

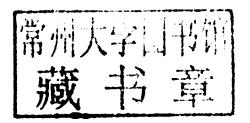
The Oxford Handbook of SPORT and PERFORMANCE PSYCHOLOGY

Editor in Chief PETER E. NATHAN

## The Oxford Handbook of Sport and Performance Psychology

Edited by

Shane M. Murphy







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# The Oxford Handbook of Sport and Performance Psychology

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Peter E. Nathan Editor-in-Chief Oxford Library of Psychology

#### ABOUT THE EDITOR

#### Shane M. Murphy

Shane M. Murphy, Ph.D., is a licensed psychologist and Professor in Psychology at Western Connecticut State University in Danbury, Connecticut, where he teaches sport, health, and performance psychology. Dr. Murphy served as head of the United States Olympic Committee's Sport Psychology Department from 1987 to 1994, and from 1992 to 1994 he was Associate Director of its Division of Sport Science & Technology.

Shane is a past-President and also a fellow of the Division of Sport and Exercise Psychology of the American Psychological Association. His books include Sport Psychology Interventions, The Sport Psych Handbook, The Achievement Zone, and The Tears and the Cheers. He has published 17 book chapters on sport psychology and human performance, and over 30 refereed articles. Shane serves on the Editorial Boards of the International Review of Sport and Exercise Psychology, the Journal of Clinical Sport Psychology, and the Journal of Media Psychology. His research includes the study of imagery and performance, the assessment of psychological skills for managing high performance, and analysis of the psychology of participation in video game play.

In addition to working with the world's top athletes, Shane is a performance consultant to many companies and organizations and has worked with Royal Bank of Scotland, Pepsi, Bristol-Meyers-Squibb, Siemens-Rolm, Deutsche Bank and with a number of performing artists, directors, musicians, and arts groups. He is married to wife Annemarie, and has two children.

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The Nature and Scope of Sport and Performance Psychology

CHAPTER

1

### History of Sport and Performance Psychology

Alan S. Kornspan

#### Abstract

This chapter presents an overview of the history of sport and performance psychology. First, the chapter will highlight the beginnings of sport psychology in the 1890s, when psychology was first applied to sport in laboratory settings. The applications of the "new psychology" applied to sport and the first sport psychology congress held in Lausanne, Switzerland, in 1913, are described. The chapter describes how psychologists began testing athletes in psychology laboratories using experimental psychology methods during 1920–1940. The development of sport psychology laboratories worldwide and the work of Coleman Griffith are highlighted. Next, the chapter explains the beginnings of the use of psychology for performance enhancement purposes between 1940 and 1965. The growth of sport psychology literature during this time is discussed. The chapter then focuses on sport and performance psychology from 1965 to 1980, including the development of sport psychology organizations. The chapter concludes by providing an overview of sport and performance psychology from 1980 to today. The modern period is characterized by an increasing application of sport and performance psychology knowledge across a variety of performance domains.

Key Words: History, sport psychology, time periods, application, historical development

Researchers in the fields of sport psychology and the history of psychology are increasingly interested in the historical development of sport and performance psychology (Green & Benjamin, 2009). Work on the historical development of the field of sport psychology has been published since at least the late 1970s (Feige, 1977), but recent analyses have provided a more thorough understanding of the development of the field.

Recent literature in the history of sport psychology has discussed the development of sport psychology from 1890 to1965, focusing on the development of the profession of sport psychology during this time. Although the field of sport psychology compromises various areas, including exercise, health, and participation and motivation, the focus of this chapter is on the historical aspects of using psychology and mental skills training to

help enhance athletic performance. First, a historical overview of the development of sport psychology from 1890 to 1920 will be detailed. This will be followed by information about how psychological testing began to be used by psychologists and coaches between 1920 and 1940, and this section also presents an overview of the laboratories developed specifically for sport psychology research. The third section, focused on 1940-1965, provides a discussion of the development and use of psychology and mental skills training to help athletes enhance performance. Historical developments that occurred in the field of sport and performance psychology from 1965 to 1980 are discussed, and the chapter concludes by providing an overview of the development of sport and performance psychology between 1980 and 1989, and from 1990 to the present.

#### The New Psychology: Sport and Performance Psychology from 1890 to 1920

Few details about sport and exercise psychology between 1890 and 1920 appeared in the literature until now, when recently published literature has provided a more detailed understanding of this period (e.g., Bäumler, 2009). For example, influential physical educators and psychologists began to teach psychology as part of the training of physical directors; William James, author of the 1892 Principles of Psychology taught a psychology course to students in the physical training program at Harvard (Kornspan, 2007a). Additionally, in 1891, Luther Gulick, the director of the YMCA training school in Springfield, Massachusetts, began teaching a new seminar in psychology for students studying to be physical training directors (Naismith, 1941). This first psychology seminar included James Naismith and legendary football coach Amos Alonzo Stagg.

During this seminar, Gulick challenged the physical directors he was training to create a sport or game that would be interesting, fun, and could be played inside during the winter; James Naismith rose to the challenge and presented his ideas for a new indoor sport. Months later, Gulick assigned Naismith the task of developing this new game by stating, "Naismith, now would be a good time for you to work on that new game that you said could be invented" (Naismith, 1941, p. 37). Thus, it was during the psychology seminar of 1891 that Naismith originally was influenced to develop the new game of basketball. Additionally, it appears that Naismith was so influenced by the field of psychology that he gave a commencement address at the YMCA Training School, in 1891, titled the "Psychology of Exercise," and he taught a psychology course in the YMCA training school after graduation (Slayer, 2009).

In addition to Gulick, James, and Naismith teaching psychology courses in physical director training schools during this period, E. W. Scripture became interested in the applications of psychology to daily life (Scripture, 1895). Scripture referred to this area of the field as the "New Psychology." Historically, psychology was at a crossroads: some individuals believed that psychology should be based on philosophical thought, whereas others, such as Scripture, believed that psychology should be based in scientific evidence gained from studies conducted in the laboratory (Kornspan, 2007a). Scripture brought attention to these ideas in his 1895 text, *The New Psychology*, which provided examples of how psychology could improve life in a variety of different

ways (Fuchs, 1998) using examples of his work and the research that he conducted in the psychology laboratory. One example of his research included an experiment on the reaction time of fencers, conducted in December 1893. Interestingly, at about the same time, at Harvard University, G. W. Fitz was also studying the reaction time of athletes (Kornspan, 2007a).

In perhaps one of the first experiments conducted studying sport in a psychology laboratory, Scripture designed an experiment to determine if there were differences between expert and novice fencers (Scripture, 1894a). It is noteworthy that Scripture's work was conducted with W. G. Anderson; Anderson was an influential physical educator and the founding president of the Association for the Advancement of Physical Education, in 1885 (Kornspan, 2007a). In addition to the sport of fencing, Scripture also studied runners and boxers in the Yale psychology laboratory during the 1890s (Scripture, 1894b).

Clearly, from Scripture's writings, he believed that psychology could have an influence on sport performance. He also believed that his work could influence physical educators to investigate and apply psychological findings to the field of sport and physical training (Kornspan, 2007a). Apparently, Scripture also had the opportunity to influence physical educators through the teaching of psychology, since he was part of the faculty of the Anderson Normal School for Gymnastics (Anderson School of Gymnastics, 1896). Additionally, as a professor of psychology at Yale University, Scripture taught the course "Psychology (Elementary Laboratory Course)," which was specifically recommended to students who had an interest in the psychology of exercise or physical training (Yale University, 1898/1899). For an in-depth description of Scripture's work at the Yale psychology laboratory, see Kornspan (2007a) and Goodwin (2009).

In addition to recent literature discussing the work of E. W. Scripture and the "new psychology" as applied to sport, recent researchers have written about the work of Norman Triplett (e.g., Davis, Huss, & Becker, 2009; Strube, 2005; Stroebe, 2012; Vaughan & Guerin, 1997), who published an experimental investigation related to the psychology of sport and social psychology (Triplett, 1898). This study, often referred to as the first experimental study in sport psychology, has been considered by some as the birth of the social psychology discipline (Brehm, Kassin, & Fein, 1999). Triplett's (1898) study was a part of his master's degree thesis at Indiana University (Strube, 2005) and was completed under

the direction of professors W. L. Bryan and J. A. Bergstrom (Triplett, 1898). Triplett was interested in studying the performance of cyclists: He wanted to know if cyclists were more likely to cycle faster if they were riding against a competitor, if they were paced, or if they were riding alone. Interestingly, one of the first Europeans to study the psychology of sport during the same period, Phillipe Tissie, was also studying the psychological aspects of cycling (Bäumler, 2009).

Researchers have recently reanalyzed the results of the Triplett (1898) study (Strube, 2005). Strube has suggested that, based on the results of Triplett's study, there was very little evidence to suggest that social facilitation existed based on his (2005) reanalysis of statistical data using contemporary statistical methods. Fascinatingly, Triplett's study of cyclists would not be the only study of athletics and games completed in the psychology department at Indiana University during this period. Claude E. Price completed a master's degree thesis titled, "The relation of athletics to scholarship at Indiana University: A statistical study." Additionally, Robert E. Newland completed a master's degree thesis titled, "The psychology of a game—Checkers" (Indiana University, 1905; Hearst & Capshew, 1988).

Recent sport psychology literature has also begun to discuss one of the first sport psychology events to be organized by the International Olympic Committee, the International Congress of the Psychology and Physiology of Sport (Bäumler, 2009; Kornspan, 2007b; Kornspan, 2009b; Silva, 2002). This event was developed through the efforts of the founder of the modern Olympic Games, Pierre de Coubertin, who organized the modern Games in the early 1890s. He believed that the Olympic Games should include an educational component and not be simply focused on watching and participating in sports (Kornspan, 2007b). Thus, he developed educational congresses to be part of the Olympic Games. The first congress to have a psychological component was held in Le Havre, France, in 1897. A part of the congress held in Le Havre focused on the "Psychology of Exercise" (Kornspan, 2007b).

A comparison of the works by Scripture and Coubertin shows that, whereas Scripture was very interested in bringing psychology into the laboratory and taking scientific measurements in order to make data-based recommendations, Coubertin viewed psychology from a philosophical point of view. This would be a significant distinction as Coubertin developed and planned the International Congress of the Psychology and Physiology of Sport.

Throughout the early 1900s, Coubertin wrote philosophical essays related to the psychology of sport, and a collection of these articles would later be published as a book, *Essais de psychologie sportive*, in 1913 (Coubertin, 1913). These essays were mainly developed and published in the *Olympic Review* to help individuals consider the psychology of sport as a lead-up to the International Congress of the Psychology and Physiology of Sports. A review of this book appeared in the *American Physical Education Review* (Meylan, 1917).

Coubertin described the sports psychology congress in his *Olympic Memoirs*. He organized the congress because he believed that the medical profession had been too focused on the physiology of sports, and he wanted to see the medical profession focus additionally on psychology related to sport. Coubertin presented the idea to develop a sport psychology congress in 1909 (Coubertin, 1936/1979), and he received permission to hold the congress in 1911, at the Budapest meetings. After receiving permission to assemble the congress, Coubertin focused on convincing the medical profession of its importance (Coubertin, 1936/1979).

The International Congress of the Psychology and Physiology of Sport, or what Coubertin has referred to in his Olympic memoirs as the Sports Psychology Congress, took place from May 8 to May 10, 1913 (Kornspan, 2007b). Approximately 400 individuals from throughout the world attended the congress. Many of the reports were related to philosophical or introspective psychology. For example, presentations were provided by elite athletes who discussed what they were thinking during high-level performance. Paul Rousseau, a famous cyclist, discussed how positive thoughts could help him overcome fatigue while performing. In addition to these introspective reports, a presentation was provided by Jean Phillipe (Kornspan, 2007b), who called for the psychology of sport to be studied in psychological laboratories. Although many of the presentations focused on the mental aspects of sports, a main critique of the congress by those in attendance was related to insufficient scientific evidence presented to support the statements made. Despite the critics, Coubertin would later refer to this event as "the birth of the psychology of sport" (Müller, 1997, p. 54).

As recent literature in the history of sport psychology demonstrates, the works of E. W. Scripture, Pierre de Coubertin, and Norman Triplett are an important part of the early history of the field. An additional important aspect of this period is the

interest psychologists showed in the area of sport, physical activity, and human performance. Wilhelm Wundt, who is considered the father of modern experimental psychology, was the major professor for 16 American doctoral students who went on to work as professors of psychology in the United States (Benjamin, Durkin, Link, Vestal, & Acord, 1992). Eight of the 16 American psychologists whom Wundt trained would go on to either conduct research in physical training/athletics or write or work in the field of athletics. These psychologists included Frank Angell (who became an athletic director at Stanford University), James Cattell, Lightner Witmer, Charles Judd, Edward A. Pace, Walter Dill Scott, E. W. Scripture, and Harry Kirke Wolfe.

James McKeen Cattell conducted a study of how individuals practiced running 3 miles (Fuchs, 1998). E. W. Scripture, along with writing various books and conducting studies related to sport and physical activity, was an active presenter at American Physical Education Association conferences. An abstract of his presentation, "The Psychological Aspects of Physical Education" was published in the American Physical Education Review in 1901 (Scripture, 1901). Lightner Witmer, the founder of the first psychology clinic and the first individual to use the term "clinical psychology" (Watson, 1956), presented a paper at the National Education Association conference and at the Philadelphia Physical Education Society in 1898 titled, "The Mental Factor in Physical Training" (Kuhn, 1898; Stoneroad, 1898). Witmer also published an experimental study of his work titled "The Special Class for Backward Children." A main part of this study was to observe how physical training and exercise affected those children who participated in the study (Witmer, 1911).

Additionally, Edward A. Pace was part of the gymnasium committee at Catholic University ("Report of the Temporary Committee on the Gymnasium," Catholic University Bulletin volumes 21–23). Walter Dill Scott completed laboratory studies of athletes (Scott, 1917); Scott was interested in whether coaching could improve the performance of athletes. Harry Kirke Wolfe had an interest in athletics because he served on the faculty athletics committee helping to oversee athletics at the University of Nebraska. Additionally, Wolfe may have been one of the first to propose the creation of a laboratory specifically to study the psychology of football (Brannon, 1913).

It also should be noted that early psychologists were actively involved in committee membership

for the American Physical Education Association during this time. The Committee of Nineteen (originally the Committee of Fifteen) was formed by the Advancement of the American Physical Education Association in 1899. The purpose of this committee was to focus on helping elementary, secondary, and higher education institutions understand the important role of physical training in education (American Physical Education Association, 1900). Psychologists who were a part of the Committee of Nineteen included G. Stanley Hall, Joseph Jastrow, E. W. Scripture, James M. Cattell, and William James.

In summary, the early years of sport psychology saw psychologists and physical educators becoming interested in applying psychology to physical training and sport. From the beginning of the experimental study of psychology, psychologists and physical educators collaborated to determine how psychology could be applied to sport and physical education. It is noteworthy that many individuals trained directly by Wilhelm Wundt had an interest in writing about, researching, or working in sport-related jobs. It should be noted that other areas of performance psychology also began to be studied and written about during this period (e.g., Carl E. Seashore's study of the psychology of music [Seashore, 1919]; Walter Dill Scott's application of psychology to business [Scott, 1917]).

As this period progressed, suggestions were made to create laboratories to study the psychology of football and to study athletes directly in psychology laboratories. The next phase of the development of the field of sport psychology saw the actual creation of laboratories specifically devoted to sport psychology.

#### 1920–1940: Development of Sport Psychology Laboratories and Psychological Testing Applied to Sport

During the decades between 1920 and 1940, psychologists and physical educators began to study the psychological aspects of athletics utilizing experimental laboratory methods. Individuals with an interest in applying psychology focused on the use of psychological testing and measurement to identify highly skilled athletes. Thus, testing that took place at psychology laboratories involving athletes often focused on identifying those psychological attributes that helped athletes become successful (e.g., Fuchs, 1998).

There was a worldwide development of sport psychology laboratories in which athletes were