

A photograph of a tennis coach and a player on a blue court. The coach, wearing a light blue polo shirt and cap, is pointing towards the right. The player, wearing a white Adidas shirt and cap, is holding a red and black tennis racket. Their shadows are cast on the court surface.

AN INTRODUCTION TO
**SPORTS
COACHING**

CONNECTING THEORY TO PRACTICE

SECOND EDITION

EDITED BY
**ROBYN L. JONES &
KIERAN KINGSTON**

AN INTRODUCTION TO SPORTS COACHING

An Introduction to Sports Coaching provides students with an accessible and engaging guide to the scientific, social scientific, medical and pedagogical theories that underlie the practice of quality sports coaching. Now in a fully updated and revised second edition, it introduces students to the complex, messy, multi-faceted nature of coaching, and explores the full range of ‘knowledges’ that inform all successful coaching practice.

Written by a team of leading international sports coaching academics and practitioners, as well as sport scientists and social scientists, the book provides a concise guide to every key theme in sports coaching, including:

- reflective practice
- pedagogy
- skill acquisition
- psychology
- biomechanics
- physiology
- sport medicine and injury
- performance analysis
- sociology
- history
- philosophy
- sport development

Each chapter makes a clear link between theory and practice, and includes discussion of real-life coaching scenarios and insights from practising international and club coaches. The book includes clear definitions of important themes and concepts, as well as seminar and review questions in each chapter designed to confirm understanding and encourage further enquiry.

No other introductory textbook explains the importance of a holistic approach to sports coaching practice. This is an essential companion to any sports coaching course.

Robyn L. Jones is a Professor of Sport and Social Theory at the Cardiff School of Sport, Cardiff Metropolitan University (UWIC), UK, and a Visiting Professor (II) at the Norwegian School of Sport Sciences, Oslo, Norway. He has published several books on sports coaching and pedagogy, the most recent being *A Sociology of Sports Coaching* (Routledge). He also serves as the General Editor of the newly launched Taylor & Francis journal *Sports Coaching Review*.

Kieran Kingston is a Senior Lecturer in Sport Psychology at the Cardiff School of Sport, Cardiff Metropolitan University (UWIC), UK. He received his PhD in 1999 from the University of Wales. His research interests are focused broadly on the motivational aspects of sport. Recent publications involve work on goal-setting, coach/athlete motivation, confidence, treatment efficacy/adherence and performance routines. He has provided psychological support to a variety of elite and professional sports performers since 1997.

AN INTRODUCTION TO SPORTS COACHING

Connecting theory
to practice

**EDITED BY ROBYN L. JONES AND
KIERAN KINGSTON**

First published 2013
by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

Simultaneously published in the USA and Canada
by Routledge
711 Third Avenue, New York, NY 10017

*Routledge is an imprint of the Taylor & Francis Group, an
informa business*

© 2013 Robyn L. Jones and Kieran Kingston

The right of the editors to be identified as the authors of the editorial material, and of the authors for their individual chapters, has been asserted in accordance with sections 77 and 78 of the Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

Trademark notice: Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

Every effort has been made to contact copyright holders for their permission to reprint material in this book. The publishers would be grateful to hear from any copyright holder who is not here acknowledged and will undertake to rectify any errors or omissions in future editions of this book.

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the
British Library

Library of Congress Cataloguing in Publication Data
An introduction to sports coaching: connecting theory to practice/
edited by Robyn L. Jones and Kieran Kingston. – 2nd ed.
p.cm.

1. Coaching (Athletics) I. Jones, Robyn L. II. Kingston, Kieran.
GV711.158147 2013
796.07'7–dc23

2012033976

ISBN: 978-0-415-69490-2 (hbk)
ISBN: 978-0-415-69491-9 (pbk)
ISBN: 978-0-203-14744-3 (ebk)

Typeset in Melior

by RefineCatch Limited, Bungay, Suffolk

CONTENTS

<i>List of illustrations</i>	xiii
<i>List of contributors</i>	xv
<i>Preface to 2nd edition</i>	xvii

PART I

1 REFLECTIVE PRACTICE IN SPORTS COACHING: THOUGHTS ON PROCESS, PEDAGOGY AND RESEARCH 3

DAVID GILBOURNE, PHILLIP MARSHALL AND ZOE KNOWLES

Introduction	3
Reflective practice in sport coaching pedagogy	3
Reflective practice in applied sport settings	6
Doing reflection	8
Staged reflection	10
Final thoughts	11

PART II

2 PEDAGOGY FOR COACHES 15

KEVIN MORGAN AND JOHN SPROULE

Introduction	15
--------------	----

Learning theories	16
Behaviourist learning theories	16
Constructivist learning theories	18
The spectrum of teaching styles (Mosston and Ashworth, 2002)	22
Motivational climate	25
Conclusion	28

3 SKILL ACQUISITION FOR COACHES

31

GAVIN LAWRENCE, KIERAN KINGSTON AND VICTORIA GOTTWALD

Introduction	31
Structuring the practice environment	32
Blocked versus random practice	32
Factors influencing the contextual interference effect	33
Constant versus variable practice	35
Specificity of practice and learning	35
Nature and administration of feedback	37
Types of augmented feedback	38
The frequency and timing of augmented feedback	38
Attentional focus	40
Support for an external focus of attention	41
Outcome tasks versus form sports	43
Practical implications	43
Conclusion	46

4 PSYCHOLOGY FOR COACHES

49

KIERAN KINGSTON, OWEN THOMAS AND RICHARD NEIL

Introduction	49
What is sport psychology?	49
Motivation	50
Promoting motivation in athletes: A self-determination approach	51
Self-confidence in sport	53
Promoting confidence in athletes	57
Stress and anxiety in sport	59

Competitive stress	62
Managing the stress process	63
Conclusion	64

PART III

5 SOCIOLOGY FOR COACHES 69

NIC MATTHEWS, SCOTT FLEMING AND ROBYN L. JONES

Introduction	69
What is sociology?	71
So how can sociology help coaches?	72
Macro-sociology: Helping coaches understand their social context	73
Micro-sociology: How might it help coaches?	76
Conclusion	79

6 HISTORY FOR COACHES 83

MALCOLM MACLEAN AND IAN PRITCHARD

Introduction	83
The sports coach in history	85
History and national identity	88
Sports coaching and national identity	90
Making sense of the past	93
Conclusion	95

7 PHILOSOPHY FOR COACHES 99

ALUN HARDMAN AND CARWYN JONES

Introduction: What is philosophy and how can it help us understand coaching?	99
The tools of philosophy and how they can be used in coaching	101
Axiology (values)	102

Ethics (morality)	103
Ontology (the meaning of coaching)	105
Phenomenology	107
Applying philosophy to coaching	108
Conclusion	110

8 ETHICS FOR COACHES

113

ALUN HARDMAN AND CARWYN JONES

Introduction: What are ethics and how can they help us understand coaching?	113
Moral concepts in sport	115
Fairness, cheating and competition	115
Gamesmanship	116
Merit, admiration and luck	117
Autonomy, freedom and paternalism	117
Equity, equality and justice	118
A moral point of view – the objectivity, subjectivity and normativity of sport coaching	119
Types of ethics in sport	120
The nature and practice of coaching ethics	124
The ethics of sports coaching – example	126
Conclusion	128

9 SPORTS DEVELOPMENT FOR COACHES

131

NICOLA BOLTON AND BEV SMITH

Introduction	131
Key concepts	132
Sports development	132
Community development	134
Policy context	134
The UK Coaching Certificate	136
The UK Coaching Framework	137
Insights for sports development and sports coaching	137
Conclusion	141

PART IV

10 BIOMECHANICS FOR COACHES

145

GARETH IRWIN, IAN BEZODIS AND DAVID KERWIN

Introduction	145
The conceptual model of technique and performance	146
The coaching–biomechanics interface	148
Enhancing coaches' technical understanding of skills	149
Evaluating coaching practices to enhance skills	151
Evaluating training practices to develop skills	151
Facilitating the evolution of technique within sport (i.e. through the development of new skills)	152
Assisting in optimising performance (i.e. by theoretically justifying the modification of skills)	154
Types of analysis in sports biomechanics	155
Qualitative analysis (e.g. matching to a mental image of a skill)	155
Semi-quantitative analysis (e.g. analysis of angles and temporal aspects of movements)	156
Quantitative analysis (e.g. full kinematic and kinetic analyses)	157
Modelling in biomechanics	158
Concluding thoughts: The future	159

11 MATCH ANALYSIS FOR COACHES

161

PETER O'DONOGHUE

Introduction	161
System development	162
Overview of the system development process	162
Step 1: Requirements' analysis	163
Step 2: Evolutionary prototyping	164
Step 3: System reliability and validity	170
Step 4: System operation and maintenance	171
Match analysis within coaching	171
The match analysis cycle	171
Instructional feedback	173
Conclusion	175

12 SPORTS MEDICINE FOR COACHES

177

ANDREW MILES AND RICHARD TONG

Introduction	177
What is sports medicine and how can it help coaches?	179
Understanding sports injuries	181
Injury prevalence	182
Injury causation	186
Injury prevention	187
Injury management	191
The rehabilitation process	193
Summary	195

13 PHYSIOLOGY FOR COACHES

197

MICHAEL G. HUGHES, JOHN L. OLIVER AND RHODRI LLOYD

Introduction	197
The physiological components of sport performance	197
An overview of sports physiology	198
Initiation of movement	199
The maintenance of muscle activity	201
Intermittent muscle activity	202
Training to improve physical performance	203
General considerations	203
Specific considerations	204
Physiological issues in exercising children	207
Training in children	208
Maturational status	209
Conclusion	210



PART V

14 TYING IT ALL TOGETHER

215

ROBYN L. JONES AND KIERAN KINGSTON

Introduction	215
Differing views of coaching knowledge	216
Kieran's interpretation	217
Robyn's view	218
Finding agreement: Concluding thoughts	219
<i>References</i>	223
<i>Index</i>	249

ILLUSTRATIONS

TABLES

2.1	Teaching styles adapted from Mosston and Ashworth (2002)	22
2.2	Multiple intelligences adapted from Gardner (1993)	24
2.3	TARGET behaviours that influence motivational climate	26
4.1	Summary and comparison of sport-confidence sources	55
4.2	Summary and comparison of sport-confidence types	56
13.1	Sporting events and the physiological factors that limit their performance	199
13.2	Load, repetition, force output and movement speed assignments based on training goal	206
13.3	A selection of training (running) sessions to enhance anaerobic fitness	206
13.4	Selection of (running-based) training sessions to enhance aerobic fitness	207

FIGURES

10.1	A conceptual model depicting how coaches develop skills in athletes	146
10.2	Coaching–Biomechanics Interface	149
10.3	The functional phases of the gymnastic longswing	150
10.4	Darren Campbell performing the sprint start showing extension into the ‘thrust position’	150

<i>10.5</i>	The Tkachev move	153
<i>10.6</i>	Graphical reconstruction of a triple backward somersault by two gymnasts at 1988 Seoul Olympics	154
<i>10.7</i>	A frame-by-frame depiction of the rugby place kick	156
<i>11.1</i>	A manual notation system for tennis	166
<i>11.2</i>	The main SportsCode components	167
<i>11.3</i>	The SportsCode interface (when used to analyse a netball game)	168
<i>11.4</i>	Match analysis as action research in a coaching context	172
<i>11.5</i>	Normative performance profile for a male Grand Slam tennis player	174
<i>12.1</i>	The so-called ‘sequence of prevention’	181
<i>12.2</i>	A categorisation of the most common sports injuries	186
<i>13.1</i>	The force–velocity and force–power relationships for concentric contractions of muscle	200
<i>13.2</i>	Power output during 5 seconds of treadmill sprinting	201

CONTRIBUTORS

Professor David Gilbourne, Department of Sport, Health and Exercise Science, University of Hull

Phillip Marshall, Department of Sport, Health and Exercise Science, University of Hull

Dr Zoe Knowles, School of Sport and Exercise Science, Liverpool John Moores University

Dr Kevin Morgan, Cardiff School of Sport, Cardiff Metropolitan University

Dr John Sproule, Moray House School of Education, University of Edinburgh

Dr Gavin Lawrence, School of Sport, Health and Exercise Science, Bangor University

Dr Kieran Kingston, Cardiff School of Sport, Cardiff Metropolitan University

Dr Victoria Gottwald, School of Sport, Health and Exercise Science, Bangor University

Dr Owen Thomas, Cardiff School of Sport, Cardiff Metropolitan University

Dr Richard Neil, Cardiff School of Sport, Cardiff Metropolitan University

Dr Nic Matthews, School of Leisure, University of Gloucestershire

Professor Scott Fleming, Cardiff School of Sport, Cardiff Metropolitan University

Professor Robyn L. Jones, Cardiff School of Sport, Cardiff Metropolitan University

Dr Malcolm MacLean, Department of Sport and Exercise, University of Gloucestershire

Dr Ian Pritchard, Department of Sport and Exercise Sciences, University of Chester

Dr Alun Hardman, Cardiff School of Sport, Cardiff Metropolitan University

Dr Carwyn Jones, Cardiff School of Sport, Cardiff Metropolitan University

Dr Nicola Bolton, Cardiff School of Sport, Cardiff Metropolitan University

Bev Smith, Cardiff School of Sport, Cardiff Metropolitan University

Dr Gareth Irwin, Cardiff School of Sport, Cardiff Metropolitan University

Dr Ian Bezodis, Cardiff School of Sport, Cardiff Metropolitan University

Professor David Kerwin, Cardiff School of Sport, Cardiff Metropolitan University

Dr Peter O'Donoghue, Cardiff School of Sport, Cardiff Metropolitan University

Dr Andrew Miles, Cardiff School of Sport, Cardiff Metropolitan University

Professor Richard Tong, Cardiff School of Sport, Cardiff Metropolitan University

Dr Michael G. Hughes, Cardiff School of Sport, Cardiff Metropolitan University

Dr John L. Oliver, Cardiff School of Sport, Cardiff Metropolitan University

Dr Rhodri Lloyd, Cardiff School of Sport, Cardiff Metropolitan University

PREFACE TO 2ND EDITION

BACKGROUND AND AIM

Although scholars agree that coaching is a complex, multifaceted activity involving many different forms of knowledge, the literature which has informed it, particularly at the beginner or introductory level, has been roundly criticised (e.g. Jones, 2006b, among others). The disapproval has centred on the portrayal of coaching as a simple sequential course of knowable action to be delivered and then accepted by the athlete; a picture which grossly oversimplifies the process involved. Such a portrayal has also been fragmented or splintered in nature, presenting coaching as a series of isolated, discrete and largely unrelated components. The problem with such compartmentalisation is that those parts being analysed have been de-contextualised, resulting in a very artificial account of events. As everyone who has coached or been coached can attest, coaching is just not that clear-cut. What has exacerbated the situation is that coaches and students of coaching have been left to make the links between the different theoretical strands and the thorny reality of practice for themselves; a task at which they have consistently failed. Unsurprisingly, it has left the relevancy of such work open to question. The result is that much of coaches' knowledge remains rooted in implicit assumptions as opposed to explicit research and theory. No doubt authors of such introductory texts would rightly protest that there is a need to present coaching in a way that is both accessible and understandable for students and novice coaches. We couldn't agree more. Consequently, those wishing to write a foundational book in coaching are left with a dilemma; how to pen a clear, readable text suitable for undergraduate students and beginner coaches, without dumbing-down the activity so that it lacks any perceived application to the real world.

The first edition of this book was a response to the challenge described, which to a degree was met, as we were invited by Routledge to produce a second. We were pleased to do so for a number of reasons. Principal among these was our belief in the need to improve the text, particularly in terms of strengthening the case related to the value of considered reflection in developing coaching knowledge. This was not primarily aimed at improving understanding of the content contained in the chapters (which remain grounded in differing disciplines of sport sciences), but rather to encourage considered interpretation of how the different knowledge strands presented comprise integrated coaching practice. To help develop such analysis, and consequently a more critical reading of this book, a definitive chapter borrowing, principally from the work of Donald Schön (1983, 1987) on reflective practice, now follows this Preface. This chapter, new to this second edition, encourages readers to become reflexive practitioners by recognising that interpretations of sports coaching are produced and not found (Smyth and Shacklock, 1998). Its primary aim, then, is to promote greater cognitive and creative consideration of the differing strands of knowledge presented within the book's subsequent chapters in relation to everyday coaching practice (Jones, 2000). In doing so, coaching is more firmly positioned as a personal construction where one coach may rely on his physiological or biomechanical knowledge to a greater extent to deal with a particular issue, whilst another, faced with a similar problem, would utilise her pedagogical or psychological skills.

Within this second edition, we have also tried to highlight (and encourage) this constructivist nature a little more in an amended concluding chapter. Here, we present examples of how the holistic approach we call for in the book (taking information from a range of sources) can be realised. In addition to our personal interpretations of a coaching issue (which were a popular feature of the first edition), we also present two additional real-life coaching scenarios to be engaged with. These 'exercises' further emphasise the pedagogical purpose of the book for other users, be they students, lecturers, coach educators or practitioners. Finally within this second edition, in order to take account of the burgeoning field of coaching (and sports science) research, the chapters have been both expanded and updated, often through the invited critique of additional colleagues, thus considerably enriching the original text.

Despite the changes and improvements evident, this second edition retains the three principal goals which defined the first, namely: to introduce students to the multifaceted nature of coaching and the predominant sport science knowledges which inform it; to highlight how such differing perspectives can and should be related to coaching practice; and, finally, to emphasise them as part of an integrated entirety which comprises the holistic nature of the activity. Although an introductory text, then, this is not a simple 'how-to' book of coaching comprising a list of handy hints and quick fixes. Indeed, this is where it differs from much of

what has gone before. Rather, the significance of the book lies in better defining coaching's content knowledges, and how they contribute to a collective body of understanding for beginner coaches and students of coaching. Clarifying in this way holds the potential to increase the perceived relevancy of explicit knowledge sources for readers, consequently reducing the gap between theory and practice.

CONTENT

Although not claiming to cover all the possible information sources available to coaches, the chapters included in the book examine coaching from a number of sport science related perspectives. We're aware that presenting the book in such a format can be seen as going against the argument just given in respect of fragmenting knowledge. However, taking account of the complexity of coaching as a subject and the introductory nature of the book, for the purposes of clarity and to counter fear and frustration among readers, it was decided to delineate or bracket coaches' knowledge along accepted lines within sports science. This is not to say that we have sacrificed the multifaceted and knotty nature of coaching for an easy ride as, although delivered as discrete, each chapter discusses evidence and concepts directly related to coaching's messy and interpretive character. Additionally, in line with the complexity of the subject matter examined, an inescapable element of overlap exists between the notions discussed in many of the chapters. Far from being a bad thing, however, we see this emergent conceptual blending as allowing readers to clearly identify and grasp the most illuminating and consistent ideas that underpin coaching (Jones *et al.*, 2011). For example, following an introductory chapter on reflective practice, the chapters relating to psychology (Chapter 4) and philosophy (Chapter 7) both highlight the relative importance of developing intrinsic motivation in athletes; that is, an appreciation of the game for the game's sake, to maximise performance. The same could be said of deciding what comprises appropriate interaction with athletes, which is discussed (albeit in different ways) both in Chapter 2 ('Pedagogy for coaches') and Chapter 5 ('Sociology for coaches').

To encourage readers to make the required connections between the different chapters for themselves, we have deliberately clustered them into distinct sections or parts, so that each chapter is followed by another that relates to it. For example, following Chapter 1 which comprises Part I, 'Skill acquisition for coaches' (Chapter 3) is preceded by 'Pedagogy for coaches' (Chapter 2) and followed by 'Psychology for coaches' (Chapter 4) – this cluster presented as Part II. The chapters relating to 'Sociology for coaches' (Chapter 5), 'History for coaches' (Chapter 6), 'Philosophy for coaches' (Chapter 7), 'Ethics for coaches' (Chapter 8) and 'Sports development for coaches' (Chapter 9) are similarly

grouped (Part III), as are those related to ‘Biomechanics for coaches’ (Chapter 10), ‘Match analysis for coaches’ (Chapter 11), ‘Sports medicine for coaches’ (Chapter 12) and ‘Physiology for coaches’ (Chapter 13) (Part IV). Grouping in this way, however, does not imply that cross-cluster connections cannot and should not be made, as the boundaries between the clusters are inevitably flexible and permeable. Indeed, the content of the chapter groups was very much our subjective decision around which there was plenty of enthusiastic debate. The point to be made, however, is that each chapter is inherently linked (in various degrees) to every other and should be read as such.

Each of these discipline-specific chapters is based on a similar format. This comprises a clear definition of the area in question followed by a discussion of a number of important constructs or sub-areas that inform it. For example, within ‘Sociology for coaches’ (Chapter 5), issues concerned with both micro- (i.e. face-to-face interaction) and macro-sociology (i.e. how wider social forces such as race or gender affect behaviour) are discussed. Far from isolating the knowledge presented, however, we’ve tried to take account of its nature by contextualising it within coaching. Hence, as mentioned earlier, an attempt is made to illustrate how the knowledge presented in each chapter informs coaching both generally and uniquely. Each chapter also concludes with a series of discussion points related to the information presented within it, which can also serve to check understanding, and additional web resources from which further knowledge can be gleaned. To close the book, an amended final chapter (Part V: Chapter 14 ‘Tying it all together’) outlines a means through which a more holistic and personal approach to coaching, incorporating all the differing knowledge strands previously discussed, can be considered. The aim here is to illustrate how the various information presented in the earlier chapters can be brought together, analysed and applied at an individual level to address unique, contextually defined coaching problems.

WHO IS THE BOOK FOR?

An Introduction to Sports Coaching is a book true to its title in that it provides an introduction to the sport science knowledge behind coaching for undergraduate students and novice coaches. By design, it is clear and manageable. For some students, it will provide their only formal study of coaching, while for others it will serve as a foundation for further investigation. For all, however, it should enhance their general awareness of the various knowledges that underpin coaching and how each can be applied to practice. A further valuable aspect of the book is that, whilst it consolidates coaching’s principal knowledges into coherent sections, it also conveys, to some extent, the complex nature of

coaching, thus demonstrating to students a little of what it means to be a coach. Our intention, then, is to introduce the value of considered reflection into the thoughts and practices of those beginning their study of coaching. This is specifically so regarding a heightened appreciation of what kinds of knowledges comprise coaching and how they can be better understood and developed to inform practice.

Robyn L. Jones and Kieran Kingston

PART I

CHAPTER 1

REFLECTIVE PRACTICE IN SPORTS COACHING: THOUGHTS ON PROCESS, PEDAGOGY AND RESEARCH

DAVID GILBOURNE, PHILLIP MARSHALL AND ZOE KNOWLES

INTRODUCTION

For a number of years, all three authors of the present text have commented upon and engaged with reflective practice. We are committed ‘users’ of all things reflective and, mindful of our histories, we have sought to write this introductory chapter in a critical and cautious way. However, and despite our best efforts, it is inevitable that we comment on the themes and processes of reflective practice in a supportive light and, in doing so, we align with the general pitch and flow of the reflective practice literature (Knowles and Gilbourne, 2010). In our past writings, we have collectively promoted the applied-practice benefits that can be accrued through systematic reflection. Similarly here, with specific reference to coaching, we argue that reflective practice is an ideal way to develop critical self-awareness, and a mechanism through which coaches might monitor, evolve and improve what they do. In this introductory chapter, we explain how the processes of reflection have affected coaching pedagogy, consider how coaches might engage in reflection, and how they can approach the task of writing reflectively derived material. As the chapter progresses, we focus increasingly on how reflection might help you understand your own (coaching) practice.

REFLECTIVE PRACTICE IN SPORT COACHING PEDAGOGY

Over the last few decades, there has been a significant shift in the way the government in the United Kingdom has viewed sport and exercise. Major challenges for the nation’s health and well-being have raised the profile of sport as a tool to help address a wide range of issues. This challenge has gone hand-in-hand with

the growing profile of performance sport. The award of the 2012 Olympic Games to the UK, bringing an additional need for success at the highest level in sport, has drawn governmental attention to the role of the sports coach. Until recently, the landscape of sports coaching in the UK did not give the impression of a profession that was well equipped to address these major issues (Taylor and Garratt, 2011). The subsequent drive to professionalise sports coaching has centred on the need to deliver an appropriately trained, regulated and sufficiently knowledgeable workforce, and thus to tackle this neglect.

Significant government investment through the work of the UK Coaching Task Force (DCMS, 2002) has been responsible for driving this process of professionalisation. The resulting launch of the UK Coaching Certificate and the UK Coaching Framework aimed to deliver a professionally regulated vocation (sports coach UK, 2008). In an environment of professionalisation, it was perhaps inevitable that the role of reflection and reflective practice would gain the interest of the coaching community. This can be seen in the significance reflective practice has held for researchers in the field of sports coaching over the last decade (see for example Cassidy *et al.*, 2009; Gilbert and Trudel, 1999, 2001, 2004, 2005; Knowles *et al.*, 2001; Knowles *et al.*, 2005; Nelson and Cushion, 2006). In addition, the promotion of reflection in coaching practice has begun to emerge in coach education programmes (Nelson and Cushion, 2006) and in undergraduate university programmes focused on sports coaching (Knowles *et al.*, 2001).

The aforementioned literature, however, has recognised the often *ad hoc* nature of the development of coaching knowledge (Knowles *et al.*, 2001); coaches develop their knowledge not just through attendance at National Governing Body (NGB) coaching awards, but through accessing a range of additional learning resources. These resources can include appropriate literature, internet searches, discussion with peers and knowledgeable others, and involvement in mentoring programmes. Even the formally organised structures of NGB coach education awards are only accessed for very short periods of time, with gaps often amounting to months or years between courses (Knowles *et al.*, 2001). Schön's (1983, 1987) extensive work on the value of reflection suggests that the development of professional knowledge is primarily achieved through experience gained in the field. Similarly, it is acknowledged that sports coaches spend little time in formal educational settings and that their professional learning predominantly takes place in a coaching setting (Gilbert and Trudel, 1999). There is certainly a need in the field of sports coaching for the development of what Schön (1983) described as 'artful competence', or craft skills. These skills and this level of professional competence require a process of reflection to allow their effective development to occur.

While it is accepted that most learning in coaching takes place through experience in the practice environment, learning cannot be assumed as an outcome

of this practice. For learning to occur, professionals must actively engage in a process of reflection. As Gilbert and Trudel (2006) suggest, ‘ten years of coaching without reflection is simply one year of coaching repeated ten times’ (p.114). At the centre of Schön’s work is the idea that reflection is stimulated by encountering problematic situations during one’s professional practice; on encountering a problem, a practitioner is stimulated to solve it through a systematic process of reflection. Schön describes this type of reflection as ‘reflection-in-action’. Schön (1983) argued that reflection-in-action can be seen as a process of reflecting on our activity in the ‘action-present’; here, phrases such as ‘thinking on your feet’ are advanced as descriptors for the act of reflecting while doing (Schön, 1983, p.54).

Gilbert and Trudel (2006) observe that a range of researchers have proposed models of reflection based on Schön’s work, in fields such as teaching (Gibbs, 1988), nursing (Johns, 1994) and sports coaching (Gilbert and Trudel, 2001). Gilbert and Trudel’s (2001) model suggests a process of reflection which begins with the identification of a ‘coaching issue’ which can be equated with the kind of problematic situation that instigates reflection, as first outlined by Schön. This identification of a coaching issue is influenced by what Gilbert and Trudel (2006, p.119) describe as a coach’s ‘role frame’. This is a coach’s own approach to coaching, and can be likened to a coaching philosophy (Gilbert and Trudel, 2001, 2004; Nelson and Cushion, 2006). If a ‘coaching issue’ is deemed to be of significance, a coach may then engage in a four-stage reflective conversation (Gilbert and Trudel, 2006). This reflective conversation is designed to generate a suitable solution to the identified issue. The conversation is a cyclical process, beginning with issue setting and proceeding to the generation of a strategy to deal with the problem. In the experimentation stage, this strategy is tested before being evaluated for effectiveness. If the generated strategy proves to be effective, the reflective conversation can be considered complete. However, if it is ineffective, the process can begin again, with a return to the strategy generation stage.

While the use of reflection is now widely accepted as good practice in the development of effective and professional sports coaches, some researchers have noted that coverage of reflection in coach education courses is insufficient to develop effective practitioners (Knowles *et al.*, 2001; Knowles *et al.*, 2005). They have argued that the development of good reflective skills cannot be assumed by coach educators as a natural outcome of the introduction of reflection in the coaching curriculum. Approaching reflection in this way may mean that sports coaches who do reflect, may do so at a purely superficial level. Indeed, Knowles *et al.* (2005) report that in a range of NGB coaching awards, no discussion took place of coaches’ underlying value and belief systems. Such discussions only really took place as part of lower-level coaching qualifications, and even then, in no real depth. This then, brings us back to a closer investigation of

Gilbert and Trudel's (2001) model of reflection in coaching. While the suggested framework offers a useful method for helping coaches structure their own reflective practice, perhaps the starting point for any truly searching level of reflection should be an in-depth consideration of role frame. Nelson and Cushion (2006) link the terms 'role frame' and 'coaching philosophy', while Cassidy *et al.* (2009) make similar connections between the construction of a coaching philosophy and reflecting on coaching practice. They note that 'fundamental issues about one's own personal involvement in coaching' must be answered before 'more detailed reflective questions' can emerge (p.62). Further similarities in terminology exist in the coaching literature. For example, Lyle (2002) discusses the use of 'critical incidents' (p.167) to prompt the analysis and construction of a personal coaching philosophy.

As stated, Gilbert and Trudel's work noted the importance of an awareness of role frame in the process of effective reflection. Here, their investigation identified both boundary and internal elements of coaches' role frames. Of particular importance were the internal elements, which they described as 'tacit' in nature. These internal elements linked most closely with a coach's underlying belief systems and values (other related texts have talked to this issue through the term 'craft' knowledge). The significance of these internal elements led both Gilbert and Trudel (2004) and Nelson and Cushion (2006) to conclude that an in-depth consideration of role frame be included in coach education programmes. Gilbert and Trudel (2004) suggested that this represented a 'critical step in personal and professional development' (p.40).

While it cannot be doubted that any level of reflection will be better than none in making positive changes to coaching practice, for coaching to truly evolve as a profession, these reflections need to progress beyond the consideration of purely tactical and technical issues (a matter developed further in the final phase of our discussion). Rather, a much deeper level of reflection is required for coaching practitioners to develop an increased level of personal and professional awareness. However it is attained, it is hoped a heightened level of awareness will lead to the development of more effective practitioners; practitioners who possess what Schön (1983) described as 'artful competence'.

REFLECTIVE PRACTICE IN APPLIED SPORT SETTINGS

Some time ago, Anderson, Knowles and Gilbourne (2004) suggested that reflective practice was a process that allowed practitioners to explore personal decisions and experiences. Following on from this, Knowles *et al.* (2007) attempted to illustrate these ideas-in-action by presenting ways of helping practitioners to engage in reflective practice; in this instance, within an applied sport psychology

training programme. Here, the authors provided examples of *technical* and *practical* levels of reflection by using extracts from an applied psychologist's training diary (Tomlinson's diary). Building on this, in a more recent commentary, Knowles and Gilbourne (2010) developed ideas on how to undertake and disseminate *critical* reflective practice. The intention here was to further engage with the reflective practice debate in a way that allowed all levels of reflection to be considered and evidenced. The following paragraphs provide an illustration of not only the difficulties and benefits associated with 'doing' reflective practice, but also how it has begun to guide the work of sport science and coaching practitioners.

Illustrations of the products of written reflection are commonplace within the sport-based literature, and many of these accounts can be associated with neophyte or new practitioners who have used reflective practice to develop skills and practice-based knowledge (e.g. Jones *et al.*, 2007; Woodcock *et al.*, 2008). More recently, the use of reflective practice with athletes (e.g. Faull and Cropley, 2009; Hanton *et al.*, 2009) has made an important contribution to the overall reflective practice literature which, in the past, had tended to be dominated by the 'educare' based professions such as education or nursing and allied healthcare. Pragmatic 'how to do' processes such as the focus of reflection, diary keeping, supervision, the use of guides and models, levels of reflection and stages of reflection, have now been explored in both sports coaching (e.g. Irwin *et al.*, 2004; Knowles *et al.*, 2001) and sport psychology (e.g. Martindale and Collins, 2005; Anderson *et al.*, 2004; Cropley, *et al.*, 2010a, 2010b; Knowles and Gilbourne, 2010; Tod, 2007).

It is good to see so many sport-based texts connected in one way or another with the reflective practice agenda. That is not to say that such texts are beyond critique. For example, Knowles and Gilbourne (2010) have argued that reflective practice texts, though for the most part interesting and informative, house a generic tendency to provide readers with examples of technical and practical levels of reflection, whilst critical reflection is not readily in evidence. The present introduction hinted at the importance of critical reflection, and in the next section we spend a little time talking over definitions and explanations of what we mean by *levels* of reflective practice.

A coach engaged with a *technical* level of reflection might be expected to focus upon issues such as the organisation and practical running of his or her sessions. *Practical* reflection, in contrast, is centred on a more personal and, sometimes, emotion-focused account of practice. For example, practical reflection can relate to how a coach felt an aspect of their coaching session (warm-up, game situation, etc.) had progressed, and how that had made them *feel*. In contrast to these first two levels of reflection, *critical* reflection moves the process onto a different

landscape with an emphasis on an integration of intra, inter and global issues. For instance, a coach might question the efficacy of his or her role in developing elite talent in a world where many children shy away from sports participation. To extend this hypothetical example, the coach may, as a consequence, become drawn more towards participation in community-based coaching, turning away from progression through the elite sporting system and all that it entails.

In philosophical terms, Knowles and Gilbourne (2010) associated critical reflection with the underlying aspirations of critical social science (Carr and Kemmis, 1986). This, in turn, is linked to notions of contesting, challenging and changing practice. Knowles and Gilbourne (2010) position critical social science as an underpinning philosophy or aspiration; a perspective that a reflective practitioner might embrace, work towards or hope to achieve; a point of interest to 'keep in mind' rather than a set of rules that drive everything. That said, the aforementioned authors and Gilbourne (2010) argue that, as far as they are concerned, there seems little critical reflection around (not in published form). In addition to this, Knowles and Gilbourne (2010) freely acknowledge that the issues of critical reflection can appear opaque or unclear. Critical reflection is a challenging area, one in need of development, yet it is important for us to outline the topic here. With so little critical reflection in evidence, it is possible to wonder whether the applied sporting community has much appetite for pursuing a critical reflective agenda. We wonder if its members worry over the unrest that a new generation of critical reflective practitioners might unleash on an aspect of professional sports practice that sometimes appears to be rather comfortable. We hope that the scholars and practitioners in sports coaching do not follow the example of some, and become wary of all things critical. Although it is beyond the scope of the present chapter to talk further on issues of critical reflection, we do urge coaches, those established and those just beginning their practical journey, to take time to consider the challenges of critical reflection and how their profession might be invigorated by a generation of reflective thinkers and doers.

DOING REFLECTION

Reflective practitioners are often faced with questions over what to reflect 'on' and how to deduce practical and meaningful insights from a complex and constantly changing environment. It is important to emphasise that confusion and, to an extent, frustration often accompany the early stages of reflective practice. One explanation for what might be deemed 'reflective chaos' is that the immediate stages of reflection will inevitably capture incomplete and messy information. For the newcomer to reflective practice, the sense of messiness may be inflamed or exacerbated by the challenges of trying to deploy a range of

reflective techniques such as keeping a diary, jotting down field notes, taking photographs of practice and/or using an audio recorder to record thoughts and feelings.

It might be helpful here to talk a little about the messiness of practice and how that can sometimes contrast with the generally ‘tidy’ appearance of sport science research, because this might be one reason for reflective practitioners sensing that they are somehow not reflecting correctly. Some may feel, for example, that they should ‘see’ theory-in-action as they reflect, and it is possible to get frustrated if that does not happen. This might be compounded if what a coach ‘sees’ is a myriad of complications, such as people not getting along, difficulties with the coaching venue and other such matters. Yet, to us, such messy things, such complicated things, lie at the heart of what practice is actually like.

When trying to consider some of the above ideas, Knowles and Gilbourne (2010) considered the issue of tidiness by talking about the limitations of qualitative research in sport. Their case, put briefly, is that when qualitative research is heavily associated with established theory, it risks being limited by the boundaries of that theory. So, in a piece of research into anxiety in coaching, a researcher might only seek to ask questions about anxiety and to analyse data from the same theoretical perspective. Whilst this is logical enough, the scope of what the researcher seeks to understand might be narrowed by the scope of theory. One outcome from this kind of work is a neat and tidy exploration of a practitioner’s world. Gilbourne and Richardson (2006), on the other hand, have argued that the world, rather than being neat and tidy, is more likely to be messy, unpredictable, and emotional. This point was re-emphasised by Knowles and Gilbourne (2010) when stating that if the world of coaching is indeed messy, unpredictable, emotional and so on, then practitioners should be relaxed about reflecting upon all of these untidy things and try to make sense of them. This is not to say that theory is not important, but, first of all, we would say embrace messiness; theory can come later.

In practical terms, and returning to techniques of logging reflections, making sense of what you see, what you hear, and what you feel might be assisted by limiting the ways of recording reflection. Finding time to reflect in a clean and systematic way, when life is busy and things need to be done, is difficult. Once you have decided on the best way to log your reflections (a written diary or a Dictaphone, for example), organising a file system that allows ready access to reflective contributions over a timeline (say, over a playing season) is important. If the material is logged orally (through using an audio recorder), the tape-recorded material can be transcribed at a later date if need be, though it is worth warning that this can be a time consuming and laborious task. The dilemma of ‘when to reflect’ is also important. Reflecting some time after an

event, after a coaching session for example, might allow you to think in a quiet space, away from the noise and interruptions of the practice site. Reflecting on the session at home, maybe later in the evening or in a quiet moment relaxing over a coffee, are simple examples. Quieter reflective moments sometimes allow for a more relaxed reflective experience and, from this, a deeper exploration of the practice experience might unfold.

STAGED REFLECTION

Gibbs' (1988) model states that staged reflection is, first of all, characterised both by an immediate and a delayed phase of reflection. In the immediate phase, the practitioner captures description, thoughts, feelings and evaluation as close in time to the event as possible. This ensures accurate recall of information which may dissipate over time or be influenced by external factors. Such factors include the opinions of others, or, internally, a practitioner might change his or her perspective as they 'think-over' events (referred to as 'reflective episodes' by Knowles *et al.*, 2001). In practical terms, practitioners may capture their immediate reflections by jotting down thoughts in a notebook or by using a Dictaphone and focus generally on the first three stages of the reflective cycle (description, thoughts and feelings, and evaluation). Delayed reflection, on the other hand, encompasses a review of the 'immediate' stages and a purposeful movement around the remaining stages of the process. Delayed reflection requires time and space to be effective and so may occur days after the experience, depending on schedule.

Reflection that takes place over longer periods of time may be assisted by the support of significant others, such as that which might occur in supervision or peer coaching groups. These delayed and shared episodes of reflection may eventually impact on practice, as coaches (learners) engage in a reflective process of 'sense making' and/or action planning. Knowles *et al.* (2007) advocated a process of reflection that allowed for a revisiting of events over an extended period of time. In some professional settings, reflective practice that is longitudinal in nature and structured around supportive others, such as tutors or mentors, may also contribute towards some form of reflective log: a summary record of reflective thinking (see Knowles *et al.*, 2001, 2007).

Conditions that encourage and support staged reflection, as described above, play an important role in establishing systematic engagement with reflection and, consequently, would seem to be important to the efficacy of the reflective process. Establishing appropriate time and space for reflection, together with the need for a good understanding of the process in general, would seem a sensible thing to do. At a practical level, this may mean ensuring time at the end of a

coaching session to allow for immediate reflection, alongside time set aside some days later for further delayed reflection. It is logical and, to an extent, common sense, to suggest that an emotionally supportive environment is conducive to the reflective process.

It is useful to forewarn those who seek to engage with reflection, and those who expect to act as reflective mentor, that the process of longitudinal and staged reflection might result in the declaration of personal material; it would not be unusual for emotions and beliefs to be made explicit through these processes of discussing and documenting. On a more cautious note, agendas housed within the coaching context (such as specific traditions or wider social norms, values and prejudices) can sometimes act to restrict and so militate against the openness of the reflective process; a limitation that can be exacerbated where external assessment is involved. Similarly, coaches may be unfamiliar and uneasy with the notion of introspection, and with sharing their thoughts with others either verbally or in print. These structural and personal limitations should be held in mind, and, if possible, overcome and/or supported when reflective practice is being introduced and developed.

FINAL THOUGHTS

We hope this introductory chapter on reflective practice has managed to provide an overview on a literature base that is growing in scope and in conceptual complexity. We also hope that we have signalled a number of different avenues for further reading and thinking. It is clear that reflective practice is a process embraced by professions of practitioners (teachers, nurses, sport psychologists, coaches) who work with, help and care for people. In a short space of words, we have attempted to raise many issues associated with the practice–people interface, and placed emphasis on different facets of ‘doing reflection’. We have also hinted at the challenges housed in undertaking different levels of reflection. Brief reviews of reflective practice literature, and even briefer explanations of the contents of series of reflective practice commentaries, also allude to the challenges that have faced practitioners who wish to write and so share their reflective experiences. These writing issues have led many commentators to draw comparisons between reflectively informed texts and themes within qualitative inquiry, such as auto-ethnography and life history. Consequently, readers are encouraged to visit this area of thinking and writing particularly when critical reflection is being considered. Finally, we wish all reflective coaches good fortune as, through reflective practice, they seek to confront what they do and why they do it.

REFERENCES

- Agassi, A. (2009). *Hope: An autobiography*. London: Harper.
- Al-Abood, S.A., Bennett, S.J., Moreno Hernandez, F., Ashford, D. and Davids, K. (2002). Effect of verbal instructions and image size on visual search strategies in basketball free throw shooting. *Journal of Sports Sciences*, 20: 271–278.
- Ames, C. (1992a). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology*, 84: 261–271.
- Ames, C. (1992b). Achievement goals and the classroom motivational climate. In J. Meece and D. Schunck (eds.), *Student perceptions in the classroom*. Hillsdale, NJ: Erlbaum. pp. 327–348.
- Ames, C. (1992c). Achievement goals, motivational climate, and motivational processes. In G.C. Roberts (ed.), *Motivation in sport and exercise*. Champaign, IL: Human Kinetics. pp. 161–176.
- Anderson, A.G., Knowles, Z. and Gilbourne, D. (2004). Reflective practice for sport psychologists: Concepts, models, practical implications and thoughts on dissemination. *The Sport Psychologist*, 18: 188–203.
- Anderson, B. (2005). *Imagined communities* (3rd edn), London: Verso.
- Arampatzis, A. and Brüggemann, G.P. (1999). Mechanical energetic processes during the giant swing exercise before dismounts and flight elements on the high bar and the uneven parallel bars. *Journal of Biomechanics*, 32: 811–820.
- Archard, D. (2004). *Children: Rights and childhood* (2nd edn). London: Routledge.
- Aubry, M., Cantu, R., Dvorak, J., Graf-Baumann, T., Johnston, K., Kelly, J., Lovell, M., McCrory, P., Meeuwisse, W. and Schamasch, P. (2002). Summary and agreement statement of the first International Conference on Concussion in Sport, Vienna 2001. Recommendations for the improvement of safety and health of athletes who may suffer concussive injuries. *British Journal of Sports Medicine*, 36: 6–7.
- Bahr, R. and Holme, I. (2003). Risk factors for sports injuries: A methodological approach. *British Journal of Sports Medicine*, 37: 384–392.
- Bailey, R. and Toms, M. (2010). Youth talent development in sport: Rethinking luck and justice. In A. Hardman and C.R. Jones (eds.), *The ethics of sports coaching*. London: Routledge. pp. 149–164.
- Bak, K., Bue, P. and Olsson, G. (1989). Injury patterns in Danish competitive swimming. *Ugeskr Laeger*, 151(45), 2982–2984.
- Balyi, I. (2001). *Sport system building and long term athlete development in British Columbia*. Vancouver: SportMed BC.

- Bandura, A. (1977). Self-efficacy: To ward a unifying theory of behaviour change. *Psychological Review*, 84: 191–215.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Battig, W.F. (1966). Facilitation and interference. In E.A. Bilodeau (ed.), *Acquisition of skill*. New York: Academic Press. pp. 215–244.
- Battig, W.F. (1979). The flexibility of human movement. In L.S. Cermak and F.I.M. Craik (eds.), *Levels of processing in human memory*. Hillsdale, NJ: Erlbaum. pp. 23–44.
- Baumeister, R.F. (1984). Choking under pressure: Self-consciousness and paradoxical effects of incentives on skilful performance. *Journal of Personality and Social Psychology*, 46: 610–620.
- Baumeister, R.F. and Leary, M.R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117: 497–529.
- Bayles, M.D. (1988). The professional-client relationship. In J.C. Callaghan (ed.), *Ethical issues in professional life*. Oxford: OUP.
- Beilock, S.L., Carr, T.H., Macmahon, C. and Starkes, J. (2002). When paying attention becomes counterproductive: Impact of divided versus skill focused attention on novice and experienced performance of sensorimotor skills. *Journal of Experimental Psychology*, 8(1): 6–16.
- Bell, J.J. and Hardy, J. (2009). Effects of attentional focus on skilled performance in golf. *Journal of Applied Sports Psychology*, 21(2): 163–177.
- Bennett, S.J. (2000). Implicit learning: Should it be used in practice? *International Journal of Sport Psychology*, 31: 542–546.
- Berger, P. (1963). *Invitation to sociology*. New York: Anchor Books.
- Bergmann-Drewe, S. (2000). Coaches, ethics and autonomy. *Sport, Education and Society*, (5)2: 147–162.
- Bernstein, N. (1967). *The co-ordination and regulation of movement*. London: Pergamon Press.
- Best, D. (1978). *Philosophy and human movement*. London: Allen and Unwin.
- Bezodis, I.N., Salo, A.I.T. and Kerwin, D.G. (2008a). A longitudinal case study of step characteristics in a world class sprint athlete. In Y.-H. Kwon, J. Shim, J.K. Shim and I.-S. Shin (eds.), *Proceedings of XXVI International Symposium on Biomechanics in Sports*, Seoul, Korea: 537–540.
- Bezodis, I.N., Kerwin, D.G. and Salo, A.I.T. (2008b). Lower-limb mechanics during the support phase of maximum-velocity sprint running. *Medicine and Science in Sports and Exercise*, 40: 707–715.
- Billig, M. (1995). *Banal nationalism*. London: Sage.
- Birch, K. (2005). Female athlete triad. *British Medical Journal*, 330: 244–246.
- Bjork, R.A. (1988). Retrieval practice and the maintainance of knowledge. In M.M. Gruneberg, P.E. Morris and R.N. Sykes (eds.), *Practical aspects of memory* (Vol. II). London: Wiley. pp. 396–401.
- Bolton, N. and Smith, B. (2008). Sports development for coaches. In R.L. Jones, M. Hughes and K. Kingston (eds.) *An introduction to sports coaching: From science and theory to practice*. London: Routledge.
- Bolton, N., Fleming, S. and Elias, B. (2008). The experience of community sport development: A case study of Blaenau Gwent. *Managing Leisure*, 13(2): 92–103.
- Boutcher, S.H. (1990). The role of performance routines in sport. In G. Jones and L. Hardy (eds.), *Stress and performance in sport*. Chichester: Wiley and Son Ltd.
- Bower, G.H., Monteiro, K.P. and Gilligan, S.G. (1978). Emotional mood as a context for learning and recall. *Journal of Verbal Learning and Verbal Behavior*, 17(5): 573–585.

- Brackenridge, C. (2001). *Spoilsports: Understanding and preventing sexual exploitation in sport*. London: Routledge.
- Brackenridge, C. (2002). '... so what?' Attitudes of the voluntary sector towards child protection in sports clubs. *Managing Leisure*, 7(3): 103–123.
- Brackenridge, C. (2004). Women and children first? Child abuse and child protection in sport. *Sport in Society*, 7(3): 322–337.
- Brackenridge, C.H., Bishopp, D., Moussalli, S. and Tapp, J. (2008). The characteristics of sexual abuse in sport: A multidimensional scaling analysis of events described in media report. *International Journal of Sport and Exercise Psychology*, 6(4): 385–406.
- Bradley, P.S., Sheldon, W., Wooster, B., Olsen, P., Boanas, P. and Krustrup, P. (2009). High-intensity running in English FA Premier League soccer matches. *Journal of Sports Sciences*, 27: 159–168.
- Brady, F. (2004). Contextual interference: A meta-analytic study. *Perceptual and Motor Skills*, 99(1): 116–126.
- Bramham, P. and Hylton, K. (2008). Introduction. In K. Hylton and P. Bramham (2nd edn) *Sports development: Policy, process and practice*. London: Routledge.
- Bray, K. and Kerwin, D.G. (2003). Modelling the flight of a soccer ball in a direct free kick. *Journal of Sports Sciences*, 21: 75–85.
- Brewin, M.A. and Kerwin, D.G. (2003). Accuracy of scaling and DLT reconstruction techniques for planar motion analyses. *Journal of Applied Biomechanics*, 19: 79–88.
- Bringer, J., Brackenridge, C.H. and Johnston, L.H. (2006). Swimming coaches' perceptions of sexual exploitation in sport: A preliminary model of role conflict and role ambiguity. *The Sports Psychologist*, 20(4): 465–479.
- Brooks, J.H.M., Fuller, C.W., Kemp, S.P.T. and Reddin, D.B. (2005). Epidemiology of injuries in English professional rugby union: Part 1 match injuries. *British Journal of Sports Medicine*, 39: 757–766.
- Brucker, B.S. and Bulaeva, N.V. (1996). Biofeedback effect on electromyography responses in patients with spinal cord injury. *Archives of Physical Medicine and Rehabilitation*, 77(2): 133–137.
- Brukner, P. and Khan, K. (2006). *Clinical sports medicine*. Sydney: McGraw-Hill.
- Brukner, P. and Kahn, K. (2007). Sports medicine: The team approach. In P. Brukner and K. Kahn (eds.), *Clinical sports medicine* (3rd edn). Sydney: McGraw-Hill.
- Budd, C. (2011). *The growth of an urban sporting culture: Middlesbrough, c.1870–1914*. Unpublished PhD, De Montfort University.
- Budgett, R. (1998). Fatigue and underperformance in athletes: The overtraining syndrome. *British Journal of Sport Medicine*, 32: 107–110.
- Bull, S.J., Shambrook, C.J., James, W. and Brooks, J.E. (2005). Towards an understanding of mental toughness in elite English cricketers. *Journal of Applied Sport Psychology*, 17: 209–227.
- Bunker, D. and Thorpe, R. (1982). A model for the teaching of games in secondary schools. *Bulletin of Physical Education*, 18: 5–8.
- Burgomaster, K.A., Hughes, S.C., Heigenhauser, G.J.F., Bradwell, S.N. and Gibala, M.J. (2005). Six sessions of sprint interval training increases muscle oxidative potential and cycle endurance capacity in humans. *Journal of Applied Physiology*, 98: 1985–1990.
- Burke, M. (2006). Response to Dixon and Davis: Answering realists with anti-epistemological pragmatism. *Journal of the Philosophy of Sport*, 33(1): 78–100.
- Burton, D., Naylor, S. and Holiday, B. (2001). Goal setting in sport: Investigating the goal effectiveness paradox. In R.A. Singer, H.A. Hausenblas and C.M. Janelle (eds.), *Handbook of sport psychology* (2nd edn). New York: Wiley. pp. 497–528.

- Cain, N. (2004). Question time for the coaches: The six men plotting their countries' fortunes on the best and worst of their jobs. *The Sunday Times*, Sport Section (2): 19.
- Caine, C.G., Caine, D.J. and Kindner, L.J. (1996). The epidemiologic approach to sports injuries. In C.G. Caine, D.J. Caine and L.J. Kindner (eds.), *The epidemiology of sports injuries*. Champaign, IL: Human Kinetics.
- Carless, D. and Douglas, K. (2011). Stories as personal coaching philosophy. *International Journal of Sport Science and Coaching*, 6(1): 1–12.
- Carling, C., Williams, A.M. and Reilly, T. (2005). *Handbook of soccer match analysis: A systematic approach to improving performance*. London: Routledge.
- Carpenter, P.J. and Morgan, K. (1999). Motivational climate, personal goal perspectives, and cognitive and affective responses in physical education classes. *European Journal of Physical Education*, 4: 31–41.
- Carr, D. (1998). What moral educational significance has physical education? A question in need of disambiguation. In M. McNamee and S.J. Parry (eds.), *Ethics and Sport*. London: Routledge.
- Carr, D. (2000). *Professionalism and ethics in teaching*. London: Routledge.
- Carr, W. and Kemmis, S. (1986). *Becoming critical*. Melbourne: Deakin University Press.
- Carrington, B. and McDonald, I. (eds.) (2001). *Race, sport and British society*. London: Routledge.
- Carron, A.V., Hausenblas, H.A. and Eys, M.A. (2005). *Group dynamics in sport* (3rd edn). Morgantown, WV: Fitness Information Technology.
- Cashmore, E. (1982). *Black sportsmen*. London: Routledge and Kegan Paul.
- Cassidy, T., Jones, R.L. and Potrac, P. (2009). *Understanding sports coaching: The social, cultural and pedagogical foundations of coaching practice* (2nd edn). London: Routledge.
- Chambers, K.L. and Vickers, J.N. (2006). Effects of bandwidth feedback and questioning on the performance of competitive swimmers. *Sport Psychology*, 20(2): 184–197.
- Chandler, T.J.L. (1991). Games at Oxbridge and the public school 1830–1890: Diffusion of an innovation. *International Journal for the History of Sport*, 18(2): 171–204.
- Chelladurai, P. (2006). *Human resource management in sport and recreation* (2nd edn). Leeds: Human Kinetics.
- Chollet, D., Micallef, J.P. and Rabischong, P. (1988). Biomechanical signals for external biofeedback to improve swimming techniques. In B.E. Ungerechts, K. White and K. Reichle (eds.), *Swimming science* (Vol. V). Champaign, IL: Human Kinetics. pp. 389–396.
- Clarys, J.P. (2000). Electromyography in sports and occupational settings: An update of its limits and possibilities. *Ergonomics*, 43(10): 1750–1762.
- Coad, D. (2008). *The metrosexual: Gender, sexuality and sport*. Albany: SUNY Press.
- Coakley, J. and Pike, L. (2009). *Sports in society: Issues and controversies*. Maidenhead: McGraw-Hill Education.
- Coalter, F. (2001). *Realising the potential for cultural services: The case for sport*. London: Local Government Association.
- Coalter, F. (2007). *A wider social role for sport: Who's keeping the score?* London: Routledge.
- Cobb, P. (1996). Where is the mind? A coordination of sociocultural and cognitive perspectives. In C.T. Fosnot (ed.), *Constructivism: Theory, perspectives and practice*. New York: Teachers College, Columbia University.
- Collins, M. (2008a). Social exclusion from sport and leisure. In B. Houlihan (ed.), *Sport and society: A student introduction*. London: Sage.

- Collins, M. (2008b). Public policies on sports development: Can mass and elite sport hold together. In V. Girginov (ed.), *Management of sports development*. Oxford: Butterworth-Heinemann.
- Collins, M. (2010a). From 'sport for good' to 'sport for sport's sake' – not a good move for sports development in England? *International Journal of Sport Policy and Politics*, 2(3): 367–379.
- Collins, M. (2010b). Introduction. In M. Collins (ed.), *Examining sports development*. London: Routledge.
- Collins, M. with Kay, T. (2003). *Sport and social exclusion*. London: Routledge.
- Collins, T. (1998). *Rugby's great split: Class, culture and the origins of Rugby League Football*. London: Frank Cass.
- Collins, T. (2009). *A social history of English rugby union*. London: Routledge.
- Cooke, G. (1996). A strategic approach to performance and excellence. *Supercoach: National Coaching Foundation*, 8: 10.
- Côté, J. and Hay, J. (2002). Children's involvement in sport: A development perspective. In J.M. Silva and D. Stevens (eds.), *Psychological foundations of sport*. Boston: Allyn and Bacon.
- Côté, J., Salmela, J. and Russell, S. (1995). The knowledge of high-performance gymnastic coaches: Competition and training considerations. *The Sport Psychologist*, 9: 76–95.
- Cronin, M. (1999). *Sport and nationalism in Ireland: Gaelic games, soccer and Irish identity since 1884*. Dublin: Four Courts Press.
- Cropley, B., Hanton, S., Miles, A. and Niven, A. (2010a). Exploring the relationship between effective and reflective practice in applied sport psychology. *The Sport Psychologist*, 24: 521–541.
- Cropley, B., Hanton, S., Miles, A. and Niven, A. (2010b). The value of reflective practice in professional development: An applied sport psychology perspective. *Sports Science Review*, 19, 3–4: 179–208.
- Cross, N. and Lyle, N. (1999). *The coaching process: Principles and practice for sport*. Edinburgh: Butterworth-Heinemann.
- Cunningham, C. and Cunningham, S. (1996). Injury surveillance at a national multi-sport event. *Australian Journal of Science and Medicine in Sport*, 28(2): 50–56.
- Cushion, C. (2007). Modelling the complexity of the coaching process. *International Journal of Sports Science and Coaching*, 2(4): 395–401.
- Cushion, C. and Jones, R.L. (2006). Power, discourse and symbolic violence in professional youth soccer: The case of Albion F.C.. *Sociology of Sport Journal*, 23(2): 142–161.
- Daniels, F.S. and Landers, D.M. (1981). Biofeedback and shooting performance: A test of disregulation and systems theory. *Journal of Sport Psychology*, 3: 271–282.
- Dawson, B., Fitzsimons, M., Green, S., Goodman, C., Carey, M. and Cole, K. (1998). Changes in performance, muscle metabolites, enzymes and fibre types after short sprint training. *European Journal of Applied Physiology*, 78: 163–169.
- Deci, E.L. and Ryan, R.M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.
- Deci, E.L. and Ryan, R.M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11: 227–268.
- Deci, E.L., Koestener, R. and Ryan, R. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125: 627–668.

- Del Rey, P., Whitehurst, M., Wughalter, E. and Barnwell, J. (1983). Contextual interference and experience in acquisition and transfer. *Perceptual and Motor Skills*, 57(1): 241–242.
- den Duyn, N. (1997). *Game sense: Developing thinking players*. Canberra, Australia: Australian Sports Commission.
- Denison, J. and Avner, Z. (2011). Positive coaching: Ethical practices for athlete development. *Quest*, 63: 209–227.
- Department of Culture, Media and Sport (DCMS) (2000). *A sporting future for all*. London: DCMS.
- Department for Culture, Media and Sport (DCMS) (2002). *The coaching task force – Final report*. London: DCMS.
- Department of Culture, Media and Sport (DCMS) (2008). *Playing to win: A new era for sport*. London: DCMS.
- Department for Culture, Media and Sport (DCMS) (2010). *Plans for the legacy from the 2012 Olympic and Paralympic games*. London: DCMS.
- Department for Culture, Media and Sport (DCMS) (2012). *Creating a sporting habit for life: A new youth sport strategy*. London: DCMS.
- DeSensi, J.T. and Rosenberg, D. (eds.) (2003). *Ethics and morality in sport management* (2nd edn). Morgantown, WV: Fitness Information Technology.
- Deutsch, M.U., Kearney, G.A and Rehrer, N.J. (2006). Time-motion analysis of professional rugby union players during match play. *Journal of Sports Sciences*, 25: 461–472.
- Dirix, A., Knuttgen, H.G. and Tittel, K. (eds.) (1988). *The Olympic book of sports medicine*. Oxford: Blackwell Publishing.
- Dishman, R.K. (1983). Identity crises in North American sport psychology: Academics in professional issues. *Journal of Sport Psychology*, 5: 123–134.
- Drewe, S.B. (2000). Coaches, ethics and autonomy. *Sport, Education and Society*, 5(2): 147–162.
- Dvorak, J. and Junge, A. (2000). Football injuries and physical symptoms: A review of the literature. *American Journal of Sports Medicine*, 28: suppl 5, S3–S9.
- Eady, J. (1993). *Practical sports development*. London: Hodder and Stoughton.
- Ebbeck, V. and Becker, S.L. (1994). Psychosocial predictors of goal orientations in youth soccer. *Research Quarterly for Exercise and Sport*, 65: 355–362.
- Edwards, K. and Ridgewell, M. (2011, November). Audit of injuries sustained by elite sportsmen. Poster presented at the *UKSEM Conference*, London, UK.
- Ekstrand, J. and Gillquist, J. (1983). The avoidability of soccer injuries. *International Journal of Sports Medicine*, 2: 124–128.
- Epstein, J. (1989). Family structures and student motivation: A developmental perspective. In C. Ames and R. Ames (eds.), *Research on motivation in education: Vol.3*. New York: Academic Press. pp. 259–295.
- Faigenbaum, A.D., Kraemer, W.J., Blimkie, C.J.R, Jeffreys, I., Mitchell, L.J., Mitka, M. and Rowland, T.W. (2009). Youth resistance training: Updated position statement paper from the National Strength and Conditioning Association. *Journal of Strength and Conditioning Research*, 23: S60–S79.
- Farooq, S. and Parker, A. (2009). Sport, physical education and Islam: Muslim independent schooling and the social construction of Masculinities. *Sociology of Sport Journal*, 26(2): 277–295.
- Fasting, K. and Brackenridge, C. (2009). Coaches, sexual harassment and education. *Sport, Education and Society*, 14(1): 21–35.

- Faull, A. and Cropley, B. (2009). Reflective learning in sport: A case study of a senior level tri-athlete. *Reflective Practice*, 10: 325–339.
- Feltz, D.L. and Kontos, A.P. (2002). The nature of sport psychology. In T. Horn (ed.), *Advances in sport psychology* (2nd edn). Champaign, IL: Human Kinetics. pp. 3–19.
- Ferrall, C. (2011). C.L.R. James and the dialectics of cricket. In D. Carnegie, P. Millar, D. Norton, H. Ricketts (eds.), *Running writing robinson*. Wellington: Victoria University Press. pp. 256–269.
- Filby, W.C.D., Maynard, I.W. and Graydon, J.K. (1999). The effect of multiple-goal strategies on performance outcomes in training and competition. *Journal of Applied Sport Psychology*, 11: 230–246.
- Finch, C.F. (1997). An overview of some definitional issues for sports injury surveillance. *Sports Medicine*, 24(3): 157–163.
- Finch, C. (2006). A new framework for research leading to sports injury prevention. *Journal of Science and Medicine in Sport*, 9: 3–9.
- Fitts, P.M. and Posner, M.I. (1967). *Human performance*. Belmont, CA: Brooks/Cole.
- Flanagan, O. (1991). *Varieties of moral personality: Ethics and psychological realism*. Boston: Harvard University Press.
- Fleming, S. (1995). *Home and away: Sport and South Asian male youth*. Aldershot: Avebury.
- Fletcher, D. and Hanton, S. (2003). Sources of organizational stress in elite sports performers. *The Sport Psychologist*, 17: 175–195.
- Fletcher, D., Hanton, S. and Mellalieu, S.D. (2006). An organizational stress review: Conceptual and theoretical issues in competitive sport. In S. Hanton and S.D. Mellalieu (eds.), *Literature reviews in sport psychology*. Hauppauge, NY: Nova Science.
- Fong, D.T., Hong, Y., Chan, L., Yung, P.S. and Chan, K. (2007). A systematic review of ankle injury and ankle sprain in sports. *Sports Medicine*, 37(1): 73–94.
- Ford, P., Hodges, N.J. and Williams, A.M. (2005). Online attentional-focus manipulations in a soccer dribbling task: Implications for the proceduralization of motor skills. *Journal of Motor Behavior*, 37(5): 386–394.
- Ford, P.R., Yates, I. and Williams, A.M. (2010). An analysis of practice activities and instructional behaviours used by youth soccer coaches during practice: Exploring the link between science and application. *Journal of Sports Science*, 28(5): 483–495.
- Fosnot, C.T. (1996). Constructivism: A psychological theory of learning. In C.T. Fosnot (ed.), *Constructivism: Theory, perspectives and practice*. New York: Teachers College, Columbia University. pp. 103–119.
- Fraleigh, W. (1995). Why the good foul is not good. In Morgan and Meir (eds.), *Philosophical inquiry sport* (2nd edn). Champaign, IL: Human Kinetics. pp. 185–187.
- Franks, I.M. (1997). Use of feedback by coaches and players. In T. Reilly, J. Bangsbo and M. Hughes (eds.), *Science and football 3*. London: E and FN Spon. pp. 267–278.
- Fry, J. (2000). Coaching a kingdom of ends. *Journal of the Philosophy of Sport*, 27(1): 51–62.
- Fuller, C.W., Ekstrand, J., Junge, A., Andersen, T.E., Bahr, R., Dvorak, J., Hägglund, M., McCrory, P. and Meuwisse, W.H. (2006). Consensus statement on injury definitions and data collection procedures in studies of football (soccer) injuries. *Scandinavian Journal of Medicine and Science in Sports*, 16(2): 83–92.
- Fuller, C.W., Molloy, M.G., Bagate, C., Bahr, R., Brooks, J.H.M., Donson, H., Kemp, S.P.T., McCrory, P., McIntosh, A.S., Meeuwisse, W.H., Quarrie, K.L., Raftery, M. and Wiley, P. (2007). Consensus statement on injury definitions and data collection procedures for studies of injuries in rugby union. *British Journal of Sports Medicine*, 41: 328–331.

- Gabbett, T.J. (2004). Reductions in pre-season training loads reduce training injury rates in rugby league players. *British Journal of Sports Medicine*, 38: 743–749.
- Gallagher, J.D. and Thomas, J.R. (1980). Effects of varying post-kr intervals upon children's motor performance. *Journal of Motor Behavior*, 12(1): 41–46.
- Gallagher, S.S., Finison, K., Guyer, B. and Goodenough, S. (1984). The incidence of injuries among 87,000 Massachusetts children and adolescents: Results of the 1980–81 Statewide Childhood Injury Prevention Program Surveillance System. *American Journal of Public Health*, 74(12): 1340–1347.
- Gardner, H. (1993). *Multiple intelligences*. New York: Basic Books.
- Gentile, A.M. (1972). A working model of skill acquisition with application to teaching. *Quest (Monograph XVII)*: 3–23.
- Gentile, A.M. (2000). Skill acquisition: Action, movement, and neuromotor processes. In J.H. Carr and R.B. Shepherd (eds.), *Movement science: Foundations for physical therapy* (2nd edn). Rockville, MD: Aspen. pp. 111–187.
- Gibbs, G. (1988). *Learning by doing: A guide to teaching and learning methods*. London: Further Education Unit.
- Gilbert, W. and Trudel, P. (1999). Framing the construction of coaching knowledge in experiential learning theory. *Sociology of Sport Online*, 2(1). Retrieved from <http://physed.otago.ac.nz/sosol/v2i1/v2i1s2.htm>.
- Gilbert, W. and Trudel, P. (2001). Learning to coach through experience: Reflection in model youth sport coaches. *Journal of Teaching in Physical Education*, 21: 16–34.
- Gilbert, W. and Trudel, P. (2004). Role of the coach: How model youth team sport coaches frame their roles. *The Sport Psychologist*, 18: 21–43.
- Gilbert, W. and Trudel, P. (2005). Learning to coach through experience: Conditions that influence reflection. *Physical Educator*, 62(1): 32–43.
- Gilbert, W. and Trudel, P. (2006). The coach as a reflective practitioner. In R.L. Jones (ed.), *The sports coach as educator*. London: Routledge. pp. 113–127.
- Gilbourne, D. and Richardson, D. (2006). Tales from the field: Personal reflections on the provision of psychological support in professional soccer. *Psychology of Sport and Exercise*, 7: 325–337.
- Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge: Harvard University Press.
- Gilligan, S.G. and Bower, G.H. (1983). Reminding and mood-congruent memory. *Bulletin of the Psychonomic Society*, 21(6): 431–434.
- Gittoes, M.R.J., Brewin, M.A. and Kerwin, D.G. (2006). Soft tissue contributions to impact forces using a four-segment wobbling mass model of forefoot-heel landings. *Human Movement Science*, 25(6): 775–787.
- Giulianotti, R. (ed.) (2004). *Sport and modern social theorists*. Basingstoke, Hants: Palgrave Macmillan.
- Glaister, M. (2005). Multiple sprint work: Physiological responses, mechanisms of fatigue and the influence of aerobic fitness. *Sports Medicine*, 35: 757–777.
- Gleim, G.W. and McHugh, M. (1997). Flexibility and its effects on sports injury and performance. *Sports Medicine*, 24: 289–299.
- Glynn, J., King, M. and Mitchell, S. (2006). Determining subject-specific parameters for a computer simulation model of a one handed tennis backhand. In H. Schwameder, G. Strutzenberger, V. Fastenbauer, S. Lindinger and E. Muller (eds.), *Proceedings of XXIV International Symposium on Biomechanics in Sports*, Salzburg, Austria: 766–769.

- Goldberg, A.S., Moroz, L., Smith, A. and Ganley, T. (2007). Injury surveillance in young athletes: A clinician's guide to sports injury literature. *Sports Medicine*, 37(3): 265–278.
- Gottwald, V.M., Lawrence, G.P. and Khan, M.A. (2010). Can learning under an external focus of attention counteract the negative effects of choking under pressure? *Journal of Sport and Exercise Psychology*, 32: S82.
- Gould, D., Dieffenbach, K. and Moffett, A. (2002a). Psychological characteristics and their development in Olympic champions. *Journal of Applied Sport Psychology*, 14: 172–204.
- Gould, D., Giannina, J., Krane, V. and Hodge, K. (1990). Educational needs of elite U.S. National team, Pan America, and Olympic coaches. *Journal of Teaching in Physical Education*, 9: 332–344.
- Gould, D., Greenleaf, C., Chung, Y. and Guinan, D. (2002b). A survey of U.S. Atlanta and Nagano Olympians: Variables perceived to influence performance. *Research Quarterly for Exercise and Sport*, 73: 175–186.
- Green, M. (2009). Podium or participation? Analysing policy priorities under changing modes of sport governance in the United Kingdom. *International Journal of Sport Policy and Politics*, 1(2): 121–144.
- Griffin, J. and Harris, M.B. (1996). 'Coaches' attitudes, knowledge, experiences and recommendations regarding weight control'. *The Sport Psychologist*, 10(2): 180–194.
- Guadagnoli, M.A., Holcomb, W.R. and Weber, T.J. (1999). The relationship between contextual interference effects and performer expertise on the learning of a putting task. *Journal of Human Movement Studies*, 37(1): 19–36.
- Hall, K.G., Domingues, D.A. and Cavazos, R. (1994). Contextual interference effects with skilled baseball players. *Perceptual and Motor Skills*, 78(3): 835–841.
- Hamill, J. and Knutzen, K.M. (2009). *Biomechanical basis of human movement*. London: Lippincott Williams and Wilkins.
- Hamill, J., Haddad, J.M. and McDermott, W.J. (2000). Issues in quantifying variability from a dynamical systems perspective. *Journal of Applied Biomechanics*, 16: 407–418.
- Hanton, S. and Jones, G. (1997). Antecedents of intensity and direction dimensions of competitive anxiety as a function of skill. *Psychological Reports*, 81: 1139–1147.
- Hanton, S. and Jones, G. (1999a). The acquisition and development of cognitive skills and strategies: Making the butterflies fly in formation. *The Sport Psychologist*, 13: 1–21.
- Hanton, S. and Jones, G. (1999b). The effects of a multimodal intervention program on performers: II. Training the butterflies to fly in formation. *The Sport Psychologist*, 13: 22–41.
- Hanton, S., Cropley, B. and Lee, S. (2009). Reflective practice, experience and the interpretation of anxiety symptoms. *Journal of Sports Sciences*, 27(5): 517–534.
- Hanton, S., Cropley, B., Neil, R., Mellalieu, S.D. and Miles, A. (2007). Experience in sport and its relationship with competitive anxiety. *International Journal of Sport and Exercise Psychology*, 5: 28–53.
- Hanton, S., Neil, R. and Mellalieu, S.D. (2008). Recent developments in competitive anxiety direction and competition stress research. *International Review of Sport and Exercise Psychology*, 1: 45–57.
- Hanton, S., Thomas, O. and Maynard, I. (2004). Competitive anxiety responses in the week leading up to competition: The role of intensity, direction and frequency dimensions. *Psychology of Sport and Exercise*, 5: 169–181.
- Hardman, A., Jones, C. and Jones, R.L. (2010). Sports coaching, virtue ethics and emulation. *Physical Education and Sports Pedagogy*, 15(4): 345–359.

- Hardy, L. (1990). A catastrophe model of anxiety and performance. In J.G. Jones and L. Hardy (eds.), *Stress and performance in sport*. Chichester: Wiley. pp. 81–106.
- Hardy, L., Jones, G. and Gould, D. (1996a). *Understanding psychological preparation for sport: Theory and practice of elite performers*. Chichester: Wiley.
- Hardy, L., Mullen, R. and Jones, G. (1996b). Knowledge and conscious control of motor actions under stress. *British Journal of Psychology*, 87: 621–636.
- Hardy, S. (2003). *How Boston played: Sport, recreation, and community, 1856–1915*. Knoxville, TN: University of Tennessee Press.
- Hargreaves, J. (1994). *Sporting females: Critical issues in the history and sociology of women's sports*. London: Routledge.
- Harter, S. (1978). Effectance motivation reconsidered: Toward a developmental model. *Human Development*, 1: 661–669.
- Harvey, A. (2005). *Football: The first 100 years*. London: Routledge.
- Hassan, M.F. (2011). *Motivational climate in sports coaching*. Unpublished doctoral thesis. University of Wales Institute, Cardiff.
- Hay, J.G. (1994). *The biomechanics of sports techniques*. Englewood Cliffs, NJ: Prentice Hall.
- Hays, K., Maynard, I., Thomas, O. and Bawden, M. (2007). Sources and types of confidence identified by world class sport performers. *Journal of Applied Sport Psychology*, 19: 434–456.
- Hays, K., Thomas, O., Maynard, I. and Bawden, M. (2009). The role of confidence in world-class sport performance. *Journal of Sports Sciences*, 27: 1185–1199.
- Hebert, E.P. and Landin, D. (1994). Effects of a learning-model and augmented feedback on tennis skill acquisition. *Research Quarterly for Exercise and Sport*, 65(3): 250–257.
- Hebert, E.P., Landin, D. and Solmon, M.A. (1996). Practice schedule effects on the performance and learning of low- and high-skilled students: An applied study. *Research Quarterly for Exercise and Sport*, 67(1): 52–58.
- Helgerud, J., Høydal, K., Wang, E., Karlsen, T., Berg, P., Bjerkaas, M., Simonsen, T., Helgesen, C., Hjorth, N., Bach, R. and Hoff, J. (2007). Aerobic high-intensity intervals improve $\dot{V}O_{2\max}$ more than moderate training. *Medicine and Science in Sports and Exercise*, 39: 665–671.
- Hemmestad, L.B., Jones, R.L. and Standal, Ø.F. (2010). Phronetic social science: A means of better researching and analysing coaching? *Sport, Education and Society*, 15(4): 447–459.
- Henry, F.M. (1968). Specificity vs. generality in learning motor skill. In G.S. Brown and R.C. Kenyon (eds.), *Classical studies on physical activity*. Englewood Cliffs, NJ: Prentice Hall. pp. 331–340.
- Henry, I. (2001). *The politics of leisure policy* (2nd edn). Basingstoke: Palgrave.
- Hiley, M.J. and Yeadon, M.R. (2005). The margin for error when releasing the asymmetric bars for dismounts. *Journal of Applied Biomechanics*, 21: 223–235.
- Hill, J. and Williams, J. (eds.) (1996). *Sport and identity in the North of England*. Keele: Keele University Press.
- Hobsbawm, E. (1983a). Introduction: Invented traditions. In E. Hobsbawm and T. Ranger (eds.), *The invention of tradition*. Cambridge: Cambridge University Press. pp. 1–14.
- Hobsbawm, E. (1983b). Mass-producing traditions: Europe, 1870–1914. In E. Hobsbawm and T. Ranger (eds.), *The invention of tradition*. Cambridge: Cambridge University Press. pp. 263–307.
- Hobsbawm, E. (1992). *Nations and nationalism since 1790: Programme, myth, reality*. Cambridge: Cambridge University Press.

- Hodge, K., Lonsdale, C. and Ng, J.Y.Y. (2008). Burnout in elite rugby: Relationships with basic psychological needs fulfilment. *Journal of Sports Sciences*, 26: 835–844.
- Hollembek, J. and Amorose, A.J. (2005). Perceived coaching behaviours and college athletes' intrinsic motivation: A test of self-determination theory. *Journal of Applied Sport Psychology*, 17: 20–36.
- Hollman, W. (1988). The definition and scope of sports medicine. In A. Dirix, H.G. Knuttgen and K. Tittel (eds.), *The Olympic book of sports medicine*. Oxford: Blackwell.
- Home Office (2010). The Equality Act. London: The National Archives. Available: <http://www.homeoffice.gov.uk/equalities/equality-act/>
- Horne, J., Tomlinson, A. and Whannel, G. (1999). *Understanding sport: An introduction to the sociological and cultural analysis of sport*. London: E and FN Spon.
- Horne, T. and Carron, A. (1985). Compatibility in coach-athlete relationships. *Journal of Sport Psychology*, 7: 137–149.
- Houlihan, B. and White, A. (2002). *The politics of sports development: Development of sport or development through sport*. London: Routledge.
- Hubbard, M. and Alaways, L.W. (1987). Optimum release conditions for the new rules javelin. *International Journal of Sport Biomechanics*, 3: 207–221.
- Hughes, M. (1998). The application of notational analysis to racket sports. In A. Lees, I. Maynard, M. Hughes and T. Reilly (eds.), *Science and racket sports 2*. London: E and FN Spon pp. 211–220.
- Hughes, M. (2008). Notational analysis for coaches. In R.L. Jones, M. Hughes and K. Kingston (eds.), *An introduction to sports coaching: From science and theory to practice* (2nd edn). London: Routledge. pp. 101–113.
- Hylton, K. and Totten, M. (2008). Community sports development. In K. Hylton, and P. Bramham (eds.), *Sports development: Policy, process and practice*. London: Routledge.
- Iachini, A., Amorose, A. and Anderson-Butcher, D. (2010). Exploring high school coaches' implicit theories of motivation from a self-determination theory perspective. *International Journal of Sports Science and Coaching*, 5(2): 291–308.
- Intiso, D., Santilli, V., Grasso, M.G., Rossi, R. and Caruso, I. (1994). Rehabilitation of walking with electromyographic biofeedback in foot-drop after stroke. *Stroke*, 25(6): 1189–1192.
- Irwin, G., Hanton, S. and Kerwin, D. (2004). Reflective practice and the origins of elite coaching knowledge. *Reflective Practice*, 5: 425–442.
- Irwin, G., Hanton, S. and Kerwin, D.G. (2005). The conceptual process of progression development in artistic gymnastics. *Journal of Sports Sciences*, 23(10): 1089–1099.
- Irwin, G. and Kerwin, D. (2001). Use of 2D-DLT for the analysis of longswings on high bar. In J. Blackwell (ed.), *Proceedings of XIX International Symposium on Biomechanics in Sports*, San Francisco: 315–318.
- Irwin, G. and Kerwin, D.G. (2005). Biomechanical similarities of progressions for the longswing on high bar. *Sports Biomechanics*, 4(2): 164–178.
- Irwin, G. and Kerwin, D.G. (2006). Musculoskeletal work in the longswing on high bar. In E.F. Moritz and S. Haake (eds.), *The Engineering of Sport 6, Volume 1*. New York, USA: Springer LLC. pp. 195–200.
- Irwin, G. and Kerwin, D.G. (2007a). Musculoskeletal work of high bar progressions. *Sports Biomechanics*, 6(3): 360–373.
- Irwin, G. and Kerwin, D.G. (2007b). Inter-segmental co-ordination of high bar progressions. *Sports Biomechanics*, 6(2): 129–142.
- Irwin, G. and Kerwin, D.G. (2009). The influence of the vaulting table on the handspring front somersault. *Sports Biomechanics*, 8(2): 114–128.

- Jackson, R.C., Ashford, K.J. and Norsworthy, G. (2006). Attentional focus, dispositional reinvestment, and skilled motor performance under pressure. *Journal of Sport and Exercise Psychology*, 28: 49–68.
- James, C.L.R. (1994). *Beyond a boundary*. London: Serpents' Tail.
- Janelle, C.M., Kim, J.G. and Singer, R.N. (1995). Subject-controlled performance feedback and learning of a closed motor skill. *Perceptual and Motor Skills*, 81(2): 627–634.
- Jarvie, G. (1990a). Towards an applied sociology of sport. *Scottish Journal of Physical Education*, 18: 11–12.
- Jarvie, G. (1990b). The sociological imagination. In F. Kew (ed.), *Social perspectives on sport*. Leeds: British Association of Sports Sciences and National Coaching Foundation.
- Jarvie, G. (ed.) (1991). *Sport, racism and ethnicity*. London: Falmer Press.
- Jarvie, G. (2006). *Sport, culture and society: An introduction*. London: Routledge.
- Jarvie, G. and Maguire, J. (1994). *Sport and leisure in social thought*. London: Routledge.
- Jenkins, R.E., Morgan, L. and O'Donoghue, P.G. (2007). A case study into the effectiveness of computerized match analysis and motivational videos within the coaching of a league netball team. *International Journal of Performance Analysis of Sport-e*, 7(2): 59–80.
- Johns, C. (1994). Guided reflection. In A. Palmer, S. Burns and C. Bulman (eds.), *Reflective practice in nursing*. Oxford, UK: Blackwell Science. pp. 110–130.
- Jones, G. (1991). Recent issues in competitive state anxiety research. *The Psychologist*, 4: 152–155.
- Jones, G. (1995). More than just a game: Research developments and issues in competitive anxiety in sport. *British Journal of Psychology*, 86: 449–478.
- Jones, G., Hanton, S. and Connaughton, D. (2002). What is this thing called mental toughness? An investigation of elite sport performers. *Journal of Applied Sport Psychology*, 14: 205–218.
- Jones, G., Hanton, S. and Connaughton, D. (2007). A framework of mental toughness in the world's best performers. *The Sport Psychologist*, 21: 243–265.
- Jones, L., Evans, L. and Mullen, R. (2007). Multiple roles in an applied setting: Trainee sport psychologist, coach and researcher. *The Sport Psychologist*, 21: 210–226.
- Jones, N.P., James, N. and Mellalieu, S.D. (2008). An objective method for depicting team performance in elite professional rugby. *Journal of Sports Sciences*, 26: 691–700.
- Jones, R.L. (2000). Toward a sociology of coaching. In R.L. Jones and K.M. Armour (eds.), *The sociology of sport: Theory and practice*. London: Addison Wesley Longman. pp. 33–43.
- Jones, R.L. (2006a). How can educational concepts inform sports coaching? In R.L. Jones (ed.), *The sports coach as educator: Reconceptualising sports coaching*. London: Routledge.
- Jones, R.L. (2006b). Dilemmas, maintaining 'face' and paranoia: An average coaching life. *Qualitative Inquiry*, 12(5): 1012–1021.
- Jones, R.L., Armour, K.M. and Potrac, P. (2002). Understanding the coaching process: A framework for social analysis. *Quest*, 54(1): 34–48.
- Jones, R.L. and Standage, M. (2006). First among equals: Shared leadership in the coaching context. In R.L. Jones, (ed.), *The sports coach as educator: Reconceptualising sports coaching*. London: Routledge. pp. 65–76.
- Jones, R.L., Armour, K.M. and Potrac, P. (2003). Constructing expert knowledge: A case study of a top-level professional soccer coach. *Sport, Education and Society*, 8(2): 213–229.

- Jones, R.L., Armour, K.M. and Potrac, P. (2004). *Sports coaching cultures: From practice to theory*. London: Routledge.
- Jones, R.L., Glintmeyer, N. and McKenzie, A. (2005). Slim bodies, eating disorders and the coach-athlete relationship: A tale of identity creation and disruption. *International Review for the Sociology of Sport*, 40(3): 377–391.
- Jones, R.L., Potrac, P., Cushion, C. and Ronglan, L.T. (eds.) (2011). *The sociology of sports coaching*. London: Routledge.
- Junge, A., Dvorak, J., Graf-Baumann, T. and Peterson, L. (2004). Football injuries during FIFA tournaments and the Olympic Games 1998–2001 – Development and implementation of an injury-reporting system. *American Journal of Sports Medicine*, 32(1) suppl 80S–89S.
- Junge, A., Engebretsen, L., Mountjoy, M., Alonso, J.M., Renström, Per, A.F.H., Aubry, M.J. and Dvorak, J. (2009). Sports injuries during the summer Olympic Games 2008. *American Journal of Sports Medicine*, 37(11): 2165–2172.
- Kavussanu, M. and Roberts, G.C. (1996). Motivation in physical activity contexts: The relationship of perceived motivational climate to intrinsic motivation and self-efficacy. *Journal of Sport and Exercise Psychology*, 18: 264–280.
- Kay, T. (2000). Sporting excellence: A family affair? *European Physical Education Review*, 6: 151–169.
- Kernodle, M.W. and Carlton, L.G. (1992). Information feedback and the learning of multiple-degree-of-freedom activities. *Journal of Motor Behavior*, 24(2): 187–196.
- Kerwin, D.G. and Irwin, G. (2010). Musculoskeletal work preceding the outward and inward Tkachev on uneven bars in artistic gymnastics. *Sports Biomechanics*, 9(1): 16–28.
- Kerwin, D.G., Yeadon, M.R. and Sung-Cheol, L. (1990). Body configuration in multiple somersault high bar dismounts. *International Journal of Sport Biomechanics*, 6: 147–156.
- Khan, M.A. and Franks, I.M. (2000). The effect of practice on component submovements is dependent on the availability of visual feedback. *Journal of Motor Behavior*, 32(3): 227–240.
- Kidman, L. (2001). *Developing decision makers: An empowerment approach to coaching*. Christchurch, NZ: Innovative Print Communications.
- Kingston, K. and Hardy, L. (1997). Effects of different types of goals on processes that support performance. *The Sport Psychologist*, 11: 277–293.
- Kingston, K.M., Harwood, C.G. and Spray, C.M. (2006). Contemporary approaches to motivation in sport. In S. Hanton and S.D. Mellalieu (eds.), *Literature Reviews in Sport Psychology*. Hauppauge, NY: Nova Science. pp. 159–197.
- Kingston, K., Lane, A. and Thomas, O. (2010). A temporal examination of elite performers sources of sport-confidence. *The Sport Psychologist*, 18: 313–332.
- Kirkbride, A.N. (in press). Media applications of performance analysis. In McGarry, T., O'Donoghue, P.G. and Sampaio, J. (eds.), *The Routledge handbook of sports performance analysis*. London: Routledge.
- Knowles, Z. and Gilbourne, D. (2010). Aspiration, inspiration and illustration: Initiating debate on reflective practice writing. *The Sport Psychologist*, 24: 504–520.
- Knowles, Z., Borrie, A. and Telfer, H. (2005). Towards the reflective sports coach: Issues of context, education and application. *Ergonomics*, 48(11–14): 1711–1720.
- Knowles, Z., Gilbourne, D., Borrie, A. and Nevill, A. (2001). Developing the reflective sports coach: A study exploring the processes of reflective practice within a higher education coaching programme. *Reflective Practice*, 2(2): 185–207.

- Knowles, Z., Gilbourne, D., Tomlinson, V. and Anderson, A. (2007). Reflections on the application of reflective practice for supervision in applied sport psychology. *The Sport Psychologist*, 21: 109–122.
- Knuttila, M. (1996). *Introducing sociology: A critical perspective*. Oxford: Oxford University Press.
- Komi, P.V., Linnamo, P., Silventoinen, M. and Sillanpaa, M. (2000). Force and EMG power spectrum during eccentric and concentric actions. *Medicine and Science in Sports and Exercise*, 32(10): 1757–1762.
- Kowal, J. and Fortier, M.S. (2000). Testing relationships from the hierarchical model of intrinsic and extrinsic motivation using flow as a motivational consequence. *Research Quarterly for Exercise and Sport*, 71: 171–181.
- Kraemer, W.J., Patton, J.F., Gordon, S.E., Harman, E.A., Deschenes, M.R., Reynolds, K., Newton, R.U., Triplett, N.T. and Dziados J.E. (1995). Compatibility of high intensity strength and endurance training on hormonal and skeletal muscle adaptations. *Journal of Applied Physiology*, 78: 976–989.
- Kraemer, W.J., Adams, K., Cafarelli, E., Dudley, G.A., Dooly, C., Feigenbaum, M., Fleck, S., Franklin, B., Fry, A., Hoffman, J.R., Newton, R.U., Pottenger, J., Stone, M.H., Ratamess, N.A. and Triplett-McBride, T. (2002). American College of Sports Medicine position stand on progression models in resistance training for healthy adults. *Medicine and Science in Sports and Exercise*, 34: 364–380.
- Kreider, R.B., Fry, A.C. and O'Toole, M.L. (1998). *Overtraining in sport*. Champaign, IL: Human Kinetics.
- Kretchmar, R.S. (1994). *Practical philosophy of sport*. Leeds: Human Kinetics.
- Kristjánsson, K. (2005). Smoothing it: Some Aristotelian misgivings about the phronesis-praxis perspective on education. *Educational Philosophy and Theory*, 37(4): 455–473.
- Lago, C. and Martin, C. (2007). Determinants of possession of the ball in soccer. *Journal of Sports Sciences*, 25: 969–974.
- Laird, P. and Waters, L. (2008). Eye-witness recollection of sports coaches. *International Journal of Performance Analysis of Sport*, 8(1): 76–84.
- Lampton, C.C., Lambert, M.E. and Yost, R. (1993). The effects of psychological factors in sports medicine rehabilitation adherence. *Journal of Sports Medicine and Physical Fitness*, 33(3): 292–299.
- Lave, J. and Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Lawrence, G.P., Beattie, S.J., Woodman, T., Khan, M.A., Hardy, L., Gottwald, V.M. and Cassell, V.E. (in press). Practice with anxiety improves performance, but only when anxious: Evidence for the specificity of practice hypothesis. *Journal of Sport and Exercise Psychology*, S.
- Lawrence, G.P., Gottwald, V.M., Hardy, J. and Khan, M.A. (2010). Internal and external focus of attention in a novice form sport. *Research Quarterly for Exercise and Sport*, 82(3): 431–441.
- Lawrence, G.P., Khan, M.A., Mourton, S. and Bernier, P.M. (2011). The reliance on visual feedback for online and offline processing. *Motor Control*, 15(2): 232–246.
- Lazarus, R. S. (1999). *Stress and emotion: A new synthesis*. London: Free Association.
- Lazarus, R.S. and Folkman, S. (1984). *Stress, appraisal and coping*. New York: Springer.
- Lee, M. (1988). Values and responsibilities in children's sport. *Physical Education Review*, 11: 19–27.

- Lee, T.D. and Magill, R.A. (1983). The locus of contextual interference in motor-skill acquisition. *Journal of Experimental Psychology: Learning Memory and Cognition*, 9(4): 730–746.
- Lee, T.D. and Magill, R.A. (1985). Can forgetting facilitate skill acquisition? In D. Goodman, R.B. Wilberg and I.M. Franks (eds.), *Differing perspectives in motor learning, memory and control*. Amsterdam: Elsevier. pp. 3–22.
- Lee, T.D., White, M.A. and Carnahan, H. (1990). On the role of knowledge of results in motor learning: Exploring the guidance hypothesis. *Journal of Motor Behavior*, 22(2): 191–208.
- Lees, A., Vanrenterghem, J. and Dirk, D.C. (2004). Understanding how an arm swing enhances performance in the vertical jump. *Journal of Biomechanics*, 37(12): 1929–1940.
- Lemert, C. (1997). *Social things: An introduction to the sociological life*. New York: Rowan and Littlefield.
- Liao, C. and Masters, R.S.W. (2002). Self-focused attention and performance failure under psychological stress. *Journal of Sport and Exercise Psychology*, 24: 289–305.
- Lian, O.B., Engebretsen, L. and Bahr, R. (2005). Prevalence of jumper's knee among elite athletes from different sports: A cross-sectional study. *American Journal of Sports Medicine*, 33(4): 561–567.
- Light, R. (2008). Complex learning theory – Its epistemology and its assumptions about learning: Implications for physical education. *Journal of Teaching in Physical Education*, 27: 21–37.
- Light, R. and Wallian, N. (2008). A constructivist-informed approach to teaching swimming. *Quest*, 60: 387–404.
- Loland, S. (2011). The normative aims of coaching. In A. Hardman and C.R. Jones (eds.), *The ethics of sports coaching*. London: Routledge.
- Long, J. and Spracklen, K. (eds.) (2011). *Sport and challenges to racism*. Basingstoke: Palgrave Macmillan.
- Louw, R. with John Cameron-Dow (1987). *For the love of rugby*. Melville: Hans Strydom Publishers.
- Lowenthal, D. (1985). *The past is a foreign country*. Cambridge: Cambridge University Press.
- Lyle, J. (2002). *Sports coaching concepts: A framework for coaches' behaviour*. London: Routledge.
- Lyle, J. (2008). Sports development and sports coaching. In K. Hylton and P. Bramham (eds.), *Sports development: Policy, process and practice*. London: Routledge.
- McDonald, I. (1995). 'Sport for all – RIP?' In S. Fleming, M. Talbot and A. Tomlinson (eds.), *Physical education policy and politics in sport and leisure* (LSA publication no. 55). Eastbourne: Leisure Studies Association.
- McFee, G. (1998). Are there philosophical issues with respect to sport (other than ethical ones)? In M. J. McNamee and S. J. Parry (eds.), *Ethics and sport*. London: Routledge. pp. 3–18.
- McGarry, T. and Franks, I.M. (1994). Stochastic approaches to predicting competition squash match play. *Journal of Sports Sciences*, 12: 573–584.
- MacIntyre, A.C. (1984). *After virtue*. London: Duckworth.
- Macionis, J. (2007). *Sociology* (11th edn). New Jersey: Pearson Education International.
- McKay, G.D., Payne, W.R., Goldie, P.A., Oakes, B.W. and Stanley, J.J. (1996). A comparison of the injuries sustained by female basketball and netball players. *The Australian Journal of Science and Medicine in Sport*, 28(1): 12–17.

- Mackrous, I. and Proteau, L. (2007). Specificity of practice results from differences in movement planning strategies. *Experimental Brain Research*, 183(2): 181–193.
- MacLean, M. (2010). Ambiguity within the boundary: Re-reading C. L. R. James's *Beyond a Boundary*. *Journal of Sport History*, 37(1): 99–117.
- MacLean, M. (2011). Artificially natural: A brief history of modern sport. In C. Anxo, Roibas, E. Stamtakis and K. Black (eds.), *Design for sport*. Aldershot: Ashgate. pp. 13–32.
- McNamee, M.J. (1995). Sporting practices, institutions and virtues: A critique and a restatement. *Journal of the Philosophy of Sport*, 22: 61–82.
- McNamee, M.J. (1997). Values in sport. In D. Levinson and K. Christenson (eds.), *Encyclopedia of world sport*. Oxford: ABC-CLIO Inc.
- McNamee, M. (1998). Celebrating trust: Virtues and rules in the ethical conduct of sports coaches. In M. McNamee and J. Parry (eds.), *Ethics and Sport*. London: Routledge.
- McNamee, M.J. and Parry, S.J. (1990). Notes on the concept of 'health'. In J. Long (ed.), *Leisure, health and well-being*. Brighton: LSA Publications.
- McNevin, N.H., Shea, C.H. and Wulf, G. (2003). Increasing the distance of external focus of attention enhances learning. *Psychological Research*, 67: 22–29.
- MacPhail, A., Lyons, D., Quinn, S., Hughes, A-M. and Keane, S. (2010). A framework for lifelong involvement in sport and physical activity: The Irish perspective. *Leisure Studies*, 29(1): 85–100.
- Mageau, G.A. and Vallerand, R.J. (2003). The coach-athlete relationship: A motivational model. *Journal of Sport Sciences*, 21: 883–904.
- Magill, R.A. (2010). *Motor learning and control: Concepts and applications* (9th edn). New York: McGraw-Hill.
- Magill, R.A. and Hall, K.G. (1990). A review of the contextual interference effect in motor skill acquisition. *Human Movement Science*, 9: 241–289.
- Magill, R.A. and Schoenfelder-Zohdi, B. (1996). A visual model and knowledge of performance as sources of information for learning a rhythmic gymnastics skill. *International Journal of Sport Psychology*, 27(1): 7–22.
- Malmerg, E. (1978). Science innovation and gymnastics in the USSR, *International Gymnast*, 20: 63.
- Marqusee, M. (2005). *Anyone but England: An outsider looks at English cricket* (3rd edn). London: Aurum Press.
- Marsh, I., Keating, M., Eyre, A., Campbell, R. and McKenzie, J. (1996). *Making sense of society: An introduction to sociology*. London: Longman.
- Martens, R. (2004). *Successful coaching*. Champaign, IL: Human Kinetics.
- Martens, R., Burton, D., Vealey, R.S., Bump, L.A. and Smith, D.E. (1990). Development and validation of the Competitive State Anxiety Inventory-2 (CSAI-2). In R. Martens, R.S. Vealey and D. Burton (eds.), *Competitive anxiety in sport*. Champaign, IL: Human Kinetics. pp. 117–213.
- Martindale, A. and Collins, D. (2005). Professional judgement and decision making: The role of intention for impact. *The Sport Psychologist*, 19: 303–317.
- Maslovat, D. and Franks, I.M. (2008). The need for feedback. In M. Hughes and I.M. Franks (eds.), *Essentials of performance analysis: An introduction*. London: Routledge. pp. 1–7.
- Masters, R.S.W. (1992). Knowledge, nerves and know-how: The role of explicit versus implicit knowledge in the breakdown of a complex motor skill under pressure. *British Journal of Psychology*, 83: 343–358.
- Masters, R.S.W. (2000). Theoretical aspects of implicit learning in sport. *International Journal of Sport Psychology*, 31: 530–541.

- Mawer, M. (1995). *The effective teaching of physical education*. Essex: Longman.
- Maxwell, J.P. and Masters, R.S.W. (2008). The theory of reinvestment. *International Review of Sport and Exercise Psychology*, 1(2): 160–183.
- Mayes, A., O'Donoghue, P.G., Garland, J. and Davidson, A. (2009). The use of performance analysis and internet video streaming during elite netball preparation. *3rd International Workshop of the International Society of Performance Analysis of Sport*. Lincoln, UK, 6–7 April 2009.
- Maynard, I.W. and Cotton, P.C.J. (1993). An investigation of two stress management techniques in a field setting. *The Sport Psychologist*, 6: 357–387.
- Mazur, J. (1990). *Learning and behaviour* (2nd edn). Englewood Cliffs, NJ: Prentice-Hall.
- Mellalieu, S.D., Hanton, S. and Fletcher, D. (2006). A competitive anxiety review: Recent directions in sport psychology research. In S. Hanton and S.D. Mellalieu (eds.), *Literature reviews in sport psychology*. Hauppauge, NY: Nova Science.
- Metzler, M. (2000). *Instructional models for physical education*. Boston: Allyn & Bacon.
- Mirwald, R.L., Baxter-Jones, A.D.G., Bailey, D.A. and Beunen, G.P. (2002). An assessment of maturity from anthropometric measurements. *Medicine and Science in Sports and Exercise*, 34: 689–694.
- Mitchell, M. and Kernodle, M. (2004). Using multiple intelligences to teach tennis. *Journal of Physical Education, Recreation and Dance*, 75(8): 27–32.
- Mohr, M., Krstrup, P., Nybo, L., Nielsen, J.J. and Bangsbo, J. (2004). Muscle temperature and sprint performance during soccer matches – beneficial effect of re-warm-up at half time. *Scandinavian Journal of Medicine and Science in Sports*, 14: 156–162.
- Moore, W.E. and Stevenson, J.R. (1994). Training for trust in sport skills. *The Sport Psychologist*, 8: 1–12.
- Morgan, K. (2011). *Athletics challenges* (2nd edn). London: Routledge.
- Morgan, K. and Carpenter, P.J. (2002). Effects of manipulating the motivational climate in physical education lessons. *European Journal of Physical Education*, 8: 209–232.
- Morgan, K. and Kingston, K. (2008). Development of a self-observation mastery intervention programme for teacher education. *Physical Education and Sport Pedagogy*, 13(2): 1–28.
- Morgan, K. and Kingston, K. (2010). Promoting a mastery motivational climate in a higher education sports class. *Journal of Hospitality, Leisure, Sport and Tourism Education. Practical paper*, 9(1): 73–84.
- Morgan, K., Sproule, J., Weigand, D. and Carpenter, P. (2005a). Development of a computer-based measure of teacher behaviours related to motivational climate in physical education. *Physical Education and Sport Pedagogy Journal*, 10: 113–135.
- Morgan, K., Sproule, J. and Kingston, K. (2005b). Teaching styles, motivational climate and pupils' cognitive and affective responses in physical education. *European Physical Education Review*, 11(3): 257–286.
- Morgan, L. and Fleming, S. (2003). The development of coaching in Welsh Rugby Union Football. *Football Studies*, 6(2): 39–51.
- Morgan, W.J. (2003). Why the 'view from nowhere' gets us nowhere in our moral considerations of sports. *Journal of the Philosophy of Sport*, 30(1): 51–67.
- Morgan, W.J. (2004). Moral antirealism, internalism and sport. *Journal of the Philosophy of Sport*, 31: 161–183.
- Morris, L., Davis, D. and Hutchings, C. (1981). Cognitive and emotional components of anxiety: Literature review and revised worry-emotionality scale. *Journal of Educational Psychology*, 75: 541–555.
- Mosston, M. (1966). *Teaching physical education*. Columbus, Ohio: Merrill Publishing Co.

- Mosston, M. (1981). *Teaching physical education* (2nd edn). Columbus, Ohio: Merrill Publishing Co.
- Mosston, M. and Ashworth, S. (2002). *Teaching physical education* (5th edn). Columbus, Ohio: Merrill Publishing Co.
- Mullen, R. and Hardy, L. (2000). State anxiety and motor performance: Testing the conscious processing hypothesis. *Journal of Sport Science*, 18: 785–799.
- Murias, J.M., Lanatta, D., Arcuri, C.R. and Laino, F.A. (2007). Metabolic and functional responses playing tennis on different surfaces. *Journal of Strength and Conditioning Research*, 21: 112–117.
- Nash, C. and Sproule, J. (2009). Career development of expert coaches. *International Journal of Sport Science and Coaching*, 4(1): 121–138.
- Nash, C. and Sproule, J. (2011). Insights into experiences: Reflections of an expert and novice coach. *International Journal of Sport Science and Coaching*, 6(1): 149–161.
- Nash, C., Sproule, J. and Horton, P., (2011). Excellence in coaching: The art and skill of elite practitioners. *Research Quarterly for Exercise and Sport*, 82(2): 229–238.
- Neil, R., Hanton, S., Mellalieu, S.D. and Fletcher, D. (2011). Competition stress and emotions in sport performers: The role of further appraisals. *Psychology of Sport and Exercise*, 12: 460–470.
- Nelson, L.J. and Cushion, C.J. (2006). Reflection in coach education: The case of the national governing body coaching certificate. *The Sport Psychologist*, 20: 174–183.
- Nesti, M. (2001). Working in sports development. In K. Hylton, P. Bramham, D. Jackson and M. Nesti (eds.), *Sports development: Policy, process and practice*. London: Routledge.
- Newell, K.M. and Walter, C.B. (1981). Kinematic and kinetic parameters as information feedback in motor skill acquisition. *Journal of Human Movement Studies*, 7(4): 235–254.
- Ng, J.Y.Y., Lonsdale, C. and Hodge, K. (2011). The basic needs satisfaction in sport scale (BNSSS): Instrument development and initial validity evidence. *Psychology of Sport and Exercise*, 12: 257–264.
- Nicholls, A., Polman, R.C.J. and Levy, A.R. (2012). A path analysis of stress appraisals, emotions, coping and performance satisfaction among athletes. *Psychology of Sport and Exercise*, 13: 263–270.
- Nicholls, J.G. (1989). *The competitive ethos and democratic education*. Cambridge, MA: Harvard University Press.
- Nissinen, M.A., Preiss, R. and Brüggemann, P. (1985). Simulation of human airborne movements on the horizontal bar. In D.A. Winter and R. Norman (eds.), *Biomechanics IX-B*. Champaign, IL: Human Kinetics. pp. 373–376.
- Ntoumanis, N. and Biddle, S.J.H. (1998). The relationship between competitive anxiety, achievement goals and motivational climate. *Research Quarterly for Exercise and Sport*, 69: 176–187.
- O'Donoghue, P.G. (2005). Normative profiles of sports performance. *International Journal of Performance Analysis of Sport*, 5(1): 104–119.
- O'Donoghue, P.G. (2006). The use of feedback videos in sport. *Performance analysis of sport 7* (eds. H. Dancs, M. Hughes and P.G. O'Donoghue), 23–26 August 2006, Szombathely, Hungary, Cardiff: CPA UWIC Press, pp. 126–137.
- O'Donoghue, P.G. (2010). *Research methods for performance analysis*. London: Routledge.
- O'Donoghue, P.G. and Cullinane, A. (2011). A regression-based approach to interpreting sports performance. *International Journal of Performance Analysis in Sport*, 11: 295–307.

- O'Donoghue, P.G. and Longville, J. (2004). Reliability testing and the use of statistics in performance analysis support: A case study from an international netball tournament. In P.G. O'Donoghue and M. Hughes (eds.), *Performance analysis of sport 6*. Cardiff: CPA Press, UWIC. pp. 1–7
- O'Donoghue, P.G., Mayes, A., Edwards, K.M. and Garland, J. (2008). Performance norms for British National Super League netball. *International Journal of Sports Science and Coaching*, 3: 501–511.
- Olsen, E. and Larsen, O. (1997). Use of match analysis by coaches. In T. Reilly, J. Bangsbo and M. Hughes (eds.), *Science and Football III*. London: E&FN Spon. pp. 209–220.
- Ommundsen, Y., Roberts, G.C. and Kavussanu, M. (1998). Perceived motivational climate and cognitive and affective correlates among Norwegian athletes. *Journal of Sport Sciences*, 16: 153–164.
- Ost, L.G. (1988). Applied relaxation: Description of an effective coping technique. *Scandinavian Journal of Behaviour Therapy*, 17: 83–96.
- Oudejans, R.R.D. (2008). Reality-based practice under pressure improves handgun shooting performance of police officers. *Ergonomics*, 51(3): 261–273.
- Oudejans, R.R.D. and Pijpers, J.R. (2009). Training with anxiety has a positive effect on expert perceptual-motor performance under pressure. *Quarterly Journal of Experimental Psychology*, 62(8): 1631–1647.
- Oudejans, R.R.D. and Pijpers, J.R. (2010). Training with mild anxiety may prevent choking under higher levels of anxiety. *Psychology of Sport and Exercise*, 11(1): 44–50.
- Papaioannou, A. (1997). Perceptions of the motivational climate, beliefs about the causes of success and sportsmanship behaviours of elite Greek basketball players. In R. Lidor and M. Bar-Eli (eds.), *Innovations in sport psychology: Linking theory and practice*. Proceedings of the IX World Congress in Sport Psychology: Part II. Netanya, Israel: Ministry of Education, Culture and Sport. pp. 534–536.
- Partington, M. and Cushion, C. (2011). An investigation of the practice activities and coaching behaviours of professional top-level youth soccer coaches. *Scandinavian Journal of Medicine and Science in Sports*: 1–9.
- Patel, D.R., Greydanus, D.E., Pratt, H.D. and Phillips, E.L. (2003). Eating disorders in adolescent athletes. *Journal of Adolescent Research*, 18(3): 280–296.
- Pearson, P. and Webb, P. (2006). Improving the quality of games teaching to promote physical activity. *Journal of Science and Medicine in Sport*, 9(6): 9–18.
- Pelletier, R.L., Montelpare, W.J. and Stark, R.M. (1993). Intercollegiate ice hockey injuries: A case for uniform definitions and reports. *American Journal of Sports Medicine*, 21: 78–81.
- Perez, C.R., Meira, C.M. and Tani, G. (2005). Does the contextual interference effect last over extended transfer trials? *Perceptual and Motor Skills*, 100(1): 58–60.
- Perkins, D. (1999). The many faces of constructivism. *Educational Leadership*, 57(3): 6–11.
- Perkins-Ceccato, N., Passmore, S.R. and Lee, T.D. (2003). Effects of focus attention depend on golfer's skill. *Journal of Sports Sciences*, 21: 593–600.
- Pigott, R.E. and Shapiro, D.C. (1984). Motor schema: The structure of the variability session. *Research Quarterly for Exercise and Sport*, 55(1): 41–45.
- Pitchford, A. and Collins, M. (2010). Sports development as a job, a career and training. In M. Collins (ed.), *Examining sports development*. London: Routledge.
- Polley, M. (2011). *The British Olympics: Britain's Olympic heritage 1612–2012*. London: Played in Britain/English Heritage.

- Poolton, J.M., Maxwell, J.P., Masters, R.S.W. and Raab, M. (2006). Benefits of an external focus of attention: Common coding or conscious processing? *Journal of Sports Sciences*, 24: 89–99.
- Porter, J.M. and Magill, R.A. (2010). Systematically increasing contextual interference is beneficial for learning sport skills. *Journal of Sports Sciences*, 28(12): 1277–1285.
- Potrac, P. and Jones, R.L. (1999). The invisible ingredient in coaching knowledge: A case for recognising and researching the social component. *Sociology of Sport Online*, 2(1). Available: <http://physed.otago.ac.nz/sosol/v2i1/v2i1a5.htm>
- Potrac, P. and Jones, R.L. (2009a). Micropolitical workings in semi-professional football. *Sociology of Sport Journal*, 26: 557–577.
- Potrac, P. and Jones, R.L. (2009b). Power, conflict and co-operation: Towards a micro-politics of coaching. *Quest*, 61(2): 223–236.
- Potrac, P., Jones, R.L. and Armour, K.M. (2002). ‘It’s all about getting respect’: The coaching behaviours of an expert English soccer coach. *Sport, Education and Society*, 7(2): 183–202.
- Potrac, P., Jones, R.L. and Cushion, C. (2007). Understanding power and the coach’s role in professional English soccer: A preliminary investigation of coach behaviour. *Soccer and Society*, 8(1): 33–49.
- Powell, J.W. and Barber-Foss, K.D. (1999). Injury patterns in selected high school sports: A review of the 1995–1997 seasons. *Journal of Athletic Training*, 34(3): 277–284.
- Powers, C.H. (2004). *Making sense of social theory: A practical introduction*. Lanham, MD: Rowan and Littlefield.
- Premack, D. (1965). Reinforcement theory. In D. Levine (ed.), *Nebraska symposium on motivation*. Lincoln: University of Nebraska Press. pp. 123–180.
- Pribram, K.H. and McGuinness, D. (1975). Arousal, activation and effort in the control of attention. *Psychological Review*, 82: 116–149.
- Prinz, W. (1997). Perceptions and action planning. *European Journal of Cognitive Psychology*, 9: 129–154.
- Proteau, L. and Marteniuk, R.G. (1993). Static visual information and the learning and control of a manual aiming movement. *Human Movement Science*, 12(5): 515–536.
- Purdy, L.G. (2006). Coaching in the ‘current’: Capturing the climate in elite rowing training camps. Unpublished PhD dissertation, University of Otago, New Zealand.
- Reinboth, M. and Duda, J.L. (2006). Perceived motivational climate, need satisfaction and indices of well-being in team sports: A longitudinal perspective. *Psychology of Sport and Exercise*, 7: 269–286.
- Richards, A. (2002). *Carwyn: A personal memoir*. Swansea: Christopher Davies.
- Riess, S. (1991). *City games: The evolution of American urban society and the rise of sports*. Urbana-Champaign, IL: University of Illinois Press.
- Robbins, J.E. and Rosenfeld, L.B. (2001). Athletes’ perceptions of social support provided by their head coach, assistant coach and athletic trainer, pre-injury and during rehabilitation. *Journal of Sport Behavior*, 24: 277–297.
- Roberts, G.C. (2001). Understanding the dynamics of motivation in physical activity: The influence of achievement goals on motivational processes. In G.C. Roberts (ed.), *Advances in motivation in sport and exercise*. Champaign, IL: Human Kinetics. pp. 1–50.
- Roberts, K. (2004). *The leisure industries*. Basingstoke, Hants: Palgrave Macmillan.
- Roberts, T. (1995). Sport and strong poetry. *Journal of the Philosophy of Sport*, 23: 94–107.
- Robertson, G., Caldwell G., Hamill, J., Kamen, G. and Whittlesey, S. (2004). *Research methods in biomechanics*. Champaign, IL: Human Kinetics.
- Robinson, L. (2004). *Managing public sport and leisure services*. London: Routledge.

- Rodano, R. and Tavana, R. (1995). Three-dimensional analysis of instep kicks in professional soccer players. In T. Reilly, J. Clays and A. Stibbe (eds.), *Science in Football II*. London: E & FN Spon. pp. 357–361.
- Rogers, C.A. (1974). Feedback precision and post-feedback interval duration. *Journal of Experimental Psychology*, 102(4): 604–608.
- Rothstein, A.L. and Arnold, R.K. (1976). Bridging the gap: Application of research on videotape feedback and bowling. *Motor Skills: Theory into Practice*, 1: 36–61.
- Ryall, E. (2010). *Critical thinking for sports students*. Exeter: Learning Matters.
- Ryan, R.M. and Deci, E.L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development and well-being. *American Psychologist*, 55: 68–78.
- Salmoni, A.W., Schmidt, R.A. and Walter, C.B. (1984). Knowledge of results and motor learning: A review and critical reappraisal. *Psychological Bulletin*, 95(3): 355–386.
- Sarrazin, P., Boiché, J. and Pelletier, L. (2007). A self-determination theory approach to dropout in athletes. In M. Hagger and N. Chatzisarantis (eds.), *Intrinsic motivation and self-determination in exercise and sport*. Champaign, IL: Human Kinetics.
- Saury, J. and Durand, M. (1998). Practical knowledge in expert coaches: On-site study of coaching in sailing. *Research Quarterly for Exercise and Sport*, 69(3): 254–266.
- Schmidt, R.A. (1975). Schema theory of discrete motor skill learning. *Psychological Review*, 82(4): 225–260.
- Schmidt, R.A. (1991). Frequent augmented feedback can degrade learning: Evidence and interpretations. In J. Renquin and G.E. Stelmach (eds.), *Tutorials in motor neuroscience*. Dordrecht, The Netherlands: Kluwer Academic Publishers. pp. 59–75.
- Schmidt, R.A. and Lee, T.D. (2011). *Motor control and learning: A behavioural emphasis* (5th edn). Champaign IL: Human Kinetics.
- Schmidt, R.A. and Wrisberg, C.A. (2000). *Motor learning and performance* (2nd edn). Champaign, IL: Human Kinetics.
- Schmikli, S.L., Backx, F.J.G., Kemler, H.J. and Mechelen, W. (2009). National survey on sports injuries in the Netherlands: Target populations for sports injury prevention programs. *Clinical Journal of Sport Medicine*, 19(2): 101–106.
- Schön, D.A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.
- Schön, D.A. (1987). *Educating the reflective practitioner*. San Francisco: Jossey-Bass.
- Schunk, D. (1999). Social self interaction and achievement behaviour. *Educational Psychologist*, 26: 207–231.
- Scuderi, G.R. and McCann, P.D. (2005). *Sports medicine: A comprehensive approach*. Philadelphia, PA: Elsevier Mosby Books.
- Shaheen, R. (2010). Creativity in education. *Creative Education*, 1(3): 166–169.
- Sharpe, T. and Koperwas, J. (1999). *BEST: Behavioral Evaluation Strategy and Taxonomy software*. Thousand Oaks, CA: Sage Publications.
- Shea, C.H. and Kohl, R.M. (1990). Specificity and variability of practice. *Research Quarterly for Exercise and Sport*, 61(2): 169–177.
- Shea, C.H. and Kohl, R.M. (1991). Composition of practice: Influence on the retention of motor skills. *Research Quarterly for Exercise and Sport*, 62(2): 187–195.
- Shea, J.B. and Morgan, R.L. (1979). Contextual interference effects of the acquisition, retention and transfer of a motor skill. *Journal of Experimental Psychology*, 5(2): 179–187.
- Shea, J.B. and Zimny, S.T. (1983). Context effects in memory and learning in movement information. In R.A. Magill (ed.), *Memory and control of action*. Amsterdam: North-Holland. pp. 345–366.

- Shoenfelt, E.L., Snyder, L.A., Maue, A.E., McDowell, C.P. and Woolard, C.D. (2002). Comparison of constant and variable practice conditions on free-throw shooting. *Perceptual and Motor Skills*, 94(3): 1113–1123.
- Shumway-Cook, A., Anson, D. and Haller, S. (1988). Postural sway biofeedback: Its effect on re-establishing stance stability in hemiplegic patients. *Archives of Physical Medicine and Rehabilitation*, 69(6): 395–400.
- Sicilia-Camacho, A. and Brown, D. (2008). Revisiting the paradigm shift from the versus to the non-versus notion of Mosston's Spectrum of teaching styles in physical education pedagogy: A critical pedagogical perspective. *Physical Education and Sport Pedagogy*, 13(1): 85–108.
- Siedentop, D. (1994). *Sport education*. Champaign, IL: Human Kinetics.
- Simon, R.L. (1991). *Fair play: Sports, values and society*. Boulder, CO: Westview.
- Slavin, R. (2003). *Educational psychology: Theory and practice* (7th edn). Boston: Allyn & Bacon.
- Smith, C.A. (1994). The warm-up procedure to stretch or not to stretch: A brief review. *Journal of Orthopaedic Sports Physiotherapy*, 19: 12–17.
- Smolevskij, V. (1969). *Masterstvo gimnastov*. Moscow.
- Smyth, J. and Shacklock, G. (1998). *Re-making teaching: Ideology, policy and practice*. New York: Routledge.
- Soligard, T., Myklebust, G., Steffen, K., Holme, I., Silvers, H., Bizzini, M., Junge, A., Dvorak, J., Bahr, R. and Andersen, T.E. (2008). Comprehensive warm-up programme to prevent injuries in young female footballers: Cluster randomised controlled trial. *British Medical Journal*, 337: a2469.
- Solmon, M.A. (1996). Impact of motivational climate on students' behaviors and perceptions in a physical education setting. *Journal of Educational Psychology*, 88: 731–738.
- Spielberger, C.D. (1966). Theory and research on anxiety. In C.D. Spielberger (ed.), *Anxiety and behavior*. New York: Academic Press. pp. 3–20.
- sports coach UK (2004). *UK coaching certificate monitoring study: Learning from the early stages of implementation: Phase 2 report*. Leeds: sports coach UK.
- sports coach UK (2006). *UK action plan for coaching: Consultation draft*. Leeds: sports coach UK.
- sports coach UK (2008). *The UK Coaching Framework: a 3-7-11 year action plan*. Leeds: sports coach UK.
- sports coach UK (2011a). *The UK Coaching Certificate Support Guide Levels 1–3*. Leeds: Coachwise Ltd.
- sports coach UK (2011b). *Sports Coach UK Annual Review 2010–2011*. Leeds: sports coach UK.
- Spray, C.M. (2002). Motivational climate and perceived strategies to sustain pupils' discipline in physical education. *European Physical Education Review*, 18: 5–20.
- Sproule, J., Ollis, S., Gray, S., Thorburn, M., Allison, P. and Horton, P. (2011). Promoting perseverance and challenge in physical education: The missing ingredient for improved games teaching. *Sport, Education and Society*, 16(5): 665–684.
- Standage, M., Duda, J.L. and Ntoumanis, N. (2003). Predicting motivational regulations in physical education: The interplay between dispositional goal orientations, motivational climate and perceived competence. *Journal of Sports Sciences*, 21: 631–647.
- Standahl, Ø.F and Hemmestad, L. (2011). Becoming a good coach: Coaching and phronesis. In A. Hardman and C.R. Jones (eds.), *The ethics of sports coaching*. London: Routledge. pp.45–55.

- Steele, M.K. (1996). *Sideline help: A guide for immediate evaluation and care of sports injuries*. Champaign, IL: Human Kinetics.
- Stones, R. (1998). Tolerance, plurality and creative synthesis in sociological thought. In R. Stones (ed.), *Key sociological thinkers*. Basingstoke, Hants: Macmillan Press.
- Suinn, R.M. (1987). Behavioural approaches to stress management in sports. In J.R. May and M.J. Asken (eds.), *Psychology of motor behaviour and sport*. Champaign, IL: Human Kinetics. pp. 54–72.
- Suits, B. (1995). The elements of sport. In W.P. Morgan and K.V. Meier (eds.), *Philosophic inquiry in sport*. Leeds: Human Kinetics.
- Swain, A.B.J. and Jones, G. (1993). Intensity and frequency dimensions of competitive state anxiety. *Journal of Sport Sciences*, 11: 533–542.
- Swinnen, S.P., Schmidt, R.A., Nicholson, D.E. and Shapiro, D.C. (1990). Information feedback for skill acquisition: Instantaneous knowledge of results degrades learning. *Journal of Experimental Psychology: Learning, Memory and Cognition*, 16(4): 706–716.
- Szymanski, S., Kruger, A., Riess, S. and MacLean, M. (2008). Forum: Associativity and modern sport. *Journal of Sport History*, 35(1): 1–64.
- Taimela, S., Kujala, U.M. and Osterman, K. (1990). Intrinsic risk factors and athletic injuries. *Sports Medicine*, 9: 205–215.
- Targett, S.G.R. (1998). Injuries in professional rugby union. *Clinical Journal of Sport Medicine*, 8(4): 280–285.
- Taylor, B. and Garratt, D. (2011). The professionalisation of sports coaching: Definitions, challenges and critique. In J. Lyle and C. Cushion (eds.), *Sports coaching: Professionalisation and practice*. London: Elsevier. pp. 99–117.
- Taylor, J.B., Mellalieu, S.D., James, N. and Shearer, U.A. (2008). The influence of match location, quality of opposition and match status on technical performance in professional association football. *Journal of Sports Sciences*, 26: 885–895.
- Taylor, M. (2005). *The leaguers: The making of professional football in England, 1900–1939*. Liverpool: Liverpool University Press.
- Tenga, A., Holme, I., Ronglan, L.T. and Bahr, R. (2010a). Effect of playing tactics on goal scoring in Norwegian professional soccer. *Journal of Sports Sciences*, 28: 237–244.
- Tenga, A., Holme, I., Ronglan, L.T. and Bahr, R. (2010b). Effect of playing tactics on achieving score-box possessions in a random series of team possessions from Norwegian professional soccer matches. *Journal of Sports Sciences*, 28: 245–255.
- Thomas, J.R., Launder, A.G. and Nelson, J.K. (2001). *Play practice: The games approach to teaching and coaching sports*. Champaign, IL: Human Kinetics.
- Thomas, O., Lane, A. and Kingston, K. (2011). Defining and contextualizing robust sport-confidence. *Journal of Applied Sport Psychology*, 23: 189–208.
- Thomas, O., Maynard, I. and Hanton, S. (2004). Temporal aspects of competitive anxiety and self-confidence as a function of anxiety perceptions. *The Sport Psychologist*, 18: 172–187.
- Thomas, O., Maynard, I. and Hanton, S. (2007). Intervening with athletes during the time leading up to competition: Theory to practice II. *Journal of Applied Sport Psychology*, 19: 398–418.
- Tinning, R. (1997). Performance and participation discourses in human movement: Toward a socially critical physical education. In J.M. Fernadex-Balboa (ed.), *Critical post-modernism in human movement, physical education and sport*. Albany, NY: SUNY. pp. 99–119.
- Tinning, R., Kirk, D. and Evans, J. (1993). *Learning to teach physical education*. London: Prentice Hall.

- Tod, D. (2007). The long and winding road: Professional development in sport psychology. *The Sport Psychologist*, 21: 94–108.
- Tom, A.R. (1984). *Teaching as a moral craft*. New York: Longman.
- Torkildsen, G. (2011). Torkildsen's sport and leisure management (6th edn). In P. Taylor (ed.), *Torkildsen's sport and leisure management*. London: Routledge.
- Totsika, V. and Wulf, G. (2003). An external focus of attention enhances transfer to novel situations and skills. *Research Quarterly for Exercise and Sport*, 74: 220–225.
- Tracey, J. (2003). The emotional response to the injury and rehabilitation process, *Journal of Applied Sport Psychology*, 15(4): 279–293.
- Treasure, D. (1993). A social-cognitive approach to understanding children's achievement behavior, cognitions and affect in competitive sport. *Unpublished doctoral dissertation*. University of Illinois, Urbana-Champaign, IL.
- Tremblay, L. and Proteau, L. (1998). Specificity of practice: The case of power-lifting. *Research Quarterly for Exercise and Sport*, 69(3): 284–289.
- Tremblay, L. and Proteau, L. (2001). Specificity of practice in a ball interception task. *Canadian Journal of Experimental Psychology-Revue Canadienne De Psychologie Experimentale*, 55(3): 207–218.
- Turner, D. and Nelson, L.J. (2009). Graduate perceptions of a UK university based coach education programme and impacts on development and employability. *International Journal of Coaching Science*, 3(2): 3–28.
- Tuxhill, C. and Wigmore, S. (1998). 'Merely meat'? Respect for persons in sport and games. In M.J. McNamee and S.J. Parry (eds.), *Ethics and sport*. London: Routledge.
- Vallerand, R.J. (1997). Toward a hierarchical model of intrinsic and extrinsic motivation. In M.P. Zanna (ed.), *Advances in experimental sport psychology* (Vol. 29). San Diego: Academic Press. pp. 271–360.
- Vallerand, R.J. (2007). Intrinsic and extrinsic motivation in sport and physical activity: A review and a look at the future. In G. Tenenbaum and R.E. Eklund (eds.), *Handbook of sport psychology* (3rd edn). New York: John Wiley. pp. 49–83.
- Vallerand, R.J. and Losier, G. F. (1999). An integrative analysis of intrinsic and extrinsic motivation in sport. *Journal of Applied Sport Psychology*, 11: 142–169.
- van Emmerik, R.E.A and van Wegen, E.E.H. (2000). On variability and stability in human movement, *Journal of Applied Biomechanics*, 16: 394–406.
- Van Mechelen, W., Hlobil, H. and Kemper, H.C. (1992). Incidence, severity, aetiology and prevention of sports injuries: A review of concepts. *Sports Medicine*, 14(2): 82–99.
- Vealey, R.S. (1986). Conceptualization of sport-confidence and competitive orientation: Preliminary investigation and instrument development. *Journal of Sport Psychology*, 8: 221–246.
- Vealey, R.S. (2001). Understanding and enhancing self-confidence in athletes. In R.N. Singer, H.A. Hausenblas and C.M. Janelle (eds.), *Handbook of sport psychology* (2nd edn). New York: Wiley. pp. 550–565.
- Vealey, R.S. and Chase, M.A. (2008). Self-confidence in sport: Conceptual and research advances. In T.S. Horn (ed.), *Advances in sport psychology* (3rd edn). Champaign, IL: Human Kinetics. pp. 65–97.
- Vealey, R.S., Hayashi, S.W., Garner-Holman, M. and Giacobbi, P. (1998). Sources of sport-confidence: Conceptualization and instrument development. *Journal of Sport and Exercise Psychology*, 20: 54–80.
- Vealey, R.S. and Knight, B.J. (2002, September). *Multidimensional sport-confidence: A conceptual and psychometric extension*. Paper presented at the Association for the Advancement of Applied Sport Psychology Conference, Tucson, AZ.

- Vilwock, M.R., Meyer, E.G., Powell, J.W., Fonty, A.J. and Haut, R.C. (2009). Football playing surface and shoe design affect rotational traction. *American Journal of Sports Medicine*, 37(3): 518–525.
- Viru, A., Loko, J., Harro, M., Volver, A., Laaneots, L. and Viru M. (1999). Critical periods in the development of performance capacity during childhood and adolescence. *Physical Education and Sport Pedagogy*, 4: 75–119.
- Vygotsky, L.S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, M.A: Harvard University Press.
- Walker, J. and O' Shea, T. (1999). *Behaviour management: A practical approach for educators* (7th edn). Upper Saddle River, NJ: Prentice Hall.
- Walling, M.D., Duda, J.L. and Chi, L. (1993). The perceived motivational climate in sport questionnaire: Construct and predictive validity. *Journal of Sport and Exercise Psychology*, 15: 172–183.
- Watkins, J. (2007). *An introduction to biomechanics of sport and exercise*. Edinburgh, UK: Elsevier.
- Watkins, C. and Mortimore, P. (1999). Pedagogy: What do we know. In P. Mortimore (ed.), *Understanding pedagogy and its impact on learning*. London: Paul Chapman. pp. 1–19.
- Watson, A.W.S. (1997). Sports injuries: Incidence, causes, prevention. *Physical Therapy Reviews*, 2(3): 135–151.
- Weinberg, D.R., Guy, D.E. and Tupper, R.W. (1964). Variation of post-feedback interval in simple motor learning. *Journal of Experimental Psychology*, 67: 98–99.
- Whannel, G. (1992). *Fields in vision: Television sport and cultural transformation*. London: Routledge.
- Whannel, G. (2002). *Media sport stars: Masculinities and moralities*. London: Routledge.
- Whannel, G. (2008). *Culture, politics and sport: Blowing the whistle revisited*. London: Routledge.
- White, A. and Bailey, J. (1990). Reducing disruptive behaviour of elementary physical education students with sit and watch. *Journal of Applied Behaviour Analysis*, 3: 353–359.
- Williams, J. (2003). *A game for rough girls? A history of women's football in Britain*. London: Routledge.
- Williams, J.M. and Straub, W.F. (2005). Sport psychology: Past, present, future. In J.M. Williams (ed.), *Applied sport psychology: Personal growth to peak performance* (5th edn). Mountain View, CA: Mayfield.
- Williams, K. (3 April 2012). Aspel & Co Show, BBC [online:youtube.com/watch?v=CdDt wc9HA7s&feature=player_detailpage 1987]
- Wilson, C., King, M.A. and Yeadon, M.R. (2006). Determination of subject-specific model parameters for visco-elastic elements. *Journal of Biomechanics*, 39: 1883–1890.
- Winkler, W. (1988). A new approach to the video analysis of tactical aspects of soccer. In T. Reilly, A. Lees, K. Davids and W. Murphy (eds.), *Science and football*. London: E & FN Spon. pp. 368–372.
- Winstein, C.J. and Schmidt, R.A. (1990). Reduced frequency of knowledge of results enhances motor skill learning. *Journal of Experimental Psychology: Learning Memory and Cognition*, 16(4): 677–691.
- Wolf, B.R., Ebinger, A.E., Lawler, M.P. and Britton, C.L. (2009). Injury patterns in division I collegiate swimming. *American Journal of Sports Medicine*, 37(10): 2037–2042.
- Woodcock, C., Richards, H. and Mugford, A. (2008). Quality counts: Critical features for neophyte professional development. *The Sport Psychologist*, 22: 491–506.

- Woodman, T. and Hardy, L. (2001a). Stress and anxiety. In R. Singer, H.A. Hausenblas and C.M. Janelle (eds.), *Handbook of research on sport psychology* (2nd edn). New York: Wiley. pp. 290–318.
- Woodman, T. and Hardy, L. (2001b). A case study of organizational stress in elite sport. *Journal of Applied Sport Psychology*, 13: 207–238.
- Woollard, J. (2010). *Psychology for the teacher: Behaviourism*. London: Routledge.
- Wright Mills, C.W. (1959). *The sociological imagination*. New York: Oxford University Press.
- Wulf, G. (2007). Attentional focus and motor learning: A review of 10 years of research. *Bewegung Und Training*, 1: 1–11.
- Wulf, G., Höß, M. and Prinz, W. (1998). Instructions for motor learning: Differential effects of internal versus external focus of attention. *Journal of Motor Behavior*, 30: 169–179.
- Wulf, G., Lauterbach, B. and Toole, T. (1999). Learning advantages of an external focus of attention in golf. *Research Quarterly for Exercise and Sport*, 70: 120–126.
- Wulf, G., McNevin, N.H., Fuchs, T., Ritter, F. and Toole, T. (2000). Attentional focus in complex skill learning. *Research Quarterly for Exercise and Sport*, 71: 229–239.
- Wulf, G., McNevin, N. and Shea, C.H. (2001). The automaticity of complex motor skill learning as a function of attentional focus. *The Quarterly Journal of Experimental Psychology*, 54(4): 1143–1154.
- Wulf, G. and Schmidt, R.A. (1994). Contextual interference effects in motor learning: Evaluating a KR-usefulness hypothesis. In J.R. Nitsch and R. Seiler (eds.), *Movement and sport: Psychological foundations and effects* (Vol. 2. Motor control and learning). Sankt Augustin, Germany: Acedemia Verlag. pp. 304–309.
- Wulf, G. and Su, J. (2007). An external focus of attention enhances golf shot accuracy in beginners and experts. *Research Quarterly for Exercise and Sport*, 78(4): 384–389.
- Wulf, G., Zachry, T., Granados, C. and Dufek, J.S. (2007). Increases in jump-and-reach height through an external focus of attention. *International Journal of Sports Science and Coaching*, 2: 275–284.
- Young, D.E. and Schmidt, R.A. (1992). Augmented kinematic feedback for motor learning. *Journal of Motor Behavior*, 24(3): 261–273.
- Zachry, T., Wulf, G., Mercer, J. and Bezodis, N. (2005). Increased movement accuracy and reduced EMG activity as the result of adopting an external focus of attention. *Brain Research Bulletin*, 67: 304–309.
- Zimmerman, B.J. and Kitsantas, A. (1996). Self-regulated learning of a motoric skill: The role of goal setting and self-monitoring. *Journal of Applied Sport Psychology*, 8: 60–75.
- Zinkovsky, A.V., Vain, A.A. and Torm, R.J. (1976). Biomechanical analysis of the formation of gymnastic skill. In P.V. Komi (ed.), *Biomechanics V-B*. Baltimore, MD: University Park Press.
- Zinsser, N., Bunker, L. and Williams, J.M. (2001). Cognitive techniques for building confidence and enhancing performance. In J.M. Williams (ed.), *Applied sport psychology: Personal growth to peak performance*. Mountain View, CA: Mayfield. pp. 284–297.
- Zuber-Skerritt, O. (1996). Emancipatory action research for organisation change and management development. In O. Zuber-Skerritt (ed.), *New directions in action research*. London: Falmer. pp. 83–105.