

Concussions in Athletics

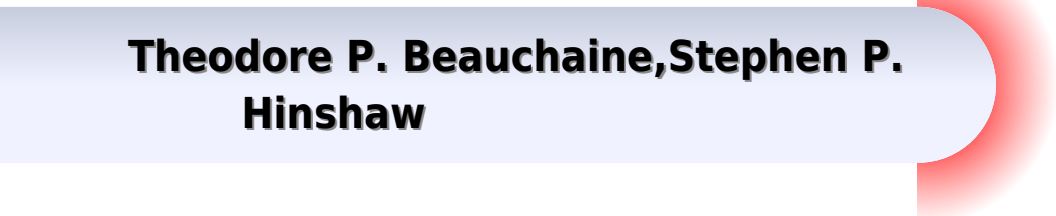
From Brain to Behavior

Semyon M. Slobounov
Wayne J. Sebastianelli
Editors

 Springer

Concussions In Athletics From Brain To Behavior

**Theodore P. Beauchaine, Stephen P.
Hinshaw**



Concussions In Athletics From Brain To Behavior:

Concussions in Athletics Semyon M. Slobounov, Wayne J. Sebastianelli, 2014-02-20 Concussions in Athletics From Brain to Behavior is a timely and major contribution to the literature that comprehensively addresses the neuromechanisms predispositions and latest developments in the evaluation and management of concussive injuries Also known as mild traumatic brain injury concussion in athletics is a growing public health concern with increased attention focusing on treatment and management of this puzzling epidemic Despite the increasing occurrence and prevalence of concussions in athletics there is no universally accepted definition or gold standard for its assessment Concussion in Athletics From Brain to Behavior provides a range of major findings that may shed important light on current controversy within the field The book is organized in five parts Evaluation of Concussion and Current Development Biomechanical Mechanisms of Concussion and Helmets Neural Substrates Biomarkers and Brain Imaging of Concussion Research Pediatric Sport related Concussions and Clinical Management and Rehabilitation of Concussions An invaluable contribution to the literature Concussions in Athletics From Brain to Behavior is a state of the art reference that will be of significant interest to a wide range of clinicians researchers administrators and policy makers

Concussions in Athletics Semyon M. Slobounov, Wayne J. Sebastianelli, 2021 Now in a fully revised and expanded second edition this comprehensive text remains a timely and major contribution to the literature that addresses the neuromechanisms predispositions and latest developments in the evaluation and management of concussive injuries Concussion also known as mild traumatic brain injury continues to be a significant public health concern with increased attention focusing on treatment and management of this puzzling epidemic as well as controversies within the field The book is comprised of five thematic sections current developments in evaluation biomechanical mechanisms neural substrates biomarkers genetics and brain imaging pediatric considerations and clinical management and rehabilitation Since the publication of the original edition in 2014 much has changed regarding the current understanding of mild traumatic brain injury including development of more precise imaging modalities development and classification of new biomarkers and updates to clinical treatment and management of athletic concussion This new edition will include new chapters targeting the influence of genetics on concussive injury as well as an expansion on the knowledge of pediatric response to concussion and the influence of repetitive subconcussive impacts on athlete health An invaluable contribution to the literature Concussions in Athletics From Brain to Behavior reestablishes itself as a state of the art reference that will be of significant interest to a wide range of clinicians researchers administrators and policy makers and this updated version aims to narrow the gap between research findings and clinical management of sports related concussion and other mild traumatic brain injury The second edition also attempts to broaden the scope of the knowledge to apply to more professionals and pre professionals in the fields of neuroscience neuropsychology and other allied health professionals that closely work with athletes and sports medicine professionals

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Slobounov, Wayne J. Sebastianelli, 2021-08-18 Now in a fully revised and expanded second edition this comprehensive text remains a timely and major contribution to the literature that addresses the neuromechanisms predispositions and latest developments in the evaluation and management of concussive injuries Concussion also known as mild traumatic brain injury continues to be a significant public health concern with increased attention focusing on treatment and management of this puzzling epidemic as well as controversies within the field The book is comprised of five thematic sections current developments in evaluation biomechanical mechanisms neural substrates biomarkers genetics and brain imaging pediatric considerations and clinical management and rehabilitation Since the publication of the original edition in 2014 much has changed regarding the current understanding of mild traumatic brain injury including development of more precise imaging modalities development and classification of new biomarkers and updates to clinical treatment and management of athletic concussion This new edition will include new chapters targeting the influence of genetics on concussive injury as well as an expansion on the knowledge of pediatric response to concussion and the influence of repetitive subconcussive impacts on athlete health An invaluable contribution to the literature Concussions in Athletics From Brain to Behavior reestablishes itself as a state of the art reference that will be of significant interest to a wide range of clinicians researchers administrators and policy makers and this updated version aims to narrow the gap between research findings and clinical management of sports related concussion and other mild traumatic brain injury The second edition also attempts to broaden the scope of the knowledge to apply to more professionals and pre professionals in the fields of neuroscience neuropsychology and other allied health professionals that closely work with athletes and sports medicine professionals

Foundations of Sport-Related Brain Injuries Semyon M. Slobounov, Wayne J. Sebastianelli, 2006-08-25 This book is the partial product of a conference on concussion in athletics held at the Pennsylvania State University April 29 30 2004 For a number of reasons it seemed timely to hold such a conference as well as to condense our current understanding of mechanisms predispositions and latest developments in evaluation and managements of sport related concussions in a single book format Despite dramatic advances in medicine traumatic brain injury commonly know as concussion is still one of the most puzzling and least understood injuries facing the sport medicine world today There still no universal agreement assigning the level of severity the sport related concussions nor there is any treatment besides the passage of time Medicines inability to fully understanding concussion has led us to question when it is truly safe to return an athlete to full sport participation so threat for risk of re injury is minimized The need for a multidisciplinary approach to understanding the spo related concussions stem from recent evidence that there are long lasting residual behavioral psycho social and neural disabilities that are often overlooked using current research methods The notion of transient and rapid symptoms resolution is misleading since symptoms resolution is frequently not indicative of injury resolution There are no two traumatic brain injuries alike in mechanism symptomology or symptoms resolution Most grading scales are based on loss of consciousness and post traumatic

amnesia both of which occur infrequently in sport related mild traumatic brain injuries *Sociocultural Examinations of Sports Concussions* Matt Ventresca, Mary McDonald, 2019-11-18 Sport's concussion crisis has been characterized by controversial scientific discoveries athlete suicides and high profile lawsuits involving professional sports leagues while provoking widespread media coverage changes to game rules and debate about the future of many popular sports *Sociocultural Examinations of Sports Concussion* is the first edited collection to bring together multiple sociocultural perspectives on sports concussion that interrogate the social economic political and historical forces shaping the cultural impacts of these injuries Each of the ten chapters moves beyond biomedical or neuroscientific paradigms to critically examine a specific intersection of sociocultural factors influencing public perceptions about concussion or athlete experiences of brain injury These include analyses of media and advertising medical treatment and diagnostic protocols gender and masculinity developments in equipment and scientific models economics and labor politics understandings of trauma and recovery public health philosophies and disciplinary differences in framing the ontologies of concussion Drawing from a wide range of theoretical and methodological approaches *Sociocultural Examinations of Sports Concussion* offers a diverse set of analyses examining brain injuries as cultural and embodied phenomena affecting more than just athletes brains but also embedded within and re shaping meanings identities and social contexts It is valuable reading for graduate students and researchers interested in the experience and treatment of sports concussion sports sociology and sports technology

Abnormal Psychology William J. Ray, 2016-11-30 In *Abnormal Psychology Perspectives on Human Behavior and Experience* Second Edition William J Ray brings together current perspectives concerning the manner in which the human mind behavior and experience can be understood In addition to the traditional psychological literature this book draws from work in the cognitive and affective neurosciences epidemiology ethology and genetics Ray's focus is on a unification and integration of the biopsychosocial understandings of human behavior within a broader consideration of human culture and language as it applies to abnormal psychology Psychological Aspects of Sport-Related Concussions Gordon Bloom, Jeffrey Caron, 2019-03-13 Recognition of concussion as a serious injury informed by neurological and physiological research is now commonplace in sport However research on the psychology of concussive injury its psychological implications and outcomes and psychological interventions for prevention and recovery has largely been overlooked This is the first book to explicitly and authoritatively set out the psychological aspects of sport related concussion from a multidisciplinary and global perspective The book attempts to offer a global understanding of the injury by presenting an historical overview exploring the psychological implications of sport related concussion and the influence of gender and sociocultural context on concussive injury and recovery setting out practical guidance on working with special populations suffering from concussive injuries and discussing the theoretical and methodological considerations for research on concussion and future directions for this research Written by a group of leading international experts and offering a hitherto underdeveloped perspective on

this crucial area of sports injury research this book is crucial reading for any upper level student researcher sport scientist coach or allied health professional working on sport related concussion It is also valuable reading for students and researchers interested in the psychosocial processes that impact injury and recovery or general professional practice in sport psychology

ICT for Health, Accessibility and Wellbeing Edwige Pissaloux, George Angelos Papadopoulos, Achilleas Achilleos, Ramiro Velázquez, 2022-03-05 This book constitutes selected papers presented at the First International Conference on ICT for Health Accessibility and Wellbeing IHAW 2021 held in Larnaca Cyprus in November 2021 The 12 full papers and 7 short papers were thoroughly reviewed and selected from 36 submissions One invited paper was also included in this volume The papers are organized in topical sections on active aging assistive devices and systems brain functions support and mHealth brain functions support and oncology ICT and wellbeing

Psychopathology William J. Ray, 2024-02-19 In Psychopathology Fourth Edition best selling author William J Ray brings together current perspectives concerning the manner in which the human mind behavior and experience can be understood In addition to the traditional psychological literature this book draws from work in the cognitive and affective neurosciences epidemiology ethology and genetics Ray focuses on unifying and integrating the biopsychosocial understandings of human behavior within a broader consideration of human culture and language as it applies to psychopathology

Child and Adolescent Psychopathology Theodore P. Beauchaine, Stephen P. Hinshaw, 2017-01-24 A unique multi discipline developmental approach to childhood psychopathology Child and Adolescent Psychopathology is the only comprehensive text in the field to address genetic neurobiological and environmental factors within a developmental context Based on cutting edge research and aligned with the DSM 5 this book emphasizes how when and why disorders emerge among young people and the ways in which symptom profiles change at different stages of development This new third edition has been updated to include new chapters on OCD and trauma disorders consistent with DSM 5 classification and includes new discussion on epigenetics and the neighborhood effects on the development of delinquency Coverage includes extensive discussion of risk factors from disturbed attachment relations and abuse neglect to head injury and teratogen exposure followed by in depth examination of behavior disorders and psychological disorders including Autism Spectrum Schizophrenia Spectrum and Eating Disorders Psychological disorders in children are increasingly being explored from a relational perspective and continuous advances in neurobiology research are adding an additional dimension to our understanding of cause effect and appropriate intervention This book provides detailed guidance toward all aspects of childhood psychopathology with a multi discipline approach and a unique developmental emphasis Discover how psychopathology emerges throughout the stages of development Learn how both genetics and environmental factors influence risk and behaviors Understand the prevalence risk factors and progression of each disorder Gain deep insight from leading experts in neurobiology and developmental psychopathology As the field of child psychology continues to evolve behavioral and psychological disorders move beyond a list of symptoms to encompass the whole child

biology chemistry environment and culture are becoming increasingly relevant in understanding and treating these disorders and must be considered from the earliest assessment stages Child and Adolescent Psychopathology provides comprehensive information on childhood disorders from a developmental perspective

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