?

Similar arguments may be made for mastery avoidance goals. These goals involve focusing on not making mistakes or not doing worse than a previous performance. According to Conroy *et al* (2003), mastery avoidance combines a desirable definition of competence with an undesirable focus on avoiding incompetence. It must be confessed that little is known of these goals as yet. With the traditional achievement goal approach, it is conceptually inconsistent to have a mastery, or task involved goal with a focus on avoiding appearing incompetent. What may cause mastery avoidance is that a mastery/task person may also be ego involved in the task? Achievement goal theory argues that orientations are assumed to be orthogonal, then the individual may have a task involving orientation as well as an ego involving orientation, and it is this

that may affect whether the individual is also concerned with the demonstration of incompetence. It may be that a mastery-avoidance person is one who has both ego and task goals and when the context is perceived to evoke ego involving criteria, they wish to avoid demonstrating incompetence (Roberts *et al*, 2007). This needs to be investigated more fully empirically, and only when we have data informing theory will we be able to determine the energizing mechanisms driving mastery avoidance, if that goal actually exists.

In achievement goal theory, the orientations are considered orthogonal and it is an important element of achievement striving, and helps us understand the motivational equation better. Individuals can have both orientations to one degree and another (e.g., Roberts, Treasure & Kavussanu, 1996). Even with elite athletes - those we would expect to exhibit high ego involvement and to succeed with such a profile (Hardy, 1997) - we find that they seem to function better when high ego involvement is tempered with high task involvement (Pensgaard & Roberts, 2003).

Being both task and ego oriented is conceptually coherent with achievement goal theory. Swain and Harwood (1996) have suggested that an individual with both goal orientations cannot fail to be satisfied because they have more than one criterion of success. Duda (1988) has asserted a similar notion and states that persistence may be increased with both orientations because a person has two sources of determining success. For an athlete, being both task and ego involved in an activity is both intuitively plausible and conceptually consistent with achievement goal theory. I have argued for a long time (e.g., Roberts, 1992, 2001; Roberts *et al.*, 2007) that one of the conceptual strengths of achievement goal theory is the dynamic nature of achievement goals. One can shift from one goal to another as the relevant information from the environment is processed. We must not forget that task and ego involvement are dynamic constructs and subject to ebb and flow as the athlete plays the game, or continues with the activity (Roberts, 2001). It is not whether an individual should be either task or ego involved, but rather when being task involved or ego involved is appropriate.

The hierarchical model also may be confounding worry with actual avoidance with mastery avoidance and performance avoidance variants and getting an artifactual factor structure that supports two different avoidance constructs (Smith, Cummings & Smoll, in press). Smith *et al.* were not able to validate the 2 x 2 model involving separate mastery- and ego-avoidance dimensions. Children clearly don't differentiate between the two when the items actually refer to avoiding achievement situations. Thus this raises more doubts about the veracity of the hierarchical definition of achievement goals.

3.3. Are there other goal theories?

Achievement goals have been defined in other ways too. One approach has been to use the concept of value, where goal orientations emerge from the value laden attractiveness of an achievement context. Values are directed at desirable end states of behaviour, and goals are seen as objectives (Bandura, 1986; Eccles & Harold, 1991). As an example, Eccles and her colleagues (Eccles & Harold, 1991) suggest that achievement goals emerge from values and expectancies. Mastery goals emerge from

intrinsic task values and a belief in one's competence to do the task, while performance goals emerge from the utility value of the task for success in an important domain, and the expectancy of outperforming others.

Goals have also been seen as "self-primes", a form of heightened self awareness (Kaplan & Maehr, 2002). Nicholls (1984) suggested that heightened self awareness may make thoughts of competence salient. What is an ego (or performance) goal may well represent a heightened awareness of the self as the person may focus on what one can do, or not do as the case may be. Self awareness certainly may affect ego or performance goals. It is interesting that the research into self awareness is meaningful to achievement goal theory, and may propose a future line of inquiry.

There may be other conceptualizations of achievement goals. It will be the business of future research to attempt to combine the various perspectives into a parsimonious explanation that combines how contexts and individual difference constructs forge achievement goals.

The foregoing reflects one major trend in achievement goal research, the attempt to converge achievement goals into a larger, more parsimonious framework. Elliot and colleagues have attempted to integrate achievement goal theory with more traditional concepts of achievement needs. Kaplan and Maehr (2002) have argued for more general processes of meaning construction that involve the self and the context into a broader framework. This is welcome as the development of specific achievement goals should be based on a sound conceptual framework.

3.4. Are there other achievement goals?

There are other achievement goals identified. Some came from early conceptualizations of achievement goal theory (e.g., Maehr & Braskamp, 1986); however, the parsimony of the dichotomous interpretation has been demonstrated over time. One early goal was a social goal that referred to social approval and/or interpersonal reasons for engaging in achievement tasks (e.g., Maehr & Nicholls, 1980). Little attention has been given to social goals in physical activity in recent times, even though some have raised the concept again when describing the achievement goals of children. Another early goal was that of extrinsic orientation, where the individual strove to achieve an external criteria of success (e.g., Maehr & Braskamp, 1986). But little attention has been paid to extrinsic goals, except within the framework of other motivational conceptualizations (e.g., Deci & Ryan, 2002). And qualitative research has identified other goals in addition to ego and task goals (e.g., Dowson & McInerney, 2001). It may well be that future research, particularly qualitative research, may identify and demonstrate how these goals may further our understanding on the origin and development of achievement goals, and the achievement behaviour they may explain.

The above reflects a second trend in achievement goal research, that of developing other achievement goals. In particular, there have been arguments in favour of recognizing different criteria for engagement in achievement striving, and that these have their own patterns of consequences. But researchers need to be careful in adding unnecessary complexity to the parsimonious interpretation of achievement goals without a concomitant increase in conceptual integration.

4. Conclusions

There are two important conclusions we may draw from 25 years of achievement goal research. The first one is that ego involvement (however it has been defined and/or conceptualized) is more likely to lead to maladaptive achievement behaviour, especially when participants perceive their competence to be low, are concerned with failure, or invested in protecting self worth. In such circumstances, the evidence is quite clear, motivation ebbs, task investment is low, persistence is low, performance suffers, satisfaction and enjoyment are lower, and participants feel more negatively about themselves and the achievement context (Roberts *et al*, 2007). But this does not mean that ego involvement is always negative. In some situations for some people, it is positive. When one has a performance approach goal (e.g., Elliot, 1997), or has an ego (or performance) goal with a high perception of competence (e.g., Pensgaard & Roberts, 2002), then such states of ego involvement are facilitative of achievement and function as positive motivating constructs. When you believe you are competent, then you want to demonstrate that competence, and will seek out contexts to demonstrate the competence. But even then, ego involvement is fragile, and can lead to maladaptive achievement striving as context information is processed and leads one to perceive one's competence to be inadequate (Dweck & Leggett, 1988). As an example, when a child moves from one age division to another, and was a "star" player in the younger age division, he/she may have had high motivation to demonstrate that competence in a normative way because he/she perceived him/herself as able. Suddenly, he/she is less a "star" in the older division. As a consequence, he/she is less likely to be able to demonstrate normative competence, then he/she loses the motivation to perform. In that case, motivation ebbs, persistence lessens, and the child feels less positive about him/herself.

Second, the research is unequivocal that task (mastery) goals are adaptive. When task involved or participants perceive mastery criteria in the context, then motivation is optimized, participants are invested in the task, persist longer, performance is higher, satisfaction and enjoyment are higher, and participants feel more positively about themselves and the task. Being task involved has been consistently associated with desirable cognitive and affective responses, and more and more evidence is accumulating that achievement behaviour and performance are enhanced too. The research is now clear: To optimize motivation in physical activity, we should promote task involvement. Whether we do it through enhancing socialization experiences so that the individual has a task goal orientation and is naturally task involved (Nicholls, 1989), or we structure the physical activity context to be more task involving (e.g., Treasure & Roberts, 2001), is irrelevant. The evidence has led many sport psychologists to conclude that task involvement better enables learners to manage motivation in the sport experience.

It is probable that always fostering task involving criteria may not satisfy all individuals in the sport experience, especially elite athletes (Hardy, 1997). It may well be that athletes at all levels of competition would benefit from being **both** task and ego involved. Being both task and ego involved is conceptually coherent with achievement goal theory (but not the hierarchical model), and may be valuable in the learning process because it provides multiple sources of competence information to the athlete. Encouraging individuals to be task involved in achievement tasks has

been demonstrated to optimize motivation, even with elite athletes, but we need not be blind to the fact that some athletes do favour and are motivated by ego involving criteria. The task for the investigator and the practitioner is to determine when task and/or ego involving criteria of success and failure are motivational.

As is clear, many questions remain. Are achievement goals the manifestation of needs, values, the valence of outcomes, and/or cognitive schemas driving how one sees one's world and how one responds to the environmental cues extant with achievement striving? What gives meaning to achievement striving for the individual? Within sport and physical activity, we need to address these questions to expand our conceptual understanding of motivational processes and achievement behaviours so that we can intervene effectively to enhance motivation and make the sport and physical activity context enjoyable and satisfying for all. As Nicholls would have stated, we need to optimize motivation for all, not only those who benefit from normative feedback.

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SPORT, EDUCATION AND SOCIETY: THE CHALLENGE

1. Introduction

In a book of this nature I thought it would be valuable to explore the relationships between the ideas of sport, education and society, all of which are changing at an increasing rate. Many of these changes, which place demands upon teachers, coaches and administrators in both sport and education were probably not considered 50 or even 20 years ago. Consequently it may be helpful to look briefly at these relationships and their effects on current, and possibly future, practice. I should say at the outset that, over several decades in the field, I have come to a position that promotes sport for kids rather than kids for sport. This principle guides what I shall say here, and I hope that during the discussion I shall be able to present the case for that position.

2. Society, education and sport

I have deliberately changed the order of presentation of these concepts because it seems to me that society embraces those sporting and educational processes within it (see Figure 1).

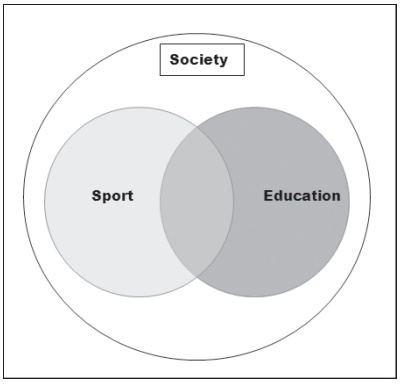

Figure 1. Relationships between Society, Education and Sport

Essentially, while sporting and educational processes occur within a social setting there is an overlap between sport and education. Sporting activities, e.g. games, athletics, swimming and gymnastics are included in educational curricula , and sport can have educational influence, for better or worse! The impact probably depends less on the content and more on the process of the programmes; in the words of the well known song "It ain't what you do but the way that you do it!" However, that in itself is dependent upon the vision of one or more clearly understood goals for the process. They will determine, ultimately, both the content and process.

3. Society

There is little doubt that the last several years have seen the growth, almost at an exponential rate, of change in societies throughout the world. Migration rates are on the rise throughout the world with many from poorer and third world nations migrating to more affluent countries. The USA has been subject to a steady increase in its Hispanic population, which is having marked effect on its demographic characteristics and politics. The recent expansion of the European Union has led to a considerable flow of labour from the eastern nations to the more affluent western members. The movement is not all one way. Increasing numbers of British people are taking advantage of early retirement, inexpensive housing and employment opportunities to move to the warmer parts of Europe and living in what sometimes have become, English enclaves – not always to the desire of local people! All these developments have political, economic, and educational effects and can cause considerable upheaval.

Since the fall of the Berlin Wall in 1989, which signalled the demise of Communism in eastern Europe, one of the most significant socio-political changes has been the migration of Islamic peoples to western Europe and beyond and the rise of militant Islam. This is already having a major effect on politics and economics and upon education protocols in the host countries and has resulted in conflict. It is predicted that the situation will become much more volatile in the relatively near future. A senior British military strategist, Rear Admiral Christopher Parry, has recently (June, 2006) warned that western civilisation faces a threat similar to that which destroyed the Roman Empire. As a result of environmental destruction, a population boom, advancing technology and a radical Islam he predicts a world of 'reverse colonisation' in which groups of people travel between countries exploiting modern communications and cheap travelling costs, without developing any commitment to the host country (Almond, 2006). Such a scenario suggests challenges to the notion of assimilation and the integrating effects of education. In the United Kingdom this has already prompted debate about the place of church (now 'faith') schools, which operate to specifically tailored curricula. Previously the faith schools were largely limited to Anglican, Catholic and Jewish schools which were sought after as promoters of high academic standards but largely promoted tolerance and allowed children to mix freely. More recently however the spread of Muslim schools which promote strict adherence to Islamic principles and teaching is causing concern among traditional "European" schools. Add to this the continuing recognition of women's equality in many male

dominated societies and it can be argued that we are in a period of considerable social change that will have effects on, and may conflict with educational, social and athletic life. For example In 1992 Hassiba Bulmerka won the 1500 metres to become Algeria's first Olympic gold medallist but was criticised by fundamentalist Muslims who objected to her athletic dress and she was forced to live and train in Europe. The values associated with particular cultures are coming into conflict as migration increases and the prevailing cultural norms seem to be increasingly under threat. A recent proposal in the United Kingdom would change the goals of education to reduce the teaching of a particular set of cultural values and replace it with encouraging young people to develop their own set of "secure" values. This has provoked considerable argument and some dismay since the values that may be developed may not be in accord with the prevailing culture. In particular, clearly identifying right from wrong appears to be under threat and children may be encouraged to take a relativistic view of their own, and others', actions. This is of particular relevance to sport and physical education, as I shall argue later.

The point of the current argument is to emphasise the rapidly changing nature of society (societies) and the need for coaches and teachers to reflect on their role within them. Unless coaches and teachers understand the widespread influence they have over their charges and the nature of cultural norms and values systems within which they operate they will not optimise the influence that they have.

4. Education

Broadly, education may be considered as a process by which societies prepare their young people for adulthood and to make a contribution to the maintenance of that society. This process embodies experiences which contribute both to the development of maturity and independence and to the collective welfare of the society itself. In modern industrial and post-industrial societies much of the time devoted to educational processes is training in skills appropriate to the demands of the society. So, we have training in, for example, language skills, mathematics (elementary), information technology and so on. Increasingly, in the United Kingdom at least, there is a drift towards subjects for which students can see a direct and immediate market in order to progress to higher education or to the workplace. This concern with content may overshadow the broader outcomes of education that assist the transmission of dominant cultural expectations such as personal growth and the attitudes and values that impact upon social behaviour.

The developmental period of human young is longer than for other species, taking in the region of twenty years. During that period children acquire language and numeracy skills, abstract thought, physical skills and an appreciation of morality. The latter may be exemplified through the learning of conformity to rules. It is reasonable to suppose that, during this extended developmental period all experiences contribute to the learning process, for better or worse. This leads to the conclusion that those who interact with young people necessarily influence them and are obliged to maximise the benefits of that interaction beyond the strict confines of their subject material.

5. Physical Education

Let me now turn to the specific domain of physical education, not surprisingly I will draw upon my experience of the subject in the United Kingdom. The National Curriculum in Great Britain distinguishes PE & Sport as follows: P.E. emphasises learning in a physical context, the purpose of which is to develop knowledge, skills, understanding, and to promote physical development. Sport, on the other hand is a range of physical activities where the emphasis is on participation and competition, where the contest and its outcomes are the central focus. Nevertheless the curriculum, or its proposers, recognises that sporting activities and, indeed, the practice of sport *can contribute* to education (italics added; National Curriculum, 1999). A more recent statement issued by a group of experts at the National Summit on Physical Education in January 2005 introduced the concept of physical literacy as an objective of the physical education curriculum as follows:

> "The aim of physical education is systematically to develop competence so that children are able to move efficiently, effectively, and safely and *understand* (my italics) what they are doing. The outcome – physical literacy – is as important to children's education and development as numeracy and literacy." (Talbot, 2006, p. 9)

Two leading figures in physical education in the UK, Margaret Whitehead and Elizabeth Murdoch, have developed the concept further and point out that, while physical education is limited to the school years, physical literacy has a life-long significance. They consider that the benefits it bestows include self-esteem, self-confidence, physical competence at the level appropriate to the individual, sensitivity to interpersonal relationships and an understanding of the contribution of exercise to health (Whitehead & Murdoch, 2006). Thus there are considered to be physical, cognitive, social and personal benefits.

Since I have argued that all experiences may contribute to learning in some way it is pertinent to ask not only what does it contribute but also: are there unintended consequences? Furthermore, since much of P.E. consists of sporting activities there is inevitably a degree of competition and the nature of the activity may change because the competitive outcome, not the process, becomes more important. Therefore, we are in a situation in which P.E. and Sport involve the many of the same activities to different ends.

Because of this divergence the individualistic and altruistic ends of physical education as envisaged by Whitehead and Murdoch may become subservient to the achievement goals demanded by sport as the boundaries between physical education and sport become more indistinct. Thus the teacher becomes a sport coach, often as an enjoyable extension of his or her formal teaching duties and the part-time amateur coach becomes a physical educator almost by default. For example, and with reference to the distinction between right and wrong, which has become an issue for debate in UK education proposals in recent months, sports activities provide clear rules about what is and what is not allowable – playing within the rules is a condition of participation, whilst we must acknowledge that exacting maximum advantage over opponents within those rules is the mark of skilled performers. Thus sports activities

provide a golden opportunity to teach the difference between right and wrong and lay the foundation for understanding moral principles, as well as providing opportunities to excel at given skills.

6. Sport

Let us now turn specifically to sport. That sport forms a significant part of modern life across the world is self-evident. The Football World Cup taking place in Germany at the time of writing was expected to draw an audience of over 100,000,000 television spectators for each game; this is probably the biggest marketing event in television history. The quadrennial celebration of global sports events also includes the Olympic Games, probably the largest sport festival but one which is free of overt commercial sponsorship, and World championships in most of the sports included in the Olympics. The revenue generated by sports events is enormous and forms a significant part of the global economy. This puts the emphasis on commercial outcomes and competitive success as opposed to educational benefits. Nevertheless such benefits remain possible outcomes.

Sport, as opposed to physical education, fulfils a number of different functions in modern society some of which I will address briefly. First, it promotes the pursuit of excellence. This is a necessary outcome of the competitive element and has been said to encourage the fascist values of admiration of strength and contempt for weakness which reaches its ideal in the individual sports that are on show at the Olympic Games (Tannsjo, 2000). This admiration of the elite may actually lead to a reduction in participation in sport as more people are content to be spectators. Thus, the drive to excellence may be instrumental in reducing sport solely to a form of entertainment.

Secondly, sport fosters a sense of identity. People take pleasure in the success of their local and national teams and bask in the reflected glory that is produced. Increasingly we see demonstrations of social identity at sports events, sometimes to the detriment of the event itself. This process can promote national unity as opportunities for national achievement proliferate and nations are ranked in superiority. Hence, young people are the necessary raw material to sustain the pursuit of national success.

Thirdly, sport is a facet of the entertainment industry in which different sports and events compete for spectators. Given the economic value of sport and its infrastructure the industry, for that is what it is, demands expansion and has resulted in extensive labour migration in many sports as athletes sell their skills. However, failure means that sports clubs may be bankrupted and unsuitable performers – athletes – become a liability. Interestingly, unlike any other business, professional sport depends upon the survival of competitors. It is, therefore in the interests of clubs to keep rivals in business! The draft system in the USA recognises this and encourages an equal distribution of talent. In the major European sports the free market operates and leads to the accumulation of the best talent in a few clubs, e.g. Chelsea FC, Real Madrid etc. In this process, as is the case with nationalism, young people are the raw material without which the product cannot be manufactured.

Thus, a fourth function, or perhaps outcome, of sport is to identify talent. In the race for national and commercial success only the most talented survive and sports bodies and clubs must develop strategies for identifying and enlisting talented

children. This, in turn, places pressure on coaches, parents, and, ultimately, the children themselves.

Fifthly, sport provides opportunities for strenuous physical activity, which in the current climate, has become more desirable in order to combat the rise in both childhood and adult obesity. As young people are increasingly drawn to electronic forms of recreation the need for attractive physical activity is more pressing to establish healthy exercise patterns for life and preserve the health of the population.

Finally, sport can be an educational forum. It is felt that children can develop physical and social skills and self-confidence, be presented with challenges, and better academic performance. They also have the opportunity to prepare for adult recreation, with its consequent health and social benefits; and there are career openings for a few. However, the educational benefits, as anticipated in the development of specialist sports schools in the UK have not yet been clearly demonstrated (Jesson & Taylor, 2002; Jesson, 2003).

On a slightly different tack there are outcomes of sporting participation that may be thought of as unintentional, or of secondary importance. And yet many educators and sports coaches see them as an integral part of the process of taking part in sport. I am referring to those personal qualities which may be encouraged by sports participation and which some consider of major lifelong benefit. As an example I will draw from a little book by Bill Bradley entitled *Values of the Game* (1998). Bradley was an all-American basketball player while at Princeton, Olympic gold medallist, a Rhodes scholar, and won two NBA championships with the New York Knicks. He later went on to serve as the Senator for New Jersey. So he has been an athlete, scholar and politician and is well placed to reflect on his experiences in basketball. In his book he describes some of the qualities that it imbued in him – perhaps the value of the game to him. By implication he believes that such qualities can be made available to all who commit themselves to sporting excellence. The qualities that he identifies are as follows:

- *Passion*: The sheer joy of performing skills and being a member of a team working towards a single goal.
- *Discipline*: A quality common to all great athletes shown in their determination to practice hard to achieve their goals.
- *Selflessness*: Helping others and helping oneself; for those in team sports it means putting the team before oneself to achieve a common end.
- *Respect*: A strong commitment to the team ethos, for other players and the requirements of the game.
- *Perspective*: The ability to act on the knowledge of one's strengths and weaknesses; to accept victory with modesty and dignity and failure with grace and determination.
- *Courage*: Willingness to give your all for the team, to play in spite of your fears and to return when you don't initially succeed.
- *Leadership*: Getting others to achieve what they might not have achieved without your influence.

- *Responsibility*: Accepting ownership of one's own weaknesses and putting them right.
- *Resilience*: Being able to learn from defeat or failure and to come back stronger.
- *Imagination*: Breaking out of the confines of the predictable, "thinking out of the envelope"; it allows good players to become great.

It is interesting that there is no place in this list of personal qualities for a sense of justice and fairness. Sport is structured by sets of rules which constrain certain types of behaviour and, in so doing, fashions the skills that are necessary to achieve the ends of the particular sport or game. Thus in association football players use the feet to play the ball and may not handle it, while in basketball the game is played only with the hands. Violations of the constraints result in penalties of varying forms. And yet players will try to violate them or take advantage of accidental violations in order to gain a tactical or even a scoring advantage which is undeserved. Hence, taking part in sport exposes the participants to a moral choice on many occasions – should I foul an opponent now? should I claim that I was fouled when I wasn't? Can I get a penalty shot on goal?

The influential German philosopher Immanuel Kant explored the nature of moral choice at length and had as a basic principle that moral decisions have no purpose outside of themselves, there is no utilitarian outcome to a moral choice. He said that there were two compelling principles with regard to the command of reason. The first is the *hypothetical imperative* which says that one must do *x* in order to achieve an end *y*. Thus the action of choice is determined, in sport, by doing anything to assist in winning whether within the laws of the game or not. So, it is acceptable to cheat, upset your opponent by wasting time, insulting her, or by taking drugs. The second principle, however, known as the *categorical imperative,* demands that one must act on the principle that the action should become law and, in essence, is the virtuous thing to do (Russell, 1945 / 1972). Thus to cheat, insult an opponent or take drugs, is non-virtuous and hence is immoral. These principles seem to me to embody the dilemma that faces athletes and coaches on a daily basis and also provide the opportunity for education through sport – to distinguish between right and wrong and act accordingly. A major categorical imperative for Kant was that no-one should use another as the means to his own ends. This, too, has significant implications for youth sport coaches (see Ryan, 1995).

7. Values in Physical Education and Sport

This brings me to the notion of the values that drive our choices in sport and life itself. The essentially elitist, outcome orientation of sport conflicts with the universalist, process orientation of physical education. In the world of sport, the pursuit of power, prestige and status demands success and children's broader developmental and educational needs may be subjugated to those values.

Thus we are faced with a dilemma to choose between different value sets. Values are the guiding principles by which we live our lives, or primary motivational forces. They are essentially beliefs that we hold about desirable goals or actions; they transcend situations and, hence, are universally applicable; they guide the selection of behaviour; and they can be ordered by importance (Rokeach, 1973; Schwartz, 1992). These characteristics imply, therefore, that all values are desirable but that we make choices about their relative importance. When we are faced with a value conflict we must make a choice, e.g. is it more important for me to be the best or to be the best I can be? There is an important difference between these two.

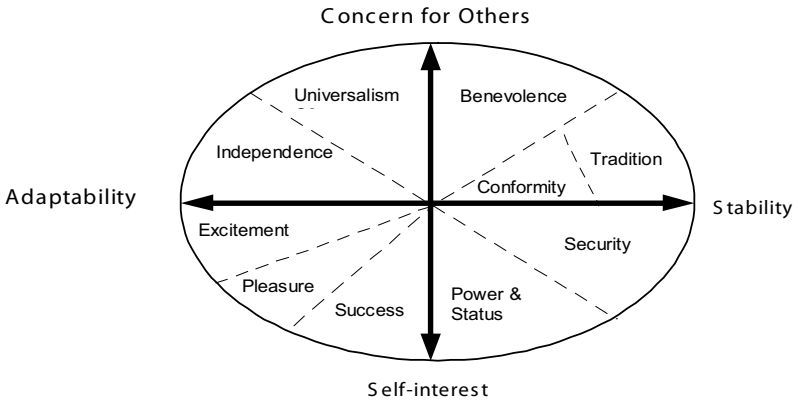

Figure 2. Structure and content of values applied to sport. (Adapted from Schwartz, 1992)

Values have both content and structure. Value content refers to the type of goal involved, e.g. competitive success. Structure refers to the relationships between different goal types. After a world-wide study Schwartz (1992) showed that values can be mapped around two major axes, each with two polar extremes (Figure 2). The first represents Self-interest to Concern for Others. The second represents Adaptability to Stability. Ten value types (domains) are located around these axes and are more or less compatible according to their proximity or separation along them. In the case shown, Achievement values are opposite values of Benevolence but compatible with Power, and values concerned with Power are opposite to Universalism, which is compatible with Benevolence – which represents those values concerned with care for others. Universalism is defined as demonstrating understanding, tolerance, and enhancement of the welfare of all; for example, both team-mates and opponents. Benevolence is defined as demonstrating similar concerns for those with whom we are in frequent contact, for example, team-mates (Sagiv & Schwartz, 2000). Since values are ranked into systems, we can experience conflict when we are forced to choose

between opposing values that are similar in importance to us. So herein lies a paradox; we promote competitive activities in which the goal is to beat an opponent, while at the same time we ask young people to be altruistic. Schwartz (1992) considers that value conflicts rarely arise in everyday life but, in sport, it is common; the activity is essentially self-interested but requires selflessness in the expression of sportsmanship. This lies at the heart of the potential conflict between an activity as education and activity as sport. However, for adolescents Bardi & Schwartz (1994) have suggested that achievement values are located in the self-direction domain, which may mean that the conflict is experienced less among younger athletes.

Indeed, we have some data that suggests that young athletes do not encounter the problem. In a large survey of values in young athletes, my colleagues and I have found that most important values were Enjoyment followed by Personal Achievement, then a group of values concerned with fairplay, which we termed socio-moral values. The least important value, in a list of 18, was Winning (Lee, Whitehead & Balchin, 2001). We have since replicated this with other samples and get consistent results, so we are confident that it is reliable data.

8. Transmission of values

Teachers and coaches are an important influence on the values of children (Lee & Cockman, 1996) but it is important to show consistency between words and deeds and across different situations. In adults, changes in values are most reliably brought about by exposing discrepancies between self-image and perc eived value systems (Rokeach, 1973). In children, it is reasonable to propose that these two facets of personality might develop together because of interpersonal influences from significant others, such as parents, teachers and coaches.

For example, if the development of winners is the prime objective, as it is in elite sport, then we may emphasise competitive success above all else, encourage winners, reject those who do not measure up, and encourage competitors to take all possible advantages. However, if, as teachers, holistic development of young adults is the prime consideration then we will encourage every athlete to do his or her best, set individual targets for performance, support all athletes even when they fall short, and reward effort, commitment, good behaviour and personal improvement.

There are clearly important implications of this analysis; I will identify just three. First, the attitudes and behaviours that we see in our young athletes are strongly influenced by the values that we hold and transmit. Second, elitist values demand superiority – and only a few coaches work with the best; in the pursuit of competitive success, educational values may be overwhelmed. Third, sport forces a confrontation with values, perhaps as nowhere else.

9. The challenge

In summary, Schwartz' model, upon which I have based this argument, predicts that educational values are self-transcendent while sport's values are self-enhancing. Thus, young people are inevitably forced to make choices – frequently moral choices – all the

time in sporting activities. This in itself creates the paradox. Physical education and sport use the same activities for different purposes; a benevolent motive can produce unwanted -- possibly malevolent -- outcomes. Therefore, stronger links between school and sport force a confrontation of values and create a need for careful philosophical examination by those entrusted with the development of the programmes. The effects of programmes are brought about by not what we do but the way that we do it.

The challenge, therefore, is to be able to distinguish the Educational Process from the Sporting Performance Product, to treat each child as an end in itself and not as a means to an end. This means that teachers and coaches should provide programmes that have a sound philosophical basis, with clear objectives, and provide the best opportunities for each and every individual to develop whatever talent they possess and to promote personal growth as they progress from young people to adulthood. It means asking ourselves serious questions about what we are trying to do. For coaches this may be particularly enlightening. Some may see themselves as an extension of the school physical education programme which focuses on the development of full potential, however little that may be, of all the youngsters who turn up. Others may see themselves as being there to develop excellence in the few talented youngsters in their charge – and by definition talented youngsters are in short supply! Still others may see it as a career opportunity in which coaching successful young athletes is a step up the ladder to future glory. Your response to this challenge demands careful consideration and is revealing; it will clarify why you are coaching youngsters.

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