Sport Cyberpsychology is the first book devoted to assessing the influence of technology on human interaction, behaviour and mental health in a sport context, gathering research on the use of technology and the Internet by athletes, coaches and sport science support staff. The book identifies the potential impact of technology on athletes’ mental preparation for competition, as well as the role of technology in improving performance. It explores the use of technology by athletes and sport organisations for social interaction, while also considering the ‘darker’ side of athletes’ Internet use.

It covers topics including:

- the role of GPS, gaming and virtual reality in training and injury recovery
- the use of social media by athletes and sport organisations
- the psychology of self-presentation and brand management, as well as issues of online privacy
- the use of technology by other elite groups, such as military and medical personnel, and non-elite sportspeople
- cyberbullying and online harassment of athletes
- online gambling and athletes’ mental health in relation to their online activities
- virtual learning environments and the educational opportunities the online world can offer athletes

Accessibly written, with a companion website featuring lecture slides, reading lists, video links and suggested social media accounts, Sport Cyberpsychology offers a complete resource for students and instructors alike. It is important reading for any students of sport psychology, sport coaching or sport media, as well as coaches, athletes and sport science support staff.

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To Mum and Dad, Trish, Dave and Lee
‘My Team’

To Granny and Grandad Bolton, to Anto, TJ and Jim
‘My Angels’

And, finally, to Matt
‘My Guardian Angel’, who would have been first in line to get
Sport Cyberpsychology
(We will forever be dancing to ‘Pretty Woman’ in my head; I continue to miss you every single day).
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Recent years have witnessed increasing popular and scholarly interest in sport psychology or the scientific study of the performance, mental processes and well-being of people who are involved in sport. Within this discipline, cutting edge research investigates how athletes use, and interact psychologically with, technology such as computers, mobile phones, virtual reality devices and gaming consoles. Against this background, it is a great privilege to introduce Olivia Hurley’s important book on sport cyberpsychology – an emerging field that explores how sport performers and coaches interact with technology in sport settings. Adopting a theory-to-practice orientation, Olivia skilfully investigates the nature, implications and application of a range of fascinating issues in this field. For example, among the questions that she addresses are the following: Why is it important to study sport in cyberpsychology? What types of technology are commonly used in sport? How does technology affect an athlete’s mental preparation? Can virtual reality devices enhance athletic preparation and performance? Can technological innovations (e.g., Skype, FaceTime, webinars) enhance sport psychology consulting? What are the advantages and disadvantages of athletes’ engagement with social media? How do sport teams, coaches and organisations use online platforms in their day-to-day activities? What are the most effective strategies to counteract cyberbullying? Finally, can certain types of online behaviour impair an athlete’s mental health? In order to enhance discussion of these questions, Olivia includes a number of impressive pedagogical features in her book, such as precise learning objectives, a helpful glossary, case studies and lots of practical exercises. Written in a clear and accessible style, and covering the latest research findings, Sport Cyberpsychology is an excellent introduction to a burgeoning field that lies at the interface between sport psychology and cyberpsychology.

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Professor of Cognitive Psychology
University College Dublin
Aims of the book

The purpose of this textbook is to introduce the reader to this new and influential area of study within the discipline of sport psychology, namely that of cyberpsychology within the sport environment.

Athletes, coaches, sport psychologists and other sport scientists, technologists and data analysts are now some of the most prevalent users of technology within their roles, as they strive to perform or assist those they work with to perform to their potential best, often within high-pressure environments. Such individuals specifically use technology to: (i) analyse and assess performances, (ii) assist them in their physical and mental preparation, (iii) help their recovery from injury and/or illness and (iv) interact with spectators, supporters and the media online. The influence of such technology use on sport performances is potentially vast, yet no textbook appears to have gathered together available research findings and information on such topics in order to communicate them to their many interested parties. Therefore, the main aim of this textbook is to provide a solution to this issue and to help bridge the knowledge gap between the sport psychology and cyberpsychology worlds.

The key themes of this text centre around the use of technology by athletes and their surrounding networks of support individuals (e.g., their coaches, physiotherapists, movement analysts, psychologists and medics): (i) to improve their performances, (ii) to communicate with each other and (iii) to identify the potential dangers and risks associated with the use of such technology – mainly the Internet and social media – for athletes’ performances, relationships with others and their overall mental health and well-being. No textbook to date appears to have attempted to address such issues in this integrated way, thus highlighting the unique contribution of this textbook to the literature on sport psychology, cyberpsychology, sport science and technology. This text includes some content relevant to other elite groups (e.g., dancers, military, medical personnel) and non-elite
populations (e.g., exercisers/hobbyists) in order to appeal to a wide sport and performance audience. This text also uses some of the technology discussed within its chapters to supplement its content. For example, online resources for instructors and students who use this text as a core or supplementary textbook within their programme are available. PowerPoint materials, online article and journal resources, video links and relevant Twitter accounts are available/are suggested, along with some discussion/essay based questions and Multiple Choice Questions. These additional online materials complement the sport cyberpsychology theme of the text.

**Structure of the book**

This book is organised into four sections. This structure is considered appropriate, as it allows the reader to be introduced to the relevant topics first, before progressing to more detailed sections which address specific psychology and technology issues relevant first for the athletes, followed by their consultants and then for the wider sport network surrounding them (i.e., their coaches, clubs and organisations). The first section (Chapters 1 and 2) introduces the reader to the key disciplines and new technologies available within sport environments. The second section (Chapters 3 to 5) identifies the uses and impact of technology on athletes preparing for their sport. For example, it details the use of global positioning system (GPS), gaming devices and virtual reality (VR) technologies to help athletes train and complete in their sport. It also addresses the use of new technologies by other elite non-sport groups (e.g., the military, the arts and medical personnel). The third section (Chapters 6 to 8) then specifically explores athletes’ and sport organisations’ uses of technologies for social interaction online. Athletes, support team personnel and team organisations extensively use social media platforms such as Twitter, Facebook, YouTube and Instagram to communicate, recruit and promote themselves. The psychology of self-presentation, brand management and privacy issues surrounding such individual and group interactions online are discussed in this section. The final, fourth section of the book (Chapters 9 and 10) considers the darker side of sport cyberpsychology. These two chapters address the risks associated with athletes’ use of social media, and the Internet in general. Cyberbullying, online harassment, problematic gambling and gaming, as related to athletes, are explored within these final two chapters.

This text also uses a number of key features to engage the reader’s attention. Each chapter includes a case study at the start of the chapter to stimulate some thinking in relation to the topics being presented in that chapter and to provide readers with real-life examples to which they can apply a theory they are studying, for example. Definitions of relevant terms are provided at the start of each chapter also, in a mini glossary. Each chapter also concludes with a number of open-ended questions designed to promote discussion among students studying this new area of sport cyberpsychology. Lecturers and academic staff can make use of such questions in their classes in order to help their students engage with the content of this textbook. Each chapter also ends with a practical exercise, which will hopefully encourage some applied activities related to the content of the chapter.
ACKNOWLEDGEMENTS

This book would not have been possible without the help and support of a number of individuals. I would first like to thank my long-time mentor and ‘academic dad’, Professor Aidan Moran (UCD), for agreeing to write the foreword for this, my first solo book. Aidan, your constant encouragement and support have enabled me to reach this place in my career today. So many opportunities have come my way because of you, so thank you! I would also like to thank some specific colleagues in IADT, Dr Irene Connolly and Dr Grainne Kirwan, who helped me to believe I was ready to take on this first solo book project – your work ethic is a model for all in our field of Psychology. To Dr Annie Doona, our IADT President and Dr Andrew Power, our IADT Registrar – thank you both for always recognising my passion for my discipline of sport psychology and for helping me to achieve some of my greatest career goals to date. Your leadership is inspiring.

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To my extended family, the Boltons: Maureen, Leo, Margaret, Claire and Jenny (and all the kiddies, including my godson Adam); to the Hurleys, especially Kay, ‘Big’ Cathal and ‘Little’ Cathal; to my brother-in-law Paul(ie) Cronin; and to my many cousins – thank you all for your unfailing love and support in my career and life to date – it is something I never take for granted.

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And, finally, to ‘my team’, Mum, Dad, Trish, Dave and Lee. No words can express my love for you five people. You are my heroes, the ones I know I can turn to at any time, who are always there, always willing to listen, to laugh, to support, to hug, to help, to guide and to love me unconditionally. I am so lucky to have you all in my life. I am so proud to be your daughter/sister. You all inspire me every day. I am the person I am, achieving my life goals, because of you. You are my oxygen, the air beneath my wings – I can only ‘fly’, because you are all there, beneath me, holding me up.
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<tr>
<td>AASP</td>
<td>Association for Applied Sport Psychology</td>
</tr>
<tr>
<td>ABC</td>
<td>American Broadcasting Company</td>
</tr>
<tr>
<td>APA</td>
<td>American Psychological Association</td>
</tr>
<tr>
<td>AR</td>
<td>Augmented Reality</td>
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<tr>
<td>BBC</td>
<td>British Broadcasting Corporation</td>
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<tr>
<td>BPS</td>
<td>British Psychological Society</td>
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<tr>
<td>FA</td>
<td>Football Association</td>
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<td>FAI</td>
<td>Football Association of Ireland</td>
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<td>GAA</td>
<td>Gaelic Athletic Association</td>
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<td>GB</td>
<td>Great Britain</td>
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<tr>
<td>IRFU</td>
<td>Irish Rugby Football Union</td>
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<tr>
<td>IT</td>
<td>Information Technology</td>
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<tr>
<td>JETS</td>
<td>Jockeys Education and Training Scheme</td>
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<tr>
<td>MUFC</td>
<td>Manchester United Football Club</td>
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<tr>
<td>PR</td>
<td>Public Relations</td>
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<tr>
<td>PSI</td>
<td>Psychological Society of Ireland</td>
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<td>QE</td>
<td>Quiet Eye</td>
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<td>RPI</td>
<td>Rugby Players Ireland</td>
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<tr>
<td>USA</td>
<td>United States of America</td>
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<tr>
<td>USADA</td>
<td>United States Anti-Doping Agency</td>
</tr>
<tr>
<td>USSR</td>
<td>Union of Soviet Socialist Republics</td>
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<tr>
<td>VR</td>
<td>Virtual Reality</td>
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<td>WADA</td>
<td>World Anti-Doping Agency</td>
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<td>WiFi</td>
<td>Wireless</td>
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PART I

Introducing sport cyberpsychology
CASE STUDY 1

Patricia is an accredited sport psychologist working with an elite group of young golfers aged between 18 and 24 years. Patricia is preparing a session for these young golfers, to discuss their uses of technology as part of their training and competition routines for their sport. Patricia hopes this session will increase these players’ awareness of the role technology plays in both their sport and non-sport lives. Patricia will direct some of the discussion with these young golfers toward topics related to the potential psychological impact that various types of new technology within golf may have on these golfers’ performances.

(i) What new technologies could be important for Patricia to discuss during this session with these young golfers?

(ii) Identify some of the psychological issues that may arise for these golfers, as they discuss this topic on the impact of new technologies used as part of their preparations for their sport of golf?

(iii) How could Patricia ethically use the information the players share during this session to develop guidelines for other athletes in other sports she works in, on how they too might effectively manage their use of technology within and indeed outside of their sport environment so that it could facilitate rather than debilitate their performances?
1.1 Overview

This chapter introduces the disciplines of sport psychology and cyberpsychology to the reader. It explains, in brief, the historical pathways of both disciplines. It also presents a rationale for considering this new, combined area of sport cyberpsychology study that brings sport psychology and cyberpsychology together under one heading, in order to create an exciting area of research and applied focus for sport psychologists and cyberpsychologists alike.

1.2 Learning objectives

1. To introduce this new discipline of sport cyberpsychology
2. To identify and define key terms related to sport cyberpsychology
3. To provide brief histories of sport psychology and cyberpsychology
4. To highlight some key developments within these disciplines of sport psychology and cyberpsychology that have led to interest in sport cyberpsychology being considered as a new, worthy area of theoretical and practical psychological study in the future

1.3 Definitions of relevant terms

**Cyberpsychology**

The branch of psychology that examines how people interact with each other when using technology. It includes an examination of how technology developers might be able to create the best possible technologies in order to meet the needs and demands of their users (known as Human Computer Interaction, or HCI). How technology influences the behaviours and mental states of its users is also of interest to cyberpsychologists.

**Exercise psychology**

The study of mental processes and behaviours within exercise and health settings.

**Green exercise**

The study of how exercise activities completed outdoors, within natural environments, may benefit the health and well-being of participants.

**Performance psychology**

The study of psychological principles applied to the performances of individuals not typically referred to as athletes, but whose performances also include demanding physical and cognitive elements. Such performers include dancers, medical personnel (e.g., surgeons), members of the military and defence forces (e.g., police force and army personnel) as well as other emergency service specialists, such as firefighters and rescue workers.

**Sport cyberpsychology**

The proposed new study of human interaction with technologies, including the Internet, mobile phones, games consoles and virtual reality devices, specifically