

# Sport and Exercise Psychology

A CANADIAN PERSPECTIVE  
THIRD EDITION



EDITED BY Peter R.E. Crocker

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**EDITED BY PETER R.E. CROCKER**

UNIVERSITY OF BRITISH COLUMBIA

**PEARSON**

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# About the Editor

## Peter R.E. Crocker

**Dr. Peter Crocker** is a professor in the School of Kinesiology at the University of British Columbia (UBC) and is an associate member in health psychology in the Department of Psychology. His research focuses on stress and adaptation, with a particular interest in understanding sport, exercise, and health-related behaviour. Ongoing research includes investigating perfectionism, stress, and coping in athletes, self-compassion in sport, the link between physical self-perceptions and health behaviour, and the role of self-conscious emotions in motivation in physical activity settings.

Dr. Crocker is a two time president of the Canadian Society of Psychomotor Learning and Sport Psychology (SCAPPS) and a former section head for sport and exercise psychology in the Canadian Psychological Association. He has also been recognized as a Fellow in the Association of Applied Sport Psychology and SCAPPS. Actively involved as a reviewer for several scholarly journals and granting agencies, he is a former editor of *The Sport Psychologist*, a former associate editor for the *Journal of Sport & Exercise Psychology*, as well as an editorial board member of *Sport, Exercise, and Performance Psychology*. Dr. Crocker has also served as a consultant for athletes in gymnastics, volleyball, basketball, baseball, and soccer. He presently volunteers as a performance psychology consultant with the UBC golf teams. Dr. Crocker played competitive basketball and soccer as a youth and was also a soccer coach for several University and Provincial-select soccer teams.

Dr. Crocker completed an undergraduate degree in psychology and a Masters degree in Kinesiology from Simon Fraser University. His PhD, under the supervision of Dr. Rikk Alderman at the University of Alberta, focused on sport psychology and skill learning. He has taught previously at Lakehead University (1986–1990) and the University of Saskatchewan (1990–1999). In his leisure time, he struggles with golf and Scrabble® on the internet. He lives in Vancouver, B.C. with his wife Linda and has two adult children, Julisa and Douglas.



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**Dr. David Scott** is an associate professor of sport psychology in the Faculty of Kinesiology at the University of New Brunswick in Fredericton. He teaches and researches in the area of sport and exercise psychology, focusing primarily on performance enhancement, and physical activity and mental health. He has been a psychological consultant with a number of national teams in addition to working with teams in the National Hockey League.

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# Preface

Most people are familiar with the term “sport psychology” from popular media, which frequently refer to elite athletes working with sport psychologists to enhance performance. However, this is only a small part of sport and exercise psychology. Involving the study of psychological factors in physical activity settings, this field includes diverse areas, such as the mental health benefits of physical activity, motivation, aging well, group dynamics, leadership, the benefits of youth sport, effective coaching, emotional- and self-regulation, and body image, just to name a few.

Research and practice has a significant impact on the lives of exercisers, athletes, coaches, health professionals, and scholars in the field. Today, many Canadian scholars are recognized as world leaders in this research and practice, and their important work influences the lives of many involved in physical activity in Canada.

Developed for an introductory undergraduate course in sport and exercise psychology taught at Canadian institutions, the Third Edition of *Sport and Exercise Psychology: A Canadian Perspective* presents an overview of the discipline while building a solid foundation in core concepts.

## APPROACH AND PHILOSOPHY

Three unique features characterize this resource. First, Canadian scholars who are all active teachers of undergraduate sport and exercise psychology courses have written the chapters. Second, this resource illustrates important concepts by showcasing many Canadian examples. Third, the book not only highlights research by Canadian scholars, but also recognizes the contributions of distinguished academics around the world.

## NEW TO THE THIRD EDITION

Based on feedback from peer reviewers, educators, and authors, we made several changes to the Third Edition:

- Added a new chapter on body image, an important though seldom addressed topic
- Incorporated a new chapter on leadership, highlighting the processes and impact of effective leadership in sport and exercise
- Removed the research perspectives chapter, as this topic is covered in other courses
- Shifted critical ideas related to research and evidence-based practice to the introductory chapter
- Updated all chapters to reflect the latest developments in theory, research, and practice
- Increased the number of case studies
- Incorporated a new, fresh colour design to improve the resource’s visual appeal

## ORGANIZATION

The 15 chapters of this book present the key topics covered in a typical introductory course. While educators may wish to vary the sequence of coverage, we recommend covering the first six foundational chapters in order. Depending on the needs of specific courses, some educators may wish to cover psychological interventions (Chapter 7) before covering the chapters on group processes, leadership, aging, exercise and mental health, body image, and physical activity interventions.

**Chapter 1** provides an overview of the field. Topics include the diverse nature of sport and exercise psychology, differences in career orientations and educational training opportunities, a brief history of sport and exercise psychology in Canada and the world, ethics in sport and exercise psychology, and a basic primer in research methods and the importance of evidence-based practice. It concludes with predicted trends in the field.

**Chapter 2** examines personality perspectives in sport and exercise. It covers conceptions of personality, ethics related to measuring personality, and the limitations of personality in explaining athletic behaviour and performance as well as exercise behaviour. The chapter also emphasizes contemporary topics in sport and exercise personality, including the five-factor model, competitiveness, sensation-seeking, passion, perfectionism, and mental toughness.

**Chapter 3** focuses on models and principles of motivation and behavioural change in sport and exercise. It provides students with a brief review of behavioural, cognitive, and cognitive-behavioural principles. The number of theories and models of motivation applied to sport and exercise were reduced in accordance with reviewer feedback, but this chapter continues to cover the transtheoretical model, theory of planned behaviour, social cognitive theory, achievement goal theory, and self-determination theory. The chapter also discusses social approaches to motivation.

**Chapter 4** discusses stress, emotion, and coping in sport and exercise. The chapter emphasizes types of cognitive evaluations, types of coping, individual and group (team) level coping, and the relationship between appraisal, stress, and diverse emotions, such as anger, happiness, anxiety, and fear. Major modifications include increased emphasis on emotional regulation, neurophysiological effects of stress, coping effectiveness and outcomes, and intervention strategies.

**Chapter 5** concentrates on anxiety in sport and exercise. It defines types and dimensions of anxiety, personal sources of anxiety in sport and exercise settings, the specificity of anxiety to competitive and exercise settings, and how anxiety affects exercise and sport behaviour. Changes to this chapter include increased coverage of physiological arousal, the effects of the exercise environment on anxiety, and the phenomenon of choking in sport. It also explains how anxiety and arousal affect sport performance using three different models and theories, including inverted-U, zones of optimal functioning, and catastrophe theory.

**Chapter 6** focuses on moral development and aggression in sport. Important additions to this chapter include bullying and hazing, as well as fan violence. It reviews various perspectives on how youth learn moral behaviour in sport and the role of the environmental and personality factors, such as motivational climate, team and sport norms, and motivational orientation. Discussing key theories useful for understanding why athletes (and spectators) behave aggressively, this chapter also explores how personal, situational,

and group factors influence aggressive behaviour, while examining ways to reduce this type of conduct in sport.

**Chapter 7** discusses how to enhance performance and well-being in sporting populations. Addressing specific intervention techniques for arousal, cognitive, and emotional self-regulation, this chapter features many applied examples and exercises. Specific topics include relaxation procedures, psyching strategies, attention control, self-talk, imagery, performance profiling, goal setting, and mindfulness.

**Chapter 8**, a new chapter, explores the factors associated with leadership in sport and exercise settings. The chapter covers the various ways to study leadership, including personality, situational, and interactional approaches. Highlighting key processes of effective leadership within sport and exercise, this chapter focuses on transactional and transformational leadership styles and their application to various physical activity settings. It concludes with a list of best practices.

**Chapter 9** offers a comprehensive review of group cohesion in sport and exercise. Students will learn about group dynamics, group cohesion and its measurement, how and why cohesion affects behaviour in both sport and exercise settings, a conceptual model of cohesion, team-building concepts, the effects of hazing on cohesion, and important correlates of cohesion. The chapter also covers social loafing, self-handicapping, role clarity and acceptance, and leader behaviour.

**Chapter 10** describes the health and developmental benefits of youth sport participation. The chapter explains the potential outcomes of youth sport participation, principles of positive youth development, and how youth sport programs and types of activities lead to positive sport experiences. The Third Edition includes greater emphasis on how coaches, parents, and peers can influence the development of a child's competence, confidence, connection, and character.

**Chapter 11** discusses the complexity of coaching psychology. Describing the structure and process of coaching education in Canada, the chapter chronicles the steps to becoming an elite coach, the psychological factors involved in coaching, and the common characteristics and coaching principles of youth sport coaches. Additions to the chapter include a discussion of the 3 + 1 Cs model for studying the relationship between a coach and an athlete's emotions, behaviours, and cognitions.

**Chapter 12** covers the psychological factors related to sport and exercise in the older person. We included this chapter to acknowledge that many "older" Canadians are, and should be, involved in physical activity. Highlighting a wide range of issues—including the factors influencing sport and exercise involvement in this group, and the impact of societal perceptions of aging on physical and cognitive performance—this chapter offers strategies for increasing sport and exercise involvement in older adult populations.

**Chapter 13** explores the relationship between exercise and mental health. The chapter has been rewritten to distinguish between mental health and mental illness. Examining how and why physical activity might be an effective mental health promotion strategy, this chapter showcases evidence about how physical activity may perform a preventive function, a treatment function, a quality of life function, and a feel-good function for emotional well-being among healthy populations and those with existing mental or chronic illness. It also covers the different mechanisms that could explain the relationship between exercise and mental health, while providing a framework for understanding physical activity and mental health relationships.

**Chapter 14,** a new chapter on body image, details the multidimensional nature of body image and its link to motivated behaviour in sport and exercise. The chapter discusses key factors in the development of body image and the association between body image and mental health, emotions, stress, and cardiometabolic outcomes. Practical strategies are identified to help reduce negative body image and/or enhance positive body image in sport and exercise settings.

**Chapter 15** outlines exercise interventions and builds upon concepts from previous chapters related to exercise psychology while highlighting the means by which to increase physical activity in all populations. It describes how specific theories can be used to understand and enhance physical activity interventions, nontheoretical approaches to exercise intervention, the key components to increase the success rate of exercise interventions, and how exercise can enhance the lives of nonclinical and clinical populations. The chapter includes many practical guidelines about interventions to increase physical activity.

## PEDAGOGICAL FEATURES

We continue to employ the pedagogical features that facilitate learning and enhance understanding.

- **Learning Objectives.** A set of four to eight learning objectives provide a road map at the beginning of each chapter to help students read the material more effectively. The learning objectives also form the basis of the review questions found near the end of the chapter.
- **Vignette.** Each chapter begins with a scenario that raises issues and topics to be addressed in the chapter; many of the vignettes present actual real-world situations.
- **Common Myths.** Each chapter includes three to five common myths about the chapter's subject. We clarify and dispel each myth by presenting clear evidence to the contrary.
- **Key Terms in Margins.** Key terms are boldfaced where they are introduced in the text and appear in the margins with definitions, providing an effective way for students to engage with important terms and concepts.
- **Case Studies.** Case studies illustrate and exemplify key ideas and concepts.
- **Reflections Boxes.** Each chapter contains Reflections boxes that require students to consider how key concepts and ideas apply to their personal knowledge and experiences.
- **Canadian Examples.** Numerous Canadian examples support concepts, making the material more relevant to students studying at Canadian institutions.
- **Figures and Tables.** Diagrams, graphs, and tables illustrate and clarify important points.
- **Photos.** New and timely colour photos throughout the book feature athletes and participants in physical activity.
- **Weblinks.** References to many useful websites for sport and exercise psychology, advanced papers, scholarly organizations, and scholarly journals are included.
- **Chapter Summary.** A summary of the main points appears near the end of each chapter.
- **Review Questions.** A set of review questions requiring short answers help educators and students determine whether the learning objectives have been mastered.

- **Suggested Reading.** Each chapter concludes with a list of several readings for the interested student.
- **Glossary.** All the key terms are presented at the end of the text, organized by chapter, with full definitions.

## INSTRUCTOR RESOURCES

To aid instructors in presenting lectures, fostering class discussion, and administering examinations, we prepared the ancillaries outlined below. They are downloadable from a password-protected section of Pearson Canada's online catalogue, [catalogue.pearsoned.ca](http://catalogue.pearsoned.ca), from which you can navigate to your book's catalogue page. Contact your Pearson Canada sales representative for details and access.

- **Instructor's Manual.** The Instructor's Manual includes:
  - chapter overview
  - lecture outline
  - projects and assignments
  - case studies for class discussion
  - answers to review questions
  - discussion questions
- **PowerPoint® Slides.** Every chapter features a Microsoft PowerPoint® slide deck that highlights, illuminates, and builds on key concepts for your lecture or online delivery. Each deck can be tailored to suit individual requirements.
- **Computerized Test Bank.** Pearson's computerized test banks allow instructors to filter and select questions to create quizzes, tests, or homework. Instructors can revise questions or add their own, and they may be able to choose print or online options. These questions are also available in Microsoft Word format.
- **Image Library.** An Image Library provides access to many of the figures and tables in the textbook. Instructors can utilize these images for in-class presentations and lectures.

## COURSESMART FOR INSTRUCTORS

CourseSmart goes beyond traditional expectations—providing instant, online access to the textbooks and course materials you need at a lower cost for students. And even as students save money, you can save time and hassle with a digital eTextbook that allows you to search for the most relevant content at the very moment you need it. Whether it's evaluating textbooks or creating lecture notes to help students with difficult concepts, CourseSmart can make life a little easier. See how when you visit [www.coursesmart.com/instructors](http://www.coursesmart.com/instructors).

## PEARSON CUSTOM LIBRARY

For enrollments of at least 25 students, you can create your own textbook by choosing the chapters that best suit your own course needs. To begin building your custom text, visit

www.pearsoncustomlibrary.com. You may also work with a dedicated Pearson Custom Library editor to create your ideal text—publishing your own original content or mixing and matching Pearson content. Contact your local Pearson representative to get started.

## PEERSCHOLAR

Firmly grounded in published research, peerScholar is a powerful online pedagogical tool that helps develop students' critical and creative thinking skills through creation, evaluation, and reflection. Working in stages, students begin by submitting written assignments. peerScholar then circulates their work for others to review, a process that can be anonymous or not, depending on instructors' preferences. Students immediately receive peer feedback and evaluations, reinforcing their learning and driving development of higher-order thinking skills. Students can then resubmit revised work, again depending on instructors' preferences.

Contact your Pearson representative to learn more about peerScholar and the research behind it.



# Acknowledgments

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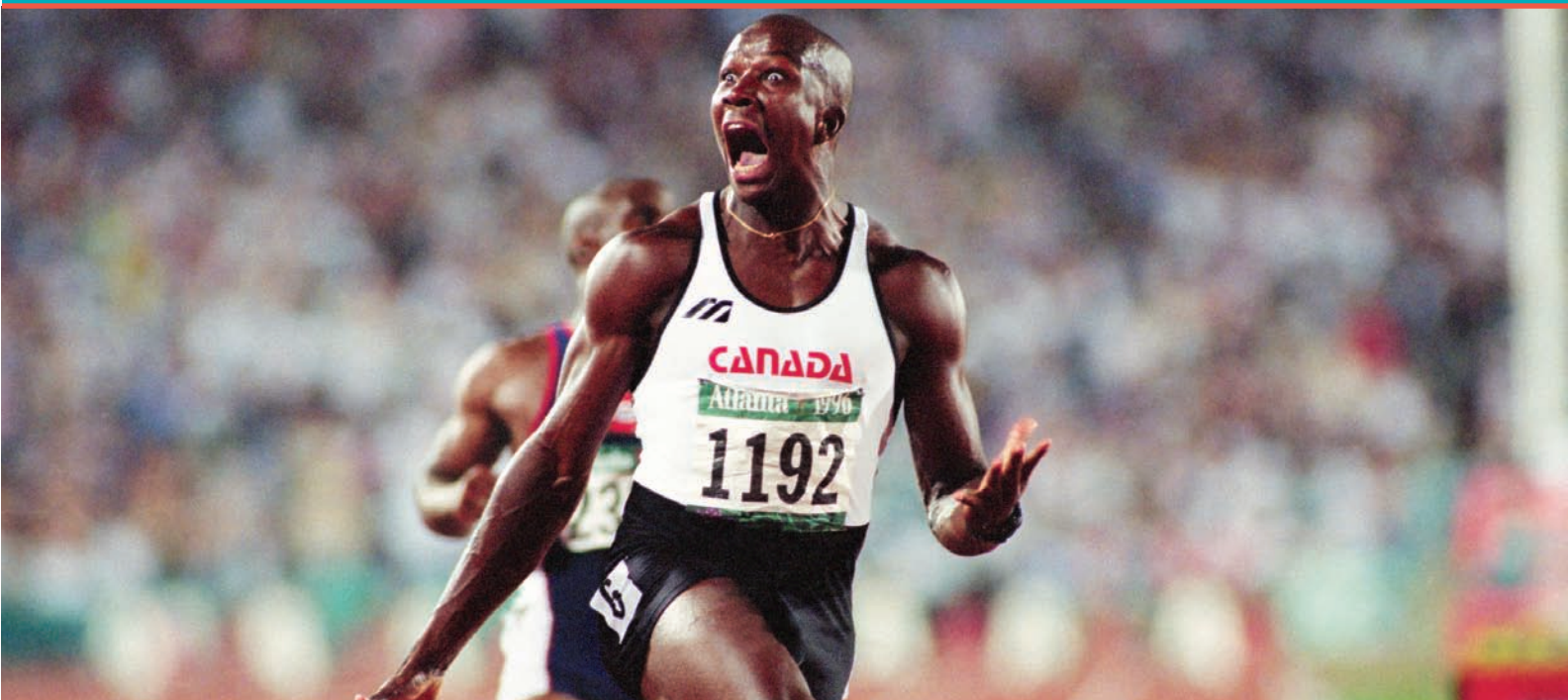
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Peter R.E. Crocker

# Chapter 1

## Introducing Sport and Exercise Psychology

Peter R. E. Crocker · David Scott · Melanie Gregg



Gilbert lundt/TempSport/Corbis Sports/Corbis

### Chapter Objectives

After reading this chapter, you should be able to do the following:

- 1 Explain what sport and exercise psychology is and what sport and exercise psychology specialists do.
- 2 Explain the differences between educational and clinical/counselling orientations in sport and exercise psychology.
- 3 List the diverse educational training opportunities in sport and exercise psychology.
- 4 Identify the basic standards of conduct and service in sport and exercise psychology.
- 5 Identify key moments in the history of sport and exercise psychology in Canada and the world.
- 6 Identify key concepts in sport and exercise psychology research.
- 7 Explain basic differences in quantitative and qualitative methods in sport and exercise psychology.
- 8 Describe future trends in sport and exercise psychology.

*Alex is a 16-year-old competitive soccer player hoping to make the transition to the provincial team. Unlike several of his teammates who specialized early in soccer, Alex played many different sports (hockey, tennis, and golf) until deciding in the last year to focus on soccer. Although a little behind his teammates in terms of technical skill, Alex is considered a mentally tough athlete who is highly motivated to become a better player at the highest levels.*

*Alex is struggling, however, to manage the stress of being both a top athlete and a student. He is concerned with teammates' pressure to bend the rules to ensure team success. His coach is also very demanding, and often tries to control Alex's behaviour both on and off the field. However, he feels the coach also helps by establishing clear group norms for acceptable behaviour. His parents are very supportive but they also stress the importance of education. The pressure to perform is leading Alex to experience increased anxiety and performance difficulties. Alex feels that he needs better psychological skills to meet all of his achievement goals.*

*Alex's mother faces different physical activity challenges in her life. Having recently turned 50, Christine would like to increase her activity levels to improve her health and fitness. She is worried about her long-term health profile, as both her parents died of heart attacks in their 60s. Christine was moderately active as a youth and young adult but the demands of career and child-raising derailed her exercise regimen. She remembers how regular exercise boosted her spirits and also enhanced her physical functioning.*

*Some of Christine's older friends tell her to "chill out" since women put on weight as they age, and exercise is for the young. Christine has identified several key barriers to exercise including lack of time and difficulty in getting to a gym, as well as anxiety about showing off her body in exercise settings. She has a very good friend, Dorothy, who would also like to become healthier. Both women have been thinking about exercising for the last few months but just cannot get started.*

*Alex and his mother decide that they could benefit from professional help. Through a registry established by the provincial Sport Medicine Council, Alex's parents are able to contact Dr. Coxen, a registered psychologist who specializes in sport. Dr. Coxen also uses the services of Dr. Lenny, a well known expert in exercise psychology and older adults. What can Dr. Coxen and Dr. Lenny do to help?*

The above vignette illustrates common situations that capture many elements of sport and exercise psychology. Alex's experiences involve personality, motivation, stress and coping, anxiety and performance, aggression and moral reasoning, group cohesion, coaching and parental leadership, and issues surrounding early specialization in sport. Christine's story reflects issues involving motivation, aging, body image, mental health, and physical activity interventions.

The vignette also highlights the services of qualified sport and exercise psychology consultants. To help Alex and his mother, a sport and exercise psychology consultant must have expertise in a number of areas informed by strong research. These areas include knowledge of how psychological factors may influence performance and motivation; knowledge about exercise adoption and adherence in older adults; knowledge of the technical, physical, and psychological demands of competitive sport; knowledge of assessment to determine the psychological skills of the athlete; knowledge related to motivational factors in exercise; and intervention skills to design

and implement an effective intervention for either Alex or his mother. Indeed, sport and exercise psychology consultants require knowledge and skills in many areas.

Are interventions related to performance enhancement or exercise adoption the only roles of sport and exercise psychology specialists in Canada? How does one become a sport and exercise psychology specialist? How does research help us understand the interrelationship between psychological factors and involvement in physical activity, and inform evidence-based practices of practitioners? In this chapter, we will discuss the various roles and training in sport and exercise psychology. As you will discover, sport and exercise psychology specialists work in a variety of settings, have a multiplicity of educational training opportunities, and possess varying competencies. There are also ethical standards that govern the application of sport and exercise psychology principles. Many of the practices and controversies in sport and exercise psychology were shaped by its history, a history unlike that of other fields in psychology. In this chapter, we will address many of these issues related to sport and exercise psychology. We will also provide a primer on basic research issues that can help students understand the role of research in providing insight into how personal and environmental factors influence participants' performance, thoughts, and emotions. But before we go any further, it is important to identify a few common myths about sport and exercise psychology. We will address these myths at the end of the chapter.



## COMMON MYTHS ABOUT SPORT AND EXERCISE PSYCHOLOGY

**MYTH:** Only athletes or exercisers with serious mental problems need a sport or exercise psychologist.

**MYTH:** All sport psychology specialists work with elite athletes to enhance their performance.

## INTRODUCTION

Canada has a great sporting history, with numerous athletes reaching the peak of performance in world championships, Olympics, Paralympics, and professional championships. Today, millions of Canadians are involved in organized sport. Beyond sport, there is recognition that participation in regular physical activity across the lifespan is important for physical and mental health. Sport and exercise are important elements of Canadian life. Physical activity experiences might involve running a 10-km Fun Run in British Columbia, playing hockey on an outdoor rink in the Prairies, canoeing the waterways of the Yukon or Quebec, working out in an exercise class in Winnipeg, engaging in a specialized activity session for people with spinal cord injuries in Hamilton, kayaking with whales in Newfoundland–Labrador, or competing in a golf tournament on the Highlands Links on Cape Breton Island.

Understanding sport and exercise involves many subdisciplines in the sport sciences, including sport and exercise psychology. Reflect on your own experiences of participating in and watching sports or exercise. How do we make sense of athletes who are unable

to concentrate or control anxiety in crucial situations, of acts of violence by parents at a children's sport event, and of athletes' feelings of joy or shame after events? What are the characteristics and behaviours of effective coaches? Why do some people seem to find it easy to be physically active, whereas others cannot even get started despite their best intentions? How do we answer even the seemingly simple question of why some people choose to participate in a specific physical activity? It is little wonder that people are interested in sport and exercise psychology.

Sport and exercise psychology is a legitimate scientific and applied discipline throughout the world and is an important component of the sport sciences in Canada. National accreditation standards identify sport and exercise psychology as a core discipline in undergraduate kinesiology and physical education programs ([www.ccupeka.ca](http://www.ccupeka.ca)). We will provide you with a clearer understanding about sport and exercise psychology, especially in Canada.

## THE NATURE OF SPORT AND EXERCISE PSYCHOLOGY

The term *sport and exercise psychology* means different things to various people in an array of situations. If you entered “definition of sport and exercise psychology” into an internet search engine, the results would reveal numerous definitions. Some definitions would emphasize sport science, some would emphasize performance enhancement, and still others would address psychological principles applied to physical activity settings. The reason for this inconsistency is that sport and exercise psychology has been shaped by theoretical and methodological influences of both kinesiology and psychology (Vealey, 2006). However, much of the research and practice in sport and exercise psychology is heavily dominated by theoretical perspectives that were developed in the general field of psychology.

In Canada, students can take sport and exercise psychology courses in most sport science programs (kinesiology, physical education, human kinetics). Most university professors in sport and exercise psychology also work in sport science programs. An increasing number of psychology programs are offering sport and exercise psychology courses at the undergraduate level. Sport and exercise psychology is recognized within both the Canadian Psychological Association (CPA) and the American Psychological Association (APA) Division 47. Sport and exercise psychology consultants have training in both sport sciences and psychology. Thus we believe that **sport and exercise psychology** is an interdisciplinary scientific and applied field that embraces the integration of sport science and psychological knowledge.

**Sport and exercise psychology:** An interdisciplinary scientific and applied field that embraces the integration of sport science and psychological knowledge.

## SPORT AND EXERCISE PSYCHOLOGY: A MULTIDIMENSIONAL PERSPECTIVE

Students might ask what makes sport and exercise psychology unique as a field of study and practice from other areas of psychology. Not only does it integrate both sport science and psychological knowledge, but it integrates many areas of psychology (Anshel, 2012). Many traditional and emerging disciplines within psychology continue to have an impact on sport and exercise psychology. These include, but are not restricted

to, cognitive psychology, clinical and counselling psychology, biological psychology, social psychology, developmental psychology, and health psychology. You will recognize the impact of many areas of psychology on sport and exercise psychology.

It should be recognized that all areas of psychology are influenced by developments in other academic disciplines, including computer science, sociology, medicine, education, family studies, and women's studies, to name a few. The search for knowledge regarding human challenges goes beyond arbitrarily defined academic boundaries. Think about a person trying to recover physical and social functioning following a stroke. Recovering, rediscovering, and redefining oneself will require integrating knowledge from many disciplines, including neurophysiology, exercise physiology and rehabilitation, exercise motivation, stress and emotion, social psychology, and counselling. Canadian researchers and practitioners are aware that many human health and wellness challenges require a transdisciplinary approach. Sport and exercise psychology specialists are well positioned to make a positive contribution to Canadian society.

## Positive Psychology in Sport and Exercise

There is a common belief that sport and exercise psychology focuses on abnormal or problematic behaviour—that is, that the field is driven by a medical model to reduce or eliminate pathological mental behaviours. Indeed, much has been made of how sport and exercise can be employed as an effective intervention with respect to certain psychological problems and their possible solutions. There can be little doubt that this has had important and positive consequences with regard to the growth of sport and exercise as a vehicle for bringing about improvements in quality of life. However, the question of what makes life worth living remains more elusive. What role does sport and exercise play with regard to general satisfaction and happiness with life? For example, does supporting a particular team or playing a specific sport allow people to thrive? Can sport and exercise contribute to an individual's self-acceptance, personal growth, purpose in life, and positive social relationships? What kinds of sporting and/or physical activities do people who are contented, satisfied, and fulfilled with everyday life participate in?

Recent years have seen renewed interest in the field of **positive psychology**, an area of psychology concerned primarily with understanding the processes that enable people and groups to thrive. Seligman (2002) criticized psychology (and much of his own earlier work) for focusing too much on mental illness and repair and not enough on the human side of strength and personal growth. This is not to say that studying phenomena such as anxiety or fear is not worthwhile; however, much can be learned from the positive aspects of life. Kobau and colleagues (2011), for example, have proposed that positive psychology be thought of as focusing on the more favourable attributes or strengths that an individual may possess, and Seligman and Csikszentmihalyi (2000) have suggested that positive psychology can be thought of as an examination of the subjective experience: well-being, satisfaction, fulfillment, pleasure, and happiness.

So how does positive psychology relate to sport and exercise? Much of the research in sport and exercise psychology is directed toward enhancing performance, social and physical well-being, and positive emotion. For example, adopting a positive psychology approach may have many benefits in the world of performance enhancement. Often, skill development and performance improvement is a slow, frustrating, and sometimes deflating process. The adoption of a mindset that encourages satisfaction, pleasure, and

### Positive psychology:

An area of psychology concerned primarily with understanding the processes that enable people and groups to thrive.

happiness often leads to resiliency and perseverance. Resiliency can be thought of as the process of positive adaptation in the context of adversity or risk (Masten & Reed, 2005), and positive psychology can strengthen psychological resilience through the development of skills based on avoiding thinking traps, staying calm and focused, and putting things in perspective (Lorig et al., 2000). The development of resiliency is important in the sport and exercise environment. It has been suggested by Ericsson and colleagues (1993) that it takes approximately 10,000 hours of deliberate practice to develop expert ability. This cannot be achieved without resiliency. Similarly, many of the benefits of exercise only occur over a sustained period of activity.

Positive psychology in sport and exercise can include emotional, cognitive, and behavioural intervention approaches (Park-Perin, 2013). Emotional methods can focus on positive emotional states such as joy, happiness, enjoyment, and satisfaction. Such states are important for motivation and well-being. Cognitive methods include examining how factors such as optimism influence moods, motivation, health, and performance (Park-Perin, 2013; Peterson & Seligman, 2004). Behavioural methods involve enhancing behavioural self-regulation strategies. One specific example is nurturing psychological strengths. Rather than trying to reduce weaknesses, this approach gets athletes to focus on their strengths to improve confidence and facilitate developing mental toughness (Gordon, 2012).

Many studies in sport and exercise psychology research are rooted in positive psychology. Research has focused on such topics as intrinsic motivation, confidence, enjoyment, satisfaction, positive psychological growth, team cohesion, effective leadership, mental well-being, goal-setting, self-compassion, challenge, and success. Even when exercise psychologists work with clinical conditions, such as spinal cord injuries, cancer, and cardiac rehabilitation, a major focus is related to enhancing well-being by increasing positive qualities like confidence, independence, social and physical functioning, and life satisfaction (Motl, 2013; Vallance et al., 2013).

Teaching is an important role for many sport and exercise psychology specialists.



John MacLeod

## Careers in Sport and Exercise Psychology

Many students want to know what career options are available in sport and exercise psychology, and what are the best academic pathways to these careers. These career options can be classified into three major areas: teaching, research, and consulting. We will briefly discuss each of these roles below.

**Teaching** In Canada and the United States, most sport and exercise psychology specialists are employed in universities and colleges and have a primary responsibility for teaching undergraduate and graduate courses. Courses may range from introductory sport and exercise psychology to more specialized courses such as applied sport psychology, mental training, motivational counselling, developmental and lifespan sport and exercise psychology, and behavioural medicine. Some sport and exercise psychologists also provide educational services to community and sport organizations. These teaching situations may involve increasing the awareness of sport and exercise psychology, teaching basic principles of sport and exercise psychology, helping athletes to develop and use psychological skills to enhance performance, or working with clients to enhance exercise behaviour and well-being (Cox, 1998).

**Research** A primary responsibility of sport and exercise psychology specialists working in universities is to advance knowledge. Through specialized training, researchers are able to design, conduct, and evaluate many research questions. Researchers in the areas of personality, motivation, anxiety, stress and coping, group cohesion, aggression and moral behaviour, youth sport, aging and physical activity, leadership and coaching, body image, exercise and mental health, and physical activity and sport psychology interventions seek to describe, predict, explain, and sometimes change cognition, emotion, and behaviour in physical activity settings. Research findings are presented at conferences and in refereed journals and books (see Tables 1.1 and 1.2 for lists of professional organizations and

**Table 1.1** Selected Sport and Exercise Psychology Professional Organizations

Canadian Society for Psychomotor Learning and Sport Psychology/Société Canadienne d'Apprentissage Psychomoteur et de Psychologie du Sport (SCAPPS)	<a href="http://www.scapps.org">www.scapps.org</a>
Canadian Sport Psychology Association (CSPA)	<a href="http://www.cspa-acps.ca">www.cspa-acps.ca</a>
International Society of Sport Psychology (ISSP)	<a href="http://www.issponline.org">www.issponline.org</a>
European Federation of Sport Psychology/Fédération Européenne de Psychologie des Sports et des Activités Corporelles (FEPSAC)	<a href="http://www.fepsac.com">www.fepsac.com</a>
Association for Applied Sport Psychology (AASP)	<a href="http://www.appliedsportpsych.org">www.appliedsportpsych.org</a>
American Psychological Association Division 47: Exercise and Sport Psychology	<a href="http://www.apa47.org">www.apa47.org</a>
North American Society for the Psychology of Sport and Physical Activity (NASPSA)	<a href="http://www.naspspa.org">www.naspspa.org</a>
Australian Psychological Society: College of Sport and Exercise Psychologists	<a href="http://www.groups.psychology.org.au/csep">www.groups.psychology.org.au/csep</a>



**Table 1.2** Representative Sport and Exercise Psychology Journals

<i>Journal of Sport &amp; Exercise Psychology</i>	<a href="http://www.humankinetics.com/JSEP">www.humankinetics.com/JSEP</a>
<i>Journal of Applied Sport Psychology</i>	<a href="http://www.tandfonline.com/toc/uasp20/U40-5Jj0gUU">www.tandfonline.com/toc/uasp20/U40-5Jj0gUU</a>
<i>The Sport Psychologist</i>	<a href="http://www.humankinetics.com/TSP">www.humankinetics.com/TSP</a>
<i>International Journal of Sport and Exercise Psychology</i>	<a href="http://www.tandfonline.com/toc/rijs20/U40-kJj0gUU">www.tandfonline.com/toc/rijs20/U40-kJj0gUU</a>
<i>International Journal of Sport Psychology</i>	<a href="http://www.ijsp-online.com">www.ijsp-online.com</a>
<i>Psychology of Sport and Exercise</i>	<a href="http://www.sciencedirect.com/science/journal/14690292">www.sciencedirect.com/science/journal/14690292</a>
<i>Journal of Sport Psychology in Action</i>	<a href="http://www.appliedsportpsych.org/publications/journal-of-sport-psychology-in-action">http://www.appliedsportpsych.org/publications/journal-of-sport-psychology-in-action</a>

journals, respectively). These presentations and publications allow scholars to engage in discussions and debates about the strengths and limitations of various theories, methods, and paradigms.

**Consulting** A third major role of the sport and exercise psychology specialist is to help individuals, teams, and organizations improve performance, change physical activity behaviour, manage sport and life demands, and enhance personal well-being. These specialists providing consulting services might be licensed sport psychologists, or might be individuals who have a strong knowledge of educational and psychological skills but are not formally licensed. The issues concerning who can provide sport and exercise psychology services and who can call themselves sport and exercise psychologists are discussed later in this chapter.

In Canada, many professional sport teams and national sport organizations employ sport psychology consultants. In the United States, many major universities have full-time consultants (Weinberg & Gould, 2011), but this is not the case in Canada. However, an increasing number of Canadian universities do use sport psychology consultants on a limited basis. There are also consultants working in the fitness industry, in rehabilitation settings, and progressively more in the business community (Anshel, 2012). In Canada, very few individuals make their living as full-time sport and exercise psychology consultants, however. Most sport and exercise psychology specialists combine sport consulting with university or college careers or psychological consulting in other areas.

Sport and exercise psychology consultants tend to play three general roles. Educational consultants typically teach people psychological skills to facilitate performance, increase exercise, and enhance well-being. Counselling consultants help people with developmental concerns, adjustment, and challenges (Petitpas, 1996). Clinical psychology consultants can assist clients in educational and counselling areas, but they also have special training in psychopathology. Of course, both counselling and clinical psychologists might also provide educational services in physical activity settings. We will discuss the specialized training required in the next section.



An increasing role of sport psychology specialists is as a consultant to athletes.

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## TRAINING TO BE A SPORT AND EXERCISE PSYCHOLOGY SPECIALIST

Since sport and exercise psychology is an interdisciplinary field, there are multiple career pathways. The training required to be a sport and exercise psychology specialist, however, is contentious and a source of constant debate. Silva (2002) noted that there was little controversy in the 1960s and 1970s since most sport and exercise psychology specialists were academically oriented. Now, an increasing number of students and academics are interested in applied sport and exercise psychology. However, working in applied settings requires a set of competencies different from that required in academic settings.

So what kind of training is required? Unfortunately, there is no easy answer! To a large extent, educational training depends on what career path a person chooses. There are multiple career tracks that combine teaching, research, performance enhancement, and the provision of clinical or counselling services. The APA provides some guidance on graduate training and career possibilities in exercise and sport psychology (<http://www.apadivisions.org/division-47/index.aspx>). For simplicity, we will briefly describe two general training orientations: (1) sport science education and (2) clinical and counselling sport and exercise psychology.

### Sport Science Education

In Canada, most sport and exercise psychology specialists work in university and college settings and thus require strong teaching and research skills. Typically, they are extensively trained in the sport sciences and in research methods and take additional