Record Nr. UNINA9910458202703321 Human factors methods and sports science: a practical guide / / Paul **Titolo** M. Salmon. [et al.] Pubbl/distr/stampa Boca Raton, Fla.:,: CRC Press/Taylor & Francis Group,, 2010 **ISBN** 0-429-14587-X 1-4200-7218-8 Descrizione fisica 1 online resource (380 p.) Altri autori (Persone) SalmonPaul M 613.7/1 Disciplina 613.71 Soggetti Sports sciences Athletes - Training of Sports - Psychological aspects Sports - Physiological aspects Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Front cover: Contents: List of Figures: List of Tables: Preface: Acknowledgments; About the Authors; Acronyms; Chapter 1. Introduction; Chapter 2. Data Collection Methods; Chapter 3. Task Analysis Methods: Chapter 4. Cognitive Task Analysis: Chapter 5. Human Error Identification and Analysis Methods; Chapter 6. Situation Awareness Assessment Methods; Chapter 7. Mental Workload Assessment Methods; Chapter 8. Teamwork Assessment Methods; Chapter 9. Interface Evaluation; Chapter 10. Human Factors Methods Integration: Case Study; References; Index; Back cover Sommario/riassunto During the course of any sporting event, critical cognitive and physical tasks are performed within a dynamic, complex, collaborative system comprising multiple humans and artifacts, under pressurized, complex, and rapidly changing conditions. Highly skilled, well-trained individuals walk a fine line between task success and failure, with only slightly inadequate task execution leading to the latter. Promoting crossdisciplinary interaction between the human factors and sports science

disciplines, Human Factors Methods and Sports Science: A Practical

Guide provides practical guidance on a range of methods for describing, representing, and evaluating human, team, and system performance in sports domains. Traditionally, the application of human factors and ergonomics methods in sports has focused on the biomechanical, physiological, environmental, and equipment-related aspects of sports performance. However, various human factors methods, applied historically in the complex safety critical domains, are suited to describing and understanding sports performance. This book delineates the similarities in the concepts requiring investigation within sports and the more typical human factors domains. The book's focus on cognitive and social human factors methods rather than mainly on the application of physiological ergonomics approaches sets it apart from other books in either field. It covers eight categories of human factor methods: data collection, task analysis, cognitive task analysis, human error identification, situation awareness measurement, workload measurement, team performance assessment, and interface evaluation methods.--Publisher's description.