Conference proceedings

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- Sporting

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### In cooperation with (consortium group institutes):

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Welcome in Antwerp!

This year Antwerp bears the title of European Capital of Sports. Antwerp didn’t receive this honour for no reason, but because two out of three residents of Antwerp play a sport on a regular basis. The SPLISS Conference on Elite Sport Success also contribute to the sporty character of our city. We are pleased to welcome you here.

In 2013 the city promotes sports as a way of creating community spirit. For this purpose, a virtual sports club was established: Sporting A. Residents of Antwerp are automatically members, but of course we especially hope to have a great deal of true supporters.

Sporting A wants to bring sports even closer to the residents of Antwerp. Not only are we bringing top sporting events to our city, we are seeking to get everyone exercising. Squares and plains in the various neighbourhoods have been transformed into true sporting arenas. In this way they became sporting meeting places for the local residents. Above all, in 2013 everyone has the chance to participate in sports in unexpected locations all over our beautiful city.

All information about sports in Antwerp can be found on our website www.sportingA.be. You can also follow us on Facebook (www.facebook.com/sportingantwerpen) and Twitter (www.twitter.com/SportingA_).

We sincerely hope that you enjoy this conference and hope to see you again soon!

Ludo Van Campenhout
Chairman of Sports
SPLISS Conference

On behalf of the SPLISS Consortium members, welcome to our conference in Antwerp, Europe’s Capital of Sport for 2013. Ten years ago we were at the European Association for Sport Management conference in Stockholm and discovered that we had common research interests in elite sport policy. We agreed to collaborate and from this modest beginning the SPLISS project was formed. Since then, SPLISS-related papers have been published in Europe, America and Australasia and in 2008 we celebrated the publication of our book “The Global Sporting Arms Race”.

It is hard to believe that a research project which started off as a small scale pilot study at the heart of Veerle De Bosscher’s PhD thesis would somehow develop into having its own international conference. Today we have sixteen nations(regions) from four continents taking part in SPLISS 2.0. We get regular requests for new countries to join the project, there is a demand for a Paralympic version of SPLISS, and there is probably a lifetime’s work for somebody rolling out SPLISS on a sport-specific basis.

Over the next two days we will learn the key findings from the SPLISS 2.0 project and have the opportunity to discuss the ‘state of the art’ that is elite sport policy. None of this would have been possible without the hard work and commitment of the contributor nations. Many have worked tirelessly and with limited resources to undertake the vast amount of work involved in compiling the various inventories and surveys that make up the raw data. In Brussels we have also worked tirelessly to pull the data together to make a coherent whole. The level of dedication shown by those involved in the project mirrors that of elite athletes in their pursuit of sporting excellence.

SPLISS has been a great project to be involved in. In addition to the papers and the book there has been the opportunity to present the findings at conferences all over the globe. Elite sport policy research has evolved its own strand within the European Association for Sport Management conference at which the papers attract large and highly engaged audiences. Researchers involved in the project have gone on to achieve doctorates and professorships whilst others have been elected to prestigious national level sports committees in their countries. In addition we have all formed productive research collaborations and made many new friends along the way. These outcomes are the essence of successful international research projects - long may they continue.

For more information about SPLISS, please visit: www.SPLISS.net

Veerle De Bosscher  Simon Shibli  Hans Westerbeek  Maarten van Bottenburg
## Scientific committee

<table>
<thead>
<tr>
<th>Name</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair: Prof. Dr. Veerle De Bosscher</td>
<td>Vrije Universiteit Brussel (BE) and visiting professor in Utrecht University (NED)</td>
</tr>
<tr>
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</tr>
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</tr>
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</tr>
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</tr>
<tr>
<td>Prof. Anna Villanova</td>
<td>INEFC Barcelona (ESP)</td>
</tr>
<tr>
<td>Dr. Mathieu Winand</td>
<td>University of Stirling (UK)</td>
</tr>
</tbody>
</table>
Content

GENDER DIFFERENCES IN FOUR RUGBY GOVERNING BODIES’ OLYMPIC DEVELOPMENT PLANS 10

A RESOURCE-BASED COMPETITIVE ADVANTAGE IN ATHLETICS 12

CREATING A DEVELOPMENT PATHWAY FOR PARALYMPIANS - A CASE STUDY OF PARALYMPIC SPORTS IN JAPAN 14

THE CANADIAN SPORT FOR LIFE / LONG TERM ATHLETE DEVELOPMENT MODEL: OPPORTUNITIES AND CHALLENGES 16

EVALUATION OF DUTCH ELITE SPORTS SCHOOLS FOR SECONDARY EDUCATION 18

TRICKLE DOWN EFFECT OF THE 2012 UCI ROAD WORLD CHAMPIONSHIPS 20

TALENT COACHES AND PARENTS ON SUCCESSFUL AND SOUND TALENT DEVELOPMENT 22

THE SOCIAL SURPLUS VALUE OF SPORT 24

COMPARING FEMALE ELITE ATHLETES’ CAREER DEVELOPMENT TO THE HOLISTIC ATHLETIC CAREER MODEL 26

THE JUDO IN BRAZILIAN PRINTED MEDIA DURING OLYMPICS GAMES 2012: BEHAVIOR OF ATHLETES, SPECTACLE AND SPORT 28

STRUCTURAL EQUATION MODELING PUBLIC ACCEPTANCE OF THE ELITE SPORT POLICY IN JAPAN 30

HIGH PERFORMANCE JUDO: CRITICAL SUCCESS FACTORS FOR PERFORMANCE DIRECTORS 32

EXAMINING PSYCHOLOGICAL CHARACTERISTICS OF GRASS ROOTS, PRE-ELITE, & ELITE ATHLETES 34

WHAT DO WE KNOW ABOUT SPORTS TALENT IN PORTUGAL 36

TURNAROUND STRATEGIES TO HALT PERFORMANCE DECLINE – CONSEQUENCES OF NOT MEETING ‘NO COMPROMISE’ TARGETS 38

ELITE SPORT AND HIGHER EDUCATION IN THE BRUSSELS CAPITAL REGION 40

THE TRANSITION FROM JUNIOR TO SENIOR ATHLETE: A HIGH PERFORMANCE DIRECTORS’ PERSPECTIVE 42

TWO CULTURES: ELITE AND SPORT-FOR-ALL? 43

THE USE OF HEADCAM TO INVESTIGATE COACH LEARNING WITHIN ELITE COACH EDUCATION AND PRACTICE 45
THE LEGACY OF PARALYMPIC GAMES – LEADING TO SPORTING SUCCES? 47
ELITE SPORT SYSTEMS IN DEVELOPING SPORT NATIONS: MORE QUESTIONS THAN ANSWERS 48
THE ELITE SPORT AND MILITARY PARTICIPATION IN INTERNATIONAL SPORTING SUCCESS 50
THE INTERFACE BETWEEN COMMUNITY AND ELITE SPORT: A NEW ZEALAND PERSPECTIVE 52
INNOVATIONS IN ELITE SPORTS AND THEIR CONTRIBUTION TO SPORTING SUCCESS 54
MEASURING WINNERS AND LOSERS – AN ANALYSIS OF THE LONDON OLYMPICS RESULTS IN A COMPARATIVE AND HISTORICAL PERSPECTIVE 56
SPORT EVENTS AND INTERCHANGE: WHAT BRAZIL HAS DONE IN RECENT YEARS? 58
A COMPARATIVE STUDY ON THE EFFECTIVENESS OF GSR-BIOFEEDBACK, DEEP BREATHING AND SAVASNA TO ACHIEVE RELAXATION IN ELITE ATHLETES 60
HAS TALENT DEVELOPMENT POLICY IN SWIMMING IN THE NETHERLANDS BEEN SUCCESSFUL? 62
ORGANIZATIONAL STRUCTURE OF BRAZILIAN PARALYMPIC SPORTS 64
NATIONAL DIAGNOSIS OF SPORTS: A STRATEGY FOR THE PLANNING AND DEVELOPMENT OF SPORTS POLICIES IN BRAZIL 66
TALENT IDENTIFICATION IN FOOTBALL: TOWARDS A SOCIOLOGICAL UNDERSTANDING OF PRACTICE 68
THE STATUS OF SPORTS FOR PERSON WITH DISABILITIES IN DEVELOPING COUNTRIES: THE CASE OF KENYA 70
THE INTERNATIONAL OLYMPIC COMMITTEE – INTERNATIONAL PARALYMPIC COMMITTEE STRATEGIC RELATIONSHIP AND ITS IMPACT ON OPPORTUNITIES FOR ELITE ATHLETES WITH DISABILITIES: A CRITICAL PERSPECTIVE 72
ATTITUDES AND MOTIVATIONS OF ATHLETES AND COACHES TO COMPETING AT MAJOR EVENTS 76
SPLITTED SPORT? TOWARDS A BETTER INCLUSION OF ATHLETE WITH A DISABILITY 79
SILENT RESULTS – THE EFFECT OF NOISE ON SPORT PERFORMANCE 81
THE HOLE IN THE PYRAMID – THE STRUCTURE OF HUNGARIAN BASKETBALL 83
QATAR’S MOTIVES FOR HOSTING MEGA SPORTING EVENTS AND FUNDING ELITE SPORTS 85
A COMPARATIVE ANALYSIS OF TEN ELITE WOMEN’S SOCCER COUNTRIES USING ANALYTICAL HIERARCHY PROCESS 87

TWO DIFFERENT APPROACHES, SAME RESULT: USING SPLISS AS A THEORETICAL BASIS FOR EVALUATING THE OLYMPIC SUCCESS OF USA BASKETBALL AND SWIMMING 89

DEVELOPMENT OF RIVALRY IN OLYMPIC WINTER SPORTS 90

SHOULD ELITE SPORT RECEIVE PUBLIC FUNDING IN DEVELOPING SPORT SYSTEMS? 92

IDENTIFICATION AND EARLY DEVELOPMENT PROGRAMMED 94

THE GAME CHANGER IN OLYMPIC SPORT 98

THE CHALLENGES OF DATA ANALYSIS FOR DECISION MAKERS IN SPORT 99

BRAZILIAN OLYMPIC COMMITTEE STRATEGIC PLAN FOR 2016 100
GENDER DIFFERENCES IN FOUR RUGBY GOVERNING BODIES’ OLYMPIC DEVELOPMENT PLANS

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Rugby has regained its place in the Olympic Games for 2016, after a 92 year hiatus. However, the International Rugby Board (IRB) and the International Olympic Committee (IOC) identified ‘Sevens’ as a better fit than the traditional 15-aside game for the Olympics based on three factors. First, the Sevens competition only takes two to four days, while 15-aside takes six to eight weeks. Second, the IRB tier two and three nations have proven that they are competitive with traditional tier one nations in Sevens, opening the game to a wider global population. Third, the emergence and competitiveness of women’s Sevens was an IOC requirement for Olympic inclusion of a new sport. Nevertheless, not all countries have placed a priority on gender equality.

Aim
This presentation discusses what national governing body (NGB) structures, policies, and values changed or remained constant in regards to women’s elite rugby and how those developments differ from men’s rugby. Further, there will be an explanation of why and how those changes/continuances occurred. It compares two developed countries- Australia and the USA, with an emerging or “BRICS” country- South Africa, and a developing country- Kenya.

Theoretical Background
A theoretical map was developed from three previous works. First, institutional theory, particularly O’Brien and Slack’s (2003, 2004) work on field-level characteristics, guided the examination of ‘why’ changes in the NGBs occurred. The four field-level characteristics examined were actors, exchange processes, legitimated forms of capital, and regulatory structures. Second, Laughlin’s (1991) model of organisational responses to environmental disturbances was employed to show ‘how’ the changes occurred: rebuttal, reorientation, colonisation, or evolution. And third, design archetype mapping of sport organisations, as developed by the research of Greenwood, Hinings, Slack, Kikulis, Thibault, and Amis from 1992 to 2004 (Amis, Slack, & Hinings, 2004; Kikulis, Slack, & Hinings, 1992), assisted in understanding ‘what’ structures and values may have changed.

Research Design
A case study approach was adopted for this research. Consideration for case selection was given to comparing across various contexts, such as IRB competition tier level and national economy, resulting in selection of the USA, Australia, Kenya, and South Africa. An online questionnaire asked 41 respondents employed by NGBs to compare gender differences in current organisational values, policies, and structures to before the declaration of Olympic inclusion. Those responses assisted in formulating semi-
structured interview questions, which provided deeper insight into gender differences from 20 interviewees consisting of NGB professional staff.

**Results and Discussion**

A major theme emerging from the data is gender differences between the developed nations (USA and Australia) and developing nations (South Africa and Kenya). In the developed nations, women’s rugby is gaining equal NGB support with the men’s programmes; in fact, Australia has provided more funding and domestic competition structures for women’s Sevens than for men’s. In contrast, South Africa and Kenya have focused the majority of resources on growing men’s Sevens. However, South Africa has demonstrated steps towards a more comprehensive women’s strategy for the future. The most common motive provided from the developing countries for the disparity in women’s rugby development was negative return on investment - the potential cash inflow from increasing female participant membership dues, hosting competitions, and sponsorship could not negate the expenses for the women’s programme. This deficit would also occur in the developed countries if it were not for Olympic committee and/or government funding. This highlights the need for government support of gender equality in developing countries.

A mostly unstated motive for gender differences is that rugby has traditionally been a male sport. A stigma of women in contact sports has prevented NGBs from establishing gender equality in both elite programmes and NGB management. The IRB itself only instigated a women’s Sevens Rugby World Cup in 2009 to satisfy IOC requirements for inclusion. The USA and Australia have begun to hire women in upper-level managerial positions (Australia even appointed its first-ever female board member). Women still lack an equal footing in these NGB management positions; however, opportunities have increased since Olympic inclusion. This is contrary to South Africa and, especially, Kenya. This may highlight that for a NGB to value women’s elite performance, they may need to hire managers whom personally value gender equity.

**References**


A RESOURCE-BASED COMPETITIVE ADVANTAGE IN ATHLETICS

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Looking at high-performance development studies, there is a need on sport specific and organisational-level research that improves understanding of the reasons for success and a corressponsive competitive position in international competition. As several authors have signalled the need for more in depth research at a sport specific level (De Bosscher 2007, Oakley and Green 2001, Sport Industry Research Centre 2002), little is known about (1) the organisational development of countries in specific sports, (2) the allocation of resources to elite development and (3) the development of countries’ organisational strategy at a sport specific level. Therefore, the purpose of this PhD study is to evaluate countries’ resource-based competitive advantage in athletics.

A resource-based theory examines the relationship between an organisation’s internal characteristics and performance. While resources and capabilities are the main strategic sources of a competitive advantage, the ‘integration’ of resources and capabilities in line with an organisation’s strategic goals is in itself the key to developing higher-order dynamic capabilities. For example Bar-Eli, Galily and Israeli (2008) found that long term sponsorship and media were important sources of a first mover advantage for Bayern München and Macabi Tel Aviv. Such a competitive advantage of an organisation arises from the strategy that the organisation follows in order to take advantage of the opportunities and risks within its external environment (Robinson & Minikin, 2012). Competitive advantage is based on using specific capabilities sooner, more absolutely, or more fortuitously than the competition to create resource configurations that have that advantage (Eisenhardt & Martin, 2000, p.1117).

First, 98 organisational resources and first-order capabilities in athletic were identified and grouped according to dominant categories or dimensions of elite sport policy as suggested by SPLISS (Sport Policy factors Leading to International Sporting Success). This list was based on interviews with 34 national high performance directors in athletics and a literature review. Interviews were analysed using Nvivo8 software. Besides the nine policy pillars (financial support, structure and organisation of elite sport policies, sport participation, talent identification and development, athlete career support, training facilities, coach education and development, (inter)national competition & scientific support), the elite sport environment was included as an important category of resources to improve countries competitive position (Truyens et al., 2013). In a second stage, resources were operationalised into a policy inventory that enabled a qualitative and quantitative evaluation of four countries’ organisational development in athletics (Belgium [Flanders and Wallonia], Canada, Finland and the Netherlands). Based on the evaluation of organisational resources, composite indicators for each dimension of the model were developed.
First, index scores indicate that countries organisational capacity shifts between different areas of elite sport development. Even though Finland has the best financial resources for the development of elite athletics, other countries were able to develop more
organisational resources. For example, Flanders outperforms other countries for talent identification and development. Through talent tests, centralised training sessions and a federation-based system for training and education, Flanders is able to develop more organisational resources to develop talents. Additionally, a qualitative analysis provides an understanding on how countries structure and combine specific resources in higher-order organisational capabilities. The countries in our analysis represent divergent configuration of organisational resources and consequently different capabilities. The organisational disparities between these countries represent strategic differences on the management of organisational resources in athletics.

References
CREATING A DEVELOPMENT PATHWAY FOR PARALYMPIANS - A CASE STUDY OF PARALYMPIC SPORTS IN JAPAN

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Currently in Japan, sports played by non-disabled and disabled people are not promoted by only one ministry. The Ministry of Education, Culture, Sports, Science and Technology (MEXT) has jurisdiction over sports played by the non-disabled, while the Ministry of Health, Labour and Welfare (MHLW) has jurisdiction over sports played by the disabled (Nogawa et.al, 2012).

The Sports Basic Act enacted by the Diet in 2011, for the first time placed a particular emphasis on the promotion of sports by disabled people, and there is now a small movement to integrate sports played by non-disabled and disabled people. The Sport Basic Plan (2012) states that ‘Paralympic sports aim to achieve a higher gold medal ranking than in previous Summer Paralympic Games (17th in 2008 Beijing) and Winter Paralympic Games (8th in 2010 Vancouver)’(MEXT, 2012). However, at the 2012 London Paralympic Games Japan dropped to 24th in the gold medal ranking.

One of the reasons for the decline in Japanese Paralympic performance is the perceived failure to identify and develop talented athletes via a clearly defined performance pathway. To date, there has been very little research into athlete pathways and the required environment for athletes to advance from the grassroots to the elite level to excel in their chosen sports in Japan.

Therefore, the aim of this research is to investigate the organisational structure of Paralympic sports in Japan. Specifically, the researchers attempt to look into athletes’ development in a chronological order and determine the criteria for quality in athlete development pathways from the grassroots through to the elite level in Paralympic sports. For this research, theoretical framework of De Bosscher et.al (2006) was considered. SPLISS model breaks athlete development pathway into 3 phases; initiation phase (Pillar 3), talent development phase (pillar 4), and perfection phase (pillar 5). This study attempts to answer the following research questions:
To what extent does this apply to the athlete development pathway in the Japanese Paralympic setting? What are the problems that Paralympic athletes and coaches often experience in each phase of the development pathway in Japan?
The researchers will conduct interviews with Paralympic athletes, coaches and directors of disability sports organisations in Japan from August 2013 to October 2013, in order to gather information on the environment and support structures along the athlete’s development pathway.

The research findings will be presented at the conference. The research was supported by the Sasakawa Sports Research Grant from Sasakawa Sports Foundation.
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THE CANADIAN SPORT FOR LIFE / LONG TERM ATHLETE DEVELOPMENT MODEL: OPPORTUNITIES AND CHALLENGES

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Background
Similar to the SPLISS model, the Canadian Sport for Life's (CS4L) Long Term Athlete Development (LTAD) model was developed with the hopes of guiding policy development. Part of the goal with CS4L's LTAD is to improve elite athlete performance although the full vision is to improve the health, wellness, and sporting experiences of all Canadians by advancing physical literacy, improving performance, and increasing life-long participation in physical activity.

The rectangular portrayal of the CS4L model (http://www.canadiansportforlife.ca/resources/cs4l-rectangle) includes 6 phases. The first three; Active Start, FUNdamentals and Learn to Train, are dedicated to building physical literacy. They describe developmentally appropriate movement skills required to establish the foundation for skill acquisition, knowledge and attitudes needed for each individual to lead a life filled with regular physical activity, from early childhood forward. The next three phases of the model; Train to Train, train to Compete, Train to Win and Active for Life, follow the pathway from adolescence to older adult providing options for performance and lifelong physical activity.

The LTAD system grew out of the 2002 Canadian National Sports Policy and framework when Canadian governments collectively called for a more systematic development of Canada's athletic talent. As a result, Sport Canada agreed to support a small, independent, at-arms-length-from-Government group to focus on athlete and sport development. In 2004 a small expert group was created to develop a LTAD model for Canada (Balyi, Cardinal, Higgs, Norris & Way, 2005). This LTAD model has now been adopted and applied by national governing bodies and in several countries (Ford, Croix, Lloyd, Meyers, Moosavi, Oliver, Till, & Williams, 2011). It is also worth noting, however, that there have been criticisms of the model including those voiced by Lang and Light (2010), Trefenne (2010) and Black and Holt (2009). The concerns have generally focused on the lack of long-term empirical evidence to support the model.

Objectives
This presentation will:
1. Provide an overview of the model identifying opportunities and challenges for future study,
2. Provide an update about the influence of physical literacy in shaping the future of the Canadian Sport system through the CS4L model.
Methods and Results
This presentation is unlike a typical research study in that we will present a model and the theories leading to its development. Specific methods and results therefore will not be presented.

Conclusion/Application to practice
This presentation will review a model used in Canada to support the entire sport system. Discussion will be encouraged to assess its merits, future study and application within other contexts.

References
EVALUATION OF DUTCH ELITE SPORTS SCHOOLS FOR SECONDARY EDUCATION

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Introduction
In order to maximize the performance of young elite athletes in both their sport and education, special elite sport schools were founded in the Netherlands in 1991. These so called ‘Topsport Talentschools’ (TTS) are the only schools in the Netherlands that have a legal consent to grant exemptions to young talented sport students. TTS for example have the privilege to dispense student athletes from the prescribed maximum educational time. In order to become a TTS these schools have to meet a number of strict conditions.

There are 29 TTS in the Netherlands. However the majority of talented young athletes does not attend a TTS, but a mainstream secondary school. Therefore, it is interesting to gain insight into whether there are differences in the sport and education performance levels between athletes that attended a TTS or athletes that went to a mainstream school. Furthermore, the Dutch Ministry of Education asked to investigate whether the TTS suffice to the terms and conditions and which other options can be successful in combining sport and education for young elite athletes.

Methods
We conducted a retrospective study amongst a population of (former) athletes that were talents throughout the period 2004 to 2008. They were identified as talents by six selected national sports federations with a substantial number of athletes attending TTS. Apart from this retrospective group of former sport talents, current athletes were also invited to participate in this study. A total of 242 retrospective and 228 current sports talents have completed an online questionnaire. Besides this quantitative study we also organized six focusgroup interviews at TTS with teachers and are planning to interview several policy actors in the field of education and talent development in sport.

Results
The results of the quantitative study showed that there are hardly any differences in the sports performances of former talents attending either a TTS or a mainstream secondary school. However, results indicated that athletes who attended a TTS were more likely to attain a lower educational level, compared to talents with similar cognitive capacities attending mainstream schools. The results of this study are similar to research in Belgium and Germany (Bosscher et al. 2010; Emrich et al. (2009)). TTS are regarded necessary for those young athletes with high training demands at an early age. The forthcoming study aims to provide answers on the question whether TTS should be the only schools with legal exemptions, or whether mainstream schools should also be given more (legal) opportunities to support student athletes.

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Rens, F., Van., Elling, A. & Reijgersberg, N. (2012) Topsport Talentschools in the Netherlands a retrospective analysis of the effect on performance in
sport and education. International Review for the Sociology of Sport, DOI: 10.1177/1012690212468585
TRICKLE DOWN EFFECT OF THE 2012 UCI ROAD WORLD CHAMPIONSHIPS

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Aim of the study
Frequently, public investments in major sport events are justified by policy makers who have a tendency to argue that economic and social benefits arise from those events. This was also the case with the Dutch region of Limburg, investing 6,8 million euro in the organisation of the 2012 UCI Road World Championships which were held from 15-23 September. More specifically, the political objective was to generate local economic impact, to contribute to the development of physical activity and sport participation and to use the event as a catalyst for place marketing. Competitive cycling is deeply rooted in the culture of Limburg, which also is a popular touristic region. The objective of this study is to specify to which extent the event has lead to a trickle down effect among event visitors, concerning sport participation. The project was commissioned by the region of Limburg and was a coproduction of two universities for applied sciences - Zuyd and NHTV Breda - and the Mulier Institute. This study makes a contribution to the knowledge development regarding social benefits which can arise from the organisation of sport events. It aims to make public organisations more aware of the effects which can result from a major sport event in order to stimulate optimal investment of tax payers’ money in the future.

Theoretical background
The trickle down effect or demonstration effect (van Bottenburg, 2003; Weed et al., 2009) refers to the effect of passive consumption of a sport event on physical activity and sport participation. Especially in the case of elite sport this effect should not be over estimated because event visitors might experience a competence gap. As Girginov & Hills (2010) showed, using the 2012 Olympics as an example, the realisation of a trickle down effect is a big challenge, since it has to address not only people’s behaviour but also deeply rooted social structures and relations.

Methodology
In order to generate a representative sample of event visitors, semi-structured face to face interviews with event visitors were held, spread out over varied locations and seven days. 2,045 questionnaires were completed.

Results, discussion and conclusions
87 per cent of the visitors who do not participate in sports said they were not inspired to become physically active as a result of visiting the event. The possible experience of a competence gap might have influenced this result, but confirms that visiting an elite sport event does not automatically inspire inactive people to participate in sports themselves. Moreover, 95 per cent of the visitors who participate in sports said they were not encouraged to become more physically active as a result of visiting the event. It is guaranteed that the results of additional univariate and multivariate analysis will be presented at the conference, offering more insight in the phenomenon. The results so far learn that the effects of sport events should not be overestimated and that a trickle down effect seems to be persistent sports policy rhetoric.
**References**


TALENT COACHES AND PARENTS ON SUCCESSFUL AND SOUND TALENT DEVELOPMENT

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Introduction
Like talents in other disciplines (e.g., music, dance) sport talents need to spend many training hours during adolescence apart from school and be fully dedicated to their sports career ambitions, often meaning that they have to make ‘sacrifices’ in other (leisure) activities. Due to the international development of elite sport in the past decades (De Bosscher et al., 2008; Oakley & Green, 2001) an intensification and rejuvenation of training practices has taken place (e.g., van Bottenburg, et al., 2012). Grupe (2000) argued that elite sport performance of young people is not necessary harmful, but monitoring of a pedagogical justified development of young sport talents following different training programmes remains important. Many studies have for example revealed that despite a general high educational level of sport talents and elite athletes, demands of elite sports programmes are not always easily combined with demands of school and may lead to stress, drop out or degrading educational level (Brettschneider, 1999; Luijt et al, 2009) even at Topsport Talent Schools which are founded to better balance the ambitions and obligations in sport and school (Von Heyden et al., 2012). Moreover a uni-dimensional sports identity can be harmful for a sound identity development (see eg. Luijt et al., 2009). The purpose of this study is to investigate the ideas and experiences of successful talent coaches in different talent development programmes and parents of successful talents, with a special focus on the possible influences on sporting performances and psychosocial well being of young athletes in centralized sport settings (CTO’s). In comparison to other countries, where leaving home at an early age is more common in case of boarding schools and sport talent programmes, in the Netherlands the development of CTO’s has been introduced mainly from a sports development perspective (top ten ambition; practical needs for central locations for school, training and medical care) and less from a pedagogical developmental perspective and the ‘needs’ of talents and parents. Since parents and coaches are the main responsible pedagogical actors for sport talents, this study will focus on these two groups.

Central question
With this research we want to gain more insight into experiences and the vision of talent coaches and parents of young sport talents from 12-18 years, regarding their sports development, but also broader psychological and social development and possibly associated risks and problems. The ultimate goal is to contribute to the monitoring and improvement of the (learning) environment during the process of talent development in sports. This, by giving concrete practical advice based on the results.

Methodology
This research consists of a quantitative and qualitative part. In the former part talent coaches and parents were asked to fill-out an online anonymous 10-minute questionnaire. Talent coaches working in full time training programs of sport federations
(CTO’s and National Training Centers) and talent coaches of professional football clubs received an invitation letter from their federation to participate in an online survey, for which they received a personal login code. The questionnaire contained questions about their coaching career, talent development programs, development aspects and sociodemographic characteristics. Parents of talents who attend a CTO or a professional football club directly received an invitation with personal login code to fill-out an online questionnaire. They were asked about their family and sports background and for their views on talent development programs and development aspects. A total of 152 talent coaches and 386 parents have completed the digital questionnaire. In addition to this quantitative part, focus groups in four CTO’s were held under the supervision of the researchers. Experts (talent coaches, teachers, sports psychologists, physiotherapists) working at a CTO were part of this in depth qualitative discussions.

**Results**

At this time, the research has not been fully completed. For this reason, all the results can not yet be described. The first analysis shows, however, that parents and coaches are satisfied with talent development programs, but disagree on the desired degree of parental involvement. Full results will be available in September 2013.

**References**


THE SOCIAL SURPLUS VALUE OF SPORT

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Aim
Based on different research projects within the Sport and Society unit (SASO) of the Department Sports Policy and Management of the Vrije Universiteit Brussel, we try to obtain more insight into how sport(plus)initiatives can generate a social surplus value.

Theoretical background
Research by Vanhoutte (2007) illustrates that sport is a highly accessible activity allowing large numbers of youngsters to become involved. Moreover, it has been indicated that, in comparison to other socio-cultural practices (e.g., youth movements), sports-based practices seem to be more capable in attracting young people independently of their socio-economic background and seem to provide rich contexts for reaching socially vulnerable youths (Haudenhuyse et al., 2012). Although number of specific measures by the Flemish government are intended to increase sports participation among socially vulnerable groups, evidence of successful initiatives in this sector remains scarce. As a result, we are left with the question if (and how) sport initiatives can offer the sufficient conditions through which broader social outcomes could be generated for socially vulnerable youth.

Results/discussion/conclusion
A major drive to participation among youngsters was found to be related to their particular affinity or preference for an activity (Perkins et al., 2007). Although a target group can be attracted by a specific activity, it does not imply that the activity inherently provides the conditions under which potential developmental outcomes are likely to occur (e.g., taking up responsibility, volunteering). More insight into contextual factors regarding organisational aspects of initiatives for socially vulnerable youth (e.g., structural functioning, location) as well as specific youth guidance will provide a better understanding of the active ingredients of programmes intended to foster more than participation opportunities.

Besides these organisational aspects and the type of guidance, it is also very important to investigate the role which other activities, such as individual mentorship, home work guidance, and extra sportive activities can play in creating social surplus. It becomes clear that more attention is needed regarding the role of the sport activity, organisational aspects, the nature of the guidance and other activities within these sport contexts in order to provide greater insight into the complexity of the underlying processes that are presumed to generate social benefits.
References
COMPARING FEMALE ELITE ATHLETES’ CAREER DEVELOPMENT TO THE HOLISTIC ATHLETIC CAREER MODEL

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Background
The number of female athletes involved in elite sport has shown a substantial increase in the past decades. Since the theoretical frameworks of athletic career development (e.g., Wylleman, De Knop & Reints, 2011) provide a gender non-specific description of athletes’ career development it remains a question whether female athletes’ career development is in any way specific in comparison to those models. Objectives: The purpose of this study was twofold: 1) to review the existing empirical data about female athletes’ specific career development using a developmental lifespan model (Wylleman, De Knop & Reints, 2011) as a conceptual framework; 2) to empirically investigate female athletes’ perceptions of their athletic career development in comparison to this model.

Methods
First, different databases were used to obtain athletic career transition papers which reported on female athletes’ challenges, demands, and transitions throughout their athletic career development. Second, semi-structured interviews with retired female elite athletes (N=5) were used to discuss about their development as athletes.

Results
Literature review showed several female athletes’ specifics in their athletic career development. These specifics were identified at the athletic level (e.g., in relative ages when the transitions typically occur, drop-out frequency), psychological level (e.g., reasons for retirement, gender role conflict), psychosocial level (e.g., becoming a mother), academic/vocational level (e.g., involvement into higher education, getting a job in the sport system), and financial level (financial challenges). Female athletes perceived their athletic career as multidimensional stressing out the importance of other domains (personal, academic) in their lives. Qualitative analysis of interviews revealed some alternative events and transitions (e.g., motherhood) in participants’ athletic career development and the importance of other domains (personal, social, educational, vocational) in their lives.

Conclusion/Application to practice
Research findings show that female elite athletes’ career development can be seen as specific in several aspects. A need for gender-specific transition models therefore exists as well as for gender specific career support services which would be more tailored to the needs of female athletes.
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Holt & M. Talbot (eds.), Lifelong engagement in Sport and Physical Activity (pp. 63-
THE JUDO IN BRAZILIAN PRINTED MEDIA DURING OLYMPICS GAMES 2012: BEHAVIOR OF ATHLETES, SPECTACLE AND SPORT

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Aim
Normally, the daily sports media is not used to report facts concerning judo. In time of Olympics Games, as the modality always gets medals for Brazil, the media is required to cover the judo competitions. Our intention in this research was to demonstrate how the Brazilian media portrays judo to the majority of Brazilians. Judo is not considered as a popular sport in media’s point of view.

Theoretical background
The culture of the sport worldwide, with the support of the mass media, aims victories, records, the fastest spotsmen, human beings without limit. Nowadays, sports idols are signs of consumption (Baudrillard, 2002). According Bourdieu (1997), the symbolic construction of the sports press is made of professional athletes, especially in time of Olympics, it seeks to turn these athletes into heroes, conquerors made of unusual representative of what the company wants to achieve. Within this context, we highlight the growing role of media and communications companies in the cultural universe of the sport. The major sports event and athletes are seen as elements of consumption, as a culture, entertainment and spectacle (van Bottenburg, 2001). One of the strands used by the media to build, in its speech, of legitimizing the sport as spectacle, is the development of the athlete’s sporting image, elevation to celebrity status (Amidon, 2012; Bourdieu, 1997). Guy Debord (1997) calls it “the society of the spectacle”. Judo is an Olympic sport in which Brazil has won more medals in its history of the Olympic Games. There were 19 in total, with 3 gold medals, 3 silver and 13 bronze. Brazil only won medals in 14 different sports.

Methodology
For 23 days, from July 24 until August 15, 2012, 3 major print media outlets were followed in Brazil - three daily newspapers of national circulation. We selected all the materials that was related to the 2012 Olympics, in general, and also about judo. The subjects were classified into five broad categories: a) sports apparel; b) economic fact; c) behavioral fact; d) real show; and, e) political fact and/or national identity. Our intention was to demonstrate how Brazilian media portrays judo to the Brazilian audience.

Results, discussion and implications
During the period considered, 3905 were obtained news about the Olympics in all its aspects. Of this total, only 173 (4.43% of total) had as judo main subject. According to the news about judo, 59 (34.10%) were classified as behavioral fact such as how the athletes lives, their parents’s reaction during the games etc. 52 (30.06%) had sports apparel as main subject, such as narrative or description of the fights. 36 (20.81%) were classified as news show, namely doping and how medalists celebrate their achievements. Results and their analysis will be presented in November, in Antwerp.
Although the Brazilian judo is highly victorious, the media does not consider the sport interesting for its audience. Thus, in times of great sports coverage by media, as the Olympics Games, the mass media is forced to cover the judo. In addition, the Brazilian audience does not know the details of this sport. The major Brazilian newspapers eventually choose to portray behavioral aspects of Brazilian judo athletes instead sports facts. Because of financial values transiting around the culture of the sport, a large number of companies began to see this universe an excellent business perspective, putting the sport as a major vertices of the entertainment industry and hence consumption. One of the strands used by the media to build, in its speech, of legitimizing the sport as spectacle, is the development of the athlete’s sporting image, elevation to celebrity status. The audience, in general, is exposed to either interest in consuming or sports athletes’s intimacy. Sometimes the athlete’s sporting performance is left behind. Nowadays, in fact, their affective relationships, habits of behavior, way of living are the aspects which matter the most. Thus the mass media collaborates to build the image of the main sports athletes, much more as celebrities than athletes. The sports heroes become famous artists, rock stars, personalities in imaginary universe of consumers of the growing entertainment industry.

References

STRUCTURAL EQUATION MODELING PUBLIC ACCEPTANCE OF THE ELITE SPORT POLICY IN JAPAN

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Aim
Increasing investment in elite sport often results in the achievement of more medals in international sporting events (Hogan and Norton, 2000), and is essential to maintain existing performance levels (De Bosscher, Bingham, Shibli, van Bottenburg, & De Knop, 2008). Public investment for elite sport is generally justified on the basis that the elite sport success has a wide range of social and psychological benefits for the public (Grix & Carmichael, 2011; Goodwin & Grix, 2011). Governments increasingly use this argument to further invest in elite sport and participate in the ‘global sporting arms race’ (Oakley & Green, 2001) without showing any evidence to convince taxpayers, despite acknowledging the necessity to obtain the support of the entire society (Ministry of Education, Culture, Sports, Sciences & Technology in Japan, 2012). Therefore, this study examines the determinants that influence public acceptance of the development of the elite sport policy in Japan.

Research framework and hypotheses
Research on public acceptance has been proceeding in the context of the public having direct conflict of interest, such as in nuclear energy and genetically modified products. Although the nature of elite sport policy is slightly different, the research framework utilised in these controversial fields merits application in the current exploratory research. Previous studies indicate that public acceptance is determined by the public’s perceptions of the benefits and risks involved, which in turn are explained by social trust in related institutions. This study extends the research framework by applying the public’s perception level on elite athletes as role models to render a better explanation for the public acceptance of the elite sport policy in Japan. This paper proposes a set of hypotheses: When the public feels more trust in the key Japanese elite sports actors, it will perceive more (personal or social) benefits from the elite sport success (H1); When the public feels more trust in the key Japanese elite sports actors, it will perceive fewer risks with being potentially associated with the elite sport policy (H2); When the public considers Japanese elite athletes as role models, it will perceive more (personal or social) benefits from the elite sport success (H3); When the public considers Japanese elite athletes as role models, it will perceive fewer risks with being potentially associated with the elite sport policy (H4); When the public perceives more (personal or social) benefits of elite sport success, it will be more accepting of the promotion of the elite sport policy (H5); and When the public perceives more risks with being potentially associated with the elite sport policy, it will be less accepting of the promotion of the elite sport policy (H6).

Methodology
Participants and Procedures
An Internet-based cross-sectional survey was conducted through a Japanese Internet research service company. The respondents were stratified by gender and age group (20–29, 30–39, 40–49, 50–59, and ≥ 60 years) equivalent to those in Japan’s 2010
Population Census. Of the 1,050 self-administered questionnaires conducted in February 2012, 912 were found useful for the empirical analysis.

**Measures**
This study analyses the causal relationship among the following constructs: public trust of the key Japanese elite sport policy actors, public perception of athletes as role models, public’s perceived personal benefits of elite sport success, public’s perceived social benefits of elite sport success, public’s perceived risk of being potentially associated with the elite sport policy, and public’s acceptance of the development of the elite sport policy. The measurement items of each scale were derived from public acceptance research in different fields (e.g. technology, and nuclear energy) and several elite sport studies. All items were measured on a seven-point Likert-type scale.

**Data analysis**
To assess the effect and the significance level of each path in the research framework, structural equation modelling (SEM) analysis was conducted to test the hypotheses proposed in this study. Prior to SEM, confirmation factor analysis (CFA) was conducted to assess the adequateness of the measurement model (Anderson & Gerbin, 1988).

**Results and discussion**
The results of the CFA show sufficient levels of reliability, convergent validity, and discriminant validity: thus, the quality and adequacy of the measurement model were deemed satisfactory. The results of this empirical study show that public acceptance of the promotion of the elite sport policy is determined by their perceived personal benefits; perceived social benefits of the elite sport policy, which contributes to the success of Japanese athletes; as well as perceived risks, namely, negative perception of elite sport. The public’s perceived benefits and risks of elite sport are further determined by social trust in the elite sport policy actors and the influence of Japanese athletes as role models, but not by the influence of social trust on risk perception. On the basis of the empirical results, implications and suggestions are presented to serve as bases for policy makers and related parties in their promotion of an elite sport policy that reflects the understanding and support of the public.

**References**
HIGH PERFORMANCE JUDO: CRITICAL SUCCESS FACTORS FOR PERFORMANCE DIRECTORS

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Aim
The purpose of this research project is to identify the critical success factors in international judo for performance directors from different countries.

Theoretical background
In the competitive sport environment there is an interest on the part of managers and researchers to explain the reasons for the international sporting success achieved by some, and not by others. Are some literature that sought to find the factors which determine international sporting success, comparing systems and sport policies of countries (De Bosscher et al., 2008; Houlihan & Green, 2008). But these kind of studies in one sport or in National Governing Bodies responsible for develop of particular sports in a country has been little studied (Truyens et al., 2013). Judo is a global sport; about 200 countries racing among themselves medals in various international events including the Olympic Games, consequently there is a greater competitiveness in this sport in the international context (Peset et al., 2013).

Methodology
This study is part of the initial data analysis of the PhD research project titled High Performance Judo: Organizational Factors for International Sporting Success. The research will have a qualitative research design through content analysis of documents and interviews with performance directors of judo from different nations.

Results, discussion and implications
Judo presents itself in nowadays as a highly competitive combat sport, with a world ranking system. Many of the events on the world circuit have cash prizes for the medal winners of each category striding towards professionalism in this sport. For international success, judo athletes currently use multidisciplinary teams for technical training, and receive considerable support from NGBs and investment from sports policies in their countries. According with Oakley and Green (2001) in the race to obtain good international results, the success in high performance sport can be the result of strategic investment in models and in the efficient management of the same. Research related to the identification of determinants or factors of success in judo are extremely important, given the large number of both athletes and different countries seeking to achieve a good performance in the Olympic Games and World and Continental Championships in this sport. Researches about the critical success factors in international judo can contribute to the improvement of the quality of NGBs and consequently, fostering the development of the sport in different countries. The data collection for this study will be conducted during the Judo World Championships 2013 to be held in Rio de Janeiro.
Previous results will be presented in November during the SPLISS conference which will be held in Antwerp.

References
EXAMINING PSYCHOLOGICAL CHARACTERISTICS OF GRASS ROOTS, PRE-ELITE, & ELITE ATHLETES

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Aim  
This research is exploratory in nature and focussed on examining the psychological characteristics of grass roots, pre-elite, and elite cricketers in Australia and forms part of a broader ARC Linkage funded project and results will help to inform best practice delivery of talent development programs.

Theoretical background  
Efficient and effective talent development programs are a major and relevant challenge for sport governing bodies. Traditionally, talent identification based on biophysical markers has taken priority in Australian elite sport programs. Narrowly focussed programs such as these have proven to have limited predictive power across a range of sports, particularly ball and team-based sports. However, secondary factors such as psychological characteristics have been recognised as critical to the successful development of talent, yet they remain underrepresented in talent development research and practice (Van Yperen, 2009), and there has been no published research on secondary factors of talent development in an Australian context. In this research, we begin the process of filling this gap by examining the following research question. How do recreational participants differ from elite athletes on motivation, constraints and negotiation strategies?

Methodology  
This research question was examined using a multi-attribute online survey. Participants were invited to take the survey through an email request distributed through the national database of players held by Cricket Australia. The survey included a battery of demographic questions and formed part of a comprehensive analysis of secondary factors within the broader research project. The psychological measures reported on here include Sport Involvement and Resistance to Change (Beaton et al, 2011), Behavioural Regulation in Sport Questionnaire (Lonsdale, et al., 2008), and Negotiation Efficacy (White, 2008) and perceived quality of coaching advice.

Participants were grouped in three different ways to facilitate the comparative analysis. First, the 66 geographic regions that the delivery of Australian Cricket is divided into were categorised as high, medium, or low talent producing regions based on the ratio of elite cricketers produced over a 14 year period to the number of junior participants in each region. Second, the levels of competition in the cricket pathways in Australia were classed as community cricket, inter-regional cricket, junior interstate/international cricket, and senior interstate/international cricket. Third, participants were allocated to the Ambivalence, Attraction, Attachment, and Allegiance stages within the Theory of Participation. Comparative analysis of the demographic and psychological measures was then conducted using MANOVA and cross tab procedures.
Results, discussion & conclusion
A total of 1333 players aged between 11 and 25 years completed the survey. The distribution of athletes among the stages in the Theory of Participation (Beaton et al., 2011), levels of competition, geographic regions supported the representativeness of the obtained sample. When examining the differences among the stages of Theory of Participation, the significant differences identified on the measures of Resistance to Change, Negotiation Efficacy, and Self-determination were all in the direction and magnitude suggested by prior research. There were no significant differences among the stages in the Theory of Participation when compared against the categories of regional talent production or level of competition. For perceived quality of coaching advice, participants in allegiance scored high than all other stages, participants in attachment scored higher than participants in attraction and ambivalence, and there was no difference between participants in attraction and ambivalence.
When examining differences among categories of regional talent production, the only significant difference to emerge was observed in perceived quality of coaching advice. Here, high performing regions scored significantly higher than both medium and low performing regions. When examining differences among the various levels of competition the only significant differences that emerged were again in the scores on perceived quality of coaching advice. Here the scores for senior interstate/international cricket scored higher than all other levels. The scores for junior interstate/international cricket scored higher than community cricket and inter-regional cricket, with no difference between community cricket and inter-regional cricket.
Taken together, these findings provide support for the conclusions drawn by the review of Anshel and Lidor (2012). That is, psychological measures hold little predictive value in the detection or identification of talent, but psychology plays a critical role in the development of athletes. Specifically, that we need to “focus on meeting each athlete’s individual needs through high quality coaching and program opportunities” (p. 258).

References
WHAT DO WE KNOW ABOUT SPORTS TALENT IN PORTUGAL

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Aims
Raise significant data about the talent identification and development in the country through a large survey among the main stakeholders in sport practice. Define some possible drivers to develop the predicted weak national system on talent identification and development according to a theoretical basis of an international model of critical success factors defined in SPLISS [1].

Background
Talent identification and development is an issue that raises interest and controversy in different disciplines since a long time in the past namely in psychology, education and of course in arts, music and sports. Particularly in sports “If athletes want to be high-level performers, they need to deliberately engage in practice during the specialization years” [2] and one must be careful defining the policy we will be able to undertake considering the number of related and delicate concerns such as those connected with growth and maturation, which turns scientific performance prediction almost impossible to do. Nevertheless the planning of a specific program based on scientific research and accurate methods is recommendable.

In most of the developed societies talent people are important assets [3]. The culture of physical activity and sports was always famous in several countries where youngsters are incentive to train specific sport disciplines according to the qualities some teachers are able to look at and possibly will be developed after and out of school period. Defining a talent is something we should then consider into this analysis. Talent refers to some people that show up above the average pattern for that age and context. Facing special conditions individuals that meet physiological, psychological and societal requirements will be able to follow specific and appropriate training program, which will lead them to elite sport performance results [4]. Another issue with talents relates the need to distinguish talent identification from talent development. Identifying talented people means to enthusiasm youngsters getting them to participate in the sports activities they should be keener to, considering this choice as a result of a diversified testing process conceived to predict the ability for future performance according to their maturity and fitness. At the same time this will act as a “start engine” for higher levels of performance [5].

Methodology
We used a qualitative study methodology based on the analysis upon an opinion survey answered by elite athletes, coaches and federation directors added by the National Institute of Sports and Youth (IDJP) of Portugal considerations on the subject. We used SPLISS online questionnaire [1] applied to 3 groups: a group of 400 elite athletes, other of 40 elite coaches and another to a 28 federation directors.

The registered response rate was 37, 5% in the first group, 87, 5% in the second and almost 90% in the third. The response of the IDJP director was written in person. Data and graphics were analysed in SPSS 18.0 software.
**Main Findings**
Athletes, performance directors, coaches and government do not agree on how to develop a broad strategy for talent identification and development; however, over 76% of the responses consider training hours/week is below international standards. Performance directors became aware that there is no robust and systematic database or designed strategies on sport talents. Athletes refer difficulties to manage their work/ training schedules. The current system of talent identification works in a reductionist, scarcely comprehensive and ineffective way. Portugal needs an urgent conceptual shift, which urges reformulation/clearance policies to identify new potential athletes.

**Results, discussion and implications/conclusions**
We identified/concluded for several assumptions that should form the basis of a national strategy for talent identification and development:

- The talent identification system is an on-going human development process strictly twined with schools, teachers, coaches and clubs;
- Physical Education Programs have to change dramatically from sports contents to human control behaviour activities;
- Awareness that each sport has its own development cycles and different maturation age (e.g. gymnastics and soccer);
- There is a fierce competition between sports and other human activities; therefore the need to work motivation for sport among families;
- Agents in sports coaching need specific and more scientific qualifications;
- Law and rules should take care of the needs for studying/training schedules coordination and regulation of youngster coaching activity;
- Personal counselling and excellent accurate settings for talent development require lots of practice, resilience and self determination, which conducts to outstanding competences when creating the right environments to learn and practice.

The main political implication will be to influence governmental decisions that through talent identification and development we will be strengthening human resources across the whole population.

**References**
TURNAROUND STRATEGIES TO HALT PERFORMANCE DECLINE – CONSEQUENCES OF NOT MEETING ‘NO COMPROMISE’ TARGETS

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Body of abstract
The research explores the turnaround strategies employed by National Governing Bodies for Sport (NGB) in response to them receiving significant reductions in their funding from UKSport (the body responsible for elite Olympic sport in the UK). It seeks to analyse the consequences of these measures on strategic direction. The research interviewed four participants to firstly reveal the decision-making processes that affect the allocation of funding within the NGB, and secondly how they seek to halt their ‘perceived decline’ and return to ‘acceptable’ levels of performance. By exploring the impacts of the funding reductions on the NGB, this research seeks to expose critical examples of how sport organisations can purposefully respond to a significant change in their environment through enacting a turnaround strategy.

In December 2012 UKSport allocated £283m for the 2016 Rio de Janerio Olympic Games funding cycle through its ‘No compromise’ policy which targets “resources solely at those athletes/sports that are capable of delivering medal winning performances” (UKSport, 2007, p.1). While most Olympic sports saw significant increases in funding, such as rowing received a funding increase from £27m to £32m, nine NGB saw their funding allocation cut, with four NGB seeing their funding reduced from between 89% and 100%. As argued by De Bosscher et al (2006, p.207) the ability of NGB’s, that received these significant reductions in their funding allocation (Pillar 1 – SPLISS Theoretical Model), to meet future performance based targets will be detrimentally effected because they lack the resources to effectively create sport development pathways, or for their elite “athletes to train under ideal circumstances”.

If we view a turnaround situation as being triggered by a need to respond to financial failure, then it is clear that the NGBs that have received funding reductions will have to respond effectively and quickly as there is actually a danger to survival (Kierulf & Petersen, 2009). In the context of the NGBs, there are key operational decisions and strategic choices that need to be made in order halt this decline in organisational performance and to see a return to ‘acceptable’ performance. Each turnaround situation and strategy will be unique to each NGB and the decisions and the possible consequences of these decisions will be specific to the NGB concerned (Pretorius, 2008). Therefore, the research framework employed in this study categorises the decisions of the NGB in terms of whether they can achieve future targets by continuing with its existent strategy, but with reduced resources, or if the funding cuts are so severe they may warrant the need for a drastic change in direction (Pretorius, 2008).

Through adopting a critical analysis of the impact of the turnaround strategies employed, this research has conducted in-depth interviews with Chief Executive Officers of the four NGBs that have received significant reductions in funding to their Olympic programmes. The primary research suggests that the four NGBs researched have
adopted turnaround strategies that broadly, and in line with the work of Boyne (2004), pursue retrenchment, repositioning and reorganisation. For example one NGB has used a retrenchment strategy that has seen the selling of assets in order to maintain their current commitments to their elite programme. Repositioning is a strategy employed by another NGB, seeking to develop a clearer focus on its performance pathways, talent identification processes and its grassroots commitments, with its elite commitments have been marginalised. Finally, a reorganisation strategy has seen one NGB undergo a change of leadership, and place greater focus on governance issues/systems within the NGB.

While alternate research, such as the work by Winard et al (2012), has identified that NGB can respond to funding reductions by employing new financial management tools, this research has found that the NGB have struggled to adapt to their financial situation. Indeed, a consequence of the funding reductions within all the NGB was to ‘de-professionalise’ their staff base by making the vast majority of their paid staff redundant. By reverting back to the ‘well-meaning volunteer’, who are unlikely to have the skills, knowledge-base, business acumen or time to generate new income-streams, the NGB acknowledge they are now significantly hampered in ‘turning’ their situation around. Due to the severity of the funding reductions the NGBs have clearly focused on operational issues (keeping the elite programme going), without allocating resource to activities that could in theory improve their situation (attracting new sponsorship, developing alliances). It is a conclusion of the research that this course of action may actually put the long-term survivability of the NGB in question.

References
ELITE SPORT AND HIGHER EDUCATION IN THE BRUSSELS CAPITAL REGION

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Aim
This study aimed at evaluating the need to set up and/or optimize existing support systems for promising and/or elite student-athletes in university colleges and universities in the Brussels Capital Region.

Theoretical background
Elite or promising athletes who are involved in higher education, also named student-athletes, face challenges in both the academic and the sport domain when they make the transition from secondary to higher education. This includes for example moving away from home to a student room, stronger need for independence and change in peer relationships. While it is recommended to prepare student-athletes for this transition, support services are still required in order to assist student-athletes during this dual career. For example, since 1987/88 the Vrije Universiteit Brussel has provided support to 778 student-athletes resulting in an academic success rate of 71% during the first 15 academic years and of 79%* since the implementation of the bachelor-master structure in 2002. As such, the Vrije Universiteit Brussel plays a significant role model in providing an optimal support to student-athletes in the Brussels Capital Region. Although several other universities and university colleges also provide specific services to student-athletes in the Brussels Capital Region, a need existed for an overview of the support services provided to student-athletes throughout the Brussels Capital Region. Within the Brussels Capital Region, the Flemish elite athletes are subject to the elite sport policy of the Flemish Community and the French-speaking athletes to the elite sport policy of the French-speaking Community. Both communities have their own organisation, budget and criteria.

Methodology
Seven co-ordinators for elite sport and higher education in five university colleges and two universities in the Brussels Capital Region were interviewed using semi-structured interviews. An interview lasted almost 30 minutes and focussed 1) on the allotment of elite sport statutes and 2) on the specific sport and study-related needs of student-athletes. In case of absence of a specific coordinator or service, the person responsible for elite sport and higher education was interviewed. Every co-ordinator or responsible in each university or university college was asked if they had an inventory of the presence of all student-athletes in their institution. Apart from the interviews, an online questionnaire was set up to ask the student-athletes in Brussels Capital Region about their sportive and study related needs.

Preliminary results
Six institutions have an inventory of their current student-athletes, but only three institutes have an up-to-date inventory of their current and former student-athletes. Four institutes assign elite sport statutes to their student-athletes. In the French-speaking university colleges these statutes are not assigned by the institute itself but by the sports administration and a specific commission of the French Community.
Only in two institutes is a person or service, specifically responsible for the guidance of promising and elite student-athletes, present. While all institutes offer academic-related flexibilities, in some institutions the actual application of these flexibilities is dependent on the goodwill of the professor involved. Four institutes have their own sport infrastructure and two of them provide sports scientific guidance to their student-athletes. These two institutes also provide their student-athletes with specific student housing facilities.

**Conclusion**

Until now, there is no clear overview of the total number of student-athletes in the Brussels Capital Region. There are strong indications that there is a need to set up a guidance system for promising and elite athletes in the Brussels Capital Region. An optimal guidance for these student-athletes must be based on their specific needs and can only be realised if the educational institutes collaborate with those institutes with elite sport expertise. Only a coherent and structured approach across the educational institutes will enable the universities and university colleges in the Brussels Capital Region to attract more student-athletes.

On the conference, data will also be presented from interviews with those responsible for elite sport and higher education in other university colleges as well as from the online questionnaire about the sport and study related needs of student-athletes.

**References**


* Academic success = ratio credits acquired / credits taken
THE TRANSITION FROM JUNIOR TO SENIOR ATHLETE: A HIGH PERFORMANCE DIRECTORS’ PERSPECTIVE

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Introduction
Throughout their athletic career, athletes are confronted with different transitions. During these transitions athletes face challenges, not only at athletic level, but also at the psychological, psychosocial, academic/vocational, and financial level. One of the most challenging transitions in the development is the transition from junior to senior athlete. Research showed that only one junior athlete in three makes a successful transition into the elite senior ranks. This study is part of a PhD project in which the authors aim at obtaining a holistic understanding of the transition from junior to senior athlete in elite sport.

Methodology
For the current study a total of ten face-to-face semi-structured interviews, using the holistic athletic career model (Wylleman, De Knop, & Reints, 2011) as basis, were conducted. Participants were the high performance directors of ten elite sport governing bodies. Interviews were transcribed verbatim and analyzed using Nvivo 10.

Results
Results indicate that the junior-senior transitions can be grouped in three types: the sports in which athletes go from junior to senior athlete at an early age (16-18 years), the one in which this transition happens at a later age (21 years), and the sports where athletes go from junior to aspiring athlete (18-20 years) and then to senior athlete (21-23 years). As a consequence of this variety the age at which athletes make this transition is sport-specific and thus, from a holistic perspective, also the factors influencing the pre- and post-transition as well as the actual transition at different levels of development (athletic, psychological, psychosocial, academic/vocational, and financial). Results also revealed that the high performance directors perceived the five levels of development to be of influence on the junior-to-senior transition.

Discussion
The transition from junior to senior athlete is perceived as a very challenging period in an athlete’s career. In order to get a true holistic understanding of the junior-senior transition, we do not only need to understand the challenges at the five levels of development, but also the system (e.g. the federation, the sport policy, the culture in a nation) around the athlete.

References
TWO CULTURES: ELITE AND SPORT-FOR-ALL?

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Background
Sports developers, policy-makers, and the general public frequently assume that sport encompasses at least two distinct types of activity: sport-for-all and elite sport. In many countries, policy and funding for these areas are dealt with by separate agencies, and in most cases, increased attention and funding for one means less for the other. So, Two Cultures could be said to exist in sport. This phrase comes from a lecture given by C.P. Snow in 1959, in which he expressed concern at the breakdown of communication between the arts and sciences. In this paper, our two cultures are mass participation and elite sport, and our concern related to the often-presumed gulf that exists between them. This paper examines the space between the cultures, and seeks to articulate the points of connection and sources of tension.

Literature
There is a young, but growing body of literature that critically evaluates claims made about the separation of the cultures (they serve different aims and audiences; draw on different skills from players; receive different amounts of central funding; etc.), and about connections (elite players were once recreational players and often become so after their retirement; effective talent development requires sufficient participation levels; elite performances might inspire greater participations through role-modelling, improved facilities or the ‘feel good factor’, etc.) (Bergsgard, Houlihan, Mangset, et al, 2007; Green, 2006; van Bottenburg, 2002; Weed, Coren, and Fiore, 2009). The unifying theme in this literature is a general rejection of the claims that come with great enthusiasm and frequency form politicians and policy makers that the relationship is synergistic (e.g., Department for Culture, Media and Sport, 2008; Steele, 2009). Differences arise, however, regarding the extent to which commentators attribute the tension between the cultures to be inevitable or conditional on other factors, such as economic prioritising (e.g. Collins, Bailey, Ford, et al, 2011; Grix, and Carmichael, 2012).

Methodology
Our method is a relatively simple one. First, we will identify the most common social claims made by policy makers regarding the relationship between elite sport and sport-for-all, and in particular, the contribution that the former makes to the latter (role modelling; ‘feel-good-factor’ and national pride; talent development, etc.). Second, we will undertake a focused review of the empirical literature to evaluate the veracity of each claim.

Study findings
We are still undertaking the reviews, so it is not possible to discuss findings at this stage. When the reviews have been completed, conclusions will be classified according the rubric of ‘Scots Law’, namely ‘innocent’ (where the claim is supported beyond reasonable doubt); ‘guilty’ (where they claim is falsified); and ‘not proven’ (where there is insufficient evidence to establish guilt or innocence).
Implications
Evidence-based policy as a guiding principle for all modern, democratic countries, and is usually taken as a cornerstone of rational decision-making (e.g., Cabinet Office, 1999). Consequently, there is an expectation that government policy-making, especially that resulting in the expenditure of billions of Euros, ought to meet relatively robust criteria. Proposals that fail to meet such standards ought to be scrutinised and potentially rejected.

References
THE USE OF HEADCAMs TO INVESTIGATE COACH LEARNING WITHIN ELITE COACH EDUCATION AND PRACTICE

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Aim
The research reported in this presentation is set in the context of the ‘global sporting arms race’ and the use of the SPLISS model to understand the processes associated with the development of sporting success (De Bosscher et al., 2008), especially those related to talent identification, research and coaching provision. It is the latter two processes (or, ‘pillars’, as defined in the SPLISS model) comprising both ‘research’ and ‘coaching provision and coach development’ that are of particular importance for improving both the quality and quantity of coaches required to enhance international sporting success. Since undertaking reflective practice appears to contribute to understanding coaches’ experiential learning (Cassidy et al., 2009), it is suggested that adopting a visual auto-ethnographic angle to research-based practice will help better capture and contribute to enhanced coach learning, provision and development.

Theoretical background
Current findings within sports coaching (especially football) seek to examine the development of coaches’ ability and coaching status. Within the UK and England in particular, of interest is the difference in the number of qualified coaches registered in the sport compared to other principal European nations (Peacock, 2008). To both generate and deliver research which is relevant to coaching practice and which maximizes its quality studies are required to explore what is currently happening on the ‘front line’ and in coaches’ everyday coaching sessions. The provision and expectation of coach delivery and elite (categorized as levels 4 and 5) coach education qualifications varies both within and between countries and, accordingly, approaches need to be partly understood on existed coaching provision and delivery (Taylor and Garratt, 2012). It therefore might be argued that evidence of coach learning as part of the certification of national governing bodies (NGBs) and higher education courses (Nelson et al., 2006) needs further examination. Indeed, Cushion and Nelson (2010, p.360) have noted that ‘evidence of coach learning is limited’ and the complexity of coach learning does not appear to be captured effectively by NGBs (Cushion, 2011). Thus far, coaching research has failed to better understand this complexity and develop coach learning by engaging in the various learning environments in which elite coaches find themselves.

Methodology
The approach argues that visual auto ethnography may help enable coaches to understand better the consequences of their decision-making and to learn from their ‘real life’ experiences to enhance future practice. The reflective approach of visual auto ethnography seeks to bring meaning to various learning situations by developing coaches’ knowledge base in a profession that is often categorized via ‘isolated’ and inaccessible practice (Knowles et al., 2006, p.173). It might also be proposed that capturing and reliving complex decision-making processes can be better accomplished by coaches using visual feedback, obtained via head-mounted cameras to enable...
researchers to re-access and understand coaches’ experiential and situated learning and the opportunity to posit a seat on the experience (Hughes, 2012).

**Implications**
As the ‘global sporting arms race’ continues to gather momentum, reflecting on the use of head-mounted cameras with coaches might inform future elite sport policy and development and shed greater light on the complexities of coach learning, practice and development. Research of the kind presented also enables coaches to be located at the centre of research and to ‘see’ their learning in a more realistic way that enhances their future practice.

**References**
THE LEGACY OF PARALYMPIC GAMES – LEADING TO SPORTING SUCCESS?

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The hosting of sporting events is recognized as a key pillar of sport factors leading to international success. Over the last decade a great deal of work has examined major sport event legacies, with much of this research focusing on the Olympic Games. This presentation seeks to add to the body of knowledge surrounding major sport event legacies and leverage by examining the largely overlooked area of the Paralympic games. The Paralympic Games are the second largest multi-sport event after the Olympic Games, depending upon which parameters are used, and since Sydney 2000 there has been an ‘operational partnership’ where the Paralympic Games are required to occur in the same city as the Olympic Games. Yet, no work has evaluated the comparative outcomes, legacies and event leverage that Paralympic games have generated. More specifically while sport policies such as the Canadian Sport Policy, and the International Hosting Policy suggest that through the hosting of International events, a legacy of increased participation and sport development is to accrue - there is little evidence to support this policy assertion from a Paralympic perspective. This paper thus uses the legacies (Preuss, 2007; Dickson et al., 2011) and leverage (Chalip, 2004; 2006) frameworks to conduct a synthesis of previous research to examine Paralympic games. The major findings for legacy-based research include: sport development, infrastructure, community development, and attitude change. The focus for this presentation then will be on how hosting international events can be a way to stimulate participation and sport development and which areas require further examination so that host cities and nations can fully benefit from the hosting of Paralympic Games.

References
ELITE SPORT SYSTEMS IN DEVELOPING SPORT NATIONS: MORE QUESTIONS THAN ANSWERS

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Introduction
Over the last two decades, the concept of systematically developing athletes in order to enhance their medal winning prospects has emerged as a priority area for sport policy among most, if not all, nations competing at major international events. Consequently, much research has focused on the requirements, characteristics and factors that might lead to international sporting success (De Bosscher, De Knop, van Bottenburg & Shibli, 2006, 2008; Green & Oakley, 2001). The result of this is that a macro, meso, micro approach to elite sport development has been proposed as being important sporting nations. However, most, if not all of this research has been with developed, western sport systems and therefore the appropriateness of this ‘homogenous’ approach to less developed sport systems needs to be considered. Although there are many aspects that could be debated, the discussion below will focus on the role of national federations in elite sport systems and suggests a number of questions that could inform future research in this area.

The role of national federations
Inherent within the research into elite sport systems is an assumption that the national federations (NFs) of a nation are in a position to assist with the development of elite athletes. Although the role and purpose of NFs in elite sport development has rarely been made explicit, it seems reasonable to argue that NFs have a central role in three key areas: competitions, athlete development and coach education. However, research into developing sport systems shows that most NFs in these countries are unable to underpin or even support elite sport development (Robinson & Minikin, 2011, 2012). Research carried out with countries within the Pacific and with Malaysia, Iraq and Bosnia and Herzegovina shows levels of development that make it impossible for many NFs to support any form of sport development. In particular, the research shows that most NFs lack resources, or access to resources, to support elite development, but more importantly, they lack the capabilities to use existing resources effectively. It also shows that the convergence of elite sport systems across countries, identified by Oakley and Green (2001) is not universal.

A homogenous model of elite sports systems?
There are a number of questions that arise from current research into elite sport development. First, what are the options open to countries where NFs are unable to underpin elite sport development? Second, should research continue to focus on models generated from developed elite sport systems, when so many nations do not have NFs who are able to support these systems? Third, what are the possible components of a universal elite sport development system? Robinson and Minikin (2012) have suggested a number of alternatives to ‘in-nation’ NF support, such as developing elite athletes abroad and therefore there are options open to nations with underdeveloped NFs. The answer to the second question should be ‘no’. A significant body of evidence already exists to support the elite sport dimensions identified within developed sport systems. Indeed, arguably, there is little innovative or even new emerging from on-going research
with developed sport systems. The answer to the third question lies in the fertile, but untapped field of research with developing sport systems. Chelladurai and Robinson (2012) have suggested that a universal elite sport development system might have the following components: government support, media support, educational institutions that are committed to sport, competition and athlete support networks. However, their assumption, once again, is that NFs will organise their sport in each country. State-delivered systems that negate the need for NFs may be a solution, however, research carried out in Malaysia where the state is primarily responsible for elite sport development suggests that this might not be successful in countries with low levels of sporting infrastructure and little cultural commitment to sport.

This leads to the final and perhaps most fundamental question to emerge from this area of research: should elite sport be a universal phenomenon? The universality of elite sport has been driven by the IOC, initially emerging in response to the boycotts of the 1980s, rather than because of any desire from the world’s nations. The consequence of this was the emergence of a large number of National Olympic Committees made up of NFs that are barely more than teams or clubs. Perhaps now is the time to investigate the rationale and indeed appropriateness of universal elite sport development.

References
THE ELITE SPORT AND MILITARY PARTICIPATION IN INTERNATIONAL SPORTING SUCCESS

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Aim
The objective of this research is to show the military athlete’s participation in international sporting success in the context of the London Olympic Games - 2012.

Theoretical background
Since ancient ages the sport is intrinsically linked to the military. A number of activities that were originally related to the Army and warmongering, and aimed at perfecting and developing the soldiers’ physical strength – thus multiplying the chances of victory in the battles and demonstrating the superiority of a whole people – were being transformed into civilian sporting practices (Brazil, 2012). With the advent of modern sport (after the rules of the popular games in England in the mid-nineteenth century) and contemporary sport (after edition of the UNESCO International Charter of Physical Education and Sports in 1978), governments have been more willing to intervene directly in the development of elite sport. There are some literature that sought to find the factors which determine international sporting success, comparing systems and sport policies of countries (De Bosscher et al., 2011). Founded on the 18th of February 1948 for five nations –Belgium, Denmark, France, Luxembourg and the Netherlands, the International Military Sports Council (CISM) is one of the largest multidisciplinary organizations in the world that manage various sporting events for the Armed Forces and has the objective of promoting peace after international conflicts that marked the world in the first half of the Twentieth Century. Currently, 133 countries are part of CISM, representing four continents, bringing together more than one million military athletes around the world.

Methodology
This study evaluated the effectiveness of the seventeen nations that competed in the London Olympic Games and the percentage of medals won by athletes of military origin. Effectiveness is then measured according to the ability of organizations to achieve desired objectives (Price apud De Bosscher et al., 2011). This study had used methods to measure outputs proposed by SIRC (2002): absolute success, measured as market share that is a standardized measure of total achievement in an event whereby total medals won are converted into “points” (gold=3, silver=2, bronze=1) and the points won by a given nation are subsequently expressed as a percentage of the total awarded points.
Results discussion and implications
United States is the most successful nation in the sample with 12,03% market share medal points, followed by China (10,21%) and Germany (4,55%). However, it was found that only 1.0% of the U.S. medals awarded had military participation, China with 8.0%, Brazil with 29,4% and Germany with 43,2% achieved better involvement. Greece (100%), Slovenia (75%), Czech Republic (50%) and Italy (46.4%) had great part of their medals won by the military. 8.7% of total medals disputed in the London Olympic Games were conquered by the military athletes. In many countries, the Armed Forces support the elite sport, offering basic conditions for the development of athletes, in order to improve performance in international competitions and to enable them to reach the international level (Pinheiro, 2011). The practice of incorporating the high performance athlete in the Armed Forces around the world is common according to Silva et al. (2009). However, each country has its own policies based on solid culture, military structure and legislation. The findings could be explained by different country’s sport systems that influence the sport career pathways of athletes. In the USA, High school and college fill the developmental role that in many other countries like Germany, France and Italy would be the place of civil and military clubs. Eastern European countries originated from “Iron Curtain” stand out from the strong influence of the military clubs/sports centers. Projects adopted in countries such as Italy, France and Germany are successful, which can be confirmed by this study.

References
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THE INTERFACE BETWEEN COMMUNITY AND ELITE SPORT: A NEW ZEALAND PERSPECTIVE

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The New Zealand Government justifies its investment in elite sport on a number of ideals including that our most successful athletes inspire participation. Furthermore, there are claims in New Zealand at least that success in sport at the highest level also inspires others to strive to be successful, whether this is in sport or other endeavours. This was particularly evident when allocating financial support for those preparing for and competing at the London Olympics. Discussion about how much should be spent on sport in search of glory is not only rife in many countries but very contentious. For example, Sport England claim that since the Olympics, of the 29 sports that recorded a change in once-a-week participation figures, only nine showed an increase (Gibson 2013). In other words, 20 sports suffered a decline in the number of participants. Although this can be interpreted in a variety of ways, Hugh Robertson the Minister for Sport in England insisted “we remain absolutely committed to delivering a lasting sports participation legacy from London 2012” (Gibson 2013). Likewise in New Zealand, after a successful medal haul, there is a belief that the London Games provided a feel-good factor for New Zealanders; however there is also the question of “was it all worth the cost and effort?” (Veer, 2012).

Whether or not success in the various international sporting arenas acts as a catalyst for mass participation or influences the so called ‘trickle-down effect’ of enthusiasm and efficiency from elite to community-based sport is unclear (Grix & Carmichael, 2012). In spite of the popular rhetoric endorsing the ‘trickle-down effect’, information about the interface between community sport and elite sport is scarce, fragmented and evidence is based primarily on anecdotal comments (Grix & Carmichael, 2012).

Given the significance accorded to sport in terms of social, health and economic benefits it seems appropriate to try and “better understand how elite sport impacts on participation” (Shilbury & Sotiriadou & Green, 2008, p.222) but this will require more than an uncritical and one-dimensional view of sport (Coalter & Taylor, 2010). Any such investigation needs to consider actions by government, national sport organisations, regional sports organisations and what occurs in the community. In New Zealand there are varying opinions but little evidence about the diverging paths and interface of community sport and elite sport, and how the different levels of sport (international, national, regional and local), interface to protect and enhance our sporting culture.

Drawing on my own personal and professional experiences, this presentation has three purposes. Firstly, to provide a critique of the political, structural and cultural practices that shape New Zealand sport. Secondly, to provide a rationale for why a socio-ecological framework is being used to conduct a series of case studies that investigate the interface, and in particular, the ‘trickle down’ effect between community and elite sport in basketball, BMX, football and kayaking. Thirdly, the presentation seeks to elicit feedback from SPLiSS conference delegates before the development of a substantial investigation, involving the collection of empirical data, on this topic.
References
INNOVATIONS IN ELITE SPORTS AND THEIR CONTRIBUTION TO SPORTING SUCCESS

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Context
Competition in elite sports is extremely fierce. Athletes and their coaches explore many opportunities that may lead to a competitive advantage. Sporting innovations can play a role in elite sports to improve an athlete’s performance as well as to beat the competition. However, the impact of sporting innovations in general on sporting success (as opposed to the measurement of the effects of individual innovations on athletes’ performances) has not often been investigated. Moreover, innovation in elite sports is often overlooked or even scrutinized, in spite of Schumpeter’s (1934) theory of the role of innovation in a competitive world. And what world is more competitive than that of an elite athlete?

Aim
HAN University of Applied Science, together with Victoria University and independent sports consultancy firm Sport2B, conducted an international research to innovations introduced in elite sports in the period 2008-2012. InnosportNL, an independent knowledge centre for sport innovation in The Netherlands, was the principal of this research. The main aim for InnosportNL was to identify main innovations in international elite sports. However, we extended the research, also aiming to describe some main features, such as the initial goal, contributors and the sporting effects of the innovations.

Practice description and actors
Almost 300 international experts in elite sport (such as national coaches) and leading sport scientists were identified and invited to cooperate in an online in-depth questionnaire. In total 54 experts (19% response rate) completed the full questionnaire. Questions on the features of the innovations were based on the works of Hekkert et al. (2007) and Henderson and Clark (1990), among others. Also the actors in innovation system, as categorized by Radosevic (1998) were investigated. This paper therefore answers questions such as:
• What is the initial goal of the sporting innovation?
• To what extent is the innovation a complete new product or concept or an adaptation of an existing idea or product?
• Who are involved in the innovation process in terms of time and money?
• To what extent is the sporting innovation internationally adapted?
• Did the innovation contribute to sporting success?
Implications and learnings
Performance Measurement and Sporting Equipment were the most prevalent innovation areas. Athletics and cycling were the sports in which most innovations took place.

The survey shows that:
• Sport itself initiates only 17% of all innovations mentioned, while sporting labs and science institutes together initiate almost six out of every ten sport innovations;
• Companies contribute a third of the money for sporting innovations and about the same in terms of time/effort. Governments contributed only 12% of the finances;
• Of the most important innovations, less than 20% are truly new products or services;
• Of the innovations for which the effects were measurable, 85% contributed to medals at the London Olympics. Yet almost half of all innovations were only used by only 1-5 countries. On the other hand, a quarter of the innovations is applied by over 25 countries.

The results suggest that innovation does play a significant role in elite sports and the outcomes of sporting events. Also there seems to be a large gap between the worlds of sport scientists and elite athletes. The goal of most innovations is sporting success and not a financial or commercial purpose. Athletes are however not often involved in the initiation of innovation, which may suggest that innovation in elite sports may be largely supply-driven.

This research is, however, not representative for all innovations in elite sports in general, but it gives an indication of the features of innovations in elite sports and their contribution to sporting success. Based on our current findings and methodology we suggest the following improvements in the research method:
1. Further (theoretically) develop the sport innovation construct and as such survey content – based on new literature and insights gained from this project. Future research should create a better understanding of sport innovation in different contexts as well as the success and fail factors in sporting innovations.
2. Improve survey representativeness, by increasing the survey sample, as well as the international distribution of the survey. Also include other type of experts, such as commercial organisations and government representatives in the survey.
3. The inclusion of elite athletes in this type of research at the macro-level, may be used to determine the scope of effect the innovations had on their own performance as well as their success in competition.

References
MEASURING WINNERS AND LOSERS – AN ANALYSIS OF THE LONDON OLYMPICS RESULTS IN A COMPARATIVE AND HISTORICAL PERSPECTIVE

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Aim
The aim of this study is to contribute new knowledge about the development of elite sport systems, in general (following up on studies such as Houlihan & Green, 2008), and about the international competitiveness of elite sport systems, in particular.

Elite sport systems can be analysed from the perspective of inputs, throughputs and outputs, respectively. They need inputs in the form of population and talent base, infrastructure, funding and other resources. Throughputs in the form of efforts to achieve organizational and managerial efficiency determine how inputs are transformed into outputs. National success in international sport competitions is not the only measure of the system output but it is most often given priority in policy discourse. In this analysis, the focus is on outputs, and results in Olympic Summer Games are used to measure the outputs of national elite sport systems.

The paper analyses recent trends in the international competitiveness of different elite sport systems on the basis of a detailed analysis of the results from the London 2012 Olympics. Two indicators will be used: medal points (no.1: 5 points, no. 2: 3 points, no. 3: 2 points) and top-8 points (no. 1: 8 points, no. 2: 7 points; .... no. 8: 1 points). Total medal points and top-8 points for all disciplines in London 2012 will be calculated and compared with similar figures from earlier Olympic Summer Games (since 1952) to identify how results from London 2012 fit with long-term results patterns. This will follow up on earlier studies such as Stamm & Lambrecht (2000)

Furthermore, the 2012 Olympics results will be compared with the ‘expected’ top-8 results derived from a regression model including population, GDP per capita, population density, muslim country, former Eastern bloc country and communist country:

\[
\text{In Top 8} = \beta_0 + \beta_1 \text{In Befolkning} + \beta_2 \text{In BNP pr. Capita} + \beta_3 \text{In Befolkningstæthed} + \beta_4 \text{Muslim} + \beta_5 \text{Østbloklande} + \beta_6 \text{Kommunist} + \varepsilon
\]

The model explains 62% of the results. Countries are ranked according to residual between actual and calculated results. Jamaica, Kenya and Cuba have the highest residuals. Most other top ranked countries are small or mono cultures. Australia and Great Britain are the only top 10 nations among the top ranked countries according to residuals. Other top ranked OECD countries are New Zealand, Denmark and the Netherlands.

The results section will briefly analyse the performance trends of the superpowers (USA, China and Russia) and the other top 10 nations, but will focus on the following groups of countries: c) top performers (outside the top 10 nations): New Zealand, the Netherlands, Cuba, Denmark, Azerbaijan, etc.; d) successful mono cultures: Jamaica, Kenya, Ethiopia,
etc.; e) the other BRICS: Brazil versus India; and f) former East bloc countries (Hungary versus Bulgaria and Romania).

Furthermore, an attempt will be made to provide preliminary explanations of the recent trends. A preliminary conclusion is the apparent relative progress of countries with clearly defined responsibility for elite sport development located in independent top sports organizations, selective priorities in support schemes, and performance management, relative to countries without these characteristics.

References
SPORT EVENTS AND INTERCHANGE: WHAT BRAZIL HAS DONE IN RECENT YEARS?

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Aim
The aim of this study was to diagnose the Sports Events in Brazil, both to host international sporting events such as the participation of Brazilian athletes in international sport events as a strategy of this country for achieving sporting success in international context.

Theoretical background
With the professionalism level of sports today, the success of athletes depends on the ability of the sport structures to effectively use all the available resources (Beamish & Ritchie, 2006; Houlihan & Green, 2008). Among other factors, the success of elite athletes in international context depends to access a good level of sport events. Thus, the participation and experience earned in international events is essential to increase the possibility of success (De Bosscher, Bingham, Shibli, van Bottzenburg, & De Knop, 2008). Therefore the investments in international sport events have targeted two situations. First situation is the organization of events at host nation where usually discusses the issue of legacy (Preuss, 2004) or the issue of home-advantage (Julio, Panissa, Miarka, Takito, & Franchini, 2012). Second situation is sending athletes to competitions in other countries; the staging of international sporting events has a positive effect on the success (De Bosscher et al., 2008).

Methodology
This study is part of the initial data analysis of SPLISS 2.0 Consortium Group research project based on the nine pillars of SPLISS model. In this paper is related of the results in Pillar 8 - (Inter)National Competition. Three surveys were used. The first survey is an inventory that was answered by Brazilian SPLISS researchers based on documents. The two other surveys were answered by a sample composed of 280 elite athletes and 38 elite coaches. A qualitative analysis with the inventory data and descriptive statistical analysis with athletes and coaches answers were realized. There were considerate in this study only the data related with international sporting events.

Results, discussion and implications
The analyzed information from the inventory showed that international competition hosted by Brazil increase in the last 10 years. The milestone was the organization of the South American Games in 2002, followed by the Pan American Games in 2007, World Military Games in 2011 and FIFA Confederations Cup in 2013 besides the several world and continentals championships of different sports. Indeed, it was verified in official reports that most of the funds from lotteries that are applied in Olympic sports were spending for host international events and to lead athletes to international competitions. However, despite the existence of a funding for host events for all Olympic sports, Brazil doesn’t have a national long-term planning to host international sporting events. About abroad competitions, in the opinion of athletes and coaches (63.2%) elite athletes can participate in sufficiently international (high level) events. For 68.4% of coaches there
are financial support for participating in international competitions, but 45% of athletes agree with this information. Brazil wants to improve its international sport results, especially for the summer Olympics in Rio 2016. According to the obtained results, host main international sporting events and participating in high level competitions in other countries seem to be a priority and it can be a good strategy, since the Brazilian international sporting results improved.

References
A COMPARATIVE STUDY ON THE EFFECTIVENESS OF GSR-BIOFEEDBACK, DEEP BREATHING AND SAVASNA TO ACHIEVE RELAXATION IN ELITE ATHLETES

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Relaxation is considered as the most important Psychological variable which is responsible for high level performance. The main purpose of the study was to compare and find out which of the three methods consisting of GSR-Biofeedback, deep breathing and savasna will lead to relaxation in the elite athletes.

Methods
The subjects selected for this study were in the age group of 18-24 years and a total of 30 subjects (15 males and 15 females) were enrolled and were divided into 3 groups. Each group consisted of 5 male and 5 female athletes. Each group was given respective technique of relaxation treatment for a period of 30 minutes for 15 days. The level of relaxation was measured by GSR-Biofeedback machine for the three groups. The statistical tool used for comparison of groups was ‘t’ value and the level of significance was fixed at 0.001.

Results
The relaxation levels were measured on the 1st day, 7th day and the 15th day for all the groups. The results of the intra group indicated that the t-value on the 7th day between the Deep Breathing Exercise vs. Savasna groups, the Savasna vs. GSR Biofeedback groups and GSR Biofeedback group showed a t-value of 17.40, 23.50 & 19.80 respectively which were significant at 0.001 level of confidence. Further the t-value on the 15th Day between the Savasna vs. Deep Breathing Exercise, Savasna vs. GSR Biofeedback and Deep Breathing Exercise vs. GSR Biofeedback groups was 11.30, 18.30 and 11.20 respectively at 0.001 level of confidence.

Discussion
Intra group comparison depicted that the relaxation levels achieved on the 7th day was more than the 1st day and the relaxation levels were more on the 15th day than the 7th day. Further the analysis showed that the relaxation achieved by the GSR Biofeedback was the maximum. There are a number of evidences to prove that the relaxation training is very effective to reduce the physiological arousal, which results in the increase of muscle tension, heart rate, blood pressure and altered respiration rate (Beck, 2011). These symptoms reflect the high level of arousal of the autonomous nervous system.

Conclusions
The following conclusions were reached from study: 1. The subjects belonging to all the three categories achieved relaxation by using the prescribed technique of the groups. 2. Bio-feedback assisted relaxation therapies were more successful when compared to
deep breathing and savasna groups. 3. Maximum level of relaxation was achieved by the Bio-feedback group followed by Savasna group and Deep breathing group stood the last. 4. The males were able to achieve more relaxation than the female counterparts.
HAS TALENT DEVELOPMENT POLICY IN SWIMMING IN THE NETHERLANDS BEEN SUCCESSFUL?

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In 2005 the Dutch Swimming association (KNZB) was one of the first associations applying the Long Term Athlete Development program under the name MOZ. The final purpose of the MOZ-program is to offer a structured and useful roadmap for talent development for all swimmers and their supervisors. The MOZ contains 5 stages: FUNdamentals (children ages 7-9; 2 hours training); Train Technical Skills (ages: 9-11/12; 4 hours); Train to Train (juniors; 11 hours); Train to Compete (youth; 14 hours) and Train to Win (seniors; 20 hours and more). For each stage specific requirements should be met with respect to swimming facilities, training hours, sport technical coaching and general guidance, level of athletes’ skills, and support from the KNZB, clubs and other actors in the development. The Active start and the Life Long Active stages from the LTAD have been omitted. The MOZ has been implemented for some years and it is promoted in various ways.

Aim
The aim of this research is the evaluation of the use of the MOZ talent development program at the level of clubs and its impact on a planned, structured and professionally organized approach of talent development at club level.

Theoretical background
Talent development is the process in which an athlete (M/F) uses his own set of gifts to develop himself systematically to become a person with exceptional competencies (Gagné, 2004). This process is influenced by interpersonal factors, by environmental factors and context and by the factor luck (Colangelo & Davis, 2003). The MOZ has been established to set standards for the various stages in order to control the environment of athletes and to reduce the factor luck.

Methodology
The focus has been on use of the MOZ by the clubs. A survey has been done under all clubs (387) with youth swimmers divided in 3 groups: a group which is unfamiliar with the MOZ (1), a group familiar with MOZ (2) and a group that uses the MOZ scan to benchmark their position (3). 22% of the clubs responded and 3 groups were well represented. A comparison of the 3 groups has been evaluated by using the Pearson Chi-square and Cramer V. In interviews the main results are discussed with relevant key players like the coordinating coach of the national junior swim team, the team coordinator of a top-level club, the KNZB project leader competition and championships and a guidance coordinator of a national training center.

Results
Eight years after the introduction of MOZ, only 18% of all clubs use it as a benchmark (group 3) and a further 37% is unfamiliar with the MOZ. Most of which is represented by the smaller clubs and clubs at lower completion levels from group 1.
Almost all clubs are able to fulfill the requirements for the stage ‘FUNdament’. The number of clubs that can fulfill the MOZ requirements for the subsequent stages ceased at this stage. The stages ‘Train to Compete’ and ‘Train to Win’ can only be fulfilled by respectively Regional Training Centers and National Training Centers.

Stage dependent training programs with stage dependent coaching in separate lanes is much more common in group 3 than in group 1. Especially in group 1 young athletes train with older athletes in their programs. In contrast to group 3, only 60% and 40% in respectively group 1 and 2 are able to facilitate 4 hours of swimming in the second stage ‘Train Technical Skills’. In the next stage ‘Train to Train’ 90% of the clubs from group 1 and 2 and 64 % of the clubs in group 3 aren’t able to fulfill this requirement.

In group 3, 90% of swimmers use individual goals to improve, but in the other groups this is much less. The availability of trainer-coaches is a problem for respectively 65, 51 and 43% of clubs in group 1, 2 and 3.

It has been shown that in all 3 groups of clubs, trainers are much more familiar with the MOZ than board members and members of swimming committees. Although group 3 clubs use the MOZ as a benchmark, 27% of the clubs in group 3 don’t expect the MOZ will play an important role in the future. Within the other 2 groups this is even much less. Within the clubs of all 3 groups the recruitment of new swimmers from other sources than their own education program isn’t well established or organized. The flow of swimmers between clubs is mainly due to following the trainer and the change of talents from clubs in group 1 or 2 to clubs in group 3 isn’t easily facilitated. Although 85% of the clubs emphasize the need for a policy for swimming, managing the trainers in the area of talent development isn’t seen as a key issue in the 3 groups. In clubs from the 3 groups the role of parents is mainly reduced to being an official, delivery of services (e.g. transport) and supporter.

Conclusions
Although there is a roadmap in which the environmental factors are well established, the factor ‘luck’ still plays an important role in the development of swimmers. The opportunities for development of talents differ significantly between clubs from group 1, 2 and 3 and also because the change to a club from group 3 isn’t easily facilitated by the other clubs.

Despite the differences between the 3 groups, all clubs need better educated trainer-coaches, more swimming hours and more support from the Dutch swimming association KNZB to fulfill the requirements of MOZ stages they would like to support. From this point of view the MOZ may be seen more as a program of requirements than as a helpful tool for the improvement of talent development itself.

For the small number of clubs in group 3 the MOZ has had a large impact and will play a significant role in the future, but within the other two groups the impact is restricted because there is no well-established talent development policy and because of the lack of facilities.

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ORGANIZATIONAL STRUCTURE OF BRAZILIAN PARALYMPIC SPORTS

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Aim
To analyze the organizational structure of paralympic sports in Brazil with the objective to provoke thoughts regarding their development towards high performance.

Theoretical background
The results reached by Brazil in the international paralympic scenario revealed the need to better understand its history and to compare its sports results with the ones from other countries. The search for better results in 2016 has made the Brazilian Paralympic Sports (BPS) more concerned in systemizing its information and defining indicators based on a national-level sports policy. The studies of De Bosscher, Bingham, Shibli, van Bottenburg, and De Knop (2008) provide great support to systemize the organizational structure of nations involved with high performance sports, offering a deeper explanation about the success of each country observed in their researches. This tool did not take into account issues relevant to the paralympic universe. This work intends to raise the discussion over the development of an effective tool that is able to systemize information regarding BPS, with the objective to minimize problems related to finding organized data that express the current reality, as well as records on the historical sports background of Brazil.

Methods
The present study considered as reference the work developed by Meira, Bastos, and Bohme (2012) and De Bosscher, Shibli, van Bottenburg, De Knop, and Truyens (2010), focusing its analysis in the Sports Policy Factors Leading to International Sporting Success (SPLISS) model, and more specifically in its Pillar 2. In order to collect information on paralympic sports, data obtained with the Brazilian Paralympic Committee (BPC).

Results
Paralympic sports are managed according to types of disabilities (International Organisations of Sports for the Disabled), to sports federations (International Sports Federations) and, for some modalities, the International Paralympic Committee plays the role of sports federation. This model allows developing 23 summer modalities and 5 winter modalities. In Brazil, BPC counts on the participation and support of the Federal Government since its foundation in 1995 by means of the following instruments: Law No. 8672/93, which created BPC; Law No. 10.240/01, which made feasible to transfer 15% of the funds collected by sports lottery as well as the effective...
participation in policies and programs of the Ministry of Sports of Brazil, which was structured in 2003; the Athlete Grant Program; support programs, actions and projects; the Sports Incentive Law and specific funding programs for paralympic sports. At the federal level, the Ministry of Sports, the BPC, National Associations and Confederations are responsible to manage paralympic sports. Clubs, associations, and support and teaching institutions are responsible to foster sports at state and local levels along with public authorities. Since the Sydney 2000 Paralympics, BPC has developed a strategic planning with the purpose to elevate Brazil’s position in the general medal table of the Paralympic Games. It focused on the increase of visibility in the national framework (by buying broadcasting rights of the Athena’ and Beijing’s Games); the improvement of installations and equipments used by athletes (construction of the 1st National Center for Parasport Training); the development of support programs in teaching institutions (School Paralympics, Paralympic School Club, paralympic projects in universities) and the qualification of human resources to work with high performance sports (creation of the Brazilian Paralympic Academy in partnership with universities for research and extension activities). In regards to the allocation of financial resources from 2010 - 2016, the main topics are the shared distribution of funds in order to comply with 20 modalities as well as the search for private funding, since most of it is produced in the public sector.

Conclusions
The framework presented reveals that BPS’ management is concerned with long-term development and presents significant items when the pillars of the SPLISS model are observed. Several issued still need to be explored in a deeper manner, such as the improvement of sports installations, which might increase the number training facilities, and the cost for acquisition of materials and equipments, making investments in research and innovation to be considered a priority. Another fundamental point is the need to increase basic sports projects for the further increase on the number of athletes, as to allow the better organization of the identification process of high performance sports talents.

References
NATIONAL DIAGNOSIS OF SPORTS: A STRATEGY FOR THE PLANNING AND DEVELOPMENT OF SPORTS POLICIES IN BRAZIL

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Aim  
To create a methodology that allows providing a diagnosis of sports and that works as a strategy for the planning and development of sports policies in Brazil.

Theoretical background  
This paper focuses on the discussion over the methodological background in which a sports diagnosis must be carried out in order to identify, verify, explain and propose actions and policies for the development of sports in Brazil. Currently, this debate is supported by a research required by the Ministry of Sports, involving six Brazilian public universities (UFBA, UFS, UFRJ, UFRGS, UFG, UFAM) and some research agencies such as FINEP and CNPq. It has the objective to identify the obstacles posed by the actual National Sports System (NSS) before the universalization and democratization of sports in Brazil, considering the need to increase the Brazilian sports cultural pattern, to promote social inclusion, and to qualify high performance sports and consequently increase its results. This study hypothesis was built around the idea that the Brazilian tradition of studies aiming at understanding the NSS has not been able to deepen the connections and relationships between particular and general issues, and therefore present concluding limitations over what defines the access to the Cultural Heritage of Humanity and its democratization. The challenge is to propose a method and an instrument that allow incorporating such experiences with the intent to identify and explain the development of the NSS in its micro and macro aspects taking as a starting point its basic elements: people who practice sports or not; sports infrastructure; sports legislation and funding; and policy-making.

Methods  
This research is based on experiences of European studies such as the European Network Coordinated Monitoring of Participation in Sports (COMPASS – 1996/2002), Participation in Exercise and Recreation and Sport Survey (ERASS – 2001/2009), as well as in Brazilian studies developed in the last 40 years: Diagnosis of Physical Education and Sports in Brazil – first extensive analysis concerning sports in Brazil (Costa, 1971); Inventory of the Brazilian Sports Infrastructure – study carried out in 2.602 municipalities (2000); Brazilian Sports Atlas (2005); The Profile of Brazilian Municipalities (2006); The Sports Research 2003 (2006); The Sports Dossier – a study on sports in the life of the Brazilian people.

Results
This study is currently at its final stage of development of the methods and instruments of investigation for further data collection, and is scheduled for completion by July 2014. Up to this moment, testing and validation has been carried out for the following instruments: people who practice sports or not, and sports infrastructure. The pilot study performed in the city of Aracaju, capital of the state of Sergipe, showed the possibility to collect the following data concerning people and their practice of sports: types of sports (modalities); level of participation in competitions (at state, federal and international levels); percentage of people who practice sports organized within a sports institution (federation, leagues, etc); percentage of sedentary people, regular and irregular people who practice sports; reason for practice or non-practice of sports, place of practice, among others. In regards to infrastructure, this study revealed the ability to identify, by means of georeferencing and local visitation, the whole sports infrastructure in its structural aspects (conditions, size, type, etc) as well in its management aspects (type of sport, frequency of use, access, etc). This information can be crossed by using socioeconomic categories and aspects: gender, age, geographical localization, schooling, marital status, profession, income, and others. Concerning sports legislation and funding, they are currently undergoing methodological development.

Conclusion
Based on the results found, this study intends to contribute towards decision-making processes of public policies in Brazil by means of the following products: a) creation of a coordination for monitoring and evaluation of public policies in sports; b) definition of basic statistics for sports; c) definition of national sports development indicators according to the quantitative, qualitative and organizational levels of sports; d) creation of a permanent evaluation system of public policies in sports; e) elaboration of maps holding the characteristics of the sports system; f) creation of a database by using the diagnosis’ researches in order to be applied by sports policy-makers.

References
TALENT IDENTIFICATION IN FOOTBALL: TOWARDS A SOCIOLOGICAL UNDERSTANDING OF PRACTICE

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This paper critiques the talent identification literature, specifically in relation to football, with a view to reorienting future research towards a more sociologically informed agenda. Whilst there is a substantial body of work on talent identification generally, much of it remains based on an overly rationalised, objectively informed and prescriptive, model-dependant approach which fails to adequately capture the dynamic, subjective and relative processes associated with the practice of identifying talent (Vayens, Coelhoe Silva, Visscher, Philippaerts and Williams 2013). Relatively recently, sociological accounts of talent development have emerged and suggested that talent identification is a largely subjective practice rather than a rational or objective process. In particular, Christensen’s (2009) Bourdieusian study illuminated the subjectivity of elite level football coaches’ ‘practical sense’ and ‘classificatory schemes’ as ‘arbiters of taste’ during the talent identification process. This investigation, however, was limited to a sample of elite level coaches identifying talented young players already participating in the professional club structure for selection in the national youth football team in Denmark. In addition, as in other sociologically informed accounts of the talent identification process in football, the conceptualization of knowledge is typically limited to the social and contextual processes of coaching practice more generally (Cushion and Jones, 2006).

There are other important and well-known aspects of the talent identification process which are far less understood. The increasing division of labour in the talent identification process in football, particularly between the talent scout who identifies and recruits talent and coaches who make judgements on, and subsequently develop, recruited young players (Christensen and Henriksen, 2011). Indeed, according to Day (2011), the emergence of a sports science industry that prioritises physiological, anthropometrical and psychological tests and models undertaken by sports science ‘experts’ employed by national sports organisations and professional clubs has marginalised the subjective ‘craft’ of talent identification. Identifying young talented footballers, in England at least, typically occurs in schools and grassroots clubs at an increasingly younger age by a range of individuals other than coaches representing professional clubs, and is external to state-led funding, structures and programmes as in many Olympic sports (Green and Houilhan, 2005). Indeed, it is common for both employed and volunteer scouts and academy development officers representing professional clubs to recruit children as young as age 4 from school and grassroots club settings. Yet relatively little is known about those engaged in the talent identification process (Nutt, 2007; Vayens et al., 2013), and less still regarding what informs their practice, why they identify talent in the way they do, and how this is shaped by the broader socio-cultural context in which talent identification occurs. In this regard, the present paper concludes by arguing that to develop a more adequate explanation of the constraints that mediate the practice of talent identification, future research should examine more clearly and systematically the roles of those undertaking talent identification in football and the outcomes of this for elite sport policy.
References


THE STATUS OF SPORTS FOR PERSON WITH DISABILITIES IN DEVELOPING COUNTRIES: THE CASE OF KENYA

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Background
The twenty first century has been a period over which the needs of Persons with Disabilities (PwDs) have gained prominence nationally and internationally (HCHR, 2008). This can be seen in the passage and enactment of laws and policies which address issues pertaining to disabilities (Convention for Persons with Disabilities, 2008). In Kenya these include the passage of laws (Persons with Disabilities Act, 2003; Constitution of Kenya 2010) and subsequent policies to govern the way issues relating to disability ought to be handled. In this regard, PWDs who participate in sports have had increased opportunities to access sports activities and introduced to new sports at local and international competitions. The significant impact of these policies on the sporting performance of PWDs in Kenya have not however been evaluated. This study assessed the extent to which the policies have contributed to the success of Kenyan Paralympic athletes participating in the national and international competitions. Both the number of participants and government support to the preparations and competitions were documented. The study objectives were to a) Identify the legal and structural framework that provides support services to people with disability in Kenya b) Document the funding opportunities available for persons with disabilities to participate in national and international competitions c) Evaluate specific sports programmes for persons with disabilities within the country and d) Identify transition pathways from grassroots to elite sport levels (in school systems and out of school programmes).

Methodology
The present study proposed to document the current situation of sports opportunities for persons with disabilities in Kenya. This included a mapping of the legal framework and support system of the government, identification of the involved stakeholders, and the proposition of practical and applicable activities to increase sport opportunities for persons with disabilities. Respondents from various regions of Kenya participating in Parasports as athletes and officials from different sports were interviewed using a semi-structured questionnaire to provide a detailed assessment of the sports opportunities and support systems, including the facilities available for PWDs in their regions. The data collected was analysed and reported as frequencies, means and graphically presented in the form of graphs. A comparison of rural and urban centres was computed and analyzed using t-test while the chi-square was used to analyze responses from athletes and sports leaders from different sports organisations.

Results
The results showed that Government involvement in Parasports has had a tremendous impact on the disability sports programmes in Kenya. This includes increased funding by government which remains the main funding agency for disability sports. The medal tally and number of participants with varying disabilities in the international competitions has also risen steadily from less than twenty in 1972 when Kenya first participated in the Paralympic events to 200 elite athletes currently registered by the Kenya National Paralympic Committee in 2012. There was a significant difference in the level of
participation by athletes in the rural areas as compared to those in urban centres. The athletes in urban centres were exposed more to better facilities and participated in a variety of elite sports than those in rural areas.

**Discussion and implications/conclusions**
The support to parasports by government is evident at the urban and rural setups in Kenya in terms of infrastructure and financial assistance. This however tends to favour urban centres where most of the athletes participate in national and international competitions. There is need for the government to extent services to rural communities where majority of persons with disabilities live.

**References**
THE INTERNATIONAL OLYMPIC COMMITTEE – INTERNATIONAL PARALYMPIC COMMITTEE STRATEGIC RELATIONSHIP AND ITS IMPACT ON OPPORTUNITIES FOR ELITE ATHLETES WITH DISABILITIES: A CRITICAL PERSPECTIVE

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Abstract  
This paper presents a critical perspective of the International Olympic Committee (IOC) – International Paralympic Committee (IPC) strategic relationship and its potential impact on the future of the Paralympic Games as well as fostering greater inclusion and equal opportunity for athletes with a disability in elite international sport. Central to this examination will be an analysis of the interrelationships between the IOC, the host Olympic Committee for the Olympic Games (OCOG) and the IPC with respect to bidding on and staging of the Paralympic Games. Beginning with the bids for 2008, the IOC has mandated that each candidate city’s Olympic bid proposal must also include a section on the organization and conduct of the Paralympic Games. Plans to incorporate and emphasize cultural, economic, environmental, and social values that are important to the International Olympic Committee (IOC) and to the IPC are necessary elements of any hopeful host city’s bid proposal. As often is the case, bid promises and futuristic plans by OCOGs are not fully realized leaving the impression that potential host cities over-promise to win the bid and then under-deliver once the Games are awarded. For purposes of this study, the 2010 Vancouver and 2012 London Olympic and Paralympic Games will be used as the principal case studies in analyzing the IOC – IPC strategic relationship in practice.

This study utilizes and integrates three conceptual frameworks: a) the Critical Change Factors Model (CCFM) grounded in a critical social and open-systems theories; b) the Organizational Continuum for the Inclusion of Identity Groups in Sport (OCIIGS) derived by Fay (1999) from a workplace diversity inclusion model developed by Esty, Griffin and Hirsch (1995) and c) a principal – agent framework as described in works of Grossman and Hart (1983), Holmstrom and Milgrom (1991), and Laffont and Martimort (2001) that focuses on the ability and power of a given organization to leverage its interests against those of another. The intersection of these three frameworks provides a means to identify and describe how the divergent interests of the IOC, the OCOGs and the IPC impacted the overall success of the 2010 Vancouver and 2012 London Paralympic Games.
regarding advancing a progression towards the goal of achieving greater inclusion and equal opportunity for athletes with a disability into the highest levels of sport.

In a Paralympic Games context, the principal is the IPC, who has employed an agent, the IOC, who has further delegated contractual obligations related to Paralympic Games to the local Organizing Committee for the Olympic Games (OCOG). Normally, the principal organization in a principal – agent relationship is the most powerful politically, symbolically and economically relative to the ‘agent’ organization. In this scenario, however, the IPC in it role as the principal has yielded its power by bundling and selling its rights to the IOC, as agent, who further has delegated its organizing, marketing and broadcast rights related to Paralympic Games to the local Organizing Committee for the Olympic Games (OCOG). In effect, the IPC has surrendered its rights to the IOC and the corresponding OCOG and by so doing has conceded its ability to directly influence, monitor and control its agents (e.g., the IOC and OCOG) as they carry out their tasks relative to a given Paralympic Games.

In applying a principal-agent theory in concert with the Critical Change Factors Model, it is not surprising that progression along the Organizational Continuum relative to inclusion is problematic due to the divergent interests of each of the respective parties. Findings, using a critical analysis of the 2010 and 2012 Games as primary case examples, are expected to yield results that describe potentially more effective arrangements between the IOC, IPC and OCOGs that help promote greater inclusivity through specific opportunities for athletes with a disability achieving full participation and equal opportunity in elite international sport. In so doing, the authors desire to lay the groundwork for future academic inquiry by using these three frameworks to provide a series of scenarios of how future inclusion of athletes with a disability within the Olympic Games could be structured to better serve the Olympic and Paralympic Movements.

References


ATTITUDES AND MOTIVATIONS OF ATHLETES AND COACHES TO COMPETING AT MAJOR EVENTS

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Background
Competition is the raison d’être of elite sport, and the primary motivation for the athletes who take part, and for the coaches who prepare them (England Athletics, 2011; Green and Houlihan, 2005). Event organisers are motivated by a range of economic and political considerations to bid for and stage major competitive events. A significant body of evidence exists which details the impact of major events on a host community (Shibli and Coleman, 2005; Gratton et al., 2001), effects which may extend to a performance uplift for ‘home’ athletes (Shibli et al., 2012; Shibli and Bingham, 2008; Bernard and Busse, 2001; Clarke 2003; Johnson and Ali, 2002; Kuper and Sterken 2003). As with most aspects of elite sport, the planning and delivery of major events varies from country to country (De Bosscher, et al. 2008, 2006). Data from SPLISS I suggested subtle differences of opinion between athletes and coaches regarding the sufficiency of international competitive opportunities, and recommended further research to examine individual sports in more depth.

Objectives
This paper seeks to extend the knowledge base with regard to the organisation of major events, by reviewing the findings of a major investigation into participant retention and progression in Athletics in the UK, commissioned by the governing body of the sport in England (England Athletics, 2011). Specifically, it examines the attitudes of coaches and athletes to competition, with the aim of identifying the reasons why athlete and coach motivation may differ from that of event organisers.

Methods
The performances of athletes who ranked in the top 20 at under 15 level in 2005 (n = 513) were reviewed over the subsequent 5 years (i.e. up to under 20 level). Of these athletes, 49% were still competing in 2010, while 13% were ranked in the top 20. To move beyond the interpretation of ‘hard’ performance statistics, a sub-sample of 30 athletes were interviewed to search for ‘softer’ explanations for their continued elite level performance. A further 16 athletes who were no longer competing were also interviewed, along with 15 senior athletes who had represented the UK in international competition. The opinions of 10 senior coaches and coach mentors were also sought to give balance to the findings of the athlete interviews.

Results
Analysis of results from the research reveals a number of potentially significant findings. The Olympics are regarded by most athletes as the pinnacle of achievement in the sport, and all other events (including the IAAF World Championships) are seen as milestones on the road to the games. Athletes are keen to compete in events, as much to benchmark
their progress in training as to gain experience of the competitive environment. Coaches have mixed views about competition, particularly with regard to finding an appropriate level of event to fit in with athletes’ long term development. There is a recognition of the need to balance Long Term Athlete Development (LTAD) with the commercial imperatives of event organisers. A number of critical success factors for athletes were identified by the research (including intrinsic motivation, coaching support, wider support networks and services) which help to explain athletes’ success at international events.

**Conclusion**

The motivations of athletes to compete in major events are to some extent at odds with those of their coaches and of event promoters. This study demonstrates that in one sport (Athletics) in the UK, there is a balance to be struck between the motivations of athletes, coaches and event organisers. In addition to the need athletes and coaches to plan training schedules around major events, these findings have policy implications for event planners and National Governing Bodies, since athletes are a finite resource. This research has potential applications in other sports and in nations beyond the UK.

**References**


One of the most fundamental differences between host countries is the degree of autonomy afforded to organisers – that is, the extent to which the organisation of events is devolved to sub-national or local level, such that some events take place independent of the input of local or national government altogether. The relationship between event planning and delivery may be thought of as a matrix with two axes - organisational autonomy and number of events delivered. These differences in the organisational framework for international events are often determined by cultural or political influences, but may also be due to financial or more pragmatic considerations. Surveys of elite athletes, coaches and performance directors suggest a negative relationship between the strength and depth of the organisational framework and levels of satisfaction with event planning and delivery at national level. The staging of international events does not necessarily translate into an increase in the number of competitive opportunities for athletes from the host country. This may be due to the economic and political motives of national event hosting agencies, the exclusion of National Governing Bodies from the planning process, budgetary considerations or other cultural/political factors. This conflict of aims and objectives has implications for national event hosting agencies and governing bodies of sport considering event bids and for athletes and coaches planning training cycles in preparation for major championships.
**SPLITTED SPORT? TOWARDS A BETTER INCLUSION OF ATHLETE WITH A DISABILITY**

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**Aim**

Over the past twenty-five years there have been massive changes in sport for athletes with a disability, especially in elite sport. Scholarly work has questioned this change on many aspects: sociocultural research, media representations, sport classifications, international/national policies, technological impacts. However little has been done on either management-related issues or sport-governance issues of inclusion in sport for athletes with a disability (Legg, Fay, Hums & Wolff, 2009). This paper focuses on this issue which has been a controversial topic for sport organizations, (para-) athletes and paralympians, public authorities, media and private companies and has larger ramifications in the entire society. We argue that governance solutions can be found inside the sport movement to improve the inclusion (to be understood as an ongoing process where both the majority and the minority reciprocally adjust to each other’s values and practice (Berry, 1997)) of athletes with a disability. At this time sport-governance, inspired by the network governance theory, can be defined as a structured set of autonomous entities, linked by more or less stable patterns of relations, creating (sport) products and services to adapt to and shape their environmental contingencies and which evolved through a series of games. Studying sport inclusion with a sport governance perspective could both contribute to a better theoretical knowledge of inclusion in a sport context and generate relevant advice for executive members.

**Theoretical background**

The physical activities and sport for athletes with a disability were essentially structured since the 1950s in parallel of the mainstream sport. Indeed the adapted sport has been developed according to the disability and not in regard to the sport, as usually in the mainstream sport. This organizational division has created a quasi-hermetic classification system, distinguishing the athletes with a disability from the others, evolving in different competitive circuits. Currently three main international multisport organizations focus on sports for athletes with a disability. These are the International Paralympic Committee [IPC], Special Olympics [SO] and the International Committee of Sports for the Deaf [ICSD]. These structures are embedded in a larger sport network (Chappelet & Kübler-Mabbot, 2008) including in a non-exhaustive way, the International Olympic Committee [IOC] and its principal components, the International Sport Federations [IFS], the Court of Arbitration for Sport [CAS] and the World Anti-doping Agency [WADA]. This sport network is also influenced by many other actors like the public authorities (e.g. European Union, national policies), the media and private (sport) companies. In a constant evolution since 1950, the intricate relationships between these organizations influence significantly the sport activity for athletes with a disability.

**Research design**

Our aim is to understand the dynamic of this network linked with the inclusion of athletes with a disability through the actor’s games (Crozier & Friedberg, 1992) and to
identify the inclusiveness evolution. In order to reach this goal we mobilize both the
collective action theory and the Social Network Analysis which allows a flexible set of
concepts and (inductive) methods with broad interdisciplinary appeal (Wasserman &
Faust, 1994). Three main projects linked with the inclusion of athletes with a disability
are analyzed through this lens in order to compare it. This study is conducted with the
use of qualitative and quantitative methods. Interviews with key actors of the network
and analysis of relevant documents (reports of board meetings coming from the
concerned sport organizations, minutes...) will be used.

**Discussion**

This study focus on sport-governance-related issues of inclusion in sport for athletes
with a disability. We argue that the theory and methodology mobilized, engaged
in a comprehensive approach, can improve the understanding of this issue. This
understanding can both lead to action and generate practical advice for executive
members. It could also serve as a starting point for future research in order, for example,
to implement these findings in a particular sport discipline with specific regulatory, social
or economic context.

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SILENT RESULTS – THE EFFECT OF NOISE ON SPORT PERFORMANCE

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Aim
According to the economic point of view of our study, the athletes and other professionals in the sport sector (coaches, managers etc.) consider as bounded, rational individuals respond to different incentives determining their performance. The material and immaterial incentives influence individual behaviour beyond the allocation of resources, and establish the structure of each sport and the required level of the performances (Simon 2000). One of the key factors of sports performance is the effort taken by the athletes during the preparation and competition in order to success. The rules and the systems of competitions of the different sports affect the relationship between the effort and the result on a wide scale (Symanski 2009). An important variable in the Lazear and Rosen (1981) model is the amount of noise – that is, to what degree luck affects the probability of winning. Based on this those sports where the effort defines the performance in 100% can be called absolute quiet like swimming; the one where the performance is independent from the invested effort can be called absolutely noisy (such as dice). The sports, of course, are located between the perfectly quiet and noisy end points of a scale, and consider the role of external factors, opponents and teammates. One of the goals of our research is to prepare such a scale and present the evidence based results and consequents.

Methodology
Based on the tournaments theory called in the economic literature, we assumed that the complexity and uncertainty which causes the noise have different effects on the motivation of athletes (Lazear 1986). The different structures of incentive systems (amount of income) determined by the level of the noise can achieve a satisfactory solution in order to reach the international level of performance. If the structures of the competition offer higher expected value than one, the rational actors will be motivated for further investment or effort for the better sporting results. Expected value = (chance of the promotion) * (ratio of possible benefit)
Based on this methodology in this study we compared the difference applied and evolved incentive systems of the most popular Hungarian sports and explore the rationality behind the success and draw attention to the failure of the operation which leads to lower sports achievements.

Conclusions
Uncertainty and complexity affects sports performance and the behavior of participants in the sport, and only those schemes of incentive can be efficient tools in this high competition for results and attention of fans which takes into account these factors. All the decision makers in the sport sector need to understand the rationality behind incentive systems in order to enhance the competitiveness and develop relevant systems.
References
THE HOLE IN THE PYRAMID – THE STRUCTURE OF HUNGARIAN BASKETBALL

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Aim
The most commonly used pyramid structure to describe sports models is symbolized by a broad base, and by standing elements logically on each other to form a towering house construction (Andreff 2009). According to this metaphor, the larger the number of those participating on the grassroots level, the higher the number of talented youths who are endured to be undrafted in the system; furthermore, the enhancing competition promotes the identification of the best players and the preparation of elite athletes. This article intends to show, through the systems of the competition, that these seemingly reasonable structures can lead to faulty models which influence international competitiveness of the sport.

Methods
According to the economic point of view of our study, actors of the sport sector (coaches, managers etc.) are considered as bounded, rational individuals respond to different incentives which are determined by their self-interest (Ginits 2009). To support the existence of the above-described problem, data analysis was performed on Hungarian basketball. We have investigated results and the structures of the leagues (Primault 2006). Also the participation in the different age groups was examined which was compared with their international results with particular attention paid to the analysis of the similar data from top level. Based on this, the following statements were formulated:

- The systems of the competition has a strong influence on the competitiveness of the sport;
- An organic relationship does not exist between the domestic and international competitiveness;
- The uncertainty hypothesis (Rotterberg 1956) may not be relevant from a competitiveness point of view;
- The sport’s pyramids has similar behaviour as the bureaucratic organization (Parkinson 1957);
- In some particular sport, a hole in the pyramid was formed, which absorbed the resources reversed to development and made it difficult to reach a higher international level.

Conclusion
The existing competition systems have a strong influence on the structure of the Hungarian basketball. Our research showed that the pyramid structure forced all the resources on the domestic level. This structure, resulting from the rational decisions of the actors does not lead to an efficient structure which is internationally competitive; on the contrary, it results in the spending of all the disposal resources (labour, capital, attention) on daily consumptions (e.g.: salaries) instead of the investment in talent identification and development.
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QATAR’S MOTIVES FOR HOSTING MEGA SPORTING EVENTS AND FUNDING ELITE SPORTS

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This presentation will discuss why countries host mega sporting events. Following a review of the academic literature there will follow a case study of Qatar, which is developing into a hub for international mega sporting events. Qatar has hosted in its capital Doha, among other international sports events, the Asian Games in 2006 and the Asian Football Cup in 2011. In 2015 the Arab state is hosting the Handball World Cup and in 2022 the FIFA World Cup.

There are foreign as well as domestic policy objectives for hosting mega sporting events. Foreign policy objectives include, for example, gaining international prestige and competing with other nations via the sporting sector. Domestic policy motives include goals such as cultivating national pride and modernizing the country’s infrastructure. Apart from such general motives there are some motives unique in the case of Qatar: A tiny country with borders to Saudi Arabia and being in the neighborhood of Iran, Qatar will never be able to defend itself militarily. Therefore, the country wants to increase its soft power by organizing international conferences and mega sporting events to build relationships with as many countries as possible. Hosting mega sporting events has therefore become part of the country’s defense and security policies. Apart from successfully bidding for international sporting events, Qatar has already started to heavily invest into elite sports. The Aspire Academy in Doha has the vision to be by 2020 the world’s leading sports academy in the development of youth athletes; which has already produced successes such as a silver medal at the 2013 World Championships in Athletics (by an athlete who was born in Doha and not like others before him a naturalized citizen).

Apart from a review of related literature, policy documents and newspaper articles, I want to conduct interviews in Qatar with stakeholders involved in organizing mega sporting events and elite sport funding in the country as well as local journalists and scholars.

References
A COMPARATIVE ANALYSIS OF TEN ELITE WOMEN’S SOCCER COUNTRIES USING ANALYTICAL HIERARCHY PROCESS

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A comparative analysis of those countries that have been identified as leaders in women’s soccer internationally was conducted. This comparative analysis included an evaluation of macro level variables that included population, Gross Domestic Product, Government Stability and Competitiveness Scores. Micro level variables that were included were the Hofstede’s Cultural variables of Power and Distance, Gender Gap, and Uncertainty Avoidance as well as Men’s and Women’s FIFA Ranking points, percentage of the population who are either male or female players and number of female soccer clubs. The meso level variables were financial support, integrated approach to policy development, participation in sport, talent identification and development system, athletic and post career support, training facilities, coaching provision and development, international competition and use of scientific research. (De Bosscher, De Knop, van Bottenburg & Shibli, 2006)

There was significant correlation between FIFA points and the Macro variables of Population, GDP, Government Stability, Competitiveness as well as the Micro variables of Gender Gap, Hofstede’s Cultural variables of Power Distance, Individuality, and Uncertainty Avoidance) and the Soccer Culture and Women’s Soccer culture for all 126 Countries that were included in the Women’s FIFA World Rankings.

Along with this, the leaders of women’s soccer in each of the top ten countries were interviewed using the same protocol. After this process was completed by the researchers the findings were shared with a panel of experts in the world of women’s soccer. The panel of experts were asked to first read the report and come to conclusions in regards to the strengths and weaknesses of the countries on the meso level variables. The Macro and Micro variables were already quantified. The panel was then asked to participate in the Pair Wise Comparison process which ranks criteria on level of importance in the Analytical Hierarchy Process as well as the voting process on the countries.

Results of the voting with the AHP indicate the United States, which is ranked Number 1 in the World FIFA Rankings, benefits from the Macro Level variables, variables over which it has little if no control, while the nine other countries appear to be stronger in the meso level variables, those that are controllable, thus leveling the playing field in the field of international soccer. Germany which is currently ranked second, is ahead of the US based on the AHP. In fact when the macro level variables are completely discounted, the USA ranks fourth in the world.

AHP is a multi-criteria decision making tool that provides a methodology to calibrate the number scale for the measurement of quantitative as as well as qualitative performances. The scale ranged from 1/9 for least valued than to 1 for equal and to 9 for most important.
References
TWO DIFFERENT APPROACHES, SAME RESULT: USING SPLISS AS A THEORETICAL BASIS FOR EVALUATING THE OLYMPIC SUCCESS OF USA BASKETBALL AND SWIMMING

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The United States of America won the Gold Medal Count as well as the Overall Medal Count at the 2012 London Olympic Games. Within this achievement, the USA also earned the most medals in the Swimming Competition and earned the Men’s and Women’s Gold Medals in Basketball. It can be argued these two sports are the USA strongest and most successful sports internationally. US Male Swimmers own 62.5% of the Olympic records and the women own 37.5%. Along with this in the London games US Swimmer earned 30% of all of the gold, silver and bronze medals. Men’s Basketball has won the Gold Medal in Basketball for Every Olympic Games except three, 1972, 1980 & 1988 and the women have won seven of ten Gold Medals and the last five Gold Medals including London.

While both have achieved similar positive outcomes in London and in past games, the means by which they have achieved the success are quite different. While both sports benefit from variables upon which they have little if any control such as genetic makeup and environmental and cultural influences, deemed micro level variables by De Bosscher, Bingham, Shibli, von Bottenburg & De Knop (2008); and variables such as economic welfare, population, climate, and government stability that DeBosccer et al (2008) termed macro level variables, the primary focus of this presentation will be on those variables upon which the leaders in the respective sports have a greater degree of influence. De Bosscher et al (2008) identified these variables as Sport Policy Factor Leading to International Sporting Success (SPLISS) and they include financial support, governance structure, participation in sport, talent identification and development system, athletic and post career support, training facilities, coaching provision and development, international competition and scientific research.

The SPLISS model will be used as a theoretical framework to compare and contrast the two sports and to identify the difference and similarities. An in-depth discussion of talent identification, the role of the club and the relationship between the clubs and the federation, financial support and coaching developed will be explored and the application of the ideas to the other sport environments will be discussed.
DEVELOPMENT OF RIVALRY IN OLYMPIC WINTER SPORTS

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Background
The medal market of the Olympic Winter Games grew 87% between Calgary 1988 and Vancouver 2010, due the new sports, disciplines and competitions in the Olympic program. Adding a sport increases its attention from media, spectators and competitors. The competitors in these sports are more likely to increase their effort, because value, reward, and the quality of the contest raises. Therefore, the incentives for competitors are affected by including a sport in the Olympic program. In this study paper, we compare the rivalry between new and well-established sports in the Olympic program.

Objectives
This study aims at describing and measuring the changes in rivalry between competing National Olympic Committees (NOC) in the Olympic sports at the Winter Games between 1988 and 2010. It is assumed that the level rivalry in sports newly included in the Olympic program differs from traditional sports. That means, traditional sports are characterized by no trend in rivalry, while newly included sport are characterized by an increasing rivalry over time.

Method
We use uncertainty of outcome (UO) measures to evaluate the level of rivalry within an Olympic sport. The more uncertain the outcome of a competition is, the more equal are the competing rivals. The level of rivalry is analyzed using the measurement of inequality in medal distribution at Olympic Winter Games. If inequality of medal distribution within a sport is low, the rivals are more and vice versa.
Researchers use Gini coefficient or standard deviation to examine the UO in sports (Humphreys 2002; Utt & Fort 2002). We define the inequality index, following the technical criteria of Coulter (1989). Therefore, the corrected Hoover-index is applied as a coefficient of distribution of inequality. Other than the Gini coefficient, it doesn’t measure concentration and is meanwhile similar to the standard deviation. The index measures the inequality in medal distribution between NOCs contesting medals. The development of inequality in winter sports making part of the Olympic program since 1988 are compared to the ones added between 1988 and 1998. Variance analysis is applied to research the difference between the rivalry level of traditional and new sports. The database of the International Olympic Committee (IOC) is used to extract the medal data from 1988 till 2010.

Results
The level of inequality values in traditional sports is higher than in newly added once. Hence, rivalry in sports newly included in the Olympic program is more equal from the well-established ones.
In traditional sports, the index shows no significant trend in inequality of medal distribution. A variation of inequality is observed only in speed skating.
In new sports, short track and curling show an increase of inequality, while freestyle skiing and snowboarding don’t.

**Conclusion**
The results confirm the first hypothesis: the level of rivalry in sports newly included in the Olympic program is lower than in traditional sports. Furthermore, the assumption about a trend of rivalry of newly added sports couldn’t be rejected.
Several factors influence the evolution of the rivalry within a sport: number of contestable medals and contesting nations, effort of contestants, IOC regulation and quota, innovations in performance, etc. Except for speed skating, the results are reasonable due to the particularity of the medal market growth during the period. The number of contestable Olympic medals for NOCs in freestyle skiing increased since 1992 plus 200% (from 6 to 18), and in snowboarding since 1998 plus 50% (from 12 to 18). The increase of inequality in these sports is probably perturbed by the increase of contestable medals. Further research is needed to enlighten the development of the rivalry in the case of speed skating.
Furthermore we assume, that contest theory could partially explain the difference of rivalry in new sports and traditional sports. According to this theory, competitors are maximizing their probability of success, and their behavior is guided by incentives (Szymanski 2003). These incentives are: number of contestant, value of the contest, marginal cost of effort, and quality of the contest (Downward et al. 2009). We assume, that the change from a non-Olympic to an Olympic sport affects these incentives, and therefore influences competitors’ behavior. Thus, the contest becomes less equal because of the inequality in available resources of the competitors. More able competitors are more likely to win contests (Downward et al. 2009; Szymanski 2003). Therefore we argue, that contest theory can be applied to explain why the rivalry in new Olympic sports should increase over time.
The explanatory potential of contest theory should be strengthened by further studies.

**References**
SHOULD ELITE SPORT RECEIVE PUBLIC FUNDING IN DEVELOPING SPORT SYSTEMS?

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Introduction
Research into elite sport systems over the past decade has led to an understanding of the factors that might be adopted by countries to enhance their chances of winning, or at least competing successfully on the world stage (De Bosscher, et al., 2006; Green & Oakley, 2001). The pressure to win has led to a significant increase in public financial investment in elite sport systems by governments around the world. At the organizational level, Robinson and Minikin (2012) have argued that sporting success comes about as the result of the competitive advantage that a nation can create by developing athletes capable of achieving international sporting success. They believe that the competitive advantage of a country at major sport events is dependent on the ability of a nation’s national federations (NFs) to ‘deliver’ medal winning athletes. This is particularly the case for developing nations when the strength and success of sport in a country is intrinsically linked to the strength and success of its NFs. The IOC recognises 204 National Olympic Committees, all of which are provided funding to attend the Olympic Games – the pinnacle of elite competition. As Scotland approaches its referendum on Independence in 2014, plans are being put in place to participate in the Rio 2016 Games as an independent country. Underpinning all this, is the belief that elite sport brings benefits to society through increased participation, the development of sporting role models, national identify and a ‘sense of national pride’. This makes it difficult to argue against financial investment in elite sport.

Elite sport and developing nations
However, research carried out with a number of nations suggests that even with public investment in elite sport, developing sport systems are unable to fully adopt the factors that have been identified as contributing to elite sporting success, because of the size of the necessary investment of public funds. For example, research carried out in Malaysia shows that, despite government investment in regional and state facilities, access to appropriate facilities is still limited and that most sports lack a coherent framework of competition to allow talent identification and athlete development. Research carried out in Vanuatu, Palau and Papua New Guinea has identified a lack of facilities, competition structure and little or no access to sport science support. In addition, research with the national federations in these countries (and many others) shows that these organisations are unable to create medal winning athletes because their resources and capabilities are simply not developed enough (Robinson and Minikin, 2012). This suggests that the investment made in these countries is not enough to develop the factors identified as leading to sporting success or to develop NFs that can create competitive advantage.

Does investment lead to elite sport success?
The answer to this question is obviously no. In an Olympic context, elite sport success is not a universal phenomenon despite public investment in developing elite athletes in most competing nations. As few as 25% of nations could be considered as being consistently competitive in Olympic Games competition. Although 204 nations took part in the 2012 London Games, only 85 won a medal, of which 18 won 1 medal. Seventy
three nations have never won a medal despite the fact that 63 of these countries have
competed in five or more Summer Games. In London, 58 teams had less than 6 athletes,
most of who had qualified via the tripartite system for enhancing universality, rather
than meeting qualifying standards established by International Federations (IFs). This
suggests that these athletes are not, in reality, elite, although they are the best a country
has to offer. It would appear that in many countries investment does not lead to systems
or organisations that create competitive advantage.

So should elite sport receive public investment in developing countries? The answer to
this question should probably be no. This is because the cost of investing in elite sport
has escalated significantly over the past decade and thus the amount of investment in
elite sport required to be competitive is simply beyond, and will become increasingly
beyond, many developing sport systems. There is also little evidence to support any
sustained benefits from an investment in elite sport (Grix and Carmicheal, 2012) and
any benefits received are from success at the elite level. Thus, when even significant
investment is no guarantee of success, the logic of investing public funds in elite sport is
questionable.

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IDENTIFICATION AND EARLY DEVELOPMENT PROGRAMMED

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Introduction
1. For example, on June 1994, when I founded UNIQUE ULTIMATE SPORT & ACADEMY (a Football Training Centre in Lagos-Nigeria), I was actively involved in Talent Identification and Early Development Programmed Voluntarily, in partnership with some community authorities and Football supporters. The programmed used a series of physical tasks and an interactive Sport Interactive – to determine the suitability of sports for young people. In order to investigate the validity and applicability of the programmed “SOCCER for HOPE” commissioned the Unique Ultimate Sports & Academy to undertake an academic review.

Background Information
3 In introducing the review the following points are made:
   3.1 Researchers in all domains are attempting to find a way of identifying talent.
   3.2 In developed western countries, scientific approaches increasingly are being used.
   3.3 Skills and aptitudes shown at a young age do not automatically translate into talent development and performance.
   3.4 Talent may be lost or never recognised because of lack of opportunities.
   3.5 Lessons, practice and encouragement appear to precede exceptional performance.
   3.6 Development patterns vary among individuals and different components develop at different rates.
   3.7 The quality, type and intensity of training are important.
   3.8 Evidence suggests that it takes ten years of concentrated training to reach the highest levels.
   3.9 Training must be directed at improving or developing a skill. It should be purposeful and goal-directed.
   3.10 ‘Deliberate practice’ requires time, energy, access to teachers, facilities and training materials and is not inherently enjoyable.
   3.11 Children often would not practice if it was not for parental encouragement.
   3.12 Children practice more when they are progressing and finding the practice pleasurable. Also, individuals have to enjoy an activity before they can practice deliberately.
   3.13 Talent is dependent on genetics, environment, encouragement and the effect of these on physical and psychological traits.

Objectives:
4 The objectives in Talent Identification (TI) were identified and the issues surrounding them are noted below.

Physiological
5 This approach supports the idea that there are distinct profiles for individuals in different sports. This has led to the belief that profiling young people on these measures will enable the identification of individuals with the potential to be
successful in specific sports events. However, these are unstable during adolescence, they vary with age and recent studies have been inconclusive.
6 The assumption that the individual performing best at any one age group is the individual with the most talent is unfounded. Those that excel at strength sports tend to be early mature. It takes technical superiority for late matures to develop successfully but they are likely to surpass early matures’ performances over time. (Often these early matures have not been required to develop technical skills rather relying on their strength.)

Performance Models
7 There is a number of basic movement skills (fundamental motor abilities) required to participate in sport. They are seen as essential precursors to excellence in sport. They need to be developed by age 12 or 13 or success in sport is not possible.
8 These abilities do not develop automatically; they need quality teaching and regular opportunities to practice. Most young people in the world do not receive these opportunities. This approach will lead to individuals with relevant experiences being selected rather than those with potential.

Psychological
9 Research consistently has identified psychological determinants of sporting performance. Many researchers consider psychological factors to be the main determinants of individuals’ potential in sport in terms of the development of skills, a continuing commitment to training and competing and consistent high performance and need to be incorporated into talent detection/identification models. However, the emphasis on psychological development in Developing Countries (Europe, America and Australia) sport is minimal.

Methods
Conceptual Models of Talent Identification
10 Current models are formulated primarily on presumed determinants of performance as opposed to factors that predispose individuals to learn and consolidate skills. Also, the factors emphasised within these models tend to be innate rather than develop-able performance determinants. While talent is partly innate, an individual’s development is largely dependent upon the environment and the ways in which the individual interacts with it. Conceptual models have not recognised the importance of identifying how an individual realises their talent within the competitive environment and maintains success once it has been achieved.

Current Practices in Talent Identification
11 In the other part of world selection typically occurs from the current participation base. This approach benefits those born in the early months of the selection year. There is a bias towards individuals who are physically mature for some sports (football, rugby, swimming, tennis but the reverse for gymnastics).
12 In some European countries, physical and anthropometric characteristics were used and then taken on in countries such as China and Canada. However, in this approach young people who are physically mature are identified for strength sports and others for coordination sports. Also the age of specialisation varies by sport.
12.1 Sport was developed under central control.
12.2 Sport was seen as a ‘weapon’.
12.3 Winning was expected.
12.4 Athletes trained full-time.
12.5 Minority sports were targeted to ensure Olympic dominance.
12.6 Performance enhancing drugs were used.
13 This approach is not supported by empirical evidence:
13.1 Determinants of performance and potential at adolescence are likely to differ
and mature values are hard to predict.
13.2 Determinants of performance between males and females are different.
13.3 As performance levels improve the importance of anthropometrical factors
declines.
13.4 The attributes that determine the extent that an individual is able to progress
along the athletic continuum are largely behavioural in nature.
13.5 Once skills are mastered performance is heavily influenced by psychological
factors.
14 Sport Identification profiles individuals on a limited range of performance tasks.
However it does include the need to acquire fundamental motor abilities but this
happens after the children are identified as potentially talented.
15 Some countries concluded that the three assumptions that appear to underpin Sport
Identification are empirically unsound. (The assumptions that underpin SI are that
there are unique anthropometrical, physical and physiological profiles associated
with success in different sports.)

**Talent Identification Methods in Non-Sport Settings**

*Dance/Music*

16 As in sport early schemes identified talent through output (performance).
17 In the search for artistic talent the importance of interest, desire, persistence and
self-perception cannot be under-estimated.
18 The use of single auditions is notoriously unreliable. It leads to poor predictive validity
as they are testing developed rather than potential talent.
19 Disadvantaged children are unlikely ever to be identified during a single audition as
they lack specific training.

**Results**

20 Talent in education currently is still identified mainly through performance although
there has been a gradual move towards continuous assessment.

*Development and Potential Building*

21 The focus on current performance rather than potential is paralleled by the need
for successful youth squads that drives the development agenda. Using empirical
research, agencies could redirect their performance outcomes towards a more
developmental and an agenda for potential building. The review calls for leadership
in driving this work forward to influence the development of young people in sport.

*Potential Outcomes of Talent Identification and Development Schemes*

22 New approaches could be used to equip and empower young people for a lifetime
of physical activity. For the health of talent identification and development and the
long-term health of the nation talent development systems should be focused on the
early development capacity.
22.1 Potential building for performance sport.
22.2 Raising physical activity levels.
22.3 Identifying and providing initial rehabilitation for those with mild motor
improvement.
Conclusion and Application to Practice
23. The focus is on current performance rather than the potential and there is need for successful youth squads that drives the development agenda. The review calls for leadership in driving this work forward to influence the development of young people in sports.

Honestly, this the major secrets and keys applied to achieve our major aims and objective in Sport/ Football development in our communities. So there is need in the development of a psychological excellence profile in early talents.
THE GAME CHANGER IN OLYMPIC SPORT

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Historically, data analysis has consisted of 90% data collection and cleaning and 10% data analysis. Infostrada Sports is a world leader in sports data and has developed a suitably world leading tool for data analysis, Podium, which has transformed the process to 10% data cleaning and 90% data analysis.

Transforming data into information which then leads to knowledge and wisdom is the most important challenge in data analysis, and analytical experts can now spend the vast majority of their time analysing with Podium instead of collecting and cleaning data.

Infostrada Sports enters complete results data from thousands of events in more than 300 sports as they happen. Since the introduction of Podium, we have been able to present that data, fully organised and immediately usable, in a variety of analysis modules. There are also options for downloading into Excel for other types of analytical work not covered in the Podium tool.

This presentation will be an introduction to the Podium tool and is designed to lead into a hands-on workshop which will be held on day 2.
THE CHALLENGES OF DATA ANALYSIS FOR DECISION MAKERS IN SPORT

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With data analysis becoming more and more important in the world of sport, all decision makers in sport are facing the same challenges. Resources are limited to cope with data collection, cleaning, and IT-related aspects to make things happen. All are related to the following questions.

- How can I make performance data available in an easy to use interface?
- How can I handle the large amount of data as efficient as possible?
- How do I know that the data is of the highest quality?

This workshop will focus on one of Infostrada’s best-practices; Podium, the Performance Manager. A world-leading online tool which is used by more than 10 of the top-25 NOCs in the world. Attendees will take part in a hands-on workshop to experience Podium themselves and thus gain a better insight on how to cope with the challenges of Data Analysis.
BRAZILIAN OLYMPIC COMMITTEE STRATEGIC PLAN FOR 2016

Helbert Costa
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Brazilian Olympic Comite

In this speech, Helbert Costa, General Manager of Strategic Management and Legacy of the BOC will present how the Brazilian Olympic Committee has developed a Strategic Plan and established casual relationships among its objectives to accelerate the development of high performance sport, aiming to conquer the 10th position in Rio 2016 Olympic Games. It will also show how advanced practice Project Management and Strategy are helping our athletes to be faster, stronger and jump higher!

Among other methodologies we used BSC, AHP, PARETO, PMI and PRINCE2.