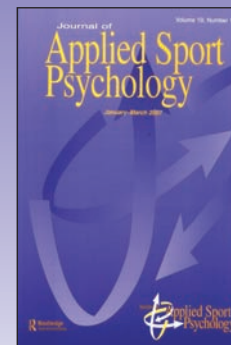
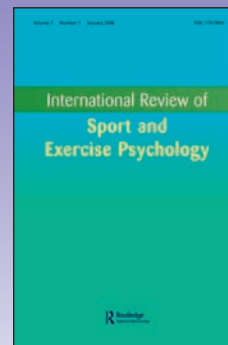
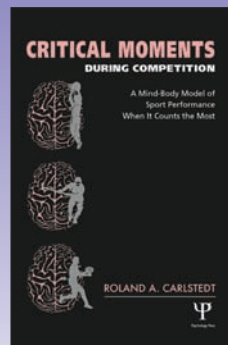
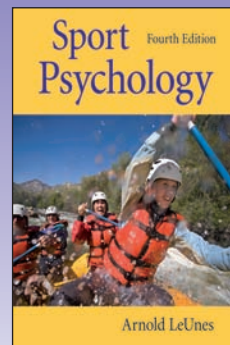
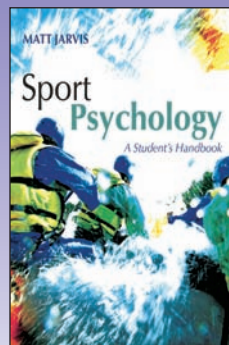
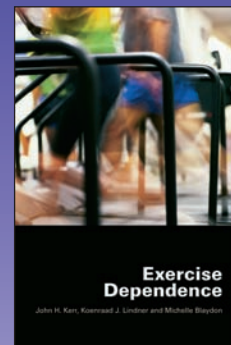
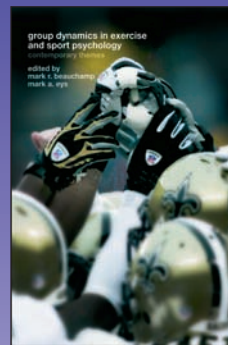
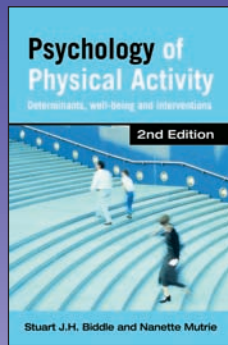
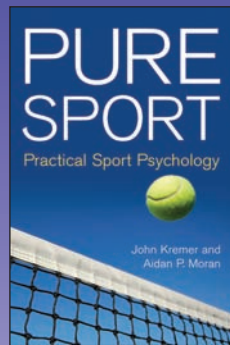
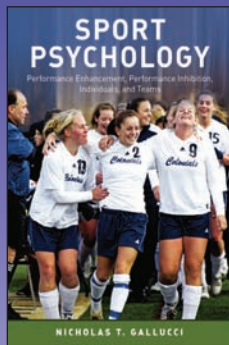


Sport Psychology

New Titles and Key Backlist



Top Row (From Left to Right): Sport Psychology, page 1; Pure Sport, page 2; Psychology of Physical Activity, page 3; Group Dynamics in Exercise and Sport Psychology, page 3; Exercise Dependence, page 3. **Bottom Row:** Sport Psychology, page 4; Sport Psychology, 4th Ed., page 2; Critical Moments During Competition, page 4; International Review of Sport and Exercise Psychology, page 6; Journal of Applied Sport Psychology, page 6.

Ψ Psychology Press
Taylor & Francis Group

270 Madison Avenue,
New York,
NY 10016, USA

www.psypress.com

an informa business

Psychology Press is part of the Taylor & Francis group,
a trading division of Informa UK Ltd.
Registered in England under no. 3099067
Registered Office: Mortimer House,
37-41 Mortimer Street, London W1T 3JH

Change of address? Please email
susannah.brown@informa.com,
quoting SPORT07



Key Backlist

Sport Psychology

New Titles and Key Backlist

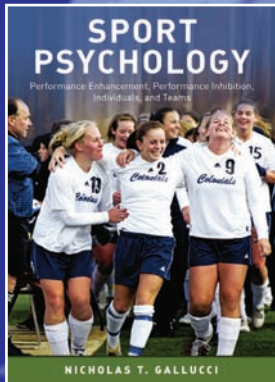
New Textbook!

Sport Psychology

Performance Enhancement, Performance Inhibition, Individuals, and Teams

Nicholas T. Gallucci

Western Connecticut State University, USA



Sport Psychology is a senior undergraduate textbook that provides a synthesis of the major topics in sport psychology with an applied focus and an emphasis on achieving optimal performance.

After the introductory chapters, there are three main sections to the text: **Performance Enhancement** covers topics such as anxiety, routines, mental imagery, self-talk, concentration, relaxation, goals, and self-confidence.

The section on **Performance Inhibition** includes chapters on choking under pressure, self-handicapping, procrastination, perfectionism, substance abuse, burnout, and injury.

While much of the information presented is universally applicable, individual differences based on gender, ethnicity, age, and motivation are emphasized in the concluding section on **Individuals and Teams**.

Throughout, there are case studies of well-known athletes from a variety of sports to illustrate topics that are being explored.



Sport Psychology is supported by online instructor resources, access to which is free of charge to qualifying adopters and their students. Visit www.psychology-textbooks.com/.

CONTENTS

Part 1. Introduction. Introduction to Sport Psychology. Motivation for Sport and Achievement. **Part 2. Performance Enhancement.** Optimal Levels of Anxiety, Intensity, or Arousal. Pre-performance Routines. Mental Skills Training: Self-talk, Concentration, Mental Imagery. Relaxation Training: Calming the Physiology. Goals. Goal Orientation. Self-efficacy and Sport Self-confidence. **Part 3. Performance Inhibition.** Choking Under Pressure and Anxiety and Performance. Self-handicapping. Procrastination and Perfectionism. Learned Helplessness. Performance Inhibition Due to Personality Factors. Substance Abuse. Burnout. Athletic Injuries. **Part 4. Individuals and Teams.** Gender and Sport. Ethnic and Cultural Differences and Sport Psychology. Youth and Sport. Leadership and Coaching. Team Cohesiveness.

January 2008: 7³/₁₆ x 9¹/₄: 576pp

Hb: 978-1-84169-485-6: \$90.00

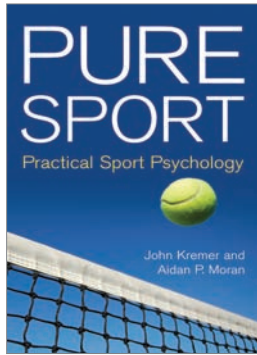
Pb: 978-1-84169-486-3: \$44.95

60-day examination copy available

www.sport-psychology-arena.com

New!**Pure Sport****Practical Sport Psychology**

John Kremer, Queen's University, Belfast, Northern Ireland
Aidan P. Moran, University College, Dublin, Eire



"Entertaining and informative, with interesting quotes from famous sports personalities and anecdotes throughout. The examples cover a wide range of situations and sports, and the book goes into detail on practical suggestions for changing one's behaviour without being bogged down in psycho-jargon." - **Dave Shaw, University of Central Lancashire**

"The book is conversationally written to engage the casual reader, while being well-informed and grounded in scientific research. Real life examples are employed to good effect and suitable exercises are provided to ensure that the information is brought into the 'real world'." - **Robert C. Eklund, Florida State University**

"This is a very well-written book that will be of interest to athletes and coaches interested in improving their understanding of sport psychology and their own psychological approach to sport. Current theory and research underpin the psychological factors discussed, and these are explained in a very readable manner." - **Marc Jones, Staffordshire University**

Are you "only as good as your last game"?**Is it really just a matter of "keeping your eye on the ball"?**

Pure Sport: Practical Sport Psychology explains in everyday language the whys and wherefores of contemporary sport psychology – pinpointing what works and what doesn't when it comes to performance enhancement.

As the title suggests, *Pure Sport* goes back to basics by highlighting practical concerns for those who are involved with competitive sport at every level – from junior club to international élite. Drawing on their considerable experience as both academic researchers and applied sport psychologists, the authors present a powerful array of techniques for channelling and harnessing mental skills with the goal of improving sporting performance. The interventions that they describe have all been tried and tested in competitive settings, but here, for the first time, the psychological techniques underlying them are brought together in a single volume that uniquely blends sound theory with good practice.

Liberally sprinkled with practical examples, evocative photographs and clear diagrams, *Pure Sport* is essential reading for anyone with an active involvement or interest in sport. It will help coaches, teams and sports people alike to develop their mental edge and so realise their true potential in sport and through sport.

CONTENTS

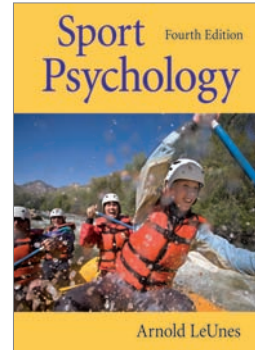
Starting. Succeeding. Reflecting. Relaxing. Focusing. Imagining. Improving. 'Teaming'. Leading. Ending?

January 2008: 7x10: 264pp
Hb: 978-0-415-39557-1: \$49.95
Pb: 978-0-415-39558-8: \$23.95

2 www.sport-psychology-arena.com

Forthcoming Textbook!**Sport Psychology****Fourth Edition**

Arnold LeUnes, Texas A&M University, College Station, USA



"The quality of the scholarship in this text is outstanding. No other textbook in the field is so extensively researched. A related strength of the book is the systematic method used to explain ideas from general to specific. The book is noted for its clarity and broad range of information. It can be used at a variety of levels – both undergraduate and graduate – and is so well referenced. The chapter lengths, clarity of writing and use of examples/figures/graphs/

summaries make this the best text in the field for a course in sport psychology." - **Brian J. Wigley, Shenandoah University**

"The LeUnes book provides a great balance between the psychological and the physical aspects of sport. This book does a great job of providing information and is easy for students to grasp. It is well suited for the mixed audiences from all disciplines that study sport performance. It's the book that others quote and the best source of current information on sport psychology." - **Pamela Wuestenberg, Texas State University**

CONTENTS

Preface. **Part 1. Introducing Sport Psychology and Sport History.** An Introduction to Sport Psychology. Professional Issues. Sport History From Antiquity Through the Enlightenment. History of Sport and Sport Psychology in the United States. **Part 2. Behavioral Principles and Applications.** Behavioral Principles. Anxiety and Arousal. Anxiety Reduction: Classical Conditioning and Operant Learning. Anxiety Reduction: Cognitive Learning Techniques. **Part 3. Social Psychological Dimensions.** Motivation: Attribution Theory and Need Achievement. Motivation: Locus of Control and Self Theory. Social Psychology of Sport: Leadership and Group Cohesion. Social Psychology of Sport: Audience Effects. Aggression: Dimensions and Theories. Aggression: Violence in Selected Sport Populations. **Part 4. Personality, Assessment, and Special Athletic Populations.** Personality and Psychological Assessment. Psychological Assessment in Sport Psychology. Minority Athletes. High Risk Sport/The Elite Athlete. Athletes With Disabilities/Injured Athletes. Doping in Sports. The Female Sport Experience: Historical and Physiological Issues. The Female Sport Experience: Sport Socialization, Psychological Variables, and Other Issues. Youth Sport: Motives for Participating and Withdrawing. Youth Sport: Stress and Other Issues. **Part 5. Coaching and Exercise.** The Coach: Roles, Communication, and Psychological Variables. Youth, Female, and Black Coaches: Coaching Burnout. Exercise Psychology: Physical Fitness, Adherence, and Cognitive and Affective Benefits. Exercise Psychology: Running Addictions and Exercise for Senior Citizens. Glossary.

Summer 2008: 8x10: 680pp
Hb: 978-0-8058-6266-9: \$74.95
60-day examination copy available

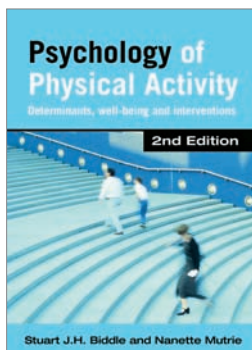
New Textbook!

Psychology of Physical Activity

Determinants, Well-Being and Interventions

Second Edition

Stuart J.H. Biddle, Loughborough University, UK
Nanette Mutrie, Strathclyde University, UK



In today's urbanised and technologised society, physical activity is becoming an increasingly peripheral part of our daily lives.

This new edition is updated to reflect new findings and current research directions, and includes full textbook features, such as key points and chapter summaries. A dedicated accompanying website provides lecturers and students with extensive supporting materials,

including slide presentations and self-test questions.

Psychology of Physical Activity is a comprehensive account of our psychological knowledge about physical activity covering:

- Motivation and the psychological factors associated with activity or inactivity
- The feel-good factor: the psychological outcomes of exercising
- Interventions and applied practice in the psychology of physical activity
- Current trends and future directions in research and practice.

This textbook is essential for students of sport and exercise science, exercise physiology, health psychology, occupational therapy and physical education.

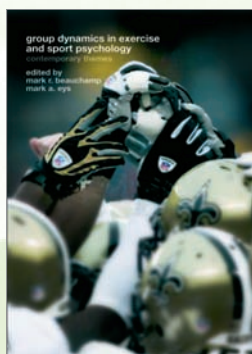
September 2007: 7x10: 448pp
Hb: 978-0-415-36664-9: \$160.00
Pb: 978-0-415-36665-6: \$48.95
60-day examination copy available

New Textbook!

Group Dynamics in Exercise and Sport Psychology

Contemporary Themes

Mark R. Beauchamp, University of British Columbia, Canada
Mark A. Eys, Laurentian University, Canada (Eds.)



Can a better understanding of group dynamics raise individual and team athletic performance or improve the outcomes of exercise interventions?

Much human behaviour in sport and exercise settings is embedded within groups where individuals' cognitions, emotions, and behaviours influence and are influenced by other group members.

Group Dynamics in Exercise and

Sports Psychology: Contemporary Themes explores the unique psychological dynamics that emerge in sport and exercise groups. It provides a clear and thorough guide to contemporary theory and research. Recommendations are also presented to inform applied psychology 'best practice'.

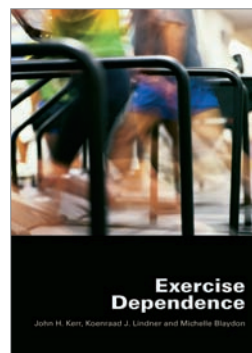
Drawing together the expertise of international specialists from sports and exercise psychology, the text covers core themes as well as emerging issues in group dynamics. It will be of interest to psychology, kinesiology, sport and exercise science students and researchers, as well as to consultants and coaches.

November 2007: 7x10: 280pp
Hb: 978-0-415-42664-0: \$170.00
Pb: 978-0-415-42665-7: \$53.95
60-day examination copy available

New!

Exercise Dependence

John H. Kerr, Kokushikan University, Japan
Koenraad J. Lindner (retired), University of Hong Kong
Michelle Blaydon, Senior Research Analyst



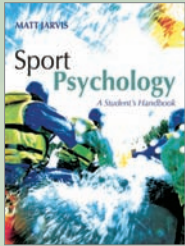
Exercise dependence or addiction has been described as a 'positive addiction', but it can have links with damaging dysfunctional and excessive behaviours, including eating disorders. Clinical and sport psychologists now acknowledge the condition and report that it can be found in recreational exercisers and competitive athletes.

This is the first text to provide a comprehensive guide to exercise dependence. The text contains case studies and reviews research into exercise dependence in both 'exercise' and 'sports' contexts. The authors examine the condition in the widest sense, exploring different types of exercise dependence, risk factors associated with the condition, the experiences and motivational characteristics of sufferers, links with eating disorders, and a number of approaches to counselling.

This text will be of significant interest to psychologists working in sport, health and clinical practice, as well as to athletes and sports coaches, particularly those involved in endurance sports associated with higher incidences of exercise dependence.

August 2007: 6x9: 200pp
Hb: 978-0-415-39344-7: \$140.00
Pb: 978-0-415-39345-4: \$41.95

Recent Textbooks in Sport Psychology



Textbook!

Sport Psychology A Student's Handbook

Matt Jarvis, Totton College, UK

"Here is an introduction to sport psychology that clarifies without oversimplifying, explains without overcomplicating and elucidates without overwhelming the reader with an excess of detail. Generously adorned with illustrations, case studies and practical

assignments, this is the perfect primer for one of the most exciting areas of contemporary study." - **Ellis Cashmore, Staffordshire University**

This is a student-friendly introduction to the discipline of sport psychology. All the key psychological issues in sport are explored, and difficult questions are raised: are athletes born or made? Does playing sport affect personality? What effect do cultural beliefs have on personal sporting development?

Matt Jarvis has substantially revised and expanded his original coverage of the subject from the highly successful first edition (*Sport Psychology* (1999) in the Routledge Modular Psychology series). Here he provides a succinct but comprehensive account of major theory and research in sport psychology, whilst maintaining the readable style and student-centred approach which made the previous book so successful.

Key issues covered include personality and sport; attitudes to sport; aggression; social factors affecting performance; arousal and anxiety; and motivation and skill acquisition.

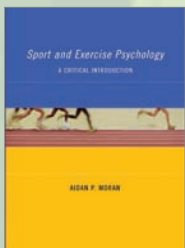
There is an emphasis not merely on learning about sport psychology, but also on developing critical and creative thinking. The book includes chapters on conducting research and writing essays in sport psychology, as well as reflective exercises throughout.

June 2006: 7x8½: 256pp

Hb: 978-1-84169-581-5: \$52.50

Pb: 978-1-84169-582-2: \$29.95

60-day examination copy available



Textbook!

Sport and Exercise Psychology A Critical Introduction

Aidan P. Moran, University College, Dublin, Eire

"Aidan Moran succeeds admirably in the integration of scientific substance with real sport examples and reference to many famous athletes and coaches. This is not merely another textbook in sport and exercise psychology. Aidan Moran has produced a book with

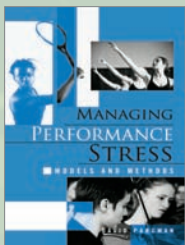
attention to substance, communication style, organization and structure, and reader interest. Who says that academic reading cannot be enlightening as well as enjoyable?" - **Robert N. Singer, University of Florida**

January 2004: 7x10: 368pp

Hb: 978-0-415-16808-3: \$78.95

Pb: 978-0-415-16809-0: \$26.95

60-day examination copy available



Textbook!

Managing Performance Stress Models and Methods

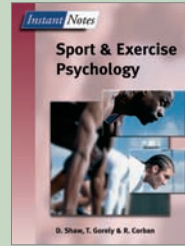
David Pargman

May 2006: 6x9: 256pp

Hb: 978-0-415-95252-1: \$80.00

Pb: 978-0-415-95253-8: \$34.95

60-day examination copy available



Textbook!

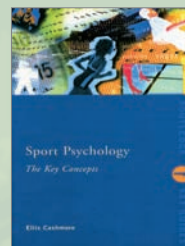
Instant Notes in Sport and Exercise Psychology

D. Shaw, T. Gonley & R. Corban
Instant Notes series

October 2004: 7x10: 304pp

Pb: 978-1-8599-6294-7: \$35.95

60-day examination copy available



Textbook!

Sport Psychology The Key Concepts

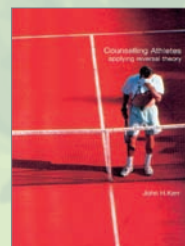
Ellis Cashmore

Routledge Key Guides series

May 2002: 5½x8½: 320pp

Pb: 978-0-415-25322-2: \$26.95

60-day examination copy available



Textbook!

Counselling Athletes Applying Reversal Theory

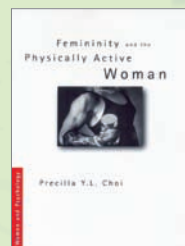
John Kerr

July 2001: 6x9: 176pp

Hb: 978-0-419-26120-9: \$145.00

Pb: 978-0-419-26130-8: \$48.95

60-day examination copy available



Textbook!

Femininity and the Physically Active Woman

Precilla Y. Choi

Women and Psychology series

August 2000: 6x9: 136pp

Pb: 978-0-415-16561-7: \$29.95

www.womenandpsychology.com

60-day examination copy available



Textbook!

Young People's Involvement in Sport

John Kremer, Karen Trew & Shaun Ogle (Eds.)

Adolescence and Society Series

July 1997: 5½x8½: 296pp

Pb: 978-0-415-16650-8: \$27.95

www.psypress.com/adolescence-and-society

60-day examination copy available

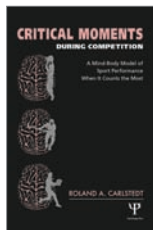
Also of Interest

Critical Moments During Competition

A Mind-Body Model of Sport Performance

When It Counts the Most

Roland A. Carlstedt, Chairman, American Board of Sport Psychology; Licensed Clinical Psychologist and Board Certified Sport Psychologist

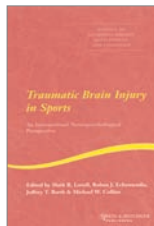


"Roland A. Carlstedt's impressive book creatively integrates research from multiple subdisciplines in psychology to arrive at a highly original and coherent theory of peak

sport performance. Readers will benefit from Dr. Carlstedt's experience as a professional athlete and coach as well as his solid academic credentials and training in the areas of cognitive neuroscience, psychophysiology, behavioral medicine, and personality. His eclectic background brings new insights, methods, and findings to the field of sport psychology that will have an impact for years to come." - Roger Drake, Keck School of Medicine of the University of Southern California and Western State College of Colorado

This book presents first-time research findings and new empirically based perspectives and applications in sport psychology. Highly provocative data derived from the largest single study ever on athletes is used to advance an original model of peak performance centering on a clearly emerging athlete's profile. Central to the book is the Theory of Critical Moments, which proposes that mental factors are most crucial during specifically delineated psychologically significant periods of competition and helps explain when and why intrusive cognitions influence performance.

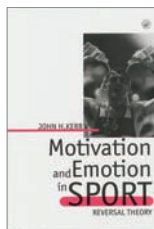
July 2004: 6x9: 280pp
Hb: 978-1-84169-092-6: \$60.00
Pb: 978-1-84169-094-0: \$27.95



Traumatic Brain Injury in Sports

Mark Lovell et al.
Studies on Neurology, Neuropsychology and Cognition series

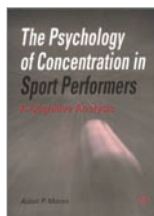
January 2004: 6x9: 520pp
Hb: 978-9-0265-1961-1: \$104.95
www.psypress.com/nnc



Motivation and Emotion in Sport Reversal Theory

John Kerr

June 1999: 6x9: 224pp
Pb: 978-0-86377-500-0: \$32.00



The Psychology of Concentration in Sport Performers

A Cognitive Analysis
Aidan P. Moran

September 1997: 320pp
Pb: 978-0-86377-444-7: \$36.00

Invitation to Authors

Psychology Press and **LEA** are leading international publishers of textbooks and handbooks in Sport Psychology. If you are planning to write a textbook, handbook or monograph we would like to hear from you. Visit www.sport-psychology-arena.com for details of our publishing program. For information on how to structure your proposal please visit www.psypress.com/proposal.asp.

Please send proposals to:

US/Canada:

Anne Duffy:

us.book.proposals@psypress.com

UK/Europe/ROW:

Lucy Kennedy:

book.proposals@psypress.co.uk



Lawrence Erlbaum Associates
 Taylor and Francis Group



Psychology Press
 Taylor & Francis Group

Inbox

Received

Online psychology alerting

FREE new book and journal information directly to your inbox!

OPAL is a free service designed to provide you with the latest information about books and journals in your field of interest.

To subscribe, please visit:
www.psypress.com/opal



JOURNALS



New for 2008!

International Review of Sport and Exercise Psychology

Editor-in-Chief: **Aidan P. Moran**, University College, Dublin
Associate Editors: **Cathy Craig**, The Queen's University of Belfast; **John Kremer**, The Queen's University of Belfast; **David Lavallee**, University of Wales, Aberystwyth; **Tadhg MacIntyre**, University of Ulster; **Nanette Mutrie**, Strathclyde University

"As a mature discipline, sport and exercise psychology must critically review its output, not only to assess what has passed, but also to point to what is to come. International Review of Sport and Exercise Psychology is a welcome addition to the scholarly journals in our field for vigorously taking up this challenge." – **Tony Morris**, Victoria University, Australia

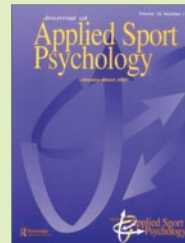
Aims & Scope

International Review of Sport and Exercise Psychology is a scholarly, peer-reviewed journal which publishes substantial (up to 5,000 words in length) critical reviews of research literature in sport and exercise psychology. Typically, these reviews evaluate relevant conceptual and methodological issues in the field and provide a critique of the strengths and weaknesses of separate empirical studies that address common themes or hypotheses. The reviews present summaries of, and conclusions about, the current state of knowledge concerning topics of interest, as well as assessments of relevant unresolved issues and future trends. Reviews of research literature on theories, topics and issues that are at the interface with mainstream psychology are especially welcome.

Publication Details

2 issues per year
Print ISSN 1750-984X, Online ISSN 1750-9858
Volume 1 (2008) Subscription Rates
Institutional (print and online): \$361.00/£185.00/€289.00
Institutional (online only): \$342.00/£175.00/€274.00
Personal (print only): \$59.00/£30.00/€47.00
Published by Routledge

www.informaworld.com



Journal of Applied Sport Psychology

The Official Journal of the Association for Applied Sport Psychology (AASP)

Editor: **Stephanie J. Hanrahan**, The University of Queensland
Associate Editors: **Mark Andersen**, Victoria University; **John B. Bartholomew**, The University of Texas at Austin; **Nichola Callow**, University of Wales, Bangor; **Ken Hodge**, University of Otago; **Frank Perna**, Boston University; **Daniel A. Weigand**, Achieve Acumen, Inc.

Aims & Scope

The Institute of Scientific Information Journal Citations Report for 2005 ranks the *Journal of Applied Sport Psychology* 25th out of 49 journals in Applied Psychology (social science), 51st out of 60 journals in Psychology (science) and 37th out of 70 journals in Sport Sciences (science), with an impact factor of .906.

The *Journal of Applied Sport Psychology* is a refereed journal designed to advance thought, theory, and research on applied aspects of sport and exercise psychology. Submissions such as position papers, reviews, theoretical developments specific to sport and/or exercise and applied research conducted in these settings or having significant applied implications to sport and exercise are appropriate content for the JASP.

The purpose of the Association for Applied Sport Psychology (AASP) is to promote the development of psychological theory, research, and intervention strategies in sport psychology. The journal is a direct benefit of membership in AASP and is received by student and professional members.

Publication Details

4 issues per year
Print ISSN 1041-3200, Online ISSN 1533-1571
Volume 20 (2008) Subscription Rates
Institutional (print and online): \$337.00/£243.00/€270.00
Institutional (online only): \$320.00/£230.00/€256.00
Personal (print only): \$128.00/£77.00/€102.00
Published by Routledge

www.informaworld.com

BOOK ORDER FORM: Customers in the US, Canada and Latin America

Qty	Author	Title	ISBN
Qty	Author	Title	ISBN

Books in this catalog are available through your bookseller or by ordering direct. Please attach a list if you prefer. Institutions: Please attach your institutional purchase order to this form. We request that all US and Canadian individual orders be prepaid by check, money order (in US dollars), or credit card; Latin American individual orders be prepaid by money order or credit card only.

Subtotal \$
Tax \$
Shipping/Handling \$
Total \$

Name

Address

City, State/Province & Zip Code

Telephone Email

Please invoice me. I have included my check (US and Canada only) or money order for the full amount due in US dollars, made out to Taylor & Francis.

I authorize you to debit my credit card with the amount of \$

My Visa/Mastercard/American Express number is Expiry Date / Start Date (Visa) /

Signature Date

Credit Card Address (if different from above)

Please check this box if you do not want to join the Psychology Press mailing list. Please check here if you do not wish to receive special offers and updates by email.

All prices and page counts are subject to change without notice. Offer good in the US, Latin America, and Canada only. All orders must be pre-paid. Shipping and handling: US & Canada: \$4.00 for the first book; \$1.00 for each additional book. Latin America: Airmail \$10 first book; \$3 each additional book; Surface \$6 first book; \$2 each additional book. Residents of CA, CT, KY, NY, and PA please add local sales tax. Canadian residents please add 7% GST.

To order in the US, Canada & Latin America, contact: Taylor & Francis Group, 7625 Empire Drive, Florence, Kentucky 41042, USA
 Call Toll Free: 1-800-634-7064, Mon-Fri, 8am-5:30pm, EST
 Fax Toll Free: 1-800-248-4724 anytime Email: orders@taylorandfrancis.com
 Call international: (561) 361-6000, ext 6418 Fax international: (561) 361-6075

Bookstores: Latin America (wholesalers, bookstores and libraries) Ethan E. Atkin, tel. +1 802-223-6565. Email: eatkin@cranburyinternational.com
 US: Contact your usual supplier. Canada: Login Canada, Call Toll Free 800-665-1148 Email: sales@lb.ca

SPORT07

EXAMINATION COPY REQUEST FORM

SPORT07

Author	Title	ISBN
Author	Title	ISBN

Professor's Name

Faculty University

Address & City

State/Province & Zip Code Email

Telephone Fax

Course Name and Number Course Start Date Expected Annual Enrollment

We offer 60-day examination copies on selected titles to academics. 60-day examination copies will be accompanied by an invoice which requires payment in 60 days from the date on the invoice. If you adopt 10 or more copies of the title for your course, the examination copy is yours for free. Return the invoice with course information and the purchase order number provided by your bookstore. If you wish to keep the book, but do not wish to adopt it, please pay the amount shown on the invoice, or return the book to us and the invoice will be cancelled. To order an examination copy, please mail or fax this form or request on department letterhead and include the following information: professor's name, course name and number, expected enrollment, decision date, and the reference number at the top of this form. Please allow up to four weeks for delivery. **Please fax to 212 563 2269 or call 917 351 7160, Mon-Fri, 8am-5.30pm, EST, or mail: Kevin Williams, Taylor & Francis Group, Inc., Associate Marketing Manager, Psychology Press, 270 Madison Avenue, New York, NY 10016, USA. Email: julie.norton@informa.com.** Examination copies are sent at the publisher's discretion.