Leisure & Recreation
Abstracts
1st Annual International Symposium on Leisure & Recreation, 9-12 May 2016, Athens, Greece

Edited by Gregory T. Papanikos
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Preface

This abstract book includes all the summaries of the papers presented at the 1st Annual International Conference on Leisure & Recreation, 9-12 May 2016, Athens, Greece, organized by the Human Development Research Division of the Athens Institute for Education and Research. In total there were 25 papers, coming from 11 different countries (Canada, Finland, Germany, Italy, Lebanon, New Zealand, Spain, Switzerland, Turkey, UK, and USA). The conference was organized into eight sessions that included areas of Sports and other related fields. As it is the publication policy of the Institute, the papers presented in this conference will be considered for publication in one of the books and/or journals of ATINER.

The Institute was established in 1995 as an independent academic organization with the mission to become a forum where academics and researchers from all over the world could meet in Athens and exchange ideas on their research and consider the future developments of their fields of study. Our mission is to make ATHENS a place where academics and researchers from all over the world meet to discuss the developments of their discipline and present their work. To serve this purpose, conferences are organized along the lines of well established and well defined scientific disciplines. In addition, interdisciplinary conferences are also organized because they serve the mission statement of the Institute. Since 1995, ATINER has organized more than 150 international conferences and has published over 100 books. Academically, the Institute is organized into four research divisions and nineteen research units. Each research unit organizes at least one annual conference and undertakes various small and large research projects.

I would like to thank all the participants, the members of the organizing and academic committee and most importantly the administration staff of ATINER for putting this conference together.

Gregory T. Papanikos
President
**FINAL CONFERENCE PROGRAM**

1st Annual International Conference on Leisure & Recreation, 9-12 May 2016, Athens, Greece

**PROGRAM**

Conference Venue: Titania Hotel, 52 Panepistimiou Avenue, Athens, Greece

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### Monday 9 May 2016

**08:00-08:30** Registration and Refreshments

**08:30-09:00** Welcome & Opening Address (ROOM B)

- Gregory T. Papanikos, President, ATINER & Vice President of Panhellenic Association of Sports Economists and Managers (PASEM).
- George Poulos, Vice-President of Research, ATINER & Emeritus Professor, University of South Africa, South Africa.

#### Session I (ROOM A): Leisure, Recreation and Sports

**Chair:** Christos Anagnostopoulos, Head, Sports Research Unit, ATINER, Associate Professor, Molde University College, Norway, & Associate Lecturer, University of Central Lancashire, Cyprus.

1. *Seppo Suominen, Senior Lecturer, Haaga-Helia University of Applied Sciences, Finland. The Sports Geography in Finland.
2. *Harry Davakos, Professor and Chair, Department of Health, Exercise, and Sport Science, The Citadel, USA. Economic and Other Financial Impacts of the Cooper River Bridge Run on the Lowcountry Region of South Carolina, and Specifically on the City of Charleston and Surrounding Towns.
3. Barry Paraskeva Costas, Senior Lecturer, University of Hertfordshire, U.K. The Voices of Children Aged 10 and 11 Years Old: Their Views on Physical Education, the Olympic Games and the Implications for Policy, Practice and Research.
4. Ian Culpan, Professor and Director of New Zealand Centre for Olympic Studies, University of Canterbury, New Zealand & Caroline Meier, Olympic Studies Centre, German Sport University of Cologne, Germany. Enhancing the Human Condition through Sport: The Political Economy and the Potential of Olympism Education.

#### Session II (ROOM A): Data Analytics and Methodologies in Sports

**Chair:** *Seppo Suominen, Senior Lecturer, Haaga-Helia University of Applied Sciences, Finland.

1. Panos Pardalos, Distinguished Professor, University of Florida, USA & Konstantinos Gakis, Adjunct Assistant Professor, University of Florida, USA. A Probabilistic Model for Multi-Contestant Races.
2. Theodore Trafalis, Head, Industrial Engineering Research Unit, ATINER, Professor of Industrial and Systems Engineering & Director, Optimization & Intelligent Systems Laboratory, The University of Oklahoma, USA. Kernel Methods Applied to Sports Analytics.

#### Session III (ROOM A): Participation in Sports and Leisure

**Chair:** *Harry Davakos, Professor and Chair, Department of Health, Exercise, and Sport Science, The Citadel, USA.

1. *Patricia K. (Tish) Doyle-Baker, Associate Professor, University of Calgary, Canada, Louise Smith, Graduate Student, University of Calgary, Canada, Benjamin Smith, Undergraduate Student, University of Calgary, Canada, Michael Christie, Undergraduate Student, University of Calgary, Canada & Logan Jones, Youth Manager Active Living, University of Calgary, Canada. An Investigation of Kids’ Steps in the summer at University Camps (KISS UC).
2. Hubert Roussel, Professor, Université de Moncton, Canada & Marc LeBlanc, Professor, Université de Moncton, Canada. Regional Recreation Planning: The Example of Kent County, NB, Canada.
3. *Hal Walker, Chair, Sport Management, Elon University, USA & Steven Carney, Assistant Professor, Saint Leo...
University, USA. An Assessment of NASSM Internship Practices.

4. Maria Ratz, Research Assistant, University of Applied Science, Germany, Florian Pieffel, Head of Studies, University of Applied Science, Germany, Christoph Kexel, Lecturer, University of Applied Science, Germany & Peter Kexel, Lecturer, University of Applied Science, Germany. Second Screen: User Behaviour of Spectators while Watching Football.

14:00-15:00 Lunch

15:00-17:00 Session IV (ROOM A): Special Topics on Leisure, Recreation and Sports I
Chair: *Patricia K. (Tish) Doyle-Baker, Associate Professor, University of Calgary, Canada

1. Erin Buzuvis, Professor, Western New England University, USA. Hormone Check: Understanding the Exclusion of Female Athletes for Endogenous Testosterone as a Form of Gender Discrimination.
2. Andreas Hebbel-Seeger, Head of Media School, Macromedia, University of Applied Sciences, Germany, Thomas Horky, Professor, Macromedia, University of Applied Sciences, Germany & Cora Theobalt, Macromedia, University of Applied Sciences, Germany. Usage of Drones in Sports Communication – New Esthetics and Enlargement of Space.
3. Laura Cousens, Associate Professor, Brock University, Canada. Trust in a Community Sport Network: The Case of Swimming Providers.

18:30-20:30 Session V (ROOM B): A Round Table Discussion on Sports as a Cultural and Leisure-Recreational Activity
Chair: Gregory T. Papanikos, President, ATINER.

1. Dr Seppo Suominen, Senior Lecturer, Haaga-Helia University, Finland.
2. Dr Annemarie Farrell, Associate Professor, Ithaca College, USA.
3. Dr Onur Burak Celik, Assistant Professor, Yasar University, Turkey.
4. Dr Andreas Hebbel-Seeger, Professor and Head, Media School, Macromedia University of Applied Sciences, Germany.
5. Dr Hal J. Walker, Chair, Sport & Event Management, Elon University, USA.
6. Dr Angela Busacca, Professor, “Mediterranea” University of Reggio Calabria, Italy.
7. Dr Laura Cousens, Associate Professor, Brock University, Canada.

21:00-23:00 Greek Night and Dinner (Details during registration)

Tuesday 10 May 2016

08:00-10:00 Session VI (ROOM A): Essays on Team Sports and Leagues
Chair: Carl Bozman, Professor, Gonzaga University, USA.

3. Annemarie Farrell, Associate Professor, Ithaca College, USA & Heidi Grappendorf, Associate Professor, University of Cincinnati, USA. Watching the 2015 USA Women’s National Team in World Cup Play: A Guy’s Perspective.

10:00-11:30 Session VII (ROOM A): Special Topics on Leisure, Recreation and Sports II
Chair: Annemarie Farrell, Associate Professor, Ithaca College, USA.

1. Onur Burak Celik, Assistant Professor, Yasar University, Turkey. Chequered Flag or Red Flag: Survival Analysis of Formula One Teams.
2. Carl Bozman, Professor, Gonzaga University, USA, Lada V. Kurpis, Gonzaga University, USA & Kevin Lehman, Gonzaga University, USA. Community Sport Social Benefits: A Basis for Continuous Improvement.
3. Marc LeBlanc, Professor, Université de Moncton, Canada & Hubert Rousse, Professor, Université de Moncton, Canada. A Comparison of Physical, Cultural and Passive Activity Participation Rates.
4. Giovanni di Cola, Special Adviser, International Labour Office (ILO), Switzerland. Mega Sporting Events (MSEs) and the Decent Work Agenda: Implementing Labour Rights.

11:30-14:30 Educational and Cultural Urban Walk Around Modern and Ancient Athens (Details during registration)

14:30-15:30 Lunch
15:30-17:30 Session VIII (ROOM A): Special Topics on Leisure, Recreation and Sports III

Chair: George Poulos, Vice President of Research, ATINER & Emeritus Professor, University of South Africa, South Africa.

1. Jemelleh Coes, Ph.D. Student, University of Georgia, USA & Corey Johnson, Professor, University of Waterloo, Canada. Storytelling for Social Justice: Black Activism as Serious Leisure.

2. Rehnuma Karim, Assistant Professor, State University of New York, USA. Rescued Through Leisure: A Qualitative Inquiry on the Female Survivors of Acid Attack in Bangladesh.

3. Manuel Gonzalez-Gomez, Professor, University of Vigo, Spain. Visitors Stream from Russia to Spain.

21:00- 22:30 Dinner (Details during registration)

Wednesday 11 May 2016
Cruise: (Details during registration)

Thursday 12 May 2016
Delphi Visit: (Details during registration)
League Quality and Attendance Evidence from a European Perspective
Community Sport Social Benefits:  
A Basis for Continuous Improvement

Community sport events, like any other sports endeavor, must be concerned with continuous improvement in order to remain or become competitive over time. In this study, we document a survey method that links the social benefits community sport attendees sought to levels of satisfaction and behavioral intentions. Our findings suggest that knowledge of the social benefits desired by a specific sport subculture may have several practical uses. For example, an awareness of desired social benefits may allow community sport managers to design and develop events with higher and more consistent levels of attendee satisfaction as well as obtain, or maintain, support from community residents and leaders. High levels of attendee satisfaction are found to be significantly related to the perceived social benefits of a community sport event as well as to the perception of the importance of the sport event to the community and individual intentions to support the event in the future.
Onur Burak Celik
Assistant Professor, Yasar University, Turkey

Chequered Flag or Red Flag:
Survival Analysis of Formula One Teams

In this study, we will perform parametric survival analysis on 186 Formula One (F1) racing teams that appeared on track at least once since the first official race in 1950 till the end of 2014 season. Formula One is the top tier auto racing organization of the fastest cars. F1 Drivers should hold the highest class of racing license and tracks should have the highest grade. This top quality racing organization is followed by millions of people at the circuits and by billions on TV. Teams in this billion-dollar-organization are big auto manufacturers -such as BMW, Renault, Ferrari, McLaren, Lotus, Jaguar, Ford, Mercedes, Honda, and Toyota-, individual entrepreneurs or big companies such as Benetton, Red Bull, and Petronas. Teams spend millions of dollars on R&D every year to have better cars on track. Then some of these high-tech revolutionary inventions appear in our daily road cars. Traction control system, paddle-shifters, and multi-function steering wheels are only a few of these gifts from F1 engineers. This makes F1 one of the world’s costliest motorsports. Since the first official F1 season in 1950, 186 different constructors appeared on track at least once. But to date, Ferrari is the only constructor appeared on track every year since 1950. 185 teams waved red flag before the flagman waves the chequered flag. Purpose of this study is to explore the factors that lead F1 teams to exit the organization by employing parametric survival analysis. Our preliminary results show that more than one third of 186 teams exit after the first year. Critical duration for survival appears to be five years. Reason for an exit can be bankruptcy, economic crisis, disappointing race results, sale/merge, or a fatal accident. By this academic study, we will shed light on the factors that affect the survival time of an F1 team.
Angela Busacca  
Aggregate Professor, “Mediterranea” University of Reggio Calabria, Italy  

Collective Sale of Television Rights and Revenue-Sharing: Italian and Spanish Model  

With the recent “Real Decreto-Ley” 5/2015 (approved April 30) also Spain, one of the last bastions of the system of individual selling of TV rights, has opted for a system of collective selling. Individual clubs have the rights, but delegate the "Entidad Organizadora" able to market them in aggregate ("Conjunta" pursuant to art. 2, paragraph 2, in relation to the various competitions, are "entitades organizadores" the Liga Nacional de Futbol Professional National Championship for the first and second division and the Real Federación Espanola de Futbol for the Copa del Rey and the Supercopa de Espana).  

The choice of a model of centralized sales must be read not only with a view to harmonization with European standards (since almost all EU countries, even those that have no explicit legislation such as the UK, appear oriented in such sense) but also, as one way to ensure a better balance in the distribution of income, avoiding the perpetuation of imbalances in favor of the team's most important. The division determined art.5 follows, in fact, the Italian model, identifying a composite criterion that recognizes shares in equal parts (50%) and quotas allocated according to sporting merit (50%).  

Analyzing the Italian situation, which already since five years using the system of collective selling, this paper proposes a comparison of the Italian system of D.lgs.9/2008, and the new system of the Spanish Royal Decree Law 5/2015, to assess the concrete responsiveness to the needs of their respective social contexts.
Hormone Check: Understanding the Exclusion of Female Athletes for Endogenous Testosterone as a Form of Gender Discrimination

In 2011 the International Association of Athletics Federations, the international governing body of track and field, adopted a policy on hyperandrogenism, a variety of naturally-occurring conditions in which a body produces excess levels of androgenic hormones such as testosterone. Under the policy, women (but not men) with endogenous testosterone above the policy’s stated “normal” range are not eligible for competition unless they prove their bodies are resistant to androgens or that they receive treatment to artificially suppress their androgen levels. This summer, a panel of the Court of Arbitration for Sport suspended the IAAF’s policy for a two year period due to insufficient scientific rationale. This interim decision allowed the policy’s challenger, Indian sprinter Dutee Chand, to be reinstated to her sport, but it also provides the IAAF with leeway to reintroduce a hyperandrogenism policy in the future.

First, this paper will place the IAAF’s hyperandrogenism policy in historical context, noting that its past attempts at gender verification have ultimately been rejected as problematic and discriminatory. Next, it will describe and analyze the decision of the CAS in Chand’s case, which, despite temporarily suspending the policy, ultimately endorsed in principle the idea that women’s natural hormones can be regulated and targeted as the basis for exclusion. Finally, this paper will criticize the CAS decision for the narrowness of its suspension rationale, and urge it and the IAAF to consider any policy excluding female athletes on the basis of endogenous testosterone as form of gender discrimination in contravention of the IAAF’s own constitution, as well as the Olympic Charter. To this end, this paper posits that United States civil rights law provides helpful way of conceptualizing sex discrimination that, when applied, supports the conclusion the IAAF’s hyperandrogenism policy is antithetical to the IAAF’s professed antidiscrimination principle.
Jemelleh Coes
Ph.D. Student, University of Georgia, USA
&
Corey Johnson
Professor, University of Waterloo, Canada

Storytelling for Social Justice:
Black Activism as Serious Leisure

Recently, events in the United States have brought international attention to the Black Lives Matter movement; a call to action to alleviate the injustices that many black Americans face daily. The blatant murder and abuse of blacks by law enforcement officials is a reoccurring trend with a focus on scenarios surrounding Trayvon Martin, Michael Brown, and Eric Gray to name a few. Fueling the Black Lives Matter movement are Black Activists: people working for justice and equality and giving their leisure (free-time, discretionary income, and social capital) to help advocate for black people and/or work for the elimination of marginalization, oppression and violence. Using the participatory action research methodology of collective memory work, we recruited six participants in the South-Eastern U.S. state of Georgia and asked them to recall, examine and write about their most meaningful memories of black activism. The next stage of collective memory work had participants engage in a process of collectively constructing social understandings of the memory narratives during a focus group setting. This collective theorizing occurred through processes of debate about individual memories, and acknowledged that meanings are contested, contradiction and dispute will be common, and that multiple meanings are possible. Our simultaneous data generation and analysis process revealed four major thematic threads: 1) hopeful change; 2) generational deference; 3) advocacy for others; and 4) peer validation. Implications of the findings aim to increase the knowledge of our understandings of activism as leisure expand the body of knowledge on ways to confront critical issues facing the Black community, provide recommendations on how to help create safer leisure spaces for those who identify as Black, and offer information on how to sustain all activists for a more socially just society.
Laura Cousens  
Associate Professor, Brock University, Canada

Martha Barnes  
Associate Professor, Brock University, Canada

&

Joanne MacLean  
Dean and Professor, University of the Fraser Valley, Canada

Trust in a Community Sport Network:  
The Case of Swimming Providers
Enhancing the Human Condition through Sport: The Political Economy and the Potential of Olympism Education

To capture the power and potential of sport’s educative, social and scientific value an inter-disciplinary approach acknowledging the contemporary political economy is necessary. This paper argues that sport’s primary purpose should beto contribute to advancing the human condition at whatever level of endeavour. Consequently sport should become an important agenda of the State. Within that agenda the excesses of today’s contemporary, commercialised, commodified and objectified world need to be considered and managed. This paper highlights how sport, at the elite level, has been commodified and commercialised by global market forces. These forces are potentially destructive and are changing the philosophical ethos of sport and its educative relevancy. It results in the social, educative, moral and ethical base of sport being challenged as a valued human practice and dismisses such as remnants of a bye-gone age. However, not all are agreeable to this global influence and are suggestive of ways in which commodified changes can be regulated through the political economy in order to protect sport’s social, educative and moral underpinning’s. Specific suggestions are made for regulation and these are anchored in the philosophy of Olympism within physical education contexts. Suggestions reinforce the need for sport, at whatever level to uphold its purpose in enhancing the human condition by:

- Arguing for the educative, social, scientific and moral base of sport to be inculcated into school physical education and sports based programmes
- Highlighting the need for Olympism to be systematically promoted as an active healthy way of life through balanced development of the person, celebrating the joy in effort; promoting the educative value of role modelling and the observance of an integrated set of universal ethics.
- Critically evaluating if the commercialization of the Olympic Movement contributes to the safeguarding and dissemination of Olympism in the school context and beyond or if it is simply political ‘window-dressing’ by the IOC.
Harry Davakos  
Professor and Chair, Department of Health, Exercise, and Sport Science, 
The Citadel, USA  

Economic and Other Financial Impacts of the Cooper River Bridge Run on the Lowcountry Region of South Carolina, and Specifically on the City of Charleston and Surrounding Towns  

In the spectrum of community organized sport events there are those that usually are established to enhance the quality of the residents’ life, and those established to enhance the financial and economic wealth of the community. Not very often a community implemented sport event will fulfill both roles. 

Cooper River Bridge Run, a 10K Road Race that draws in excess of 35,000 participants is a case of a community sport event that is established to enhance quality of life in the community that also has increased financial benefits for the community. 

The paper examines the economic and other financial Impacts of the Cooper River Bridge Run on the Low country region of South Carolina, and specifically on the city of Charleston and surrounding towns. Although mega sport events have been given attention regarding their financial benefits for a region, little research in the past has been done and/or published on the impact that some popular but not highly advertised/promoted sports might have on a given community. Some of those events have been established and maintained not only for purposes of financial profits but because of health or social impact that provide to a community. 

Literature refers to a variety of impacts accompanying possible economic ones, while there is a reference as to standards to be met so that one can call the contribution of participants as a true economic impact. Finally, economic impact for a sporting event can be defined as “the net economic change in the host community (ies) that results from spending attributed to this sporting event”. Based on the above, a study was conducted through online surveys that opened the day of the race and ended a week later, after more than 3,000 people had answered it. The results of that study are presented in this paper.
Giovanni di Cola
Special Adviser, International Labour Office (ILO), Switzerland

Mega Sporting Events (MSEs) and the Decent Work Agenda: Implementing Labour Rights
An Investigation of Kids’ Steps in the summer at University Camps (KISS UC)

**Background:** Summer recreation camps are popular for children and youth and have the potential to contribute to energy expenditure measured by step counts. According to the Heart and Stroke walk about website children (aged 8-10) should reach 12,000-16,000 and youth 11000-12000 steps to meet the recommended daily physical activity guidelines. The study purpose was to investigate whether children and youth were meeting the Canadian Physical Activity Guidelines through step counts in the Active Living Summer Camps at the University of Calgary, Alberta. **Methods:** A variety of camps were selected with a one-week duration that was educational, sport, and arts focused. A total of 195 camper expressed interest and 188 (45.6 % F) consented (mean age 10.75 ± 0.54 yrs.; Ht. 145.97 ± 1.93 cm; Wt. 38.27 ± 3.15 kg). The data was inputted into accelerometers wore on the camper’s wrist (Garmin Vivofits™) including stride length (mean 1.6±0.05 m). Data was collected from Tuesday to Friday in eight camps and Wednesday to Friday in two camps (N=10). Instructors at the start and end of each day recorded total steps taken in-camp and out-of-camp resulting in step counts over a 24 hour period. **Results:** Average total steps (24 hr) in camps with four days of data were 16793±5407; in-camp 10377±3282 steps resulted in 6.95±2.58 km walked, for out-of-camp hours steps totaled 6694±3084. Average total steps (24 hr) in camps with three days of data were 15176±4721; in-camp 11442±4090 steps resulted in 7.06±2.68 km walked, for out-of-camp steps totaled 4738±2138. **Conclusion:** The camps provided a positive venue for physical activity while learning other skills. The campers met the daily physical activity guidelines over a 24 hrs period however they were not quite meeting the guidelines during in-camp hours. An interesting outcome was that although the non-sport camps had less steps in-camp, they had more out-of-camp steps during their leisure.
Watching the 2015 USA Women’s National Team in World Cup Play: A Guy’s Perspective

Soccer has been called the sleeping giant in the United States – waiting to emerge as into the upper echelon of American sport spectatorship. In the 2015 World Cup Final, the United States viewership for soccer reached new heights as 25.4 million viewers watched a U.S. national team win a championship. Surprisingly to some, these ratings were for a women’s World Cup match. Ratings for the Women’s World Cup final would remarkably eclipse viewership the for NBA and NHL championships (Hinog, 2015). While viewership for women’s sport lags behind male counterparts, the Women’s National Soccer team captured viewer attention often only reserved for men’s sport.

While women account for, on average, about one-third of televised sport viewership in the United States, greater focus has been given to increasing male consumption of women’s sport. Men represented 62% of viewers for the 2015 Women’s World cup, while the important demographic of men 25-54 saw a 21% jump in ratings from the 2011 tournament (Hughes, 2015).

This presentation paper seeks to present a deeper understanding of the motives leading to male viewership of the 2015 Women’s World Cup. Are these motives transferable to other women’s sport? What role did female interest in the World Cup transfer to male viewership?

To explore these aspects, a qualitative methodology utilized interviews, was employed, as it allowed for the flow of participant feelings, perceptions and attitudes. A group of men who watched the 2015 Women’s Soccer World Cup were asked to share their experiences as spectators and fans in semi-structured interviews. The participant interviews with the researcher were taped and later transcribed in detail and themes identified. The central goal of data saturation was achieved, and analysis was conducted to privilege participant’s own voices.
Visitors Stream from Russia to Spain

The existing studies on international tourism to Spain focus on the analysis of British and German visitors, without paying attention to other important and emerging nationalities like Russians that decide to spend leisure time in Spain resting or enjoying hobbies or sports. Russia generates one of the more important flows of visitors worldwide. The dynamism showed by this group of visitors reveals a high potential, and involves a great opportunity for the Spanish economy to increase its market share. It is for this reason that the main objective of our research is to build a robust econometric model that allows us (i) to know the most important variables that explain the Russian flows of visitors to Spain and (ii) to quantify the impacts of these variables on this number of visitors. Our results can help in the design process of private and public initiatives that aim to increase the number of visitors.
Tobias Haupt
Director of “Social Media Marketing”, Institute for Football Management, Germany
&
Florian Kainz
Professor, Institute for Football Management, Germany

Social Media Marketing and Capitalization Opportunities in Professional Sports - An Empirical success factor analysis in the German Premier Football League
Andreas Hebbel-Seeger  
Head of Media School, Macromedia, University of Applied Sciences, Germany

Thomas Horky  
Professor, Macromedia, University of Applied Sciences, Germany

&

Cora Theobalt  
Macromedia, University of Applied Sciences, Germany

Usage of Drones in Sports Communication – New Esthetics and Enlargement of Space

In digital media society more and more the use of drones in sports communication get relevant, Goldberg, Corcoran and Picard (2013, 3) speak about a „generation drone“. The majority of the literature mentions the ethical and legal aspects of the drone’s use in public (Boucher, 2014; Gynnild, 2014). The drone is often associated with military (Roush, 2014), journalistic (Captain, 2012) or with privacy and data protection aspects (Boucher, 2014).

Aspects for usage of drones or possibilities for enlargement of space and new athletics in sports are very rare to find. Gynnild (2014, 341) points out: „The innovation of drones for journalistic purposes will most likely replace, or, more precisely, supplement visual news coverage on the ground with new kinds of aerial views as well as options for aerial close-ups that were formerly unseen.” Goldberg, Corcoran and Picard (2013, 24) underline possible reciprocal effects: „Because application of drones in journalism is only just emerging, it is unknown how the public will react to their use.”

However, nearly none of the current studies answered the following research questions: What is the cinematic and dramaturgical challenge of drone’s usage? What chances and risks become relevant for practical use?

The usage of drones in sports communication was examined with several case studies at the Macromedia, University of Applied Sciences, supported by the media foundation of Hamburg/Schleswig-Holstein. The case studies focused on three different parts of investigating spheres: high-performance sports, aquatic sports and niche sports (Australian Football). As a result we established concrete application fields for the usage of drones in sports communication. One effect seems to be characteristic: The presence of the drone itself influences the public as it evokes reactions from the athletes and from the audience.
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Rescued through Leisure: A Qualitative Inquiry on the Female Survivors of Acid Attack in Bangladesh

The ethnographic study portrays the significance of leisure experience in the lives of the female acid attack survivors in Bangladesh. Among various types of abuses and violent acts against women, the heinous act of acid attack causing severe disfigurement and sometime death has become another means to take away the freedom of living a normal life. Not only do acid attacks have traumatic physical consequences, but they also affect individuals both psychologically and socially. Despite being marginalized and controlled due to their gender in a patriarchal society, however, some survivors of acid attack were able to gain back their sense of normalcy through leisure participation.

13 participants were involved in this study and qualitative data was generated using in-depth, face-to-face interviews and observation during a prolonged period of time. The study investigated the different ways of leisure involvement among the survivors and tried to understand the emotions and motivations behind the participation amidst the cultural backdrops of Bangladesh.

The respondents of the study indicated how leisure can be experienced and understood beyond structured activities and can be enjoyed from a more collective perspective. Thus the meaning of leisure for the survivors mostly emerged from non-structured activities unlike many others developed and individualized societies. Despite experiencing leisure differently within different social contexts, the survivors did seem to share similarities in leisure experiences with the women from the rest of the world in the aspects of care, emphasizing on family leisure, and choosing activities to deal with stress. This study therefore provides an in-depth understanding on how leisure in their lives became a significant part that allowed the survivors to reconnect, find a sense of belongingness, a sense of normalcy, and as a result helped them to live again finding hope and happiness.
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&

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A Comparison of Physical, Cultural and Passive Activity Participation Rates

Leisure researchers have studied the rates of participation in different types of activities: physical (Hurst, 2009; Mota & Esculas, 2008), cultural (Foote, 2012; Baillargeon, 1996)) and passive (Statistics Canada, 2005). While these studies generally focus on one of the three types, our approach (n = 334) has allowed us to compare participation rates for all three types of leisure activities. Our population includes residents from a rural environment (i.e. the province of New Brunswick, Canada).

Our results demonstrate that physical activity participation rates (average of 7.8 per year) are greater than passive (5.1) and cultural (5.0) activity participation rates. Men are more physically active than women (8.1 vs 7.7), but participate less in cultural activities (4.9 vs 5.4). Passive activity participation rates are similar for both sexes (5.3).

Age-based results indicate that 35-44 year-olds are more likely than other age groups to participate in physical activities (9.6) and passive activities (5.8). The revenue variable demonstrates that the more wealthy respondents are, the more they tend to participate in physical activities (10.4 for $100,000 and over; 9.1 for $70,000-$99,000), whereas low income respondents (under $15,000) have overall low participation rates (6.6 for physical activities, 4.6 for cultural activities, and 5.1 for passive activities). By the same logic, respondents with university degrees have the highest participation rates (9.1 for physical activities, 6.1 for cultural activities, and 5.5 for passive activities). Married respondents are also more active, as are those who have volunteered in the past 12 months.

Our study confirms that the most educated and wealthy participate in the most activities, be they physical, cultural or passive.
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International Society of Sports Sciences in the Arab World  
Elite Sport Ranking: A New Evaluation Methodology for  
Countries Performances in International  
Sports Competitions
Barry Paraskeva Costas  
Senior Lecturer, University of Hertfordshire, UK

The Voices of Children Aged 10 and 11 Years Old:  
Their Views on Physical Education, the Olympic Games and  
the Implications for Policy, Practice and Research
Panos Pardalos  
Distinguished Professor, University of Florida, USA  
&  
Konstantinos Gakis  
Adjunct Assistant Professor, University of Florida, USA  

A Probabilistic Model for Multi-Contestant Races

Predictions of sports games have been recognized as an important area of study for its economic significance. The majorities of models for such games cover two-player games and the resulting championships or study individual players or teams and their resulting comparative position.

In this paper we propose an approach to model such multi-contestant races. The games involve only a fixed number of athletes out of a broader pool of several athletes. We first discuss a model for the probability law assuming knowledge of the relative dominance or ranking of the athletes. This approach is valid when we have a clear and consistent prevalence of one player over the other based on past results. That means we expect that if A is overall better than B and B is better than C, it follows that A is better than C. Subsequently we are discussing the limitations of such a model and we propose a second order dominance matrix to include more complex cases that the previous assumption cannot be made. Thus, for the whole pool of athletes a two-by-two matrix can be formed to express the relative advantage of one player over other. We call this the dominance matrix and it will be used to construct the probability law of the game.

Next, we develop an approach for the estimation of the parameters based on results and we are discussing the possible limitations mainly attributable to the lack of actual input on contests among all athletes. We are proposing an approach for overcoming these difficulties and we demonstrate that with real data examples.
Second Screen: User Behaviour of Spectators while Watching Football
Many authors (Gold, 1980; Nogradi, 2000; Soubrier, 2000; Reid, 2001, 2004) have looked at different planning approaches for recreation, and tourism. Master plans have been developed in Canadian municipalities for the past 50 years, and New Brunswick implemented a funding program for such studies in the late 80s. Although a great deal of attention has been given to local or municipal planning, regional planning has yet to obtain such consideration. The Province of New Brunswick took a step in that direction in 2014 when it implemented a program to encourage the new Regional Service Commissions to undertake recreation regional planning. The Kent Regional Service Commission decided to engage in such a planning process in collaboration with its 30 communities, which represent a population of 33,000 residents. This paper describes the process that we developed with the Regional Service Commission in order to better understand the current state of recreation programs and facilities, as well as the leisure needs and interests of the Kent population and associations. This included an on-site visit of approximately 120 facilities of all types (sports, tourism, and culture) in order to assess their condition (functional, secure, accessible, and esthetic) and identify the programs and services offered. We also developed an online survey that was administered to the Kent County population. The questionnaire measured actual participation in recreation activities in the past twelve months, the frequency of participation in those activities, and the motivation to do so. Barriers to participation and volunteering were also part of our survey. A questionnaire was also sent via email to a number of the region’s associations to create a profile of their financial and human resources, clientele, funding, and challenges.
The Sports Geography in Finland

The main purpose of this study is to answer why teams survive in some locations, how many top teams a particular town can sustain, how differentiated these towns are in terms of different sport types. The purpose is thus to link geography and the number of teams in a town. The monopolistic competition of Dixit and Stiglitz (1977) seems to be compatible with the sports geography in Finland. Location attributes and team success are important in determining attendance. These are in the long run the major determinants of survival in the highest level of any ball game in Finland. Geography is related to town population and their incomes.

The Dixit-Stiglitz model also proposes that the attendance or the number of spectators is more related and correlated with the cost structure of the team than with the population statistics. The results seem to verify this hypothesis. The monopolistic competition model is tested with Finnish data covering 26 seasons starting in 1990. The data incorporates top team playing in the highest men’s league. These popular ball games in this study are ice hockey, football, baseball, floor ball, volleyball and basketball. Two estimation methods are used. The Poisson regression and Negative Binomial regression both yield similar results. A larger town in terms of population is able to sustain a larger number of different sports while the average income of citizens is negatively related to the number of sport teams in that town. It is also true that the biggest city of a region seems to cannibalise its neighbouring towns and these have a smaller number of teams.
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Kernel Methods Applied to Sports Analytics
An Assessment of NASSM Internship Practices

Sport Management as an industry has always valued internships. Since the evolution of the major at the midpoint of the twentieth century, internship has always been a central focus of a quality sport management program. A broader focus on internships in other industries, including the liberal arts, has taken hold recently in higher education. It is common in many disciplines to see one or two credits required, with approximately 80 hours of practical experience. In the sport management industry however, research supports internship being the “most important” academic program requirement (Stier 2002). The industry standard in Sport Management has always been approximately 400 hours and the current COSMA requirement maintains this number as the accepted standard. Students have been shown to choose schools based on the quality of the internship program offered (Teed, 2004). Kelley, DeSensi, Beitel, and Blanton (1989), present an undergraduate curricular model stating internship should be a “one semester full-time applied work experience directly focused toward each student’s professional sport management outcome objective, and should be the culminating experience.” Human resource director of the Houston Astros (Roemisch, 2004), stresses a full-time internship with no outside interruptions. Many organizations linked with the sport management industry will only hire graduates who have completed an internship with their organization. Among NASSM programs (n=218), the mean number of internship credits required is 7.6. Seventy percent of these programs require six or more credits towards graduation, forty-four percent require 8 credits, and about thirty percent require 12 credits or more. Some programs require as many as 16 academic credits towards graduation. Recently, top quality programs are viewed as those with extensive practical requirements as stand-alone activities as well as practical experiences woven into the fabric of various required courses. Research and examination of this topic remain important.