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Eighth Edition

# Applied Sport Psychology

Personal Growth to Peak Performance

Jean M. Williams  
Vikki Krane



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Graw  
Hill

# APPLIED SPORT PSYCHOLOGY

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EIGHTH EDITION

# APPLIED SPORT PSYCHOLOGY

PERSONAL GROWTH TO PEAK PERFORMANCE

Jean M. Williams, Editor

*University of Arizona, Emeritus*

Vikki Krane, Editor

*Bowling Green State University*





## APPLIED SPORT PSYCHOLOGY: PERSONAL GROWTH TO PEAK PERFORMANCE

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## DEDICATION

We dedicate this eighth edition of *Applied Sport Psychology: Personal Growth to Peak Performance* to Ken Ravizza, who died July 9, 2018. Ken has been a contributor to the book since the first edition 35 years ago with his chapter, “Increasing Awareness for Sport Performance.” Ken was not only a pioneer in the field of applied sport psychology, but also a true giant who will be remembered as one of our greatest practitioners. He was a much sought-after consultant, having worked with numerous inter-collegiate athletic departments (e.g., Cal State Fullerton, UCLA, Texas, Nebraska, Harvard), Olympic teams (e.g., U.S. baseball, water polo, softball, figure skating), and professional teams (e.g., Anaheim Angels, New York Jets, Chicago Cubs, Tampa Bay Rays). Ken’s expertise in motivation, managing stress, developing mental skills, and team building also was requested by business groups, health care and school staffs, cancer patients, police officers, and physicians. Ken’s extensive and successful consulting activities are particularly remarkable considering that they occurred while he maintained a 40-year career as a distinguished professor at Cal State Fullerton, where he taught classes, mentored graduate students, and developed one of the best applied sport psychology programs in the country. Not surprisingly, Ken was also a dynamic, sought-after speaker. We fondly remember his presentations at AASP conferences where you knew you had to arrive early because, when Ken presented, the audience would end up “standing room only!”

What made Ken so special and such an outstanding professional? To answer that question, we

offer some quotes from colleagues who paid tribute to Ken after his passing:

*“... he received a Ph.D. in sport philosophy with an emphasis on existential philosophy/phenomenology. . . This training may have had a profound effect on how Ken approached his sport psychology consulting. He wanted performers to be in the moment and focus on what they needed to do.”*

—Penny McCullagh

*“His kindness, his wisdom, his sense of humor and his honesty were an amazing combination. Ken was probably the original mindfulness practitioner . . . the whole concept of BREATHE was part of his daily orientation with athletes and teams (BE HERE, BE PRESENT, FOLLOW YOUR BREATH).”*

—Gloria Balague

*“Ken was absolutely the best in our field at being innovative with coaches and athletes. He could give just enough without overstating the message.”*

—Rich Gordon

*“Ken had a special gift of reaching out and connecting with people on a genuine, authentic, interpersonal level . . . Ken intrinsically took interest in you as a person and wanted to learn as much as he could about your unique journey/story. He was the most compassionate, warm, sincere, heartfelt caring person I have ever known. A great listener who understood the importance of context in consulting, Ken was simply the best at bringing out the best in others.”*

—Dave Yukelson

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# PREFACE

Coaches and athletes have turned to applied sport psychology to gain a competitive edge—to learn, among other things, ways to manage competitive stress, control concentration, improve confidence, increase communication skills, and promote team harmony.

The first edition of *Applied Sport Psychology: Personal Growth to Peak Performance*, which was published in 1986, was one of the first books written specifically to introduce coaches and sport psychology consultants to psychological theories and techniques that could be used to enhance the performance and personal growth of sport participants from youth sport to elite levels. The book focused primarily on three dimensions: (a) techniques for developing and refining psychological skills to enhance performance and personal growth; (b) suggestions for establishing a learning and social environment that would enhance the effectiveness of coaches and maximize the skill and personal growth of athletes; and (c) special issues such as staleness and burnout, psychology of injury and injury rehabilitation, and retirement from athletics.

Later editions had the same focus but were expanded to cover more topics and to add a physical activity focus. New chapters were added on motivation, training youth sport coaches, improving communication, referring athletes for professional counseling, drug abuse in sport, cultural competence, and exercise psychology. The last chapter reflected the growing importance to applied sport psychology of understanding the psychological benefits and risks of exercise and the psychological and behavioral principles for enhancing exercise adoption and adherence.

## *New to This Edition*

The same important topics, focus, and organizational structure have been retained for this eighth edition, but the revision reflects the latest research, practice, and anecdotal examples in applied sport psychology. In this edition, we have added a new chapter on mindfulness. We also have taken new approaches to several of the topics. The coverage of building confidence and controlling concentration has been updated and extended. The chapter on doping, previously referred to as drug abuse, integrates new conceptualizations on this topic. The chapter on athletes' career transitions reflects more contemporary theoretical approaches to understanding shifts in athletes' focus and experiences during sport careers, as well as strategies to assist athletes going through transition periods. A new approach also has been taken in the coverage of exercise psychology, reflecting an identity approach to understanding exercise behaviors.

All of the chapters have updated reference lists and integrate the most recent research into the discussion of each topic. Also, throughout all of the chapters, new exercises and case studies have been added to help students think more critically about applied sport psychology and to apply the content to real-world situations. Current examples have been added to all chapters, as well as additional discussion of practical applications reflecting today's coaches and athletes.

Connect provides additional resources for instructors and has been updated coinciding with the eighth edition of the book. Visit Connect to find helpful materials such as a test bank of questions, PowerPoint presentations, student learning experiences. The

student learning experiences can assist instructors in bringing the content to life and applying it to real-life situations.

### ***Written Specifically for Sport Psychologists and Coaches***

Approximately 400 books have been published on mental skills for peak performance, but most of these books continue to be written primarily for the sport participant. Their coverage is not comprehensive enough for the sport psychology consultant or coach who needs to understand the rationale behind the psychological constructs and must know how to make application across a wide variety of situations and sport participants. Books written for sport psychology consultants and coaches are typically general textbooks that attempt to cover the entire field of sport psychology. Thus, their coverage of applied issues—and particularly psychological interventions for enhancing sport performance, personal growth, and exercise participation—is superficial compared to the in-depth coverage this text provides. Other applied textbooks do not have the comprehensive coverage of this book, the expertise of the diverse contributors, or as clear a presentation of the theories and research that provide the foundation for application.

### ***Based on the Latest Research and Practice***

The knowledge and experiential base in applied sport psychology, particularly for science-based interventions, has greatly expanded since the initial publication of this book. Each new edition has reflected the latest research and cutting-edge practice in applied sport psychology. Although the primary focus of the eighth edition continues to be on application, each chapter provides theoretical and research foundations when appropriate. When using the book as a textbook for a

graduate course, the instructor may want to supplement it with readings from the research studies cited by the contributors.

### ***Comprehensive Coverage of Topics***

No other text in applied sport psychology encompasses the comprehensive approach taken here. The first chapter discusses the past, present, and future of sport psychology. The remainder of the book is divided into four parts.

Part One covers learning, feedback, motivation, leadership, and social interactions that result in group cohesion and the development of effective groups and communication. For clarity and simplicity, some of these chapters have been written in the vernacular of the coach. These chapters are not only useful for coaches, however. Sport psychology consultants frequently find it necessary to work with coaches in areas such as improving communication skills, building team rapport, and fostering more effective leadership behaviors. Also, the same principles of learning, motivation, and social interaction that help to increase a coach's effectiveness apply to the sport psychology consultant teaching mental skills and interacting with athletes. Accordingly, the knowledge and insight gained from reading the chapters in Part Two are as appropriate for current and prospective sport psychology consultants as they are for coaches.

Part Two of the book discusses mental training for enhancing performance. This section begins with a chapter on the psychological characteristics of peak performance; other chapters discuss identifying ideal performance states, setting and achieving goals, managing stress and energy levels, training in imagery, identifying optimal concentration and learning how to control it, building confidence, and teaching mindfulness. Part Three deals with implementing training programs. The first chapter provides suggestions for integrating and implementing a psychological skills training program. The second

chapter provides guidance on how to conduct sport psychology training programs with coaches. The final chapter provides guidance and suggestions for achieving cultural competence.

Part Four focuses on enhancing health and wellness. It contains chapters that address when sport competitors should be referred to other helping professionals, causes and interventions for doping in sport, the occurrence and prevention of burnout, injury risk and rehabilitation, transitions in sport careers, and the psychological benefits of exercise, as well as interventions to increase exercise adoption and adherence. No sport psychology book has dealt with all of these issues, even though they are crucial to sport performance, personal development, and the enhancement of sport and exercise participation and benefits.

The appropriateness of these chapters for certain courses will depend on the students' backgrounds and interests. The book was planned to provide complete coverage of psychological theories, techniques, and issues relevant to enhancing personal growth, sport performance, and exercise participation. Instructors may select those chapters that are appropriate for their courses. For example, Chapters 2 and 3 concern motor skills learning and principles of reinforcement and feedback; this material might be redundant if students already have a thorough background in motor learning. Chapter 23, on sport transitions, may interest only individuals who work with athletes facing transition.

### ***Written by Leading Experts in Sport Psychology***

The contributors to this volume are leading scholars and practitioners in sport and exercise psychology. They work with physically active people from youth sport to Olympic and professional levels, and many have illustrious backgrounds as elite athletes or coaches.

### ***Integrated Organization and Writing Style***

The book has the major advantage of drawing on the diverse expertise and perspectives of 44 contributors, but it avoids the common disadvantage of disparate coverage and diverse writing styles frequently found in edited textbooks. The content and sequencing of chapters have been carefully coordinated to ensure comprehensive coverage and progressive development of concepts while eliminating undesirable overlap and inconsistency in terminology. Writing focus, styles, and organization have been standardized as much as possible. In addition, many of the chapters in this edition have been rewritten for even greater clarity and succinctness. Each chapter cites appropriate research and theory, applies this work to the world of sport and/or exercise, and provides examples and intervention exercises whenever appropriate. Each chapter also begins with an introduction that highlights the content of the chapter and ends with a conclusion or summary of the major psychological constructs and skills and study questions for students.

### ***Application Examples and Teaching Resources***

The numerous examples given throughout the book greatly facilitate the translation of psychological theory and constructs into everyday practice. Many of the examples involve well-known professional and amateur sportspeople. The examples cut across a wide variety of sports and provide important anecdotal evidence that can be used to motivate individuals to develop psychological and behavioral skills for their sport and exercise participation. These real-life examples are frequently supplemented with hypothetical examples, exercises, and case studies created by the contributors to clarify appropriate applications.



To further provide an optimal learning environment for students, instructors can visit Connect for more resources. SmartBook® 2.0, chapter lecture PowerPoints, an objective test bank, and student learning experiences are available.

### *Applied Sport Psychology Provides Many Benefits*

The rewards are many for those who choose to dedicate themselves to the pursuit of excellence and personal growth through use of the theories and techniques of applied sport and exercise psychology. Coaches and sport participants acknowledge the importance of mental factors in sport development and performance, yet the time individuals actually spend practicing mental skills belies this view. In publishing this book, we have made a serious effort to help abolish that inconsistency by supplying not only the necessary knowledge to improve performance but also the knowledge to improve the psychological

climate of a sport program. The benefits that can be derived from this text will arise not just in sport performance but in overall performance outside of sport and, perhaps most important, in general personal growth and increased physical and mental health.

### *Acknowledgments*

We thank Mallory Mann and Alan Kornspan for their help in updating the supplemental materials. We also are indebted to the fine editorial staff at McGraw-Hill, most particularly we thank Erika Lo, our product developer, for her efficiency and thoroughness during the development of this edition. Finally, we would like to thank Katie Roman, our development editor, Rajendra Singh Bisht, our project manager, and Lisa McCoy, our freelance copy-editor, for their attention to detail and guidance during the production process.

*Jean M. Williams & Vikki Krane*

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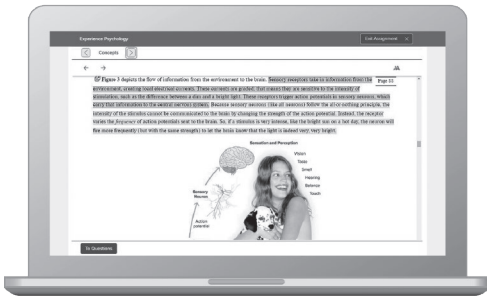
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- Jordan Cunningham,  
Eastern Washington University



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# CHAPTER

# 1

## Sport Psychology: Past, Present, Future

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Scholars and professionals in the field of **sport psychology** study motivation, leadership, group dynamics, exercise and psychological well-being, performers' thoughts and feelings, and many other dimensions of participation in sport and physical activity. Among other functions, today, those trained in sport psychology teach classes; conduct research; and consult with athletes, coaches, and exercise participants to improve performance and enhance the quality of the sport and exercise experience.

Coaches showed interest in the psychological aspects of athletic competition even before there was a science called sport psychology. For example, in the 1920s, Knute Rockne, the football coach of the Fighting Irish of Notre Dame, popularized the pep talk by making it an important part of his coaching. We should note, however, that Rockne did not attempt to psych up his team for every contest and that sport psychology involves more than a mere concern for psyching up athletes for competition.

**Applied sport psychology** is concerned with the psychological factors that influence participation and performance in sport and exercise; the psychological effects derived from participation; and theories and interventions that can be used to enhance performance, participation, and personal growth. Applied sport psychology has grown tremendously in recent years, as evidenced by the number of coaches and athletes now looking to sport psychology for a competitive edge. It now is common to hear of professional athletes or Olympic teams who work with a sport psychology consultant. For example, these individuals use various psychological training programs to learn performance enhancement strategies that help them manage competitive stress, control concentration, improve confidence, and increase communication skills and team cohesion. There are many specific intervention goals in sport and exercise settings. What follows are a few situations in which sport psychology interventions have helped individuals in a variety of professions.

### **Applied sport and exercise psychology in action**

*At the 2014 Sochi Olympic Games, Team USA Women's Ice Hockey lost the gold medal in a 3–2 sudden death after being favored to win. To overcome this disappointment and prepare for the 2018 PyeongChang Olympic Games, individually and collectively they implemented mental skills training to improve their mental toughness as they once again faced, and conquered, the pressure of being a gold medal favorite.*

*Connecticut 2017 physical educator of the year, Abigail Wrinn, created a mastery motivational climate in her middle-school physical education classes to improve student interest and engagement in physical activity.*

*NBA players Kevin Love, DeMar DeRozan, and Jahlil Okafor have reported anxiety and mood issues that have affected their performance and personal fulfillment. The NBA partnered with sport psychology experts in mindfulness training to address the mental health of athletes.*

*The U.S. military integrates mental skills (e.g., attentional control, energy management, and imagery) simulations during training sessions to improve physical skills such as rappelling and rifle accuracy.*

*The Centers for Disease Control and Prevention identified goal-setting as one of the strategies to increase physical activity in communities. Fitness experts can implement mental skills training to help sedentary people initiate and adhere to exercise programs.*

*Four-time Olympian Shalane Flanagan became the first American woman to win the New York City Marathon (2017) in four decades. Earlier that year, Shalane used mental skills training to help her focus on the positives and reduce her fear of reinjury after*

*a stress fracture limited her running for ten weeks leading up to the marathon.*

*Former high school coach and Positive Coaching Alliance founder, Jim Thompson, used imagery with his basketball players throughout the season to help them prepare for games and recover from errors.*

The authors of subsequent chapters will present psychological principles and interventions that can be used to enhance performance, personal growth, and health. These principles and interventions provide the foundation for effectively dealing with the preceding situations, as well as many others that athletes, coaches, sport psychology consultants, athletic trainers, fitness trainers, and physical educators might encounter. But first, in this chapter we will provide a brief overview of the past, present, and future of sport psychology, with a primary emphasis on sport psychology practices in North America. The coverage is intentionally selective to the focus of the book. For a more comprehensive historical overview, see Landers (1995) and Vealey (2006).

### ***History of Sport Psychology***

The conceptual roots of sport psychology lie in antiquity (Mahoney, 1989). For example, in early Greek and Asian cultures, the interdependence of mind and body was not only acknowledged but also was emphasized as central to both performance and personal development. However, most of the scientific foundation of modern sport psychology has developed since the 1970s. The roots for the emergence and acceptance of sport psychology as a discipline lie largely within the domain of kinesiology (the study of human movement), but developments in psychology also played a major role in its evolution, and psychologists conducted some of the early influential sport psychology investigations. It is important to recognize that the foundation of

sport psychology is multidisciplinary. Scholars and practitioners in psychology, motor learning, exercise science, and other disciplines have contributed to and advanced the knowledge base.

Coleman Griffith, a psychologist, considered by many to be the grandfather of sport psychology in North America, was the first person to research sport psychology over an extended period and then to apply it to enhance the performance of athletes and coaches (Gould & Pick, 1995). Griffith was hired by the University of Illinois in 1925 to help coaches improve athletes' performance. He wrote two books, *Psychology of Coaching* (1926) and *Psychology of Athletics* (1928); established the first sport psychology laboratory in North America; published over 40 articles (half dealt with sport psychology); and taught the first courses in sport psychology. Griffith also corresponded with Notre Dame coach Rockne about psychological aspects of coaching, and was hired in 1938 to consult with the Chicago Cubs baseball team. We also should credit Carl Diem in Berlin and A. Z. Puni in Leningrad (now St. Petersburg) for establishing sport psychology laboratories in Europe about this same time.

Another pioneer practitioner and researcher from this historical era was Dorothy Yates (Kornspan & MacCracken, 2001). She taught at Stanford and San Jose State College and had a private practice in psychology. Yates wrote two books (1932, 1957) and a research article (1943) describing her mental training interventions with boxers and aviators. The interventions focused on mental preparation, particularly a relaxation set-method. Because of her success, she was asked in 1942 to develop a psychology course at San Jose State University for athletes and aviators. Some of her students became aviators flying during World War II, and letters from them testified to the effectiveness of her work and teaching.

Unfortunately, the pioneering efforts in sport psychology by Griffith and Yates were not immediately followed in any systematic way; therefore, no recognizable discipline of sport and exercise psychology was established in the 1930s and 1940s (Vealey, 2006). Although Alfred Hubbard, in 1951, reinstated the

sport psychology lab Griffith started at the University of Illinois (Kornspan, 2013), very little writing occurred in sport psychology through the 1960s except for occasional research studies that were, according to Landers (1995), typically atheoretical, unsystematic, and laboratory based. During this time, one book was published, *Psychology of Coaching* (1951) by John Lawther, a psychologist who also headed the Pennsylvania State University basketball team. Coaches were particularly interested in Lawther's treatment of such topics as motivation, team cohesion, personality, emotions, and handling athletes.

Unlike the more recent development of sport psychology in North America, the former Iron Curtain countries of Eastern Europe have a long history of researching and implementing the applied aspects of sport psychology, specifically focused on enhancing elite athletes' performance. Because in these countries sport excellence was perceived as an important propaganda tool in advancing the community political system, sport psychology was a highly esteemed academic and professional field that received considerable state support and acceptance. Sport psychology consultants were viewed as central figures in facilitating athletes' quest for excellence; so, in some nations, consultants were awarded the title of academician, a title that elevated the recipient to the level of a national hero.

The first interest in sport psychology in Eastern Europe can be traced to a physician, Dr. P. F. Lesgaft, who in 1901 described the possible psychological benefits of physical activity (Vanek & Cratty, 1970), and in the early 1920s, Puni and Rudik published the first research articles. The beginning of sport psychology also can be traced to the Institutes for Physical Culture in Moscow and Leningrad, which were established in the 1920s. The Soviet space program further sparked extensive investment in athletic research in the 1950s (Garfield & Bennett, 1984). Russian scientists successfully explored the use of ancient yogic techniques to teach cosmonauts to control psychophysiological processes in space. **Self-regulation training** or **psychic self-regulation** was used to voluntarily control such bodily functions as heart rate, temperature, and muscle

tension, as well as emotional reactions to stressful situations, such as zero gravity. About 20 years later, as Kurt Tittel, then director of the Leipzig Institute of Sports (a 14-acre sport laboratory that during the 1970s employed 900 people, over half of whom were scientists), explained, new training methods similar to psychic self-regulation were responsible for the impressive victories by East German and Soviet athletes during the 1976 Olympics (Garfield & Bennett, 1984). The exact training techniques remain vague; however, a book by a Russian sport psychology consultant indicates that autogenic training, visualization, and autoconditioning (self-hypnosis) were key components (Raiport, 1988).

Most of the Eastern European sport institutes where athletes trained had teams of sport psychology consultants. For example, on a visit to a major sport institute in Bucharest, Romania, Salmela (1984) reported meeting with a team of eight sport psychology scholars and consultants. In contrast, in North America, one or two people comprised the average faculty size. Greater government control limited the scope of sport psychology research in Eastern European countries, but large-scale, government-dictated research did have advantages such as the fact that all Eastern European countries implemented as many as 30 hours of training in self-control for elite athletes (Salmela, 1984). Because of its government-funded research and widespread integration of sophisticated mental training programs, many authorities believed Eastern Europe was ahead of the rest of the world in the development and implementation of applied sport psychology.

### ***1965–1979: Birth of Sport Psychology and Supporting Organizations***

During the 1960s, San Jose State University clinical psychologists Bruce Ogilvie and Tom Tutko (1966) created considerable interest in sport psychology with their research, which culminated in *Problem Athletes and How to Handle Them*. According to

Ogilvie, this book “moved the coaching world off dead center.” After extensively researching the personality of athletes, Ogilvie and Tutko developed the controversial Athletic Motivation Inventory, which they claimed predicted success and problems in athletes. In actuality, sport is so complex that no inventory can predict performance. For example, they advised one football team not to draft a highly successful college player because he did not have what it would take mentally to make it in the pros. The player went to another team and earned the Rookie of the Year award. Despite legitimate criticism of their prediction claims (see Fisher, Ryan, & Martens, 1976), Ogilvie and Tutko’s considerable consulting with college and professional teams fostered public interest in applied sport psychology. Because of Ogilvie’s numerous contributions in the 1960s and beyond, many in the field consider him the father of applied sport psychology in North America.

### **Establishment of Professional Organizations**

The 1960s also witnessed the first efforts to bring together groups of individuals interested in sport psychology. José Maria Cagigal, Ferruccio Antonelli, Jose Ferrera-Hombravella, and Michel Bouet met at the third Congress of the Latin Group of Sports Medicine (1963) and discussed the idea of organizing an International Congress dedicated entirely to sport psychology (Ceï & Serpa, 2018). Then, in 1965, the International Society of Sport Psychology (ISSP) was formed and held the First World Congress of Sport Psychology, which is widely regarded as the first worldwide gathering of sport psychology professionals. More than 500 experts representing 40 countries (Ceï & Serpa, 2018) attended, and Ferruccio Antonelli, an Italian psychiatrist, was elected the first president of the organization. ISSP continues to host worldwide meetings.

The second meeting of ISSP was held in 1968 in Washington, DC, hosted by the newly formed North American Society for the Psychology of Sport and Physical Activity (NASPSPA). Prior to that, the first meeting of NASPSPA was held in 1967 preceding the

American Alliance for Health, Physical Education, Recreation, and Dance (AAHPERD) conference in Las Vegas, Nevada. Arthur Slatter-Hammel of Indiana University was the first president. NASPSPA hosts annual meetings that focus on research in the areas of motor learning and control, motor development, and sport and exercise psychology.

The late 1960s also saw the formation of the Canadian Society for Psychomotor Learning and Sport Psychology (referred to as SCAPPS to reflect the French translation of the name). Founded by Robert Wilberg at the University of Alberta in 1969, SCAPPS was initially under the auspices of the Canadian Association for Health, Physical Education, and Recreation, but it became independent in 1977. The members and leaders of NASPSPA and SCAPPS were influential in building the research base in sport psychology and gaining acceptance of the field. During this same period, the equivalent can be said within Europe for sport psychology professionals who, in 1969, created the European Federation of Sport Psychology (FEPSAC) and elected Ema Geron (then from Bulgaria, now Israel) as its first president.

The growth and acceptance of sport psychology within organizations continued in the 1970s, when it was added to the conference programs of the American College of Sports Medicine (ACSM) and AAHPERD. The Sport Psychology Academy, formed within AAHPERD in 1975, was the first group for which a major goal was to bridge the gap between the researcher and practitioner by providing an opportunity for scholars in sport psychology to share their research and expertise with coaches and physical education teachers.

### **Recognition Through a Knowledge Base**

In the 1970s, sport psychology in North America began to flourish and receive recognition within kinesiology as a subdiscipline separate from motor learning. Dorothy Harris, an early pioneer in U.S. applied sport psychology, started the first graduate sport psychology specialization at Pennsylvania State University in 1966 (Gill, 1995). As the

foundation of sport and exercise psychology as an academic subdiscipline solidified, systematic research by ever-increasing numbers of sport psychology scholars played a major role. In fact, the primary goal of sport psychology professionals in the 1970s was to gain acceptance for the field by advancing the knowledge base through positivist framed, experimental research (largely lab based). At this time, there was little agreement as to an appropriate knowledge base for the field; research topics were varied and involved many target populations, and most of the scholarship in this era was directed toward social psychological topics (e.g., personality, social facilitation, achievement motivation, competitive anxiety, team cohesion, coach behaviors, coach-athlete relations).

The earlier interest in personality research declined in the mid-1970s because of heated debates about the validity of personality traits and the inventories used to assess them, most of which came from mainstream psychology. Many sport psychology scholars and consultants continued to believe that internal mechanisms (i.e., traits) govern behavior, but also became concerned about the influence of environmental variables. The **interactionism paradigm**, which considers person and environmental variables and their potential interaction, surfaced and gained considerable credibility. Although not as extensive, research also began to focus on two other areas: the study of women in sport from a feminist perspective, largely due to a conference hosted by Dorothy Harris (1972) and a book published by Carole Oglesby (1978), and exercise psychology, largely through Bill Morgan's research into exercise, fitness, and well-being. The growing volume of quality research in the 1970s led to the establishment of the first journal in the field, *Journal of Sport Psychology*, in 1979.

### **Discouragement of Applied Work**

In addition, we should mention that applied sport psychology work was discouraged during the 1970s. Some of the negativity toward what was perceived as premature application came from the



bad publicity of Arnold Mandel's work with the San Diego Chargers. Mandel was a psychiatrist who was hired in 1973 to enhance performance, but an offshoot of his work was the discovery that many professional football players were taking steroids and speed (an illegal stimulant) purchased on the street. Mandel wrote them prescriptions for the drugs in an effort to get them off uncontrolled substances. Management would not acknowledge the drug problem or help him resolve it. As described in *The Nightmare Season* (Mandel, 1976), Mandel was banned by court order from further contact with players and not allowed within a certain geographical radius of the stadium.

Instead of forays into application, many in the field felt sport psychology would be better served by first developing a research foundation upon which interventions might be based. This goal influenced some of the research during the 1970s and even more of the research in the 1980s (which continues today). It also contributed to the scholarly focus in the late 1970s and early 1980s on cognition (see the next section), which is particularly relevant to applied concerns.

### ***The 1980s: Increased Research, Professional Growth, and Acceptance***

In the 1980s, the emphasis on scientific credibility, including the development of a sufficient scholarly foundation to justify the practice of sport psychology, grew tremendously. Also during this time, sport psychology interventions were implemented in systematic ways (Vealey, 2006). That, in turn, led to increased consulting with athletes and recognition of important professional issues.

#### **Research**

Perhaps the best reflection of the quality and volume of work in any academic area is the number of research journals devoted strictly to the discipline. By the 1980s, there were four sport psychology

journals (see Table 1-1). Much of the research published in these journals was driven by cognitive theories from psychology and the desire to test their applicability within sport and exercise settings (e.g., self-efficacy, motivational orientations, competence motivation, outcome attributions) and by topics of relevance to potential performance enhancement interventions (e.g., athletes' thoughts, images, and attention control). William Straub and Jean Williams' (1984) book *Cognitive Sport Psychology* propelled research in this area, supporting the need for attention to cognitive interventions in sport psychology.

Rainer Martens's 1979 article, *About Smocks and Jocks*, spawned an increase in field research. Martens chided the field for largely conducting laboratory-based research when more relevant questions and findings could result from field research. This focus on field research spurred more and better applied questions and results. Field research has been conducted on topics such as identifying effective coaching behaviors; discovering ways to enhance team cohesion and coach-athlete communication; goal-setting techniques; determining psychological characteristics of successful performers; and developing psychological and behavioral interventions for enhancing performance, personal growth, and exercise participation. Following this increase in empirical research, Deborah Feltz and Dan Landers (1983) published the first meta-analysis in the field, examining 60 studies revealing mental practice can influence performance (Krane & Whaley, 2010).

Two other important research developments occurred during the 1980s. One was better documentation of the effectiveness of psychological interventions at enhancing performance (see the meta-analysis by Greenspan and Feltz, 1989, for examples of research from this era). The second was increased attention to exercise and health psychology issues, such as the psychological effects of exercise, overtraining, factors influencing participation and adherence to exercise programs, exercise addiction, the relationship of exercise to

Table 1-1 **Timeline for the Establishment of Professional Organizations and Journals\***


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1965	International Society for Psychology of Sport (ISSP)
1967	North American Society for the Psychology of Sport and Physical Activity (NASPSPA)
1969	Canadian Society for Psychomotor Learning and Sport Psychology (SCAPPS)
1969	European Federation of Sport Psychology (FEPSAC)
1970	<i>International Journal of Sport Psychology</i> (ISSP)
1975	Sport Psychology Academy (SPA) added to AAHPERD
1979	<i>Journal of Sport and Exercise Psychology</i> (NASPSPA) (its name was <i>Journal of Sport Psychology</i> prior to 1988)
1985	Association for Applied Sport Psychology (AASP) (its name was the Association for the Advancement of Applied Sport Psychology prior to 2006)
1987	Division 47 (Society for Sport, Exercise, and Performance Psychology) of the American Psychological Association (APA)
1987	<i>The Sport Psychologist</i>
1989	<i>Journal of Applied Sport Psychology</i> (AASP)
2000	<i>Psychology of Sport and Exercise</i> (FEPSAC)
2003	<i>International Journal of Sport and Exercise Psychology</i>
2007	<i>Journal of Clinical Sport Psychology</i>
2008	<i>International Review of Sport and Exercise Psychology</i> (ISSP)
2010	<i>Journal of Sport Psychology in Action</i> (AASP)
2012	<i>Sport, Exercise, and Performance Psychology</i> (APA Division 47)
2017	<i>Case Studies in Sport and Exercise Psychology</i> (AASP)

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\*Initials in parentheses after journals indicate sponsoring organization.

stress reactivity, and the psychology of injury and injury rehabilitation (see Chapters 23 and 25). These advancements resulted in a distinct knowledge base for applied work to enhance athletes' performance and the domains of exercise and health psychology.

***Sport psychology, Olympic and professional sport.*** During the late 1980s and early 1990s, state support for sport psychology substantially declined in Eastern European countries due to the fall of communist control (Kantor & Ryzonkin, 1993). In contrast, there was considerable growth and recognition of the value of sport psychology interventions in North America. In particular, sport psychology professionals working with athletes, especially

Olympic athletes, led to increased publicity for the field. Some of this work began in the 1970s, such as Richard Suinn working with the U.S. Nordic ski and biathlon teams. Sport psychology consulting became more systematic with U.S. teams when, in 1983, the United States Olympic Committee (USOC) established an official Sport Psychology Committee and a registry of qualified sport psychology consultants approved to work with U.S. Olympic teams. For example, in the 1984 Olympic Games, Betty Wenz and Robert Nideffer served as mental skills coaches for Team USA (Granito, 2002). In 1985, the USOC hired Shane Murphy, its first full-time sport psychology consultant. As a result of the USOC's development of its sport psychology program, sport psychology consultants

played an increasingly prominent and visible role in the Olympics (see Suinn, 1985, and *The Sport Psychologist*, no. 4, 1989). In professional sport, Ken Ravizza began working as a sport psychology consultant with the Major League Baseball team the Los Angeles Angels in 1985.

Televised and written coverage of various sport psychology topics and interventions with Olympic athletes also created considerable interest among professionals and laypersons. Involvement by sport psychology consultants in the Olympic movement (see *Journal of Sport Psychology in Action*, no. 2, 2012) and on the professional and intercollegiate levels continues to grow.

**Professional issues.** The growing use of sport psychology consultants during the 1980s led to important professional issues, such as: Is there an adequate scientific base for the practice of sport psychology? What kinds of services should be offered? Who is qualified to provide these services? Beginning with an article by Robert Harrison and Deborah Feltz (1979) on the professionalization of the field, almost 20 articles debating these issues were published in sport psychology journals during the 1980s. In reference to the second question, an article by Danish, Petitpas, and Hale (1981) was particularly influential. They advocated a human development and educational approach (e.g., teaching mental skills) for sport psychology interventions, as opposed to the clinical and remedial model of correcting problems typically found in clinical psychology. This early clarification and distinction stemmed partly from tensions between sport psychology practitioners trained in kinesiology-based versus clinical psychology-based academic programs. Though the interdisciplinary foundation of sport psychology is a strength, providing multiple approaches and strategies for interventions in sport and exercise, the tension between education and training in psychology or kinesiology has been evident since Rainer Martens publicly challenged psychologists Ogilvie and Tutko about their personality trait inventory. This debate gained steam again

in the 1980s and continues today, particularly in North America, as certification standards and graduate education curricula in sport psychology are established and refined.

**Formation of professional organizations.** One important applied development during the 1980s was the formation in 1985 of the Association for Applied Sport Psychology (AASP, known as the Association for the Advancement of Applied Sport Psychology prior to 2006) with 143 charter members. John Silva played the primary role in forming AASP and served as its first president, and Jean Williams, who later served as the first female president of AASP (1993), had an integral role in its development (Krane & Whaley, 2010). The original purpose of AASP was to promote applied research in the areas of social, health, and performance enhancement psychology; the appropriate application of these research findings; and the examination of professional issues such as ethical standards, qualifications for becoming a sport psychology consultant, and certification of sport psychology consultants. Another objective was to promote the field of sport psychology within mainstream psychology. Prior to this time, relatively few people from psychology were involved in sport psychology.

In 1987 the American Psychological Association (APA) officially recognized a sport and exercise psychology division, Division 47. Bill Morgan served as the first president, and Diane Gill became the first female president in 1997. Division 47 provides APA members with an opportunity to share research and address relevant issues in sport psychology. In 2016, the division changed its name to the Society for Sport, Exercise and Performance Psychology.

Although initial efforts to create a similar section within the Canadian Psychological Association (CPA) began in the 1980s, the Sport and Exercise Section was formally recognized in 2006 (Granito, 2017). Also, in 2006, Natalie Durand-Bush and Penny Werthner developed the Canadian Sport Psychology Association (CSPA).

## *1990–2019: Progress in Research, Application, and Professional Issues*

These years have been characterized by exciting growth and diversification in the knowledge and practice of sport psychology and considerable progress regarding professional issues in sport psychology.

**Intervention research.** Particularly impressive, and relevant to this book, is the continued research into the effectiveness of interventions to enhance the performance of athletes and to increase the physical activity levels of all types of individuals. Although more research is needed, the findings from this era should quiet critics who have questioned whether sufficient knowledge exists to justify the ethical delivery of sport psychology services. For example, when this book was first published in 1986, its editor, Jean Williams, was criticized by several prominent colleagues because she had envisioned a book to promote applied sport psychology by exposing current and future coaches and sport psychology consultants to psychological theories and interventions they could use to enhance the performance and personal growth of athletes. One colleague even called her a charlatan.

### **Diversifying Research**

In her overview of the historical development of sport and exercise psychology, Vealey (2006) describes 1993–2005 as a time of emerging diversity in methods, paradigms, and epistemology. As examples, she cites interpretive approaches, feminist epistemology and methodology, a pragmatic research philosophy, an ecological meta-theoretical approach, and use of single-subject designs and qualitative methods. As Vealey notes, the use and promotion of such diverse approaches leads to multiple ways to ask and address different questions.

Two of the preceding advances are particularly important. The use of single-subject designs has been beneficial to intervention research (and practice) because it encourages personalizing

interventions based on qualities of the individual and avoids the masking effect that sometimes occurs with nomothetic (group means) comparisons. Use of this methodology has grown since the 1990s (see Barker, Mellalieu, McCarthy, Jones, & Moran, 2013). Qualitative studies are also noteworthy. They add to the knowledge base as researchers gain in-depth knowledge on a topic by, for example, observing and interviewing people. Previously, research consisted almost exclusively of quantitative methods, but during the 1990s use of qualitative data collection techniques increased. The initial growth can be attributed to Tara Scanlan's work (Scanlan, Ravizza, & Stein, 1989; Scanlan, Stein, & Ravizza, 1989). She also was instrumental in using and advocating a mixed-methods approach (integrating qualitative and quantitative research methods) (Scanlan, Russell, Beals, & Scanlan, 2003). Today, the work of Brett Smith and Andrew Sparkes (2009) has spawned more diversity in accepted qualitative approaches, specifically narrative inquiry, whereas Cassandra Phoenix has brought attention to the benefits of integrating visual methods into sport psychology research (see Phoenix & Smith, 2011).

The focus of sport psychology research has broadened as the sport world continues to grow in complexity and specificity. New and interesting areas for research continue to evolve. One such scholarly area of interest focuses on the mental health and well-being of athletes competing at all levels of sport. As evidence of interest in this research, the *Journal of Clinical Sport Psychology* was established in 2007.

Another indicator of diversity in the field during this era was the call for more research into the influence of culture on psychological processes and behavior. Although highlighted by Duda and Allison in 1990, it wasn't until the 2000s when the field responded with the application of cultural studies within sport psychology (Krane, 2001; Ryba, Schinke, & Tennenbaum, 2010; Schinke & McGannon, 2015) and the growth of **cultural sport psychology** (e.g., Schinke & Hanrahan, 2008). This