# Lifelong Engagement in Sport and Physical Activity

Participation and performance across the lifespan

Edited by
Nicholas L. Holt and
Margaret Talbot



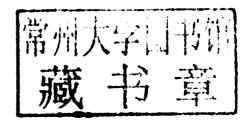


Perspectives: The Multidisciplinary Series of Physical Education and Sport Science

## **Lifelong Engagement in Sport and Physical Activity**

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**Edited by Nicholas L. Holt and Margaret Talbot** 







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### Lifelong Engagement in Sport and Physical Activity

Sport and physical activity should now be understood as lifelong activity, beginning in childhood, and accessible to participants of all levels of ability. This book offers an overview of some of the core concerns underlying lifelong engagement in sport and physical activity, encompassing every age and phase of engagement. The book explores key models of engagement from around the world, as well as specific areas of research that will help the reader understand this important topic.

In adopting a lifespan approach, the book pays particular attention to sport and physical activity during childhood and adolescence as well as transitions into adulthood, the developmental periods when participation in sport and physical activity are most likely to decline. Understanding more about participation during these early years is important for sustaining participation during adulthood. The book also addresses issues relating to sport and physical activity during adulthood, across a range of different populations, while a final section examines sport and physical activity among older adults, an often overlooked, but growing segment of society in this context.

Lifelong Engagement in Sport and Physical Activity is important reading for undergraduate and postgraduate students in teacher education, sport and coaching science, and for health promoters, coaches, teachers and relevant bodies and organisations in sport and education.

This book is published in partnership with ICSSPE, and is part of the Perspectives series.

**Nicholas L. Holt** is an Associate Professor in the Faculty of Physical Education and Recreation at the University of Alberta, Canada, where he directs the Child and Adolescent Sport and Activity laboratory. He is also the Associate Editor of *The Sport Psychologist* journal and recently edited a book titled *Positive Youth Development through Sport* (Routledge, 2007).

Margaret Talbot is President of the International Council of Sport Science and Physical Education (ICSSPE) and Principal of Margaret Talbot Consulting. She is currently leading a team of experts developing a twenty-first century physical education curriculum for schools in Egypt; and is Physical Education Champion for SportsXtra. Professor Talbot was appointed Officer of the Order of the British Empire (OBE) for services to physical education and sport in 1993.

#### Perspectives

The Multidisciplinary Series of Physical Education and Sport Science

By publishing Perspectives, ICSSPE aims to facilitate the application of sport science results to practical areas of sport by integrating the various sport science branches. In each volume of Perspectives, expert contributions from different disciplines address a specific physical education or sport science theme, which has been identified by a group of leading international experts.

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#### **About ICSSPE**

The International Council of Sport Science and Physical Education (ICSSPE) was founded in Paris, France, in 1958. It is an international umbrella organisation that disseminates and promotes findings from sport science and highlights their practical application in cultural and educational contexts.

The organisation has a membership of approximately 300 national and international governmental and non-governmental organisations, federations and institutes of sport, sport science and physical education that cooperate in a multi- or interdisciplinary setting on an international level. The organisation provides worldwide scientific knowledge and practical experiences in many different disciplines.

ICSSPE works towards achieving a higher awareness of human values inherent in sport, physical activity and physical education worldwide. There are three primary objectives, namely to encourage international cooperation, to facilitate differentiation in sport science whilst promoting the integration of various branches, and to make scientific knowledge available.

The current working programme of ICSSPE emphasises the importance of healthy living across the lifespan and the continuum of human performance/development, ethics and professionalisation, and quality physical education. This programme, decided upon by ICSSPE members, is translated into practice through the working channels of:

- Science, by analysing and initiating research across all disciplines using the knowledge and experience of expert organisations and scientific institutions;
- Service, by facilitating the exchange of information among members and partners by organising conferences, meetings and seminars and designing publications; and
- Advocacy, by acting as a voice for sport science and physical education and encouraging international initiatives to promote and improve the position of physical education and sport science as a strong partner for the development of human society.

To support cooperation across disciplines and to assist practitioners and administrators by providing research based information, ICSSPE focuses on the development of multi- and interdisciplinary publications. Perspectives, the multi-disciplinary series of ICSSPE, has been developed to disseminate information to all

#### x About ICSSPE

interested organisations and institutions and to integrate the various sport science disciplines. By doing so, the organisation facilitates the application of research results to practical areas of sport. In each volume of this series, expert contributions address current and relevant themes.

Previous titles of the series include: Talent Identification and Development – The Search for Sporting Excellence; Children, Obesity and Exercise – Prevention; Treatment and Management of Childhood and Adolescent Obesity; and Sport for Persons with a Disability.

The motivation for this volume, the tenth within the Perspectives series, has its origin in the emphasis that is placed on health and lifelong participation in physical activity by many scientists, governments, international non-governmental and governmental organisations, particularly in the health and sport sectors, on both national and international levels. Although there is much research based evidence available, the political will to implement structural change that leads to lifelong engagement in sport and physical activity can still be strengthened in many countries. This statement is made despite the growing number of pre-school activities in many countries, a variety of activity programmes developed by the health sector and a growing number of master's programmes in different sports. With this publication, ICSSPE delivers information from different countries for students, academics, politicians and administrators working in this, and related, fields.

In line with ICSSPE's working programme, the publication analyses participation and performance in sport as well as in physical activity in different periods across the human lifespan including childhood and adolescence, adulthood and late adulthood. The relationship between performance and participation especially continues to be an unsolved issue for decision-makers.

The publication documents how different concepts of sport, such as high-performance sport, sport for all, adapted physical activities, as well as physical activity, can contribute to different fields of human and societal development.

#### **Contributors**

#### Len Almond

Dr Len Almond is Visiting Professor at St. Mary's University College in Twickenham, London. He is also the Foundation Director of the British Heart Foundation National Centre for Physical Activity at Loughborough University where he coordinates the Older Adults programmes with Bob Laventure. Len is also the chairperson of the National Coalition for Active Ageing.

#### **Richard Bailey**

Richard Bailey is a writer and researcher on education and sport. A former teacher in both primary and secondary schools and a teacher trainer, he has been a Professor at Canterbury, Roehampton and most recently, Birmingham Universities. Richard has undertaken funded research in every continent of the world. He works with UNESCO as Expert Adviser for Physical Education, the World Health Organisation, the European Union, and many similar agencies. He has carried out research on behalf of the English and Scottish governments, as well as numerous educational and sports agencies. In 2004 he was selected by delegates from more than 200 countries to act as Rapporteur for UNESCO's Athens Declaration. He is author of more than 100 publications, including books, academic and professional articles and monographs. Recent books include the *Routledge Physical Education Reader*, the *Sage Handbook of the Philosophy of Education, The Philosophy of Education: An Introduction* (Continuum) and *Physical Education for Learning* (Continuum).

#### **Dave Collins**

Dave Collins is Professor of Coaching and Performance at the University of Central Lancashire and Director of Grey Matters Consultants. Previously, as Performance Director of UK Athletics, Dave directed the programme which progressed the team from twenty-fourth to fifth (World then Olympic); twenty-first to third (World Indoors); and twelfth to first (European Team). Dave has over 90 peer review publications and 25 books/book chapters published. He has worked with more than 60 World or Olympic medallists plus professional sports teams, dancers, musicians and executives in business and public service. Current research interests include performer and coach development, cognitive expertise and the

promotion of peak performance across different challenge environments. As a performer, Dave was excessively average at low skill sports such as rugby, American football, martial arts and outdoor pursuits. He has coached rugby to national level. Dave is a Fellow of the Society of Martial Arts and the British Association of Sport and Exercise Sciences, and an Associate Fellow of the British Psychological Society.

#### Paul De Knop

Paul De Knop, PhD Physical Education and Master in Sports Sociology and Sports Management from the University of Leicester (UK), is Professor in the Faculty of Physical Education of Vrije Universiteit Brussel, where he teaches in the areas of sport, leisure and physical education from a socio-pedagogical perspective. His research interests include youth and sport, sport and ethnic minorities, sport and tourism, sport management, quality in sport and sport policy.

Paul's research relates to, amongst other things, benchmarking of top-level sport success, top-level sport students at the university, competencies of sport managers, sport policy strategic plans, ethical and qualitative aspects of youth sport and evaluation of physical education programmes.

#### Lars-Magnus Engström

Lars-Magnus Engström, Professor Emeritus from Stockholm University, Sweden, has studied sport habits of children, young people and adults in various projects since the end of the 1960s. Central issues have been how, and under which conditions, knowledge, skills and values within leisure culture are communicated. His research focuses on the importance of sports, fitness activities and outdoor life for the development of personal identity and lifestyle. He is one of the founders of the European College of Sport Sciences (ECSS) and has published around 50 scientific articles in Swedish journals, 25 articles in international journals/publications and 20 books or major reports. Lars-Magnus is currently connected to the Swedish School of Sport and Health Sciences in Stockholm.

#### Elizabeth A. Fallon

Elizabeth A. Fallon is an Assistant Professor in the Department of Kinesiology at Kansas State University where she co-directs the Physical Activity and Public Health Laboratory. Her research maintains two primary focus areas pertaining to the positive effects of physical activity for the prevention and treatment of obesity and chronic diseases: (1) testing health behaviour theory related to physical activity initiation and maintenance; and (2) the promotion of physical activity among women and minorities.

#### Paul A. Ford

Paul A. Ford is Director of Olympic and Paralympic Partnership Operations at the University of East London. He is a BASES Accredited Physiologist (Scientific Support) who has worked with several elite athletes and professional sports teams within the UK. Currently, Paul is helping to coordinate the delivery of Games-time training centres for several Olympic and Paralympic teams for the London 2012 Games, including the United States Olympic Committee. Paul specialises in paediatric research on the effects of growth and maturation upon athletic performance. His doctoral research was focused on physical activity and health-related outcomes in children, specifically the 'Effects of brisk walking on children aged 5-11 years old'.

#### Nicholas L. Holt

Nicholas Holt is an Associate Professor in the Faculty of Physical Education and Recreation at the University of Alberta, where he directs the Child and Adolescent Sport and Activity laboratory. His research focuses on psychosocial dimensions of youth sport and physical activity participation. He is particularly interested in the roles of parents and coaches along with peer interactions. His research is funded by the Social Sciences and Humanities Research Council of Canada and the Canadian Institutes of Health Research. He is the Associate Editor of The Sport Psychologist journal and recently edited a book titled Positive Youth Development through Sport (Routledge, 2007).

#### Marijke Hopman-Rock

Professor Marijke Hopman-Rock is working at TNO (Netherlands Organisation for Applied Scientific Research) in Leiden and is a Professor in physical activity and health of older persons at the VU University Medical Centre in Amsterdam. She is also on the management team of the Body@Work Research Center on Physical Activity, Work and Health. Her professional background is Biology, Psychology (statistics) and Epidemiology (PhD). As a part-time professor in Amsterdam, she guides several PhD students. She is also founding (past) chair of the European Network for Action on Ageing and Physical Activity (EUNAAPA) and associate partner in several European Union projects in the area of physical activity (PA). She is Associate Editor of the Journal of Aging and Physical Activity and BMC Public Health and is also in the board of other journals, including the Human Kinetics journal, Active Aging Today. In this publication, first issued in 2009, Marijke writes columns about Reach and Adoption of PA programmes for older persons as this journal is aimed at health professionals working in the area of PA and aging. During her career at TNO, she has written more than 60 peer reviewed articles and numerous reports and book chapters. In the past, she was Head of the Department of PA and Health at TNO and programme manager in the same area; Vice-president of the EGREPA (European Group for Research in Elderly and PA) and co-chair of the Aging interest group of the American College of Sport and Exercise Medicine (ACSM).

#### Clare Hume

Clare Hume, BAppSc (Hons), PhD, is National Heart Foundation of Australia Post-doctoral research fellow at the Centre for Physical Activity and Nutrition Research in the School of Exercise and Nutrition Sciences, Deakin University, Australia. Her research interests are primarily concerned with children's and adolescents' physical activity, and particularly physical and social environmental influences on behaviour. Her research has included measuring whether factors in the physical and social environment, both at home and in the neighbourhood, are associated with children's physical activity. Her particular interest relates to understanding whether these factors influence children's active transport and independent mobility. In addition, Clare's research focuses on intervention strategies targeting physical activity and sedentary behaviours among children. This includes the development and refinement of intervention strategies, which aim to promote increased physical activity and reduced sedentary behaviours among children, both in the family and school settings.

#### Maryam Koushkie Jahromi

Maryam Koushkie Jahromi is an Assistant Professor in the Department of Physical Education and Sport Sciences, School of Education and Psychology at the Shiraz University, in Iran, where she teaches and directs many researchers. She holds a PhD in exercise physiology and her research focuses on physiological dimensions of women's sport and physical activity participation. She is particularly interested in Muslim women in sport from social and cultural aspects. She is an executive board member of the International Association of Physical Education and Sport for Girls and Women (IAPESGW) and in 1998 was the awarded best student in her PhD entrance exam of exercise physiology. She has published books and articles nationally and internationally and presented congress speeches in several countries including Canada, China, South Africa and Saudi Arabia. She has been a referee and scientific board member of a number of national and international conferences.

#### Camilla J. Knight

Camilla J. Knight is a PhD student in the Faculty of Physical Education and Recreation at the University of Alberta. She is completing her PhD under the supervision of Dr Nick Holt in the Child and Adolescent Sport and Activity Research Laboratory. Her research interests are concerned with the psycho-social experiences of children in sport, particularly focused upon the influence of parents. Recent studies have examined athletes' preferences for parental behaviours at youth sport competitions, coaches' perceptions of parental involvement in youth sport and understanding the experiences of parents involved in youth sport. Camilla has produced a number of parent education materials, including parental dos and don'ts lists, a parental behaviour leaflet and presentations. She has also consulted with various tennis organisations in Canada and the UK, providing recommendations for improving parental involvement in junior tennis.

#### Áine MacNamara

Áine MacNamara is a Senior Lecturer in Elite Performance at the Institute of Coaching and Performance at the University of Central Lancashire. The Institute for Coaching and Performance is focused on developing providers of, and the systems employed in, the enhancement of performance. Áine is currently researching

talent development processes across different performance domains, with a particular interest in the role that psychological characteristics play in the realisation of potential.

#### Howard L. Nixon II

Howard L. Nixon is Professor of Sociology and former Chair of the Department of Sociology, Anthropology and Criminal Justice at Towson University in Baltimore, Maryland. His primary teaching interests are the sociology of sport, organisational deviance and the sociology of higher education, and his research and writing in recent years have focused on commercial aspects of college athletics, disability sports and pain and injury in sports. His most recent book, *Sport in a Changing World* (Paradigm, 2008), examines the dynamics of commercialised sports in a global context. He has had various roles in the North American Society for the Sociology of Sport (NASSS) and he currently serves on the editorial board of its journal, the *Sociology of Sport Journal*.

#### Gemma Pearce

Gemma Pearce (MSc) is a Doctoral Researcher in the School of Sport and Exercise Sciences at the University of Birmingham. Her areas of research focus around life transitions, body image concerns and health. She previously worked as a research methods specialist with Richard Bailey at Roehampton University, after doing an MSc in Sport and Exercise Psychology at Chichester University. Recent publications and presentations have focused on children's perceptions of health and play, research methods and literature reviews, self-presentational concerns, elite athletes' attitudes towards doping, gifted and talented education and player pathways in sport.

#### **Anke Reints**

Anke Reints, Master in Developmental Psychology from the Universiteit Utrecht and Sport Psychology from the Universiteit van Amsterdam, is currently finalising her PhD on career development and transitions of elite athletes at the Vrije Universiteit Brussel. In 2008, she conducted research on the provision of career support services worldwide for the International Olympic Committee (IOC). Anke presented at several international congresses on the career development of and career support services for talented and elite athletes. Finally, as a sport psychology consultant, Anke has worked with several talented tennis players within elite sport schools.

#### Jo Salmon

Jo Salmon, BA, BBSc (Hons), PhD, is National Heart Foundation and sanofiaventis Career Development Award Fellow in the Centre for Physical Activity and Nutrition Research at the School of Exercise and Nutrition Sciences, Deakin University, Australia.

Jo's programme of research focuses on the behavioural epidemiology of children's and adults' physical activity and sedentary behaviour. She is interested in

the assessment of these behaviours; in understanding the individual, social and environmental factors that influence participation; and the development of strategies to promote physical activity and reduce sedentary time among children and adults.

Recent research includes the development and validation of instruments to assess physical activity and sedentary behaviour among children; descriptive studies of influences on child and youth physical activity and sedentary behaviour; and examination of the effectiveness of strategies to reduce children's sitting time and promote physical activity at school and at home.

#### Maarten Stiggelbout

Maarten Stiggelbout received his MSc degree in 1990. He then went to TUFTs University in Boston where he visited the post-doctoral course in Epidemiology (by Kenneth Rothman and Lemeshaw). Since completing his university degree, he worked for a range of organisations: The Dutch Ministry of Welfare, Public Health and Culture from 1990 to 1992, where he carried out two freelance projects: (1) the organisation and reporting of an invitational expert meeting 'Sports, Physical Activity and Health'; and (2) the inventory of scientific research in sports in the Netherlands; The Netherlands Institute of Sports and Health from 1992 to 1995 as Consultant for Physical Activity and Health, and project leader for the development of a database on exercise programmes for the elderly and people with chronic diseases; TNO Prevention and Health, Department of Physical Activity and Health, from 1995 until 2005 as a researcher in the field of physical activity, sport and e-health, monitoring physical activity and health, as well as offering consultancy and research on governmental policy; and the Netherlands Institute for Health Promotion (NIGZ), from mid-2005 to the present. Maarten is currently Senior Advisor with Specialty Healthy Lifestyle. He is involved in the development and implementation of healthy lifestyle programmes, i.e. Woerden Active/Local Active, Scoring for Health, and he is also advisor to the National Action Plan Sports and Physical Activity for the NISB. He completed his thesis on More Exercise for Seniors in 2008, on which his chapter in this book is based and relates to.

#### Margaret Talbot, PhD OBE FRSA

Margaret Talbot is President of the International Council of Sport Science and Physical Education (ICSSPE) and Principal of Margaret Talbot Consulting. Previous employment includes Chief Executive, Association for Physical Education (United Kingdom (UK)); Chief Executive, Central Council of Physical Recreation, the umbrella organisation for English and UK non-governmental sport organisations; and Carnegie Research Professor and Head of Sport, Leeds Metropolitan University. She is a lifelong researcher, advocate and activist for equity in sport and physical education and has continually fought to defend and promote the statutory entitlement to physical education, which is the cornerstone of its status and development in the UK. She is currently leading a team of experts developing a twenty-first century physical education curriculum for schools in

Egypt; and is Physical Education Champion for SportsXtra, a company supporting the delivery of physical education and physical activity, mainly in primary schools.

Professor Talbot was appointed Officer of the Order of the British Empire (OBE) for services to physical education and sport in 1993.

#### **Martin Toms**

Dr Martin Toms is a Senior Lecturer in Coaching and Sport Education in the Department of Sport Pedagogy at the University of Birmingham. He is a former professional cricket coach and amateur player and has spent some years researching the coaching experiences of young performers at grassroots level in the UK. His areas of research and teaching include the sociological aspects of participant and talent development and grassroots youth sports participation. In addition he is also interested in the influence of the family and other socio-cultural factors in the sports participation process. He works closely with organisations and National Governing Bodies such as The Professional Golfers' Association (PGA), and was responsible for developing the partnership programmes between the University and the PGA. He is currently co-editor of the *European Journal of Sport and Society* and is involved in a Europe-wide Da Vinci funded project investigating occupational standards in sport.

#### Paul Wylleman

Paul Wylleman, PhD Psychology, is Professor in the Faculties of Physical Education and Physiotherapy and of Psychology and Educational Sciences at the Vrije Universiteit Brussel where he teaches sport psychology, mental support provision across the athletic career and lifestyle management for elite athletes. He is Head of the Department Topsport and Study, which provides support services to elite student-athletes. Paul has published articles, chapters and books and has been a keynote speaker at international congresses as well as at meetings of the IOC, European Olympic Committees (EOC) and national Olympic Committees on the topics of, amongst others, career and lifestyle management of elite (young) athletes, the quality of sport psychology support service/providers and mental skills of elite athletes and coaches. Paul Wylleman coordinated the project Career Support Services for Elite Sport Federations and is a sport psychology consultant to the Belgian Olympic Committee and elite sport federations.

#### Bradley W. Young

Bradley W. Young, PhD, is an Assistant Professor in the School of Human Kinetics in the Faculty of Health Sciences at the University of Ottawa. His research considers the psycho-social aspects of participation in sport across the lifespan, and investigates how such participation relates to issues of successful aging and the retention of skilled sport performance. He is specifically interested in identifying the various agents and groups in the social environment of aging athletes that facilitate prolonged sport commitment and motivation. He examines topics such as perceived barriers to lifelong sport activity, as well as benefits from such

#### xviii Contributors

participation among middle-aged and older persons, in order to inform strategies for promoting Masters Sport and Seniors Games programmes. His research is funded by the Social Sciences and Humanities Research Council of Canada, in concert with Sport Canada.

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