

Sport and Exercise Psychology

A CANADIAN PERSPECTIVE THIRD EDITION

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EDITED BY PETER R.E. CROCKER

UNIVERSITY OF BRITISH COLUMBIA

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About the Editor

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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.



About the Contributors

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Dr. Catherine Sabiston is an associate professor of exercise and health psychology in the Faculty of Kinesiology and Physical Education at the University of Toronto. Her research examines the interrelations among physical self-perceptions and body-related emotions, social influences, mental health, and physical activity motivation in diverse populations who tend to be at risk for low levels of physical activity, including breast cancer survivors, overweight and obese individuals, and adolescents.

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, 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.

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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

We would like to acknowledge all the contributors to this textbook. These individuals represent many of the scholars in sport and exercise psychology in Canada, and they have all made a special contribution. We would also like to recognize those instructors who provided us with formal reviews of parts of the manuscript. Their observations, ideas, and comments greatly improved the quality of all chapters.

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Peter R.E. Crocker

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A CANADIAN PERSPECTIVE THIRD EDITION

EDITED BY PETER R.E. CROCKER

UNIVERSITY OF BRITISH COLUMBIA

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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, 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.

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

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