

Theses and Dissertations

2015

Development of the athlete: a resource manual for clinicians working with elite adolescent male athletes

Kenneth D. Hartline

Follow this and additional works at: <https://digitalcommons.pepperdine.edu/etd>

Recommended Citation

Hartline, Kenneth D., "Development of the athlete: a resource manual for clinicians working with elite adolescent male athletes" (2015). *Theses and Dissertations*. 621.
<https://digitalcommons.pepperdine.edu/etd/621>

This Dissertation is brought to you for free and open access by Pepperdine Digital Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Pepperdine Digital Commons. For more information, please contact bailey.berry@pepperdine.edu.

Running head: DEVELOPMENT OF THE ATHLETE MANUAL

Pepperdine University
Graduate School of Education and Psychology

DEVELOPMENT OF THE ATHLETE: A RESOURCE MANUAL FOR CLINICIANS
WORKING WITH ELITE ADOLESCENT MALE ATHLETES

A clinical dissertation submitted in partial satisfaction
of the requirements for the degree of
Doctor of Psychology

by

Kenneth D. Hartline

August, 2015

Drew Erhardt, Ph.D. - Dissertation Chairperson

This clinical dissertation, written by

Kenneth D. Hartline

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF PSYCHOLOGY

Doctoral Committee:

Drew Erhardt, Ph.D., Chairperson

Shelly Harrell, Ph.D.

Michelle Conover, Ph.D.

© Copyright Kenneth D. Hartline (2015)

All Rights Reserved

TABLE OF CONTENTS

DEDICATION.....	vii
ACKNOWLEDGEMENTS.....	viii
VITA.....	x
ABSTRACT.....	xi
Chapter I. Introduction.....	1
Benefits of Sports for Participants.....	1
Objectives and Current Status of Sport Psychology.....	3
Aims of the Chapter.....	3
Overview of Sport Psychology.....	4
Historical Origins.....	4
Current Status.....	6
Performance Enhancement.....	8
Emotional Well-Being.....	8
Overview of Adolescent Sport Participation.....	9
Benefits for Adolescents Participating in Sports.....	10
Potential Risks for Young Athletes.....	13
Common Issues Facing Adolescent Athletes.....	14
Parental Pressure.....	14
Fear of Failure.....	17
Identity Development.....	18
Development of Coping Skills.....	19
Sport Psychology Applied to Adolescent Athletes.....	21
Current Status of Treatment.....	22
Rationale for the Project.....	23
Aims of the Manual.....	24
Chapter II. Method.....	25
Overview.....	25
Developing the Resource.....	27
Literature Review.....	27
Interviews.....	28
Format and Structure of the Manual.....	29
Content of Manual.....	29
Evaluation of the Resource.....	30
Chapter III. Manual.....	31

Chapter IV. Discussion.....	32
Summary of the Project.....	32
Development of the Manual.....	33
Organization and Content of the Manual.....	34
Strengths of the Current Manual.....	35
Limitations of the Current Manual.....	36
Potential Improvements to the Current Manual.....	37
Plan for Evaluation of the Current Manual.....	38
Plan for Dissemination.....	40
Conclusion.....	40
REFERENCES.....	41
APPENDIX A: Literature Review.....	48
Section A: Empirical Literature.....	49
Section B: Non-Empirical Literature.....	100
References.....	125
APPENDIX B: Institutional Review Board Approval Notice.....	130
APPENDIX C: Interview Scripts and Data.....	133
Section A: Themes.....	134
Section B: Interview Scripts.....	146
APPENDIX D: Manual.....	157

DEDICATION

I dedicate this dissertation and all of my academic success to my parents, Jean and Randy Hartline, and to my family for their constant support and encouragement.

To my father Randy, who would always offer to do way more than I ever asked.

To my mother Jean, who listened to all of my fears, dreams and way too big ideas and always gave me encouragement.

To my brother Dan, who instilled a love of sports that began with the Blazers run to the NBA Finals in 1990 and continued through the 2015 college football national championship game with our beloved Ducks.

To my sister-in-law Mandy, my nephew Carson, and my niece Hadley, who always make me smile and laugh (the two most important things in life).

And to my close friends (Kyle, Reis, Rob, Karl, Ryan, Nick, and Jack) who made the journey with me to Los Angeles, either physically or in spirit. Cheers!

ACKNOWLEDGMENTS

I must first express the incredible amount of gratitude I feel toward my chair, Dr. Drew Erhardt. Thank you for your support, guidance, humor, and wisdom throughout this process. I have enjoyed every moment of my work with you and will always appreciate what you have contributed to this project. Not only were your edits and suggestions priceless, but your friendship and kind e-mails also truly helped me in incalculable ways.

Thank you to my committee members not only for your contribution to this project but for your thoughtful mentorship. Thank you Dr. Conover for your constant support, advice and friendship. I will always appreciate the opportunities you have given to me. Thank you Dr. Harrell for your mentorship while navigating externship applications and for always being such a steady influence on my professional growth.

Throughout the project, many people went above and beyond to help steer me in the right direction. Thank you to the individuals who were interviewed for providing incredibly useful information and for being so gracious with the time you devoted to this project. Thank you to the individuals whom I consulted with throughout the course of the project for sharing information that helped guide the content of this project.

Thank you to all of my supervisors throughout graduate school for your wisdom and for instilling a desire to grow clinically. A heart felt thank you to Dr. Norma Scarborough, Dr. Aaron Aviera, Dr. Quinn Neugebauer, Dr. Michelle Margules, Dr. Sepida Sazgar, Dr. Karen Earnest,

Dr. Anita Hamilton, Dr. Robert Gordon, Dr. Catherine Atkins, Dr. Ilana Grunwald, Dr. Tamar Press, Dr. David Biderman, and Dr. Kristine Kingsley.

Thank you to the faculty at the University of Oregon and Pepperdine University for believing in me and guiding me with such passion.

And finally a big thank you to my incredible family and friends.

VITA

Education

- Aug. 2015 Pepperdine University
Graduate School of Education and Psychology, Los Angeles, CA
Doctor of Psychology in Clinical Psychology
Dissertation: Development of the athlete: A resource manual for clinicians working with elite adolescent male athletes
- May 2011 Pepperdine University
Graduate School of Education and Psychology, Malibu, CA
Master of Arts in Clinical Psychology with emphasis in Marriage and Family Therapy
- Sept. 2009 University of Oregon, Eugene, Oregon
Bachelor of Science in Psychology with Honors
Bachelor of Science in Journalism with focus in magazine writing
Minor in Communication Studies

Clinical Experience

- Sept 2014 – present New York University Langone Medical Center
Rusk Institute of Rehabilitation Medicine, New York, NY
Psychology Intern
Licensed Clinical Supervisor: Robert Gordon, Psy.D.
- June 2013 – June 2014 Children’s Hospital Los Angeles
Department of Orthopaedics and Sports Medicine, Los Angeles, CA
Pediatric Neuropsychology Extern
- Mar. 2013 – Aug. 2014 Southern California Neuropsychology Group, Woodland Hills, CA
Director of Sports Performance Enhancement
Psychological Assistant – CA PSB #37405
Licensed Clinical Supervisor: Michelle Conover, Ph.D.
- Aug. 2012 – July 2013 Kaiser Permanente Los Angeles Medical Center
Department of Psychiatry, Los Angeles, CA
Neuropsychology Extern
Licensed Clinical Supervisor: Karen Earnest, Ph.D., ABPP-CN
- Mar. 2012 – Mar. 2013 Southern California Neuropsychology Group, Woodland Hills, CA
Neuropsychology Extern
Licensed Clinical Supervisor: Michelle Conover, Ph.D.
- Sept. 2011 – July 2014 Pepperdine University
West Los Angeles Psychological and Educational Clinic, Los Angeles, CA
Psychotherapist Extern
Licensed Clinical Supervisor: Aaron Aviera, Ph.D.

Jan. 2011 – July 2011 Project Impact, Lynwood, CA
Family Case Manager/In-Home Outreach Counselor
Licensed Clinical Supervisor: Norma Scarborough, DMFT

Dec. 2009 – July 2011 Project Impact, Lynwood, CA
Marriage and Family Therapist Extern
Licensed Clinical Supervisor: Norma Scarborough, DMFT

Professional Experience

June 2010 – Aug. 2014 Hartline Enterprises LLC
Founder and CEO

Feb. 2009 – July 2009 Mosaic Newsmagazine, Eugene, OR
Assistant Managing Editor and Chief Web Editor

ABSTRACT

Over recent decades, adolescent athletic participation has grown in the United States. The rise in participation means that mental health clinicians who work with adolescents are likely increasingly coming in contact with young athletes facing issues directly related to sports. The issues facing adolescent athletes create additional challenges that should be addressed in treatment to improve overall psychological well-being and to promote healthy development. In order to best meet the general mental health needs of these clients, clinicians need to be aware of the unique stressors and issues they frequently face. A resource manual was created to guide clinicians working with elite male athletes between the ages of 12 and 18 years in order to help them realize the benefits and avoid the adverse consequences that may be associated with elite-level sports participation. The manual was developed to be a resource for mental health clinicians seeking help in understanding the challenges faced by elite-level adolescent male athletes, guidance in identifying therapeutic interventions likely to be effective in addressing those challenges, and clarification of the mental skills training typically conducted by sport psychologists. The manual's content was informed by both a review of the relevant scholarly literature and by interviews conducted with a former elite adolescent athlete, a sports psychologist, and a mental health clinician who has worked with male adolescent athletes. Following a discussion of some strengths, limitations, and potential modifications to the current manual, plans for evaluating and disseminating it are described.

Chapter I. Introduction

Organized sports have been part of human experience for centuries (Tomlinson & Young, 2011). Throughout much of human history, people have participated in sports to reap a variety of physical, emotional and social benefits. The extant literature suggests two fundamental mechanisms through which these benefits accrue. Some, including mental and physical health benefits resulting from exercise and competition, may derive directly from participating in the sport itself. In addition to these direct benefits from physical activity, sports provide a context in which life skills applicable to other domains of functioning are acquired (Hansen, Larson & Dworkin, 2003; Theokas, 2009). These often derive from the ethos and social components associated with sports participation related to factors such as camaraderie, teamwork, and sportsmanship (Gould & Carson, 2008).

Benefits of Sports for Participants

Sports that require physical activity have been associated with numerous physical benefits including increased cardiovascular endurance, lower body fat and increased physical fitness (Haskell et al., 2007). Participation in physically active sports and exercise have also been implicated in the prevention of diseases including Alzheimer's disease, Parkinson's disease, heart disease, obesity and hypertension (Deslandes et al., 2009; Donaldson & Ronan, 2006; Haskell et al., 2007). Further, sports and physical exercise have been utilized in treatment and rehabilitation for a variety of physical and neurological disorders and diseases including stroke, various forms of cancer, diabetes, and osteoporosis (Kwakkel et al., 2004; Warburton, Nicol, & Bredin, 2006).

In addition to physical health benefits, sports have been implicated in improving psychological health and well-being (Donaldson & Ronan, 2006). Participation in formal sport

is related to higher levels of perceived behavioral competence and a sense of mastery among participants (Donaldson & Ronan, 2006). Additionally, sports provide numerous self-concept related benefits including higher levels of self-esteem and self-efficacy (Donaldson & Ronan, 2006; Gould & Carson, 2008) as well as a stronger sense of social identity (Eccles, Barber, Stone, & Hunt, 2003). Research suggests that sports may also increase a participant's resiliency and emotional regulation skills (Fredricks & Eccles, 2008; Hansen et al., 2003). Furthermore, reviews have suggested that exercise is an effective treatment for mild to moderate depression as well as the prevention of depression (Deslandes et al., 2009). Indeed, clinical evidence has demonstrated that exercise has a positive relationship with the outcomes of a number of disorders, improving quality of life for individuals with depression, Parkinson's disease, and Alzheimer's disease (Deslandes et al., 2009).

There are also numerous social benefits that can be garnered from sports because of the context that competition provides. In addition to the development of sport-specific skills and competencies, sport is commonly considered a medium or tool through which other life skills are taught, including, but not limited to, teamwork and leadership (Theokas, 2009). Participants learn ways of handling conflict with other people as well as working effectively with teammates, coaches, and other adults (Gould & Carson, 2008; Zimmer-Gembeck & Skinner, 2008). Thus, multiple aspects of intrapersonal and interpersonal development are promoted by participation in sports.

Objectives and Current Status of Sport Psychology

Researchers and clinicians alike have sought to identify specific ways to help athletes realize the various benefits conferred by sports participation. As a result, the field of sport psychology developed to further the scientific bases underlying athletic performance and its association with various components of well-being. The American Psychological Association (APA) defines sport psychology as "the scientific study of the psychological factors that are associated with participation and performance in sport, exercise and other types of physical activity" (as cited in Portenga, Aoyagi, Cohen, Balague, & Harmison, n.d., p.3). According to the Association for Applied Sport Psychology (AASP), a primary goal within the profession involves working to facilitate optimal involvement, performance, and enjoyment in sport and exercise (as cited in Aoyagi, Portenga, Poczwardowski, Cohen, & Statler, 2012).

In pursuit of these objectives, the work of sport psychologists encompasses several different theories and interventions in working with athletes, including mental skills training for peak performance, contextual issues for consultation in sport settings, developmental and social aspects of sport, and biobehavioral bases of sport and exercise (Stapleton, Hankes, Hays, & Parham, 2010). However, despite the rapid growth of sport psychology and increases in the number of published research articles on sports psychology treatments, relatively little attention has been paid to the application of sports psychology to adolescent athletes.

Aims of the Chapter

The initial goal of the current chapter is to describe the field of sport psychology. This will entail outlining the history of sport psychology, including brief discussions of the growth of research regarding treatment and the bases of modern sport psychology. The chapter will also examine some current limitations of sport psychology research, including the lack of studies

devoted to working with adolescent athletes. Finally, the chapter will examine the apparent need for sport psychology services for young athletes given rising rates of adolescent sport participation and competition.

In addition to describing the field of sport psychology, the chapter will discuss current issues and challenges facing adolescent athletes that may affect their development and overall well-being. Further, the chapter will specify potential risks involved in sports participation. Finally, the chapter will discuss the rationale and aims for the proposed project.

Overview of Sport Psychology

Historical origins. The origins of sport psychology are often traced back to Coleman Griffith, a psychologist and college professor who, in the 1920s and 1930s, focused on the performance of athletes as it related to psychological factors (e.g., emotional health, stress, anxiety) (Aoyagi et al., 2012). In addition to working clinically with athletes, Griffith wrote numerous publications on the emotional psychology of athletics and eventually worked as a consultant for numerous professional and college teams (Weinberg & Gould, 2010). In the 1960s, Bruce Ogilvie's work with athletes, like that of Griffith had its foundations in clinical psychology but emphasized performance skills training (e.g., imagery, behavioral rehearsal) rather than psychological factors of athletes (Aoyagi et al., 2012). The work of Griffith, Ogilvie and other early psychologists working with athletes was not empirically based but was conducted as an extension of their training as clinical psychologists. That is, their work emphasized the mental aspects of competing at the highest level of competition by focusing on either developing an athlete's overall well-being or specific psychological factors more directly related to performance.

It was not until the 1960s and 1970s that sport psychology research began in academia, beginning in kinesiology departments (Aoyagi et al., 2012). Whereas previous work with athletes focused largely on their global well-being, this kinesiology-based work was designed solely to enhance performance. The research being conducted in kinesiology involved a range of studies regarding how motivation, emotion and other psychological processes affected the performance of athletes.

Concurrent with the early work in kinesiology departments, sport psychology was utilized by clinical psychologists, who worked with athletes to overcome their psychological problems in order to enhance overall well-being (Aoyagi et al., 2012). While performance enhancement may have been a byproduct of treatment, the focus of clinical psychologists was on the global well-being of the athlete being treated. This bifurcated historical backdrop for sport psychology naturally led to the emergence of two groups of practitioners (viz., clinical psychologists and performance enhancement clinicians) trained through two different academic models (viz. kinesiology and clinical psychology) with treatment focused on two different targets (Aoyagi et al., 2012).

Much of the existing sport psychology literature can be placed into two broad categories that reflect this original divide within the field: performance enhancement and overall emotional well-being (Aoyagi et al., 2012). Despite divergent foci, there have been attempts to develop models that stress a more holistic approach to sports psychology focusing on both performance enhancement and emotional well-being. However, the development of treatment manuals reflecting such holistic models has been sparse, meaning that the treatment often focuses on either strict performance enhancement or the well-being of the athlete, rather than both.

Current Status. Despite the divergent foci within the field, sport psychology has experienced rapid growth and was recognized in 2003 as an area of proficiency by the APA. Division 47 of APA is dedicated to exercise and sport psychology and lists over 1,000 members, the majority of whom practice as either counseling or clinical psychologists (Stapleton et al., 2010). This division of APA also publishes research dedicated to the practice of sports psychology through their triennial *Exercise and Sport Psychology Newsletter* and promotes the use of evidence-based treatments in research and practice. The APA identifies several aspects of sport psychology treatment that define this as a unique area of practice, including mental skills training for peak performance, contextual issues for consultation in sport settings, developmental and social aspects of sport, and biobehavioral bases of sport and exercise (Stapleton et al., 2010). Additional markers for the growth of sports psychology include the development of professional organizations (e.g., *Association for Applied Sport Psychology [AASP]*, *European Federation of Sport Psychology*), specialized publications (e.g. *Journal of Applied Sport Psychology*, *Journal of Sport Psychology in Action*, *Psychology of Sport and Exercise*), and graduate programs dedicated to the training of sport psychology researchers and practitioners.

Whereas in the past, the field was not considered a mainstream part of athletics, sport psychologists have become increasingly sought after. Today, it is considered commonplace for all professional teams to have a full time sport psychologist on staff. The “mainstreaming” of sport psychology is also reflected in the growth of the field as a business and in the fact that many sport psychologists have become well known to casual sports fans. Further, while elite professional athletes used to be the only people to seek out sport psychologists, they are now considered necessary for many collegiate athletes, elite high school athletes, and even younger elite athletes.

Accompanying this rapid growth has been the emergence of a distinct knowledge base pertaining to understanding and enhancing performance from a psychological perspective (Aoyagi et al., 2012). Literature reviews within sport psychology have focused on evaluating interventions that are solely focused on improving performance-related outcomes (Rumbold, Fletcher, & Daniels, 2011). For example, approaches that involve mental skills training tailored to the needs and abilities of athletes have been found to improve performance levels (Vealey, 2007).

In addition to performance enhancement, a primary goal within the profession is to facilitate optimal involvement and enjoyment in sport and exercise, according to the AASP (Aoyagi et al., 2012). Further, APA Division 47 suggests that clinicians work with athletes to develop psychological skills, promote their well-being, address systemic issues associated with sports settings and organizations, and attend to social aspects of sports participation that may affect athletes (Aoyagi et al., 2012). Support for this more holistic approach to treatment emerged from a study by Anderson and colleagues (2004), who found that athletes preferred practitioners who adopted an approach that recognized and addressed all of the demands of their lives, both on and off the field. Extending this theme, Rumbold and colleagues (2011) suggested that future efforts in the field should aim to develop treatments to manage the stress process found in sports more holistically, encompassing the demands that performers experience, their appraisals, emotional responses, and subsequent coping strategies.

Beyond developing a more holistic approach to working with athletes, an additional future direction for sport psychologists is to use a more integrative theoretical approach to treatment. Gardner (2009) noted that in order for sports psychology to develop a more viable research base, its empirical basis will need to cross pollinate with findings from sister disciplines

within the broader psychology domain. Specifically, the fields of emotion-, cognitive-, and clinical-science can offer much to the development of a more empirical science of athletic performance enhancement (Gardner, 2009).

Despite the promise of a more holistic approach, the current sports psychology literature can be grouped into two broad categories reflecting the aforementioned divide in the field: performance enhancement and overall emotional well-being. Each of these areas will now be discussed in greater detail.

Performance enhancement. Sport psychologists can play a central role in helping athletes reach peak performance levels within their sport. Treatment works to identify the individual and task-specific mental and emotional states most conducive to athletes achieving their best in competitive situations. Mental skills training, defined as cognitive strategies and other techniques developed to enhance performance, has been found to be effective in enhancing performance success in athletes (Behncke, 2004). Most mental skills training techniques can be grouped into two broad categories: cognitive and somatic methods. Cognitive methods include mental rehearsal, mental imagery and visualization, visuo-motor behavior rehearsal, and cognitive-behavior therapy. Somatic methods include biofeedback, progressive muscle relaxation, and meditation (Behncke, 2004). Practitioners help athletes become more aware of their ideal performance states and help them to develop the necessary coping skills and strategies to achieve and maintain peak performance levels (Harmison, 2011). In this way, sport psychologists can play a vital role in helping athletes achieve to their potential within their sport (Harmison, 2011).

Emotional well-being. In addition to focusing on performance enhancement, sport psychologists can play a central role in helping athletes with general psychological and

emotional health. The fact that an individual participates in athletics does not avert psychological difficulties. Although research on the mental health of athletes is scant, it has indicated that stress and anxiety are prevalent in sports due to their competitive nature and the demands placed on athletes (Schaal et al., 2011). Further, prevalence rates for common mental disorders (e.g., depression, anxiety) among athletes appear comparable to those found for the general public (Markser, 2011; Schaal et al., 2011). In fact, the demands and pressure associated with high level competitive sports may place elite athletes at elevated risk for developing certain disorders (Schaal et al., 2011).

Although some athletes are able to manage stress successfully, others struggle, resulting in impairments to their performance and health (e.g., burnout, depression, illness) (Schaal et al., 2011). Even in relatively resilient individuals, the accrual of adverse circumstances in the context of the pressures inherent to high-level competition could contribute to psychological problems (Schaal et al., 2011). Specifically, the demands and pressures associated with the practice of a particular sport (e.g., pressure from coaches, internal pressure to succeed, escalating expectations regarding performance and success) may be among the socio-environmental risk factors which, if combined with a particular personality and genetic predisposition, could facilitate the development of certain mental health disorders (Schaal et al., 2011). Thus, treatment directed towards athletes overall emotional well-being as well as their performance is critically important.

Overview of Adolescent Sports Participation

Over recent decades, adolescent athletic participation has grown among both boys and girls in the United States. A 2008 report from the National Federation of State High School Associations (NFHS) noted that the number of students participating in high school athletics

increased for the 19th consecutive year (Theokas, 2009). According to the NFHS, high school sports participation reached 7,667,955 participants for the 2010-2011 school year, which represented the largest participation rate in United States history and constituted an increase of 39,578 participants from 2009-10 (“High School Sports Participation,” 2011). Overall, the NFHS estimates that over 50% of high school students participate in sports in a given year. In addition to high school athletics, collegiate athletics has also seen a significant increase in participation. Since the National Collegiate Athletic Association (NCAA) began collecting yearly athletic participation statistics in 1981, annual participation has grown by over 200,000 student-athletes (Irick, 2011). Due to these dramatic increases sports participation, many youth are positioned to experience the benefits that sports may provide. However, numerous considerations need to be taken into account in order to help young athletes realize these benefits.

Benefits for adolescents participating in sports. In addition to the aforementioned physical, emotional, and social benefits generally derived from sports participation, adolescent athletes may derive some unique benefits. Fredricks & Eccles suggest that early adolescence is a period when youth begin to begin make more decisions about how to spend their time (2008). During this time, organized activities are likely to serve as important developmental contexts as youth look for settings where they can form relationships with non-familial adults and peers, experiment with different roles, and develop different skills and competencies (Fredricks & Eccles, 2008).

Developmental researchers and youth advocates have argued that participation in structured, organized activities is associated with both short- and long-term positive developmental outcomes (Eccles et al., 2003). To explore this hypothesis, Eccles and colleagues

(2003) conducted a longitudinal study that examined the relationship between activity involvement and educational outcomes among over 1,800 youth in the greater Detroit area. Participation in extracurricular activities predicted better than expected educational outcomes including high school GPA, college attendance, and college graduation (Eccles et al., 2003). Specifically, participation in school clubs and sports predicted higher grades and educational expectations as well as educational status two years later (Fredricks & Eccles, 2006). Sport participants liked school better than non-participants at both the 10th and 12th grade levels. They were, also, more likely to attend college full time at age 21 and to have graduated from college by age 25–26. Participation in team sports was associated with a higher than expected 12th grade GPA, and more total years of tertiary education by age 25–26. Finally, team sports participation predicted having a job with a future and a job with autonomy at age 24 (Eccles et al., 2003).

Youth sport participation is associated with many aspects of development and with the acquisition of numerous skills. These include identity development, personal exploration, initiative, cognitive and physical skills, cultivating social connections, teamwork, and social skills (Hansen et al., 2003; Vella, Oades, & Crowe, 2011). Greater participation in sports has also been found to be associated with enhanced emotional and behavioral well-being among young adolescents. Donaldson and Ronan's 2006 study examined the relationship between young adolescents' sport participation and overall well-being. They found that children with higher rates of sports participation reported lower levels of externalizing and social problems and higher levels of perceived competence than those who participated in fewer sports (Donaldson & Ronan, 2006). In a 2006 study, Fredricks and Eccles examined the relationship between extracurricular activities and developmental outcomes in adolescence and young adulthood

among an economically diverse sample of African American and European American youth. Results indicated that athletes appeared to be psychologically healthier at 11th grade, even after controlling for mental health three years earlier. Further, involvement in 8th grade school sports predicted an increase in resiliency over time and was associated with lower rates of depression, though the latter finding applied only to youth from higher socioeconomic status homes (Fredricks & Eccles, 2006).

Eccles and colleagues (2003) have suggested that extracurricular activities can gratify an adolescent's developmental need for social relatedness, and can contribute to his or her identity as an important and valued member of the school community. They go on to note that extracurricular activities can clarify one's personal identity via development of relationships with peers and adults with similar interests (Eccles et al., 2003). Involvement in a school organization or sport links adolescents to a set of similar peers, provides shared experiences and goals, and can reinforce friendships between peers and relationships with adults, particularly school personnel (Eccles et al., 2003). The sense of identity emerging from participation in organized activities promotes one's self-concept, which, in turn, promotes psychological well-being and attachment to the institutional settings that provide the participation opportunities (Eccles et al., 2003).

These wide ranging positive outcomes associated with sports participation are achieved through a variety of mechanisms including providing young people with a chance to develop and practice specific social, physical, and intellectual skills that may be useful in a variety of ways (e.g., academic performance, contribution to one's community, development of a sense of agency) (Eccles et al., 2003). Benefits from extracurricular activities like sports may also relate to the fact that they allow an individual to belong to a socially recognized and valued group and

often provide a supportive social network of peers and adults (Eccles et al., 2003). It appears that the social aspect of sports competition assists participants in developing skills needed to succeed in other areas of life.

Potential risks for young athletes. Despite there being well-established benefits of being active in sports, participation, particularly at the highest level, may carry risk. The aforementioned Fredricks and Eccles' study (2008) found that athletes in certain ecological contexts (e.g., highly competitive environments, presence of deviant peers) could experience negative outcomes such as increased rates of behavior problems including risky behaviors.

Increases in the level of competition in sports has produced an environment in which individuals involved in athletics are required to devote more time, energy and mental capacity to their sport. Young athletes often have intense pressure placed on them by other people (e.g., coaches, teammates, parents). According to Theokas (2009), it appears that competition and winning at all costs often supersedes the broader developmental goals of sport including the development of attitudes and behaviors needed when working with others.

Thus, it appears that young athletes are vulnerable to possible negative outcomes that could be anticipated and avoided. With the abundant opportunities for experiencing positive developmental outcomes, the need for positive influences within a sporting context becomes clear, from having a structured, targeted sporting landscape (e.g., focusing on development growth and improvement rather than winning) to having a supportive environment. It appears that if athletes were to get more targeted interventions for the unique issues they face, their risk for negative outcomes would be decreased. Clinicians providing interventions to young athletes have the potential to help promote positive and reduce adverse outcomes of sports participation, in part, by addressing issues including but not limited to the following: parental involvement and

parental pressure, development of fear of failure, identity development, and the development of stress management and coping skills.

Common Issues Facing Adolescent Athletes

Athletes often must learn to cope with performance anxiety, high stress levels during competition itself, and psychological symptoms (e.g., generalized anxiety, depression) resulting from performing in a high stress atmosphere on a regular basis. In addition to dealing with similar challenges as their adult counterparts, adolescents face additional challenges related to their physical, cognitive and social-emotional development. Young athletes are typically participating in sports during critical developmental periods for cultivating skills that they will need well into their adult years. As a result, clinicians have an opportunity to play a pivotal role in helping young athletes realize potential benefits and avoid risks associated with sports.

Parental pressure. Although their level of involvement varies, parents often play a significant role in competitive youth sports settings (Holt, Tamminen, Black, Sehn, & Wall, 2007). Parents can have both positive and negative effects on adolescent athletes' performance and overall well-being. Parent involvement in children's sport experiences is neither inherently good nor bad. Rather, the effect of parental involvement appears to be mediated by a host of factors, including the child's perceptions of the involvement (Kanters & Jasper 2008), the type of pressure applied by the parents, and the context within which that pressure occurs (O'Rourke, Smith, Smoll, & Cumming, 2011). For example, positive effects are most often found when the pressure being applied focuses on aspects of performance that the child can control (e.g., effort, motivation). Conversely, negative effects often result from pressure on the child's performance (e.g., individual achievement) or external factors largely out of the athletes' control (e.g., playing time, outcome of games). Additionally, the specific context (e.g., during times of high stress) in

which parental pressure occurs as well as the type of pressure being applied may impact an athlete's well-being and result in the development of psychological problems (e.g., development of performance anxiety) (O'Rourke et al., 2011). For example, when parents provide a climate of high engagement and supportive encouragement, positive results are more likely to occur.

O'Rourke and colleagues' 2011 study examined the role of perceived parental behaviors on sport performance anxiety in a sample of elite adolescent swimmers. They found that positive parental effects on adolescent athletes are associated with the development of a mastery climate within the household. A mastery climate is defined as an environment in which effort, enjoyment, and self-improvement are emphasized, mistakes are not punished but viewed as a medium for learning, and the criterion for success is internal instead of external (O'Rourke et al., 2011). Parents who engage more intensely with their child to encourage effort, learning from mistakes, and focus on self-improvement may essentially be pressuring their child in an adaptive manner (O'Rourke et al., 2011). It appears that a mastery climate promotes positive effects rather than the negative effects that can result from other forms of parental pressure. In addition, a high level of engagement by a parent within a mastery climate enhances the impact they have on their children in a positive way (O'Rourke et al., 2011).

Conversely, the development of what O'Rourke and colleagues refer to as a "high pressure-ego climate" often leads to negative outcomes. An ego climate develops when the focus on athletic success is on outperforming others and mistakes are considered unacceptable (O'Rourke et al., 2011). The absence of a mastery climate combined with high parental pressure appears to elicit evaluation pressure and increases the potential for anxiety exacerbation. O'Rourke and colleagues (2011) found that anxiety was highest when both pressure and ego climate were high, indicating that parental pressure heightens the impact of an ego climate.

Under such conditions, children may perceive the need to outperform other children for parental approval, and they are driven toward goal standards (e.g., winning, individual accolades) over which they have limited control (O'Rourke et al., 2011).

Excessive parental interest in their children's athletic achievement may lead to negative consequences, such as a decreased motivation and enjoyment, and a negative emotional experience, which may lead to children dropping out of sport altogether (Bois, Lalanne, & Delforge, 2009). Specifically, Sagar & Lavallee (2010) hypothesized that three parental practices lead to negative effects on young athletes: punitive behavior, controlling behavior, and high expectations for achievement. These parental practices lead to a variety of negative outcomes such as experiencing negative affect, impaired sporting experience (i.e. less enjoyment), and decreased overall well-being (Sagar & Lavallee, 2010).

Even if parents are aware of the issues associated with excessive involvement, they may be unaware of the pressure they themselves are placing on their children. In a 2008 study on how parental attitudes and behaviors influence children's emotional reactions to sports performance, Kanters and Casper hypothesized that parents may have incongruent views from their children regarding how much pressure is applied. Their results supported this hypothesis, as parents' perception of the amount of pressure they imposed on their child was significantly lower than the pressure reported by their children (Kanters & Casper, 2008). Consequently, parents who believe they are creating a positive and nurturing environment for their child to enjoy and excel in sports may in fact be decreasing the enjoyment their child derives from sports and possibly contributing to their child's withdrawal from sports. Parents may fail to recognize that increasing their involvement in their child's sport may be viewed as stressful rather than supportive (Kanters & Casper, 2008). Parents with a healthy perspective, one not based

primarily on success, are able to emphasize balance in the child's life, thus limiting the pressure and enhancing the child's satisfaction. Parents with a healthy perspective are also able to maintain emotional control while watching their child's sporting events, which contributes to a healthy, less pressurized sport experience (Lauer, Gould, Roman, & Pierce, 2010).

Fear of failure. Fear of failure is defined as a self-evaluative framework that influences how the individual understands, experiences and copes with failure in achievement situations (McGregor & Elliot, 2005). Fear of failure can have important implications for young athletes (Sagar & Lavalee, 2010). In the context of sports, fear of failure has been associated with high levels of worry, stress, and anxiety (Conroy, Willow, & Metzler, 2002). Furthermore, high fear of failure has been associated with negative effects on an adolescent athlete's interpersonal skills, schoolwork and athletic performance (Conroy et al., 2002; Sagar, Lavallee, & Spray, 2009).

McGregor and Elliot's 2005 study examined the relationship between shame and fear of failure among college undergraduates (mean age: 19.8 years) in both a naturalistic and laboratory setting. Individuals with high fear of failure reported greater shame after failure, generalized failure to the global self, and reported more relational concerns (McGregor & Elliot, 2005). It is likely that for high fear of failure individuals, failure has implications beyond the achievement domain to outcomes such as overall psychological and physical well-being (McGregor & Elliot, 2005).

In a 2004 study, Conroy and Metzler focused on the impact of different patterns of self-talk associated with fear of failure, fear of success, and sport anxiety. They found that distinct patterns of self-talk were related to increases in competitive anxiety and fear of failure (Conroy & Metzler, 2004). Specifically, athletes with increased fear of failure experienced high levels of self-blame, self-attack, and self-neglect (Conroy & Metzler, 2004). Conroy and Metzler also

found that even while succeeding, high fear of failure participants were relatively hostile toward themselves. The authors hypothesized that even success can be somewhat distressful to these individuals because failure remains an ever-present possibility (Conroy & Metzler, 2004). As a result of their difficulties incorporating and learning from success, individuals high in fear of failure will have difficulty developing the sense of mastery that often results from sports participation.

Identity development. The critical period for identity development and increased involvement in sports often overlap. Moreover, sports participation may contribute to a number of developmental outcomes including the development of one's sense of self and identity (Eccles et al., 2003). Sports may have both positive and negative effects on identity development. With respect to beneficial effects, sport participation may enhance various aspects of self-concept. Donaldson and Ronan (2006) examined the relationship between children's sports participation and emotional well-being using multiple child self-report measures and a teacher rating scale. They found that higher levels of participation in formal sport were associated with higher levels of self-perceived behavioral competence (Donaldson & Ronan, 2006). Further, children who participated in sports self-reported lower levels of externalizing and social problems and higher levels of perceived competence as compared to those with lower rates of sports participation (Donaldson & Ronan, 2006). The authors hypothesized that participating in sports, particularly those that are organized, may help adolescents gain confidence and acquire competent behaviors such as social skills. The efficacy-based learning involved in developing reciprocal social skills through sports may, in turn, also help young athletes to feel better about themselves (Donaldson & Ronan, 2006).

Development of identity seems to be enhanced through sports participation. One mechanism through which sports have a positive influence is through their validation of identity by peers and adults. For instance, participating in sports may increase resiliency and self-esteem by giving adolescents the chance to belong to a group and by providing them with multiple opportunities to achieve success and receive public recognition, which may be particularly important during the early adolescent years (Fredricks & Eccles, 2008). When opportunities are withdrawn, unavailable, or poorly matched to the interests of the adolescents, such support for identity exploration and affirmation is likely to be lacking (Eccles et al., 2003).

Despite the numerous positive effects sports may have on identity development, an athlete's identity may become intertwined with their sport, leaving them susceptible to negative consequences. For instance, surrounding oneself with other elite athletes can create a small, distinguished, comparison group for judging one's self-worth (Denny & Steiner, 2009). In addition, having athletic prowess and success play a disproportionate role in one's self-concept may leave one vulnerable to strong, adverse reactions (e.g., depressive symptoms) to athletic disappointments (Denny & Steiner, 2009).

Development of coping skills. Coping has been defined as, "The use of cognitive and behavioral strategies to manage the demands of a situation when these are appraised as taxing or exceeding one's resources or to reduce the negative emotions and conflict caused by stress" (VandenBos, 2007, p. 232). Specifically, coping encompasses an individual's ability to manage physiological responses to stress, appraisals of events, attention, and desired outcomes (Zimmer-Gembeck & Skinner, 2008).

Adolescence is recognized as being a particularly stressful time of life as well as an important time to develop and practice personal coping skills. Stressful life experiences,

including both major events and common hassles, threaten the well-being of adolescents. Approximately 25% will experience at least one significant stressor, such as the death of a loved one or witnessing a traumatic event. An even greater number of adolescents experience chronic stressors and daily hassles, many of which are interpersonal in nature (Zimmer-Gembeck & Skinner, 2008). Compared to children, adolescents encounter many new, potentially threatening or challenging social experiences (Zimmer-Gembeck & Skinner, 2008). A developmental shift occurs between late childhood and early adolescence resulting in greater stress reactions and greater need to cope, based on major biological, cognitive, and social developments. As an adolescent's cognitive strategies for coping are improving, puberty brings biological and neurological changes that can boost reactivity to stress and also interfere with problem solving (Zimmer-Gembeck & Skinner, 2008).

In sports, competition may be appraised as challenging, beneficial, threatening (e.g., a potential for loss), and/or harmful (e.g., a loss has occurred). All of these appraisals require coping responses (Nicholls & Polman, 2008). Therefore, sports, by virtue of repeatedly presenting challenging situations where coping is required, represent a context conducive to the development of coping skills in young athletes. In a 2012 study, Tamminen and Holt interviewed adolescent athletes along with their parents and coaches to assess how young athletes learned coping strategies through sports. Adolescent athletes who were exposed to stressful experiences in sport had opportunities to learn coping strategies that they then used to cope with stressors in the future (Tamminen & Holt, 2012). Learning about coping was facilitated when athletes' attempts to cope with stressful experiences occurred in a supportive context. This involved parents and coaches establishing a psychologically safe environment in

order for athletes to feel comfortable discussing stressors and coping strategies (Tamminen & Holt, 2012).

Tamminen and Holt (2012) hypothesize that learning about coping is a process that occurs over time, contributed to by the following variables: the athlete's sport experiences and learning through trial and error, reflective practice, and coping outcomes. Without the development of coping skills, adolescent athletes are susceptible to a variety of negative outcomes. Because many common stressors of adolescence have been linked to mental health and behavioral problems, coping successfully with those stressors during this time of life is paramount (Zimmer-Gembeck & Skinner 2008). Stressors faced in adolescence have been associated with depression, anxiety, and other psychological problems. In addition, problems coped with inadequately by adolescents have been associated with an increase in externalizing behaviors such as aggression and other antisocial acts. In helping young athletes develop coping skills, it may be most important for them to have access to a sufficient range of strategies and to be able to flexibly employ them when needed (Zimmer-Gembeck & Skinner 2008).

Sport Psychology Applied to Adolescent Athletes

Despite the growth of sports psychology pertaining to the adult athletes, less attention has been devoted to the study of adolescent athletes. A literature search (via PsychInfo) of sports psychology returned over 7,500 peer-reviewed articles on the nature and treatment of a variety of sports issues facing athletes. However, the same search of *sports psychology* and the term *adolescents* returned only 360 articles, very few of which involve treatment. Thus, the extant sports psychology research with adolescent athletes is limited and relates largely to performance enhancement, behavior in sports, and developmental benefits. To date, no efforts have been

made to outline the salient issues facing adolescent athletes and to use those issues as the basis for developing treatment recommendations.

Current status of treatment. Elite adolescent athletes are increasingly utilizing sport psychologists to aid in enhancing performance. According to numerous news outlets, including *The New York Times*, parents of elite athletes are increasingly spending large amounts of money for sports psychology treatments for their children (Pennington, 2007). Increased competition amongst young athletes seeking spots on elite travel teams or college scholarships have resulted in larger numbers turning to sport psychologists to find an edge in performance.

Sport psychologists may adopt a wide range of goals. According to the APA's Division 47, sport psychologists work with athletes to enhance performance, cope with pressures of competition, help aid in the mental aspect of recovering from injuries, help reach exercise goals, and find enjoyment and fulfillment in sports ("Is an exercise," n.d.). Despite these diverse foci, in practice, most sports psychology interventions are geared toward guiding athletes to perform at their best (aka, "performance enhancement"). Sport psychologists are less likely to orient their work around promoting an athlete's emotional well being or their negotiation of developmental challenges. These tasks often fall to school- or community-based mental health clinicians who would benefit from additional resources aimed at helping them to understand and treat the unique issues faced by adolescent athletes.

Rationale for the Project

The rise in sport participation means that clinicians who work with adolescents are likely increasingly coming in contact with young athletes facing challenges directly related to sports. As outlined above, the specific issues facing adolescent athletes create additional challenges that should be addressed in treatment to improve overall psychological well-being and to promote

healthy development. In order to best meet the general mental health needs of these clients, clinicians need to be aware of the unique stressors and issues they frequently face. Furthermore, clinicians will be better positioned to understand and support the performance enhancement interventions being implemented by sport psychologists working with these athletes if they have a general understanding of the mental skills training typically used to bolster performance.

As discussed, sports participation offers the opportunity for adolescents to learn life skills that can contribute to positive developmental outcomes (Gould & Carson 2008). It is important to note that, rather than occurring automatically, many of the benefits of sports participation may need to be specifically targeted and taught in environments that are conducive for doing so (e.g., supportive coaches, clear rules and responsibilities, and positive social norms) (Gould & Carson, 2008). Mental health clinicians appear to be well positioned to help cultivate the type of conditions that promote the acquisition of life skills through sport, thereby helping to facilitate positive outcomes for young athletes with respect to their psychological adjustment.

Elite adolescent athletes have become increasingly likely to seek sport psychologists for performance enhancement. However, the unique issues adolescents encounter in high-level athletics engender a need for treatment in addition to the performance-related goals typically focused upon by sport psychologists. Without treatment designed to address the unique challenges and risks of high-level sports participation, young athletes will have difficulty realizing the potential benefits of sports, be more susceptible to adverse psychological consequences associated with high level sports participation, be less likely to reach optimal performance levels, and may experience decreases in overall emotional well-being.

Thus, mental health clinicians working with elite-level adolescent athletes would benefit greatly from a manual that outlines the issues faced by this population and provides guidelines

for addressing them in the context of outpatient psychotherapy. For the purposes of this project, the manual was designed to address issues found among male athletes (because the experiences of male and female adolescent athletes are significantly distinct, a manual that addresses both groups would be beyond the scope of this project). To the investigator's knowledge, no resource currently exists to help clinicians understand and address the unique issues elite adolescent athletes confront so as to help optimize the benefits they experience through sports.

Aims of the manual. The goal of the resource manual is to help young male athletes realize the benefits and avoid the adverse consequences that may be associated with elite-level sports participation. In order to achieve this goal, the specific aims of the manual are to (1) educate clinicians about both the unique stressors and challenges faced by elite-level adolescent male athletes, (2) identify therapeutic interventions likely to be effective in helping young male athletes cope with those stressors and challenges, and (3) familiarize clinicians with the mental skills training typically conducted by sport psychologists so as to position them to support these performance enhancement efforts.

Chapter II. Method

Overview

This clinical dissertation project involved the development of a manual for clinicians working with male adolescents who are currently participating in high-level competitive sports. The manual provides descriptive information about sport psychology interventions, including an overview of the mental skills training frequently conducted by sport psychologists. In addition, the manual provides intervention recommendations geared toward the needs and challenges commonly experienced by adolescent athletes. The project's goals were to provide a resource for mental health clinicians working with young athletes so as to enhance (a) their understanding of the sports psychology interventions their clients may be receiving, and (b) their ability to help these adolescent clients cope with a variety of unique stressors and circumstances. The target audience for this manual is mental health clinicians (e.g., psychologists, licensed therapists, and licensed clinical social workers) practicing in a range of settings (e.g., private practice, community mental health centers, schools, hospitals) who work with young, high-level male athletes (e.g., ages 12-18) currently engaged in competitive sports (many of whom may be working concurrently with a sport psychologist).

Enhancing clinicians' awareness and knowledge of the unique challenges facing adolescent athletes as well as how best to treat those challenges are areas in need of attention. Multiple factors support the decision to develop a manual targeted toward mental health clinicians who work with young athletes. First, athletic participation has increased significantly over recent decades among adolescent boys and girls in the United States (Theokas, 2009). As a result, it is likely that clinicians who treat young people will encounter adolescent athletes at times throughout their careers. Second, like their adult counterparts, adolescent athletes can

often benefit from working with a mental health clinician around various psychological factors affecting both their performance and their overall well-being (e.g., performance anxiety, high stress levels, other emotional factors). Third, by virtue of their developmental stage, adolescent athletes face additional challenges related to their physical and social-emotional development that a mental health professional could help them to navigate. Fourth, mental health professionals working with adolescent athletes are positioned to help them engender skills relevant to the context of sports participation that will serve them well across a broader range of contexts extending into their adult years. An enhanced understanding of the context of adolescent sports and some of the challenges faced by young athletes will help clinicians promote such skills more effectively. Finally, the project appears to fill a gap in the resources available to clinicians as no manual focused on assisting mental health clinicians in their treatment of adolescent athletes appears to exist at present.

The manual is intended to provide mental health clinicians with a resource to effectively treat adolescent athletes. It is anticipated that this manual will increase clinicians' knowledge of unique challenges facing adolescent athletes as well as the adjunctive treatment young athletes may be receiving from sport psychologists. The manual also guides clinicians in how to address the unique stressors that accompany being a young athlete. In addition, the manual includes information about some of the salient ethical considerations that need to be addressed when working with young athletes. Finally, the manual provides an overview of some of the relevant cultural issues that often need to be considered that need to be considered by clinicians working with young athletes in treatment.

Developing the Resource

The following section describes the development of the resource manual.

Literature review. A thorough literature review was conducted in order to provide an overview of existing literature, rationale for the resource manual, common challenges facing adolescent athletes, treatment techniques for adolescent athletes and cultural and ethical issues that must be considered by clinicians. The literature review was broken into the following four areas: (a) the benefits (physical, emotional, social) of sports for participants; (b) the field of sports psychology (historical roots and growth over time, typical treatment objectives and components, current status as a psychology subdiscipline); (c) adolescent athletes (participation rates, unique circumstances and challenges); and (d) the application of sports psychology to adolescent athletes (interventions, areas in need of increased attention, cultural and ethical issues).

The primary literature reviewed was identified through searches in online databases including Academic Search Elite, Psycinfo, Psycarticles, and Google Scholar. Specific search terms included various terms related to sport psychology (e.g., *sport psychology history, applied sport psychology, performance enhancement, performance theory, mental skills training; psychotherapy with athletes*); adolescent development; adolescent sports participation; sport psychology treatment (e.g., *evidence-based sports psychology treatment, imagery*); Cultural considerations in athletics and mental health treatment with adolescents; ethical considerations in sports and mental health treatment with adolescents; and manual dissemination.

Treatment manuals designed for mental health clinicians were reviewed in order to provide the foundation for determining the structure of the proposed manual. In addition, selections of representative sport psychology texts were reviewed in order to become familiar

with materials currently available for clinicians. These books included: *Handbook of Sport Psychology* (3rd ed.) (Tenenbaum & Eklund, 2007), *Evidence-Based Applied Sport Psychology: A Practitioner's Manual* (Carlstedt, 2012), and *Foundations of Sport and Exercise Psychology* (Weinberg & Gould, 2010).

The literature review was updated as the resource manual was developed. Specifically, periodic literature searches were conducted using the aforementioned databases and search terms throughout the course of the project.

Interviews. The content of the manual was informed largely by the existent literature but supplemented by interviews with individuals who had first-hand experience either being a young elite athlete or working with such athletes. The investigator recruited interviewees from the following categories: Sport psychologist, an elite athlete, and a licensed clinician with experience working with athletes. The three subjects who were interviewed included the following: a) A licensed clinical psychologist who has provided interventions with young athletes over the course of his career; b) a sport psychologist who also taught sport psychology courses at a well-known private university for over 15 years; and c) an former Division I male track athlete at a prominent public university. Participants were all English speaking males over the age of 18, who agreed to be interviewed for this project (See Appendix B for IRB approval notice).

Each subject was interviewed by the primary investigator using a semi-structured interview designed specifically for each individual based on his or her experience in sports (See Appendix C). The primary investigator is an advanced doctoral student with experience in clinical interviewing. Each interview took approximately 40-50 minutes. Two broad topics were addressed in each interview; (a) clarification of challenges associated with being/working with athletes, and (b) clarifying skills, interventions, and tools for navigating those challenges.

Additional descriptive information about these interviews, the content themes they yielded, and how they influenced the development of the manual is presented in Appendix C.

Format and Structure of the Manual

The manual is organized into an introductory chapter and three modules, each devoted to a specific topic. Within each module, material is organized into sections that focus on specific topics relevant to the content of that module. Sections within each module are logically sequenced, based on the anticipated preexisting knowledge and needs of the target audience. The manual includes a table of contents with clear headings and subheadings within each chapter/module. The goal is to provide an organized structure that clinicians can follow in a logical sequence while also providing each module as a stand-alone resource that the clinician can use to understand and/or address specific issues faced by the young athlete.

Each of the manual's three modules addresses unique and important aspects of intervening with young athletes. The first module provides an overview of mental skills training that are common in a young athlete's performance-oriented work with sport psychologists. The second module provides an overview of the challenges unique to adolescent athletes and outlines specific interventions to help improve the young athlete's overall emotional well-being. The third module provides an overview of some of the ethical and cultural challenges facing clinicians working with young athletes.

Content of Manual

The opening chapter of the manual presents short vignettes designed to highlight the increased use of mental health interventions with athletes. This chapter then orients the reader to the manual by identifying its intended audience (e.g., clinicians working with elite male adolescent athletes), purpose, included and excluded topics, and how it can be used. The

remainder of the manual is broken into modules that address the following topics of relevance for clinicians working with adolescent athletes: (a) performance enhancement as typically promoted by sport psychologists, (b) promoting emotional well-being, and (c) ethical and cultural considerations. Each of these modules is discussed briefly below.

The first module focuses on providing an overview of mental skills training interventions commonly used by sport psychologists to enhance performance. It addresses the rationale for and key components of mental skills training in order to provide those clinicians with clients who are working with sport psychologists with an enhanced understanding of these interventions. The second module focuses on enhancing the overall emotional well-being of the young elite athlete, both as a factor in enhanced performance and as an end unto itself. It addresses the challenges unique to adolescent athletes and discusses psychotherapy interventions likely to help the young athlete to successfully address them. The final module presents an overview of ethical and cultural considerations of likely relevance to clinicians who treat adolescent athletes. Specifically, this module addresses issues of confidentiality and boundaries as well as considerations arising when intervening with young athletes of ethnic minority groups and low socioeconomic status.

Evaluation of the Resource

Although a formal evaluation (e.g, expert review, user field testing and feedback) of the completed manual is beyond the time-scope of this project, a plan for such an evaluation is articulated as part of the Discussion chapter.

CHAPTER III. Manual

A resource manual was created to guide clinicians working with young elite male athletes in order to help them realize the benefits and avoid the adverse consequences that may be associated with elite-level sports participation. The strategies and techniques described are geared toward mental health clinicians working with elite male athletes between the ages of 12 and 18 years old. The manual was developed to be a resource to guide mental health clinicians about the nature and treatment of some of the unique stressors and challenges faced by elite-level adolescent male athletes. Additionally, the manual was designed to familiarize clinicians with the mental skills training typically conducted by sport psychologists so as to position them to support these performance enhancement efforts. The resource manual is intended to be clear, user-friendly, and appropriate for the members of the target population working in a variety of settings. The manual can be found in its entirety in Appendix D.

CHAPTER IV. Discussion

Summary of the Project

The purpose of the manual entitled *Development of the athlete: A resource manual for clinicians working with elite adolescent male athletes* is to provide a resource for clinicians who work with adolescent athletes. Young athletes currently face increased competition and intensified pressure to maximize their performance. As a result, greater numbers of young athletes are turning to sport psychologists to gain an edge in performance whereas parents of such athletes are increasingly investing large sums of money in sport psychology services (Pennington, 2007).

The rise in sport participation means that clinicians who work with adolescents are likely increasingly coming in contact with young athletes facing challenges directly related to sports. The specific issues facing adolescent athletes create additional challenges that should be addressed in treatment to improve overall psychological well-being and to promote healthy development. In order to best meet the general mental health needs of these clients, clinicians need to be aware of the unique stressors and issues they frequently face. Furthermore, clinicians will be better positioned to understand and support the performance enhancement interventions being implemented by sport psychologists working with these athletes if they have a general understanding of the mental skills training typically used to bolster performance. Thus, the resource manual aims to provide mental health clinicians with a resource to effectively treat elite male adolescent athletes. The aspiration is that this manual will increase clinicians' knowledge of unique challenges facing adolescent athletes as well as the adjunctive treatment young athletes may be receiving from sport psychologists.

Thus, the primary goal of the manual is to provide mental health clinicians with a resource to effectively treat adolescent athletes. Specific aims include the following: 1) Increase clinicians' knowledge of unique challenges facing adolescent athletes as well as the adjunctive interventions young athletes may be receiving from sport psychologists; 2) Provide ideas and resources to guide clinicians in how to address the unique stressors that accompany being a young athlete; 3) Raise awareness of some of the salient ethical considerations that need to be addressed when working with young athletes; and 4) Provide an overview of some of the cultural considerations relevant to working clinically with young athletes.

Development of the Manual¹

The first step in creating the manual was to conduct a review of the scholarly literature in the following four areas: (a) the benefits (physical, emotional, social) of sports for participants; (b) the field of sports psychology (historical roots and growth over time, typical treatment objectives and components, current status as a psychology subdiscipline); (c) adolescent athletes (participation rates, unique circumstances and challenges); and (d) the application of sports psychology to adolescent athletes (interventions, areas in need of increased attention). Conducting this review gave the author the background knowledge needed to shape the rationale and goals for the manual. Additional literature reviews were then conducted to inform the content of the three modules of the resource manual. These reviews were broken into the following four areas: (a) mental skills training with athletes; (b) psychological interventions with adolescents and adolescent athletes; (c) cultural considerations when intervening with athletes; and (d) ethical considerations when intervening with athletes.

The content of the resource manual was informed largely by the existent literature but also by interviews with individuals who have first-hand experience either being an elite

¹ Please refer to Chapter II for a more detailed description of the development of the manual

adolescent athlete or working with young athletes. Interview subjects comprised: a) a licensed psychologist with extensive experience providing clinical services to young athletes; b), a sport psychologist who taught sport psychology courses at a major university in the northeast United States for 15 years; and c) a former Division I scholarship athlete who had been recruited by major universities. Each subject was interviewed by the primary investigator using a semi-structured interview designed specifically for each individual based on his or her role. Each interview addressed two broad topics: Clarification of challenges associated with being/working with athletes as well as clarifying skills, interventions, and tools for navigating those challenges.

Organization and Content of the Manual

The manual is organized into an introductory section followed by three content modules. The first module (A) focuses on providing an overview of mental skills training interventions commonly used by sport psychologists to enhance performance. The module begins with an overview of mental skills training and addresses why sport psychologists choose specific techniques when working with athletes. The module is organized in a way that presents the most common or easily implemented techniques first, followed by less common mental skills training techniques. The interventions discussed include: cognitive behavioral therapy, imagery, visuo-motor behavior rehearsal, self-talk, goal setting, biofeedback, mindfulness, stress management training, and physical relaxation training. Each section pertaining to a particular intervention concludes with a brief discussion of the relevant outcome literature (or the absence of such) along with resources for further study.

The second module (B) provides an overview of the common issues and stressors faced by adolescent male athletes. These include parental pressure, fear of failure, identity development, and development of coping skills. The module provides intervention techniques

and clinical tips focused on enhancing the overall emotional well-being of the young elite athlete, both as a factor in enhanced performance and as an end unto itself. Additionally, Module B features a section devoted to concussions and other athletic injuries as well as a brief discussion of therapeutic alliance and adolescent termination.

The final module (C) presents a brief overview of cultural and ethical considerations of potential relevance to clinicians who provide services to adolescent athletes. Specifically, the initial section provides an overview of cultural competence, identifies some culturally-based differences that may impact treatment, and outlines the guidelines clinicians should follow to conduct culturally competent therapy. The subsequent section on ethics provides an overview of the current ethics codes set forth by various organizations (e.g., American Psychological Association) and ethical considerations when working with young athletes. In addition, this section addresses issues related to confidentiality, boundaries, multiple role relationships, competence, and marketing one's services. Each module features headings, subheadings, and figures designed to assist the reader with readily identifying subject material and interventions.

Strengths of the Current Manual

This manual represents one of the few resources available for assisting clinicians in delivering mental health services to adolescent athletes. Although informed in part by interviews with experts with different vantage points on adolescent athletes, the content of the manual was based primarily on clinical and empirical literature regarding adolescent athletes and the interventions used with them. Thus, the manual's content is empirically informed and it provides numerous additional resources that are scientifically based.

The design of the manual lends itself to flexible use, meaning that a clinician need not read the manual from beginning to end to benefit from its content. Rather, clinicians can seek out a topic of interest and apply content pertaining to that topic to a given case.

An additional strength is that the manual provides resources including empirical studies, books, websites, and professional organizations identified to help clinicians add to their knowledge and skills regarding adolescent athletes and their treatment. The additional content provides some direction for clinicians seeking practical guidance in providing the best possible treatment to their young athlete clients.

Limitations of the Current Manual

Despite the aforementioned strengths, the current manual has several limitations that merit discussion. The content included in the manual was considered the most important for clinicians working with young male athletes. However, many potentially relevant topics were excluded. For example, certain treatment modalities applicable to adolescent athletes were not discussed (e.g., virtual reality therapy, mindfulness and other meditation-based approaches). With respect to socio-cultural content, little or no attention is given to economic disadvantage, LGBT issues, religion/spirituality, or to the unique issues faced by elite adolescent athletes of color (e.g., how they might experience a dual and contradictory status with respect to privilege). Similarly, despite it being an ethical issue of relevance to clinical work with adolescents, there is little content on involving parents in the treatment of young athletes (e.g., why it is important, how best to integrate parents into treatment, managing the flow of information between teenage clients and their parents).

Additional limitations apply to the sources used to generate the content for the manual. Although information gleaned from the three interviews conducted was highly informative, the

small sample raises legitimate concerns that the experiences and opinions of these individuals may not be representative of the larger populations from which they were chosen (viz., clinicians working with young athletes, sport psychologists, elite athletes). Therefore, it may be possible that some of the content informed by these interviews may not be widely applicable.

Furthermore, although much of the content in the manual is empirically informed, the research on which it was based is of variable quality (e.g., few randomized controlled trials) and often did not pertain specifically to elite male adolescent athletes, which represent an understudied population.

Given the focus on male adolescent athletes, another obvious limitation of the manual is that it does not discuss the many unique issues faced by female athletes or interventions most suited to address them. For example, female athletes may experience additional stress and conflicts due to the fact that aspects of competitive sports conflict with traditional gender roles for females in ways that do not apply to males. Issues related to body image, identity development, performance pressure, and post-pubescent development are also likely to differ significantly for female as opposed to male athletes.

Potential Improvements to the Current Manual

There are a number of modifications that would potentially improve the current manual. In addition to including some of the aforementioned omitted content (e.g., additional interventions such as mindfulness and virtual reality), the manual could be enhanced through more in-depth discussions of the topics addressed. Accompanying each topic could be more detailed content on the practical implications for the clinician using the manual (e.g., what specifically might mental health clinicians do to coordinate care with sport psychologists and to facilitate the athlete's acquisition of various mental skills designed to enhance performance).

Clinicians would likely value more specific, step-by-step instructions to interventions that they could implement as part of their practices.

With respect to style, future versions of the manual might benefit from the adoption of a more informal tone, the consistent use of second (e.g., “you,” “your”) person pronouns, as well as more extensive use of clinical examples and case vignettes to clarify and vivify key content. Including additional graphics (e.g., pictures, charts) would also likely make the manual more user-friendly and engaging.

The author intends to expand to the current manual to include a wider range of athletic populations (beyond elite adolescent male athletes) and to provide additional resources for mental health clinicians. The author hopes to ultimately publish a revised version of the manual as a book for mental health professionals and graduate students interested in working with young athletes. Additionally, future development could involve the creation of an electronic version of the manual that could be used on tablets and other mobile devices. This would allow for more convenient access to the material and provide ways that clinicians could annotate material that they find particularly useful.

Plan for Evaluation of the Current Manual

Although a formal evaluation of the completed manual is beyond the time-scope of this project, a plan for such an evaluation is articulated below. After initial improvements identified above are made to the manual, both informal and formal evaluation of its content, format, user-friendliness, and efficacy will be necessary. The first step of the evaluation process will involve feedback emerging from the dissertation defense. Revisions based on this feedback along with the author’s self-initiated review will help to prepare the manual for the additional forms of evaluation described below.

In order to improve the manual for distribution and use in clinical settings, the next evaluation step will be to gather expert feedback. Mental health clinicians and sport psychologists who routinely work with elite male adolescent athletes will be contacted and asked to read the manual and provide feedback. Specifically, sport psychologists will be asked to provide feedback on the modules on mental skills training and cultural/ethical considerations. Mental health clinicians working with athletes in therapy will be asked to provide feedback on the modules on intervening with elite male adolescent athletes and cultural/ethical considerations. Although opportunities for open-ended comments will be provided, these professionals will primarily provide their feedback through a structured evaluation form developed by the author that will ask respondents to rate various aspects of the manual on a Likert scale. Topics to be evaluated will include the organization, style, and user-friendliness of the manual, the content they were asked to review, and the manual's anticipated usefulness for mental health clinicians. Sport psychologists and mental health clinicians will also be asked to provide feedback on the overall strengths and limitations of the manual and to evaluate its anticipated efficacy. Once feedback from professionals has been incorporated into another round of revisions, the finalized manual could be distributed to clinicians for more formal evaluation.

In addition to assisting with modifications to the content of the manual, mental health clinicians will be sought to conduct specific interventions from Module B to measure the efficacy of interventions in addressing mental health symptoms. Evaluation will assess the amount of change experienced by adolescent male athletes as a result of the interventions suggested through the use of outcome measures focused on both psychological symptoms (e.g., anxiety, depression) and performance enhancement. The first such empirical evaluation might

involve a within-subject pre-test/post-test design in which single athletes or groups of athletes complete a series of measures prior to and after receiving the intervention.

Subsequently, the efficacy of the manual could be assessed through pretest-posttest or post-test only between-group comparison studies involving two groups of like-aged athletes coping with specific psychological diagnoses (e.g., depression, anxiety disorder). The initial such study could involve randomly assigning participants to either an experimental condition where they receive manual-guided intervention (including techniques from Module B) or to a control group receiving “treatment as usual” treatment from a clinician who has not been exposed to the manual.

Plan for Dissemination

Dissemination of the manual is premature at this time as it is still in draft form and has not yet been evaluated. Dissemination would occur only after the manual has been modified on the basis of results from expert review and evaluated using at least some of the methods described above. At that time, dissemination would initially involve reaching out to psychologists and other mental health clinicians who intervene with adolescent athletes regularly to address emotional difficulties.

Conclusion

The unique issues associated with adolescence means that teenage athletes face significant challenges that differ from their adult counterparts. It is the author’s hope that this project opens a dialogue among clinicians and researchers who work with athletes to develop empirically supported interventions that supplement the traditional focus on performance enhancement by attending to the emotional well-being of adolescent athletes.

References

- Anderson, A., Miles, A., Robinson, P., & Mahoney, C. (2004). Evaluating the athlete's perception of the sport psychologist's effectiveness: What should we be assessing? *Psychology of Sport and Exercise, 5*(3), 255–277. doi:10.1016/S1469-0292(03)00005-0
- Aoyagi, M. W., Portenga, S. T., Poczwardowski, A., Cohen, A. B., & Statler, T. (2012). Reflections and directions: The profession of sport psychology past, present, and future. *Professional Psychology: Research and Practice, 43*(1), 32–38. doi:10.1037/a0025676
- Behncke, L. (2004). Mental skills training for sports: A brief review. *Athletic Insight: The Online Journal of Sport Psychology, 6*(1), 1–19. Retrieved from <http://www.aist-pain.it/en/files/SPORTANDMENTALTRAINING/SkillsPDF.pdf>
- Bois, J. E., Lalanne, J., & Delforge, C. (2009). The influence of parenting practices and parental presence on childrens' and adolescents' pre-competitive anxiety. *Journal of Sports Sciences, 27*(10), 995–1005. doi:10.1080/02640410903062001
- Carlstedt, R. A. (2012). *Evidence-Based Applied Sport Psychology: A Practitioner's Manual*. New York, NY: Springer Publishing Company
- Conroy, D. E., & Metzler, J. N. (2004). Patterns of self-talk associated with different types of competitive anxiety. *Journal of Sport & Exercise Psychology, 26*, 69–89. doi:10.4236/psych.2014.52019
- Conroy, D. E., Willow, J. P., & Metzler, J. N. (2002). Multidimensional fear of failure measurement: The Performance Failure Appraisal Inventory. *Journal of Applied Sport Psychology, 14*, 76-90. doi:10.1080/10413200252907752

- Denny, K. G., & Steiner, H. (2009). External and internal factors influencing happiness in elite collegiate athletes. *Child Psychiatry and Human Development*, *40*(1), 55–72.
doi:10.1007/s10578-008-0111-z
- Deslandes, A., Moraes, H., Ferreira, C., Veiga, H., Silveira, H., Mouta, R., ... Laks, J. (2009). Exercise and mental health: Many reasons to move. *Neuropsychobiology*, *59*(4), 191–198. doi:10.1159/000223730
- Donaldson, S. J., & Ronan, K. R. (2006). The effects of sports participation on young adolescents' emotional well-being. *Adolescence*, *41*(162), 369–389. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/16981623>
- Eccles, J. S., Barber, B. L., Stone, M., & Hunt, J. (2003). Extracurricular activities and adolescent development. *Journal of Social Issues*, *59*(4), 865–889. doi:10.1046/j.0022-4537.2003.00095.x
- Fredricks, J., & Eccles, J. (2006). Is extracurricular participation associated with beneficial outcomes? Concurrent and longitudinal relations. *Developmental psychology*, *42*(4), 698–713. doi:10.1037/0012-1649.42.4.698
- Fredricks, J., & Eccles, J. (2008). Participation in extracurricular activities in the middle school years: Are there developmental benefits for African American and European American youth? *Journal of Youth and Adolescence*, *37*, 1029–1043. doi:10.1007/s10964-008-9309-4
- Gardner, F. (2009). Efficacy, mechanisms of change, and the scientific development of sport psychology. *Journal of Clinical Sport Psychology*, 139–155. Retrieved from <http://www.pspc.com.au/files/efficacymechanismsofchangeandthescientificdevelopmentofsportpsychology.pdf>

- Gould, D., & Carson, S. (2008). Life skills development through sport: Current status and future directions. *International Review of Sport and Exercise Psychology*, *1*(1), 58–78.
doi:10.1080/17509840701834573
- Hansen, D. M., Larson, R. W., & Dworkin, J. B. (2003). What adolescents learn in organized youth activities: A survey of self-reported developmental experiences. *Journal of Research on Adolescence*, *13*(1), 25–55. doi:10.1111/1532-7795.1301006
- Haskell, W. L., Lee, I. M., Pate, R. R., Powell, K. E., Blair, S. N., Franklin, B. A., ... Bauman, A. (2007). Physical activity and public health: Updated recommendation for adults from the American College of Sports Medicine and the American Heart Association. *Medicine and Science in Sports and Exercise*, *39*(8), 1423–1434.
doi:10.1249/mss.0b013e3180616b27
- Harmison, R. J. (2011). Peak performance in sport: Identifying ideal performance states and developing athletes' psychological skills. *Sport, Exercise, and Performance Psychology*, *1*, 3–18. doi:10.1037/2157-3905.1.S.3
- High school sports participation continues upward climb. (2011, August 23). Retrieved from <http://www.nfhs.org/content.aspx?id=5752>
- Holt, N. L., Tamminen, K. A., Black, D. E., Sehn, Z. L., & Wall, M. P. (2007). Parental involvement in competitive youth sport settings. *Psychology of Sport and Exercise*, *9*(5), 663–685. doi:10.1016/j.psychsport.2007.08.001
- Is an exercise and sport psychologist what I am looking for? (n.d.). Retrieved from <http://www.apadivisions.org/division-47/about/resources/choose.aspx#>

- Irick, E. (2011). *Student-Athlete participation: NCAA sports sponsorship and participation rates report*. Retrieved from <http://www.nwcaonline.com/nwcawebsite/docs/saving-wrestling-files/pdf-.pdf?sfvrsN=0>
- Kanters, M. A., & Casper, J. (2008). Supported or pressured? An examination of agreement among parents and children on parent's role in youth sports. *Journal of Sport Behavior*, *31*(1), 64–81. Retrieved from <http://www.cabdirect.org/abstracts/20103087389.html>
- Kwakkel, G., van Peppen, R., Wagenaar, R. C., Wood Dauphinee, S., Richards, C., Ashburn, A., ... Langhorne, P. (2004). Effects of augmented exercise therapy time after stroke: A meta-analysis. *Stroke*, *35*(11), 2529–2539. doi:10.1161/01.STR.0000143153.76460.7d
- Lauer, L., Gould, D., Roman, N., & Pierce, M. (2010). Parental behaviors that affect junior tennis player development. *Psychology of Sport and Exercise*, *11*(6), 487–496. doi:10.1016/j.psychsport.2010.06.008
- Markser, V. Z. (2011). Sport psychiatry and psychotherapy. Mental strains and disorders in professional sports. Challenge and answer to societal changes. *European Archives of Psychiatry and Clinical Neuroscience*, *261*, 182–185. doi:10.1007/s00406-011-0239-x
- McGregor, H. A., & Elliot, A. J. (2005). The shame of failure: Examining the link between fear of failure and shame. *Personality & Social Psychology Bulletin*, *31*(2), 218–31. doi:10.1177/0146167204271420
- Nicholls, A. R., & Polman, R. C. J. (2008). Think aloud: Acute stress and coping strategies during golf performances. *Anxiety, Stress, and Coping*, *21*(3), 283–294. doi:10.1080/10615800701609207
- O'Rourke, D. J., Smith, R. E., Smoll, F. L., & Cumming, S. P. (2011). Trait anxiety in young athletes as a function of parental pressure and motivational climate: Is parental pressure

- always harmful? *Journal of Applied Sport Psychology*, 23(4), 398–412.
doi:10.1080/10413200.2011.552089
- Pennington, B. (2007). Young athletes turn to sports psychology. *The New York Times*. Retrieved from <http://www.nytimes.com/2007/08/05/sports/05iht-GYMNAST.1.6987311.html>
- Portenga, S., Aoyagi, M. W., Cohen, G., Balague, A., & Harmison, B. (n.d.). *Defining the practice of sport and performance psychology*. Retrieved from <http://www.apadivisions.org/division-47/about/resources/defining.pdf>
- Rumbold, J. L., Fletcher, D., & Daniels, K. (2011). A systematic review of stress management interventions with sport performers. *Sport, Exercise, and Performance Psychology*, 1(3), 173-193. doi:10.1037/a0026628
- Sagar, S. S., & Lavalley, D. (2010). The developmental origins of fear of failure in adolescent athletes: Examining parental practices. *Psychology of Sport and Exercise*, 11(3), 177–187. doi:10.1016/j.psychsport.2010.01.004
- Sagar, S. S., Lavalley, D., & Spray, C. M. (2009). Coping with the effects of fear of failure: a preliminary investigation of young elite athletes. *Journal of Clinical Sport Psychology*, 1,1-27.
- Schaal, K., Tafflet, M., Nassif, H., Thibault, V., Pichard, C., Alcotte, M., ... Toussaint, J. F. (2011). Psychological balance in high level athletes: Gender-based differences and sport-specific patterns. *PloS One*, 6(5), 1–9. doi:10.1371/journal.pone.0019007
- Stapleton, A. B., Hankes, D. M., Hays, K. F., & Parham, W. D. (2010). Ethical dilemmas in sport psychology: A dialogue on the unique aspects impacting practice. *Professional Psychology: Research and Practice*, 41(2), 143–152. doi:10.1037/a0017976

- Tamminen, K. A., & Holt, N. L. (2012). Adolescent athletes' learning about coping and the roles of parents and coaches. *Psychology of Sport and Exercise, 13*(1), 69–79.
doi:10.1016/j.psychsport.2011.07.006
- Tenenbaum, G., & Eklund, R. C. (2007). *Handbook of sport psychology* (3rd ed.). Hoboken, NJ: John Wiley & Sons.
- Theokas, C. (2009). Youth sport participation--a view of the issues: Introduction to the special section. *Developmental Psychology, 45*(2), 303–306. doi:10.1037/a0015042
- Tomlinson, A., & Young, C. (2011). Towards a new history of European sport. *European Review, 19*(4), 487–507. doi:10.1017/S1062798711000159
- VandenBos, G. R. (Ed.). (2007). *APA dictionary of psychology*. Washington, DC: American Psychological Association.
- Vealey, R. S. (2007) Mental Skills Training in Sport. In G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of sport psychology* (3rd Ed.) (pp. 287-309). Hoboken, NJ: John Wiley & Sons.
- Vella, S., Oades, L., & Crowe, T. (2011). The role of the coach in facilitating positive youth development: Moving from theory to practice. *Journal of Applied Sport Psychology, 23*(1), 33–48. doi:10.1080/10413200.2010.511423
- Warburton, D. E. R., Nicol, C. W., & Bredin, S. S. D. (2006). Health benefits of physical activity: The evidence. *Canadian Medical Association Journal, 174*(6), 801–809.
doi:10.1503/cmaj.051351
- Weinberg, R. S., & Gould, D. (2010). *Foundations of sport and exercise psychology* (5th Ed.). Champaign, IL: Human Kinetics

Zimmer-Gembeck, M. J., & Skinner, E. A. (2008). Adolescents coping with stress: Development and diversity. *Prevention Researcher*, 3–7. Retrieved from http://www.pdx.edu/sites/www.pdx.edu/psy/files/media_assets/7_Zimmer-Gembeck_Skinner_AdolCoping_PreventionResearcher.pdf

APPENDIX A:
Literature Review

Section A. Empirical Literature

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
Anderson, A., Miles, A., Robinson, P., & Mahoney, C.	Evaluating the athlete's perception of the sport psychologist's effectiveness: What should we be assessing? (2004)	Help provide a greater understanding of factors pertinent to the effective practice of applied sport psychologists in order to influence evaluation standards.	<i>N</i> = 30, 30 elite athletes from the UK from a range of sports including 20 females and 10 males (mean age = 22.7)	Semi-structured interviews with all athletes involved. The interview guide and content of the questions were developed over several phases following recommendations by Smith (1997) and Breakwell (1995).	<p>Athletes indicated that sport psychologists should be personable, a good communicator, provider of a good practical service, knowledgeable and experienced in sport and sport psychology, honest and trustworthy, and exhibits professional skills.</p> <p>Being a good communicator was perceived as being willing to listen to others' ideas and open to suggestions, as well as being perceived as someone who would actively listen to the athletes.</p> <p>Athletes also highlighted the</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
					<p>importance of the sport psychologist being perceived as someone who is easy to talk to and someone on to whom the athletes felt they could off-load concerns.</p> <p>Athletes pointed out that it was important that the sport psychologist was available when they needed to work with him or her and that they should immerse themselves in the sport in order to be optimally available.</p> <p>The sport psychologist was recognized as ‘someone who bridged the gap’ and could mediate between</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
					coaches and players and provide an objective viewpoint on issues without a vested interest in either side.
Bois, J. E., Lalanne, J. & Delforge, C.	The influence of parenting practices and parental presence on children's and adolescents' pre-competitive anxiety (2009)	To examine whether parental beliefs and perceptions influence specific behaviors and climates concerning their children including the pattern of interaction with the child, the extent of encouragement, the provision of opportunities and experiences the affective tonality of their relationship.	$N = 341$, 201 basketball players (99 boys and 102 girls, mean age 14.2 years, $sd = 1.7$, range 9–18) and 140 tennis players (78 boys and 62 girls, mean age 13.5 years, $sd = 2.3$, range 10–18).	The French version (Debois & Fleurance, 1998) of the Competitive State Anxiety Inventory (CSAI-2, Martens et al., 1990) was used to assess pre-competitive anxiety. Canonical correlation was used to examine the relationship between pre-competitive anxiety and parenting practices.	Whatever the influence of pre-competitive anxiety on performance, the presence of both parents during the competition seems to constitute anxiety for athletes, especially girls. Directive behaviors and pressure have facilitative effects on anxiety, whereas praise and understanding have a protective effect.

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
					<p>Directive behaviors and pressure were positively related to anxiety for all tennis players while praise and understanding was negatively associated with anxiety, but only for female tennis players.</p> <p>Excessive use of controlling behaviors parents can also foster negative emotional experience in sport.</p> <p>Results confirm the positive effect of parental pressure as well as directive behaviors on anxiety. A negative influence of parental praise and understanding</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
					on anxiety was found, indicating that some parental behaviors could favor positive experience in sport.
Conroy, D. E., & Elliot, A. J.	Fear of failure and achievement goals in sport: Addressing the issue of the chicken and the egg (2004)	Establish cross-sectional validity of the hierarchical model of achievement motivation in the context of sport, and to test the causal sequence of the Fear of Failure-goals relationship in a quasi-experimental context.	$N = 356$, (250 male and 106 female) undergraduates at a large university participated in the study. Participants were enrolled in various physical activity courses (strength training, golf, jogging and walking).	The Performance Failure Appraisal Inventory (PFAI; Conroy, 2001; Conroy et al., 2002) was used to assess fear of failure. The 2 x 2 Achievement Goals Questionnaire for Sport (Conroy et al., 2003) was used to measure participants' achievement goals for their courses. Multiple regression was used to assess the relationship	Fear of Failure positively predicted both avoidance goals (mastery-avoidance and performance-avoidance) with a moderate effect size. At a more specific level, all of the Fear of Failure appraisals were associated with avoidance goals (mastery-avoidance and performance-avoidance). Fears of experiencing shame and embarrass-

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
				between achievement and fear of failure.	ment were most strongly linked to these goals, and were the only appraisal scores that significantly correlated with performance-approach goals.
Conroy, D. E., & Metzler, J. N.	Patterns of self-talk associated with different types of competitive anxiety (2004)	The relationship between self-talk and sport anxiety was explored as well as the effect self-talk has on situation-specific trait performance anxiety. In addition, the article looked to establish how patterns of recalled state-specific self-talk (e.g., while failing/succeeding) were associated with performance anxiety.	$N = 440$, Female ($n = 234$) and male ($n = 204$) college students who engaged in recreational physical activities.	Five instruments were used. First, a cover questionnaire was used to identify participants' sex, age, and year in college. Participants also provided a brief narrative description of a time when they felt like they failed while performing a motor activity. Fear of Failure was assessed with the Performance	While succeeding (vs. failing), participants described themselves as being (a) more self-emancipating, self-affirming, actively self-loving, self-protecting, and self-controlling, and (b) less self-blaming, self-attacking and self-neglecting. Compared to their self-talk fears, participants reported wishing to treat

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
				<p>Failure Appraisal Inventory (PFAI; Conroy, 2001; Conroy, Metzler, & Hofer, 2003; Conroy, Willow, & Metzler, 2002). Fear of Success was assessed using the Fear of Success Scale (FOSS; Zuckerman & Allison, 1976) and the Sport Anxiety Scale (SAS; Smith et al., 1990) was used to measure cognitive anxiety. Self-talk was assessed with the SASB Intrex questionnaire (Benjamin, 1974, 2000). Twelve multiple regression</p>	<p>themselves in a manner that was (a) more self-emancipating, self-affirming, actively self-loving, self-protecting, and self-controlling, and (b) less self-blaming, self-attacking, and self-neglecting.</p> <p>Self-talk while failing strongly predicted scores for Fear of Failure.</p> <p>High Fear of Failure and Sport Anxiety were each associated with (a) low levels of self-emancipation, self-affirmation, active self-love and self-protection, and (b) high levels of self-control, self-blame, self-</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
				models were estimated to examine the relationships between the three situation-specific performance anxiety scores (outcome variables) and the four sets of state-specific self-talk scores (predictor variables).	<p>attack, and self-neglect (while failing).</p> <p>Elevated Fear of Failure was associated with high levels of recalled self-blame and self-neglect while failing.</p> <p>High Fear of Success was associated with (a) low levels of self-protection, active self-love, self-control, and self-affirmation, and (b) high levels of self-neglect, self-attack, self-blame, and self-emancipation (while failing).</p>
Conroy, D. E., Willow, J. P., & Metzler, J. N.	Multidimensional fear of failure measurement: The Performance Failure	To assess the validity of The Performance Failure Appraisal Inventory, a	<i>N</i> = 544. A general sample of university undergraduate students.	A 25-item inventory was given to all participants. Five aversive conse-	Researchers found that it is appropriate to extend applications of the Performance

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
	Appraisal Inventory (2002)	fear of failure instrument.		<p>quences of failure were assessed by the 25-item inventory were: Experiencing shame and embarrassment, devaluing one's self-estimate, having an uncertain future, important others losing interest, and upsetting important others. Confirmatory factor analyses were utilized to measure fear of failure against aversive consequences.</p>	<p>Failure Appraisal Inventory (PFAI) to performance enhancement consultations and more substantively oriented research.</p> <p>Elaborating on the cognitive, affective, and behavioral antecedents and consequences of Fear of Failure appraisal styles should be a priority.</p> <p>Fear of failure was associated with high levels of worry, somatic anxiety, cognitive disruption, and sport anxiety, as well as low levels of optimism.</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
Denny, K. G., & Steiner, H.	External and internal factors influencing happiness in elite collegiate athletes (2009)	To explore the conditions of high demand and workload among student athletes, and whether happiness and satisfaction in four domains (family, friends, academics, recreation) are influenced more by external or internal factors.	$N = 140$. The sample consisted of 79 males (56%) and 61 females (44%), between the ages of 16 and 24 (mean = 19.40, $SD = 1.51$).	Players filled out a battery of questionnaires that included the Facts About You (FAY), a survey designed by the authors assesses the average quantity of playing time received per game over the course of their current season, Rotter's Locus of Control measure, Mindfulness/Mindlessness Scale (MMS), and the Weinberger Adjustment Inventory (WAI). Researchers used a correlation matrix to examine cohability and concurrent validity of measures,	An athlete's daily activities require time management, people skills, and the ability to cope with adversity, which is parallel to any life structure that is stressful, challenging and important to one's self-identity. When athletes consciously factor in various facets of life there are more contributors to happiness than when they consider happiness in general. Self-esteem remains a significant indicator of happiness in that if an athlete feels good about himself or herself overall, they

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
				<p>and test hypothesis through a series of hierarchical regressions (three dependent variables: extended happiness assessed through the WAI, current satisfaction with the self, and a composite of current satisfaction of five domains— school, friends, family, free time and self). Hierarchical regressions included four steps: (1) demographics (SES, gender, grade), (2) external factors (playing time, athletic scholarship), (3) internal factors</p>	<p>will tend to feel good about the separate domains of their lives.</p> <p>An athlete's ability to recognize and come up with adequate and changing solutions to a changing environment may lead to an increase in happiness particular to different domains of life.</p> <p>Athletes who have a more external locus of control may be more correctly aligned with the reality of college sports, but may have lower levels of happiness because of their perceived lack of control.</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
				(mindfulness, locus of control), and (4) personality factors from the WAI (self-esteem, self-restraint).	Surrounding oneself with outstanding people can not only foster personal growth but it also can create a small, and distinguished, comparison group for which to base one's self worth. Comparing oneself to their teammate can easily skew one's vision for what success is, and in turn one's own personal success. A person's comparison group can have a major influence on a person's sense of self-worth.
Deslandes, A., Moraes, H., Ferreira, C., Veiga, H., Silveira, H., Mouta, R., ... Laks, J.	Exercise and mental health: Many reasons to move (2009)	Review literature on the relationship between physical activity and general/mental health.	32 articles related to key words exercise, physical activity, and elderly with the specific	A computer search of PubMed and IsiWeb was conducted using a combination of the key	Exercise has demonstrated that it reduces the harmful effects of other stressors when performed at

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
			<p>mental disorder (major depression, Alzheimer's disease, Parkinson's disease).</p>	<p>words exercise, physical activity, and elderly with the specific mental disorder (major depression, Alzheimer's disease, Parkinson's disease). Articles that did not specify methods of clinical diagnosis and that did not measure effects of exercise were excluded. Also, studies that measured other comorbid conditions were excluded. After all exclusions, the final result comprised 32 articles.</p>	<p>moderate intensities. Overwhelming evidence in the literature suggests that exercise ensures successful brain functioning. The efficacy of an exercise intervention after the onset of the disease is not commonly assessed and, therefore, needs to be investigated with randomized clinical trials.</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
Donaldson, S. J. & Ronan, K. R.	The effects of sports participation on young adolescents' emotional well-being (2006)	Examined the relationship between children's sports participation and emotional well-being including self-reported emotional and behavioral problems and multidimensional aspects of self-concept.	$N = 203$, young adolescents, 93 males and 109 females, aged 11 years, 1 month to 13 years, 10 months. The average age of sample was 12 years, 4 months ($SD = 1.23$).	Data was collected using a sports questionnaire concerning participation in and perceptions of sporting activities. Emotional well-being was assessed by the Youth Self-Report (Achenbach, 1991) and the Self-Perception Profile for Children (Harter, 1985). In addition, a sports questionnaire was used as a self-report for the children and their objective sports ability was obtained through teacher rating.	Greater participation in sports was related to enhanced emotional and behavioral well-being among young adolescents. Specifically, children who participate in sports reported lower levels of externalizing and social problems as compared to those that participated in fewer sports along with higher levels of perceived competence. Young adolescents who were high participators in sports reported significantly higher levels of perceived athletic confidence, social competence

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
					<p>and global self-worth compared to low participators.</p> <p>Sport participation is associated with self-concept related benefits. Specifically, higher levels of participation in formal sport were also related to higher levels of perceived behavioral competence.</p> <p>Participating in sports during adolescence, particularly those that are organized may help young adolescents gain confidence and acquire competent behaviors such as social skills.</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
					Those who engaged in more formal sports and for a greater length of time reported significantly lower levels of delinquent behavior, aggression, and peer-related problems. They also reported significantly lower levels of anxiety and depression-related problems as compared to non-participants.
Eccles, J. S., Barber, B. L., Stone, M., & Hunt, J.	Extracurricular activities and adolescent development (2003)	To explore the association of extracurricular activities with both educational and risky behavior outcomes during adolescence and young adulthood.	<i>N</i> = 1259, Participants were drawn from pool of 1800 that were involved with the Michigan Study of Adolescent Life Transitions (MSALT). This is a	During grades 10 and 12, age 21-22 and age 25-26, participants were asked about risky behaviors including alcohol and drug use. During grades 10 and 12,	Involvement in team sports was a promotive factor for academic outcomes. Sport participants liked school better than non-participants at both the 10th and 12th

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
			<p>longitudinal study that began with a cohort of sixth graders drawn from 10 school districts in southeastern Michigan in 1983. The 1259 participants completed the 10th grade survey in the study regarding activity involvement.</p>	<p>participants were asked how much they liked school and data was collected on academic outcomes including GPA and subscores on the Differential Aptitude Test. During ages 21-22 and 25-26, college enrollment and total years of education was assessed. At ages 25-26, job characteristics were assessed.</p>	<p>grade levels. They were, also, more likely to attend college full time at age 21 and to have graduated from college by age 25–26.</p> <p>Team sports participation predicted an increase in liking school between the 10th and 12th grades, a higher than expected 12th grade GPA, and more total years of tertiary education by age 25–26.</p> <p>Team sports participation predicted having a job with a future and a job with autonomy at age 24.</p> <p>It is likely that participation in some of these activities</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
					directly affects adolescents' peer groups precisely because such participation structures a substantial amount of peer group interaction.
Fredricks, J., & Eccles, J.	Is extracurricular participation associated with beneficial outcomes? Concurrent and longitudinal relations (2006)	To examine the relations between participation in different high school extracurricular contexts and developmental outcomes in adolescence and young adulthood among an economically diverse sample of African American and European American youths.	This study uses data from the Maryland Adolescent Development in Context Study (MADICS), a community-based longitudinal study of adolescents and their families in multiple contexts. Respondents were drawn from a county that consists of several ecological settings, including low-income	The surveys and interviews given at each wave of data collection included a range of constructs, with items about activity participation, academic and psychological adjustment, risk behavior, and civic engagement. An analysis of covariance (ANCOVA) was used to examine the concurrent relation	High school extracurricular participation predicted several indicators of academic, psychological and behavioral adjustment. High school sport involvement predicted psychological adjustment at 11th grade. High school sports and school club participation predicted educational status 2 years later.

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
			<p>communities; high-risk urban neighborhoods; middle-class suburban neighborhoods; and rural, farm-based communities. The first wave of data was collected in 1991, when the participants were in the 7th grade ($N = 1,480$). These adolescents were followed for five waves of data collection, into their early 20s.</p>	<p>between participation in each activity context at 11th grade and adolescent adjustment.</p>	<p>Participation in school clubs and sports predicted higher grades and educational expectations.</p> <p>Athletes were psychologically healthier at 11th grade, even when controlled for mental health 3 years earlier.</p> <p>Breadth of activity participation was associated with indicators of adolescent and young adult adjustment.</p> <p>Breadth of involvement may be advantageous because it provides youths with more opportunities to experience the features of the activity setting that</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
					<p>promote successful development. Participating in a range of extracurricular contexts may be beneficial because it may help a youth to compensate for negative experiences in one particular activity.</p>
Fredricks, J., & Eccles, J.	Participation in extracurricular activities in the middle school years: Are there developmental benefits for African American and European American youth? (2008)	To examine the effects of organized activity participation in early adolescence in an economically diverse sample of African American and European American youth.	<i>N</i> = 1,047, Participants in this study are part of the Maryland Adolescent Development in Context Study (MADICS), a longitudinal study of African American youth. Data from 1st, 3rd, and 4th waves of data collection were included. Wave 1 was	At each point of data collection in the study, the primary caregiver and the adolescent completed two questionnaires in their homes: a face-to-face structured interview and a self-administered questionnaire. Researchers used an analysis of covariance	<p>High school extracurricular participation predicted several indicators of academic, psychological and behavioral adjustment.</p> <p>High school sport involvement predicted psychological adjustment at 11th grade.</p> <p>High school sports and school club participation predicted educational</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
			<p>collected in the fall of 1991 when adolescents were entering 7th grade (mean age = 12.27). Wave 3 was collected in 1993 during the summer following the adolescents' 8th grade school year ($N = 1060$, mean age = 14.24) and wave 4 was collected in 1997 during the 11th grade school year ($N = 1075$, mean age = 16.53). 1,047 youth participated at both wave 1 and wave 3 and 855 youth participated at all three time points.</p>	<p>(ANCOVA) to examine links between participation in 8th grade school clubs, school sports teams, and out of school recreational activities and adjustment at 8th and 11th grade, controlling for self-selection factors measured at 7th grade prior to activity involvement.</p>	<p>status 2 years later.</p> <p>Breadth of activity participation was associated with indicators of adolescent and young adult adjustment.</p> <p>The strength of the relation between activity participation and development differed by type of activity, outcome, and time point. Differences in the pattern of findings in sports, school clubs, and prosocial activities likely reflect differences in the level of public recognition, the level of social integration, peer cultures, and the skills</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
					<p>and values learned through participation.</p> <p>Breadth of involvement may be advantageous because it provides youths with more opportunities to experience the features of the activity setting that promote successful development.</p> <p>Participating in a range of extracurricular contexts may be beneficial because it may help youth to compensate for negative experiences in one particular activity.</p>
Hansen, D. M., Larson, R. W., & Dworkin, J. B.	What adolescents learn in organized youth activities: A survey of	To inventory the types of developmental experiences that adolescents	The sample included 450 high school students from a small city in central	High school students' experiences were assessed the Youth Experiences	Organized youth activities include personal developmental processes that

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
	self-reported developmental experiences (2003)	report across organized youth activities.	Illinois. All students in the 9th, 11th, and 12th grades who were in class on the day of the study were asked to participate. The final sample included more females (55.8%) than males and consisted of 156 freshman, 157 juniors, and 137 seniors.	Survey (YES). Researchers utilized a multiple analysis of covariance to test whether the YES scales within each domain of experience differed between activity categories. The activity categories were used to create the independent variables; the YES scales within each domain were the dependent variables. The control variables were entered as covariates. When the MANCOVA for a domain was significant, researchers examined the F values and	stretch across three domains: facilitating identity work; development of initiative; development of basic emotional, cognitive, and physical skills. Many youth activities are believed to develop teamwork and social skills and other developmental processes that include developing social connections to others and learning skills for cultivating social connections. Adolescence who participated in youth activities reported higher rates of learning experiences for all four

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
				<p>eta squared statistics for ANCOVA for each YES scale within that domain. When ANCOVA outputs were significant, Bonferroni contrasts were computed for the adjusted means to identify differences between activity categories.</p>	<p>scales in this domain: goal setting, effort, problem solving, and time management.</p> <p>Students reported significantly more learning experiences related to group process skills and leadership in youth activities than in either comparison activities.</p> <p>Youth in sports reported higher rates of self-knowledge, emotional regulation, and physical skills experiences.</p> <p>Youth in sports reported frequent learning experiences related to self-</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
					knowledge, emotional regulation, and physical skills.
Holt, N. L., Tamminen, K. A., Black, D. E., Sehn, Z. L., & Wall, M. P.	Parental involvement in competitive youth sport settings (2007)	To examine parents' involvement in competitive youth sport settings and to explore parents' reaction to children's sport performance.	<i>N</i> = 4, Data was collected from 4 families over 120 hours of observation. Families were recruited to the study that were representative of the majority of Canadian sporting family in terms of ethnicity, age, income, and number of children.	Data were collected from four families via individual interviews and audio-diaries and were supplemented through 120 hours of observation. Data were transcribed verbatim and analyzed using grounded theory methodology. The analytic techniques of open-, axial-, and selective-coding were used. Initial open coding of self-report data produced findings in two main areas; parents'	Parents were influenced not only by opposing parents, but also by parents on their own team. Emotional intensity and game criticality may lead to increased arousal among parents, which influences communication patterns. Parents' responses to such situations actually increased the perceived emotional intensity and criticality of the situation. Parents' verbal reactions were

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
				<p>verbal responses to their children's performances and personal issues that were salient to the parents' involvement in sport.</p> <p>Axial coding involved refining the initial categories and concepts to form more precise explanations how the data "fitted together."</p> <p>Selective coding was used to reconstruct the data into an explanatory model, which encapsulated the relationships between the categories.</p>	<p>influenced by contextual and personal factors such as empathy, emotional intensity, and perceived knowledge and experience.</p> <p>Within youth sports, parents are influenced by the social context but also influence the social context, creating reciprocal relationships among players, coaches and parents that emerge over time and become more complex.</p> <p>Parental involvement was reflected by dynamic interactions between parents and other parents, game situations,</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
					children's performances, parents' empathy, and their perceived knowledge and experience.
Kanters, M. A., & Casper, J.	Supported or pressured? An examination of agreement among parent's and children on parent's role in youth sports (2008)	To provide evidence that parental attitudes and behavior influence their children's affective reactions from sport participation and to examine the importance of parent-child agreement on the amount of parental involvement.	Subjects were athletes nine to eleven years of age and their parents involved in 12 select (travel) hockey teams (Mean Age = 9.48 years, <i>SD</i> = 1.17 years) in a southeastern United States community. Each team included approximately 15 players for a total sample size of approximately 180 child participants and their parents.	Respondents completed a series of self-report measures of parental involvement, child involvement and enjoyment, child hockey skill and ability, and demographic information. An 11-question Likert type scale, modified from Leff and Hoyle (1995), was used to assess parental support (six items) and pressure (five items) from both	Parents' perception of the amount of pressure they imposed on their child was significantly lower than the scores reported by their children. Within the context of youth sports, it appears from the results of this study that parents have incongruent views to those of their children with regard to behaviors perceived as exerting pressure and support.

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
				<p>the child's and parent's perspective. Multiple regression was utilized to examine the difference in perceived support and pressure between children and parents.</p>	<p>Parents who believe they are creating a positive and nurturing environment for their child to excel in and enjoy sports may in fact be contributing to their child's withdrawal from sports.</p> <p>Based on previous research and the findings of the current study, the researchers note that it seems logical that fathers would play a more significant role in their son's sport participation and that the beliefs and behaviors of mothers, whether they are viewed as supportive or stressful, would have minimal impact on the</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
					<p>child's affective reactions from sport.</p> <p>Father's but not mother's perception of child skill was again reported as a significant predictor of child's perception of hockey skill in this study. There also seems to be support for the notion that fathers continue to play a more dominant role than mothers in shaping the perceptions and affective outcomes experienced by children in sports.</p>
Kwakkel, G., van Peppen, R., Wagenaar, R. C., Wood Dauphinee, S., Richards, C., Ashburn,	Effects of augmented exercise therapy time after stroke: A meta-analysis (2004)	To review studies that address the effects of intensity of augmented exercise therapy time	Search terms resulted in a list of 7483 citations. After selection based on title and abstract,	Potentially relevant literature was identified through computerized and	Augmented exercise therapy time spent in exercise training in the first 6 months after stroke

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
A., Miller, K., et al.		(AETT) on activities of daily living (ADL), walking, and dexterity in patients with stroke.	507 full articles were obtained. Thirty-two studies were identified as being relevant.	manual searches. The search was performed for the period of 1966 to November 2003 using the keywords cerebrovascular disorders, stroke, physical therapy, physiotherapy, occupational therapy, exercise therapy, rehabilitation, intensity, dose-response relationship, effectiveness and randomized controlled trial. Studies were included when: (1) Patient had a diagnosis of stroke; (2) Effects of the intensity of physical	<p>results in small improvements in ADLs.</p> <p>The effects were mainly restricted to therapies focused on the lower limb and ADLs in general, as well as to those studies conducted within the first 6 months of stroke.</p> <p>Augmented therapy also may lead to improvements of 5% in IADLs such as household and leisure activities. It should be noted, however, that the number of such studies ($n = 9$) is limited.</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
				therapy and/or occupational therapy were presented in the article; (3) the outcome was measured in terms of ADL and (4) the study was a randomized controlled trial.	
McGregor, H. A. & Elliot, A. J.	The shame of failure: Examining the link between fear of failure and shame (2005)	To understand the connection between fear of failure and shame and to explore whether shame is the core of fear of failure.	Study 1 pilot study: $N = 172$, (60 men, 112 women) undergraduates in an introductory-level psychology course. Study 1 primary study: $N = 179$, (64 men, 115 women) undergraduates in an introductory-level psychology course. Study 2 pilot	Study 1 Pilot Study: Participants were given questionnaires at three different sessions: a neuroticism measure was completed in a large group session, a shame proneness measure was completed in a second group session approximately two weeks later and a fear of	In each study, individuals high in fear of failure reported greater shame upon failure than those low in fear of failure. Individuals high in fear of failure were more likely to generalize a specific failure experience to the global self than those low in fear of failure.

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
			<p>study: $N = 200$, (91 men, 109 women) undergraduates in an introductory-level psychology course.</p> <p>Study 2 primary study: $N = 84$, (25 men, 59 women) undergraduates in an introductory-level psychology course.</p>	<p>failure measure was completed in a take-home session approximately five weeks later.</p> <p>Study 1 primary study: participants completed a fear of failure measure in a group session.</p> <p>Eight weeks later, participants completed their midterm examination and received performance feedback nine days later.</p> <p>Immediately following receipt of the feedback, participants rated their perceived performance on the exam. Participants then rated the extent to</p>	<p>High fear of failure participants, relative to low fear of failure participants, reported feeling less close to their mother after failure (controlling for general closeness to mother), reported that they would be less likely to tell their mother and father about their failure experience, and reported that they would be more likely to tell their mother and father about their success experience.</p> <p>For those high in fear of failure, failure attributions are extremely global in that they extend beyond not only the</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
				<p>which they were currently experiencing shame, guilt, embarrassment, shyness, and distress as a function of their exam performance. Study 2 pilot study: Participants completed the questionnaires in three different sessions: a fear of failure measure was completed twice, once in a take-home session and again in a large group session approximately three months later; mother and father shaming measures were completed in a take-home session</p>	<p>specific achievement event and the achievement domain in general but to general perceptions of the self.</p> <p>Researchers note that it is likely that for these individuals, failure has implications beyond the achievement domain to outcomes such as overall psychological and physical well-being.</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
				<p>approximately six weeks after the initial fear of failure assessment; and the impression management measure was completed in the same take-home session as the initial fear of failure measure.</p> <p>Study 2 primary study: Three weeks after mass-testing, participants attended a large group session in which they completed the fear of failure measure again, along with a general measure of shame, a general measure of overgeneralization, and a</p>	

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
				<p>measure of perceived closeness to their mother and father. Each participant was then run in an individual experimental session, conducted a minimum of two weeks after the large group session. In the experimental session, participants were told that the experiment was the final stage in the development of a “lexical decision computer protocol” that presents anagrams and provides feedback about anagram performance. Upon completion of the</p>	

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
				<p>anagram task, participants were instructed to complete a post-task questionnaire. This questionnaire assessed post-task shame, post-task over-generalization, post-task perceived closeness to parents, and likelihood to tell parents. Simultaneous multiple regression analyses was used to assess perceptions of shame and fear of failure.</p>	
Nicholls, A. R., & Polman, R. C. J.	Think aloud: Acute stress and coping strategies during golf performances (2008)	To develop and implement a technique to measure acute stress and coping during performance.	Participants were five male English-Caucasian, high-level adolescent golfers (Mean age =	Participants were told that they were required to “Think Aloud” during six holes of golf,	A competition may be appraised as challenging (difficult-to-attain, yet an anticipated gain), beneficial (a

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
			16.8 years, <i>SD</i> = 1.3; handicap: Mean = 1.4, <i>SD</i> = 1.7).	where they were not required to explain their thoughts, but to say what they were thinking. To induce stressors similar to those experienced during actual competitions, participants were offered financial performance incentives. Participants recorded their golfing goals/aims for (a) the season, (b) the next month, (c) the six holes of the study, and (d) intended score for the six holes of golf as well as their Think Aloud protocol for six holes. Data were transcribed	gain that has occurred), threatening (a potential for loss), or harmful (a loss has occurred). When events are appraised as challenging, threatening, harmful, or even beneficial, coping responses are required. The results indicated that adolescent golfers appraised a range of stressors during performance and they possessed a similar range of potential coping strategies, but the golfers often experienced a variety of stressors before deploying a

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
				<p>verbatim and each transcript was subjected to checks for relevance and consistency. Each transcript was subjected to a line-by-line inductive content analysis to identify stressors and coping responses. Similar stressors and coping strategies were grouped together as first-order themes and assigned a descriptive label, and a rule of inclusion was written for each theme. Participants reported 378 stressors from 28</p>	<p>coping strategy.</p> <p>Stressors and coping appeared to change throughout the six holes, suggesting that stress and coping occur as a process. Coping strategies are not necessarily deployed after the appraisal of a stressor. There were instances where the players reported up to five consecutive stressors before deploying a coping strategy, but this varied both intra- and inter-individually.</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
				different stressor sources and 313 coping strategies from 21 sources.	
O'Rourke, D. J., Smith, R. E., Smoll, F. L., & Cumming, S. P.	Trait anxiety in young athletes as a function of parental pressure and motivational climate: Is parental pressure always harmful? (2011)	To examine parental behaviors and their potential influence on performance anxiety in young athletes.	$N = 307$, (122 boys and 185 girls, M age = 11.88, $SD = 1.34$, age range = 9–14 years) who participated in a regional program associated with USA Swimming, the National Governing Body for the sport of swimming in the United States.	Participants took the 10-item Directive Behavior Scale developed by Lee and MacLean (1997). In addition, they took the Parent-Initiated Motivational Climate Questionnaire-2 (PIMCQ-2; White, 1998) and the Sport Anxiety Scale-2 (SAS-2; Smith, Smoll, Cumming, & Grossbard, 2006). Hierarchical regression analyses were utilized to assess the	The specific context in which parental pressure occurs, as measured by perceptions of the motivational climate, may influence a range of outcomes in youth sport, including performance anxiety. High-pressure/high-mastery combinations were associated with lower anxiety than high-pressure/low-mastery conditions. The absence of a mastery climate combined with high

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
				<p>interaction effects between parental pressure and each respective motivational climate.</p>	<p>parental pressure appears to elicit evaluation pressure and increases the potential for anxiety exacerbation. When combined with a mastery climate, high parental pressure is associated with low levels of anxiety.</p> <p>Parents who engage more intensely with their child to encourage effort, learning from mistakes, and focus on self-improvement may be pressuring their child in an adaptive manner.</p> <p>Anxiety was highest when both pressure and ego climate were</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
					<p>high, indicating that parental pressure heightens the impact of an ego climate.</p> <p>Under such conditions, children may perceive the need to beat other children for parental approval, and they are driven toward a goal standard with which they have limited control.</p> <p>Parental pressure, rather than being uniformly negative, can depend on context. A high level of engagement by the parent enhances the impact of the parent-initiated motivational climate with which it is</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
					<p>associated.</p> <p>High pressure-high mastery conditions were associated with relative reductions in anxiety while high pressure-low mastery conditions were associated with a relative increase in anxiety.</p> <p>A mastery climate provides protection against negative effects that might be created by high parental pressure.</p>
Sagar, S. S. & Lavalee, D.	The developmental origins of fear of failure in adolescent athletes: Examining parental practices (2010)	To investigate the developmental origins of fear of failure in adolescent athletes by examining how parental interactions with the child	<i>N</i> = 3, Three intact families (all with two parents) of adolescent athletes (ages 13-14) participated over a four week period.	Each mother, father and athlete was interviewed separately three times over three to four week period. Interviews with parents	Three parental practices lead to young athletes' fear of failure: punitive behavior, controlling behavior, and high expectations

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
		<p>on a day-to-day basis impact the growth fear of failure.</p>		<p>ranged between 90 and 200 minutes and with the athletes between 60 and 106 minutes. All interviews were transcribed verbatim and deductively and inductively analyzed using principles of thematic analysis.</p>	<p>for achievement.</p> <p>Parental punitive behavior encompassed criticism, punishment, and threat and believed that threats, if carried out, would end the athlete's sporting careers and ambitions.</p> <p>The athletes associated mistakes and losing with displeasing their parents and with a subsequent punitive response from their parents, and winning with pleasing their parents and with positive outcomes such as receiving privileges from their parents and their love and support.</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
					<p>Parents can use love withdrawal as a form of punishment for their child's failure in competition in which children learn over time that by improving their performances and winning they pleased their parents and, subsequently, their parents would return to watch them and support them in their competition.</p> <p>Parental controlling behavior involves high involvement by parents in children's training and competition preparation, the parents sought to control competition outcomes.</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
					<p>Some parents will adopt controlling behavior and pressure their child to avoid mistakes and failure, so that others will not judge them and their child negatively. This way of reducing or coping with their fear of their children's failure, can contribute to their children becoming fearful of failure.</p> <p>Parental high expectations for achievement is a practice that contributes, not only to children's development of Fear of Failure, but also to their experiencing negative affect, impaired sporting</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
					experience, and decreased well-being.
Schaal, K., Tafflet, M., Nassif, H., Thibault, V., Pichard, C., Alcotte, M., Guillet, T., et al.	Psychological balance in high level athletes: Gender-based differences and sport-specific patterns (2011)	To examine the principal types of psychological disorders that are encountered within high-level sport. The article also focuses on sex-specific vulnerabilities to particular disorders, and, because the practice of particular sports imposes some unique demands and stressors on athletes.	2,067 athlete evaluations were completed and returned between 2008 and 2009 and included in the analysis. The proportion of male to female athletes included was representative of the nationwide proportion for high level sport, 64.8% compared to 63.9% for men and 35.2% compared to 36.1% for women, respectively. The sample was also representative of age, ranging from 12 to 35 years old.	Data was gathered for the current study by retrospectively pooling together results from the yearly psychological evaluations of high-level athletes in France, which are mandatory by the law decree of June 16th, 2006. The presence of psychological disorders was compared by gender, age (under 18, 18 to 21, and over 21 years of age), type of professional performing the evaluation	Female athletes are more likely to be diagnosed with a psychological problem than men, and appear more susceptible to difficulties encountered in their environment than their male counterparts. There are important variations in the occurrence of psychological disorders according to the type of sport practiced, conveying that the demands and pressures associated with the practice of a particular sport may act as one of the

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
				<p>(physician or psychologist), and geographical region using the Chi-square test, or Fisher’s exact test when appropriate. A multivariate logistic regression was also performed for each disorder.</p>	<p>significant socio-environmental risk factors which, if combined with a particular personality and genetic predisposition, could facilitate the development of some disorders. The principle psychological issue encountered in athletes is GAD.</p> <p>High-risk sports, which include sliding sports, aerial sports and motor sports, show the lowest rates of GAD.</p> <p>The prevalence of GAD resembles that of the population, the rate of major depression,</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
					the most widely diagnosed and costliest mental health problem encountered in many countries, is by comparison very low within the high level athlete population.
Vella, S., Oades, L., & Crowe, T.	The role of the coach in facilitating positive youth development: Moving from theory to practice (2011)	To examine whether coaches, as a direct result of their coaching, desire outcomes for their adolescent athletes that reach beyond on-field success, and incorporate constructs that are typically associated with positive youth development.	<i>N</i> = 22, Twenty-two youth coaches. All coaches were coaches for adolescents participating in team sports near Sydney, Australia.	Coaches were interviewed using semi-structured interviews. The interviews consisted of seven open-ended questions designed to elicit open-ended responses. These seven questions aimed to focus the interview on athlete outcomes and were refined following	Outcomes of character were the most easily recognized and most often articulated outcomes, which centered on the development of moral, respectful and pro-social behaviors, as well as desirable character traits such as honesty, loyalty, responsibility and self-control.

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
				<p>feedback from three pilot interviews using high school sports coaches. Wording of the questions was guided by the conceptual framework provided by Cote and Gilbert (2009).</p>	<p>Life skills were, along with outcomes of character, the most easily articulated and desired outcomes. The four core life skills that were mentioned by the coaches were goal-setting, communication skills, leadership skills and interpersonal skills.</p> <p>Despite the coaches' view that life skills were of great importance as outcomes, the constraints of time were readily articulated. Coaches saw that their coaching context was detrimental to the development of life skills due to an</p>

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
					<p>inadequate amount of time spent in direct contact with the athletes</p> <p>Coaches saw it as their role to equip the players with the skills needed to engage with peers, and to encourage that engagement.</p> <p>Coaches saw that the positive interpersonal connections, driven by interpersonal skills, and a united sense of purpose and achievement, are the core building blocks of group climate.</p>
Warburton, D. E. R., Nicol, C. W., & Bredin, S. S. D.	Health benefits of physical activity: The evidence (2006)	To evaluate the current literature and to provide further insight into the role	A literature search revealed 152 articles that met criteria and were included in	Search of the literature was completed using the key words “physical	Both physical activity and fitness are strong predictors of risk of death.

Authors	Title (Year)	Research Question/ Objective	Sample	Measures	Results and Discussion
		physical inactivity plays in the development of chronic disease and premature death.	the study.	<p>activity,” “health,” “health status,” “fitness,” “exercise,” “chronic disease,” “mortality” and disease-specific terms (e.g., “cardiovascular disease,” “cancer,” “diabetes” and “osteoporosis”).</p> <p>Individual studies that were frequently included in systematic reviews, consensus statements and meta-analyses were considered examples of the best evidence available.</p>	<p>There appears to be a linear relation between physical activity and health status, such that a further increase in physical activity and fitness will lead to additional improvements in health status.</p> <p>The greatest improvements in health status are seen when people who are least fit become physically active.</p>

Section B. Non-Empirical Literature

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
Professional Practice	Aoyagi, M. W., Portenga, S. T., Poczwardowski, A., Cohen, A. B., & Statler, T.	Reflections and directions: The profession of sport psychology past, present, and future (2012)	Journal Article	Present the development of sport psychology as an applied profession. Review the historical context of sport psychology, examine the present state of the field, and make recommendations for the future.	<p>For students to acquire competency in both kinesiology-based training and psychology-based training requires degrees from both fields, which presents an unnecessarily cumbersome path. Within the current configuration of training programs, this necessitates a master's degree in sport psychology (to obtain competency in performance enhancement; typically offered by kinesiology departments) and a doctorate in clinical/counseling psychology (to obtain competency in counseling).</p> <p>Therapy with athletes requires the use of the</p>

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
					<p>existing clinical/counseling psychology knowledge base with a distinct population.</p> <p>In order for performance psychology to continue to build on the foundation provided by sport psychology, two related advancements must occur: (a) strengthening the unique knowledge base, specifically in regard to performance excellence, and (b) clearly delineating ethical and competent practice.</p> <p>In the future, models of optimal performance will be needed to guide issue conceptualization, intervention planning and implementation,</p>

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
					and outcome evaluation in performance psychology, rather than theories adapted from general psychology or atheoretical models of performance enhancement.
Mental Skills Training	Behncke, L.	Mental skills training for sports: A brief review (2004)	Journal Article	To provide a review of mental skills training commonly provided by sport psychologists in practice.	<p>There are many different methods used to develop mental skills in task performance, but most can be separated into two basic approaches, cognitive and somatic. Underlying both systems is the aim and motivation of the individual to attain self-mastery.</p> <p>Mental skills training relies on a methodology of self-mastery, generated through self-knowledge, to enhance the psychological</p>

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
					<p>state of the individual.</p> <p>Time set aside for mental skills practice, and the belief in the methods employed, require a certain level of motivation, even more so, than physical based training that has quantifiable results from the beginning and can be assessed and measured with regularity.</p> <p>If performance is evaluated by external factors, such as what other people may think of them, or what material gains may be made from competition, an egocentric psychology may be developed. According to the author, this may decrease the objectivity the individual requires to learn</p>

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
					<p>from failures, and face personal challenges that may be inhibiting further development.</p> <p>Reduction in anxiety, achievement of critical levels of arousal, and the appropriate attention processes require a degree of psychosomatic congruency. These criteria require self-awareness that allows self-regulation and self-monitoring to be effective in identifying psychosomatic cues for intervention.</p>
Historical Context	Gardner, F.	Efficacy, mechanisms of change, and the scientific development of sport psychology (2009)	Journal Article	Discusses issues related to the lack of efficacy of the traditional interventions for performance enhancement with athletes	The dearth of clear efficacy data in sport psychology has resulted in a profession lacking in accountability, which in turn culminates in

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
				<p>and compares the field's empirical base to other disciplines in psychology.</p>	<p>stagnant and/or insufficient practice standards.</p> <p>The scientific community must be willing to acknowledge and appropriately respond to the weaknesses and limitations within the research base of applied technologies for performance enhancement.</p> <p>The sport psychology practice community must accept the limitations of the current research base and avoid making practice decisions far removed from the available evidence.</p> <p>Unlike clinical and other disciplines within applied psychology that have long accepted the need to change</p>

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
					<p>and grow incrementally, the discipline of sport psychology appears to have accepted the current state of the empirical data, which is equivocal at best.</p> <p>For sport psychology to develop a more viable research base, it should be expected that empirical sport psychology will “cross pollinate” with findings in sister disciplines within the greater psychology domain. Emotion science, cognitive science, and clinical science are among three distinct sub-disciplines of psychology that can help develop a more empirical science of athletic performance enhancement.</p>

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
Youth Development	Gould, D., & Carson, S.	Life skills development through sport: Current status and future directions (2008)	Journal Article	Review of how life skills are defined, the conditions needed to examine life skills development, and the possible theoretical explanations of how, when, under what conditions and why life skills develop in sport participants.	<p>The results of previous research on developmental outcomes as a result of sport are somewhat inconsistent; some research indicates that sports do not build life skills in youth, while other research is demonstrating that under the right conditions sport can teach important life lessons to young people.</p> <p>Sport participants are typically compared to non-participants on measures of moral development, with results often showing that participants do not exhibit higher levels of moral reasoning and, in some sports (e.g., male contact sports), may even exhibit lower levels of character</p>

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
					<p>development. Thus, sports have not been found to automatically build character in young people.</p> <p>Some research on moral development shows that under the right conditions (i.e. when development is specifically targeted and addressed) life skills can be taught through sport.</p> <p>These findings and others focusing on different life skills have lead researchers to conclude that sport has the potential to facilitate life skills development in young people. However, life skills must be specifically targeted and taught in environments</p>

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
					that are conducive for doing so (e.g., supportive coaches, clear rules and responsibilities, and positive social norms).
Performance enhancement	Harmison, R. J.	Peak performance in sport: Identifying ideal performance states and developing athletes' psychological skills (2011)	Journal Article	An overview of peak performance and the psychological characteristics and skills associated with peak performance in sport are summarized as well as an overview of applied models related to peak performance in sport. The researchers also discuss the role of increasing athletes' awareness of their ideal performance states and the importance of following a developmen-	There is considerable overlap in the literature regarding the definitions and the manner in which positive states have been examined. As a result, the specific aspect of optimal experiences in sport that is being addressed is not clear at times, leading to confusion regarding the relationship between positive states and performance in sport. A central task for many athletes in their mental preparation is the achievement

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
				<p>tal approach when enhancing psychological skills in athletes.</p>	<p>of a pre-competition ideal performance state. Many practitioners help athletes to identify the individual and task-specific mental and emotional state most conducive for them to achieve at their best in their competitive situation and do so in many different ways in this regard.</p> <p>Athletes can benefit from becoming more aware of the ideal performance state that is specific to them and their situation and developing the necessary psychological and adversity-coping skills and strategies to achieve and maintain this mental and emotional state</p>

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
					<p>for peak performance.</p> <p>By designing ways for athletes to increase their awareness of their ideal performance states and systematically develop their psychological skills and strategies, sport psychology practitioners can play a vital role in helping them achieve their potential.</p>
Physical Health	Haskell, W. L., Lee, I. M., Pate, R. R., Powell, K. E., Blair, S. N., Franklin, B. A., Macera, C. A., et al.	Physical activity and public health: Updated recommendation for adults from the American College of Sports Medicine and the American Heart Association (2007)	Journal Article	Update and clarify the 1995 recommendations on the types and amounts of physical activity needed by healthy adults to improve and maintain health.	Disease outcomes inversely related to regular physical activity in prospective observational studies include cardiovascular disease, thromboembolic stroke, hypertension, type 2 diabetes mellitus, osteoporosis, obesity, colon cancer, breast cancer, anxiety and depression.

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
					<p>It is reasonable to assume that persons with relatively high daily energy expenditures would be less likely to gain weight over time, compared with those who have low energy expenditures.</p> <p>To promote and maintain good health, adults aged 18–65 years should maintain a physically active lifestyle. They should perform moderate-intensity aerobic physical activity for a minimum of 30 minutes five days each week or vigorous-intensity aerobic activity for a minimum of 20 minutes three days each week.</p> <p>At least twice each week adults will benefit by performing</p>

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
					<p>activities using the major muscles of the body that maintain or increase muscular strength and endurance.</p> <p>Because of the dose-response relation between physical activity and health, persons who wish to further improve their personal fitness, reduce their risk for chronic diseases and disabilities, or prevent unhealthy weight gain will likely benefit by exceeding the minimum recommended amount of physical activity.</p>
Emotional Well-Being	Markser, V. Z.	Sport psychiatry and psychotherapy. Mental strains and disorders in professional sports.	Journal Article	To review and discuss available research data about the prevalence of mental disorders in athletes.	Mental disorders do exist in high-performance sport as much as in the general public.

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
		Challenge and answer to societal changes (2011)			<p>Mental stress is an integral part of high-performance sport.</p> <p>The massive levels of physical, social, and mental stress are often a part of high-level sport.</p>
Stress	Rumbold, J. L., Fletcher, D., & Daniels, K.	A systematic review of stress management interventions with sport performers (2011)	Journal Article	To systematically identify and evaluate the psychosocial interventions used to manage a component of the stress process in competitive sport performers.	Although some performers are able to manage the various causes and consequences of the stress process, many others struggle, resulting in severe impairments to their performance and health (e.g., burnout, depression, illness). For this reason, stress management interventions are important for facilitating athletes' experiences and performances in a range of sport-related settings.

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
					<p>Stress management interventions optimize different aspects of the transactional stress process in typically one of the following ways: (a) a reduction in stressors, (b) a modification of cognitive appraisals, (c) a reduction in negative affect and an increase in positive affect, or (d) facilitating effective coping behaviors.</p> <p>The evidence in favor of optimized stress and performance appears to be weaker than that for the effectiveness of all interventions that measuring the stress process solely. Reducing athletes' stress in certain sporting situations may not necessarily</p>

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
					result in improved performance.
Ethics	Stapleton, A. B., Hankes, D. M., Hays, K. F., & Parham, W. D.	Ethical dilemmas in sport psychology: A dialogue on the unique aspects impacting practice (2010)	Journal Article	To promote awareness in the ethics of applied sport psychology and to describe some of the more commonly faced ethical considerations in applied sport psychology. Issues related to developing and maintaining competence in the field, confidentiality, and boundary issues are discussed.	<p>Although few psychologists work full-time in the field of sport psychology, the practice of applied sport psychology has grown significantly, with membership in the Division of Exercise and Sport Psychology in the APA having grown to over 1,000 members.</p> <p>Even if sport psychology practice may be a limited service offered in one's practice, ethical considerations in applied sport psychology can be numerous and diverse given the specialty of services given to athletics in often nontraditional settings.</p>

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
					<p>Sport psychologists working with youth programs may find themselves facing various multiple relationships (e.g., serving as parent or coach and then called upon as a consultant).</p> <p>Although many practicing psychologists often have an extensive education in a core area such as clinical or counseling psychology, it is also necessary for sport psychologists to receive training in the field of sport science and medicine in accordance with professional competency set forth by the APA.</p> <p>Despite the increasing interest, guidelines, and</p>

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
					<p>qualified practitioners, sport psychologists often find themselves practicing in isolation. This isolation makes continued professional consultation even more important in an effort to provide high quality services and to have support in facing ethical dilemmas.</p> <p>Sport psychologists will find distinctive differences in working with athletes at varying levels of participation and performance. Youth sport, club organizations, collegiate, and professional performers each present unique aspects to be considered by the sport psychologist.</p>

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
					Sport psychologists routinely consult with administrative, coaching, and medical staff members when offering services to the larger sport organization, which makes confidentiality much more difficult and means that extra care needs to be taken to protect the client.
Sport Participation	Theokas, C.	Youth sport participation- -a view of the issues: Introduction to the special section (2009)	Journal Article	To bring together articles addressing different aspects of youth sport participation to uncover how engagement in sport leads to both positive and negative developmental outcomes.	For the 19th consecutive year (2007–2008), the number of students participating in high school athletics increased according to the National Federation of State High School Associations (2008), indicating just how essential it is to make these programs of high quality so

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
					<p>as to positively shape the experience and the developmental trajectories of youth.</p> <p>Competition and winning at all costs supersedes broader developmental goals and the power of relationships created through playing games together and the attitudes and behaviors that are acceptable on the part of participants. Too often negative behaviors are considered side effects and are not addressed, particularly if there is a winning outcome and the pool of players dwindles as the expectations for performance increase.</p> <p>Although participation is often linked with</p>

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
					developmental benefits, mere participation does not confer benefits; it is the quality and implementation of sport programs that are the likely causal mechanisms of enjoyment and development.
Sport History	Tomlinson, A., & Young, C.	Towards a New History of European Sport (2011)	Journal Article	This article proposes a number of ways in which European sports history might be conceived comparatively between culture by examining British, German, Soviet, and Scandinavian models of sport.	Both as a participant activity and as spectator entertainment, sport has been a central cultural feature of European economic, social and political life in the twentieth century. A broad range of documents such as memoirs, correspondences, diaries and account books indicate that many 'modern' traits of modern sport might have been evident from as early as 1450.

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
					<p>Since as far back as 1450, sport becoming increasingly institutionalized through the creation and codification of rules for ball games such as tennis, pallamaglio (croquet and golf's predecessor), football and calico; its integration into school and university curricula; the building of sports spaces such as gymnasia, arenas, sports schools, Ballhauser, jeux de paume and malls; the rise in production and European-wide trade in sports equipment and paraphernalia such as racchetti, palle and palloni; and the emergence of a professional class of athletes, coaches,</p>

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
					referees, and ground-keepers.
Coping	Zimmer-Gembeck, M. J., & Skinner, E. A.	Adolescents coping with stress: Development and diversity (2008)	Journal Article	Summarize some of what is known about stress, stress reactions, and coping among adolescents and also to focus on typical developmental patterns by highlighting the emerging experiences of adolescents and how they differ from children and adults.	<p>Situations perceived as more threatening prompt certain emotions and coping strategies, such as more fear and more use of escape, withdrawal and support seeking.</p> <p>When stressors are appraised as lower in controllability or as inescapable, such as for parental conflict or medical events, they are more likely to prompt withdrawal, the use of cognitive distraction, seeking social support, or responses aimed at reducing emotional distress.</p> <p>Adolescence may be a particularly stressful time of life as well as an</p>

Topic	Authors	Title (Year)	Type of Resource	Purpose	Content Summary/Key Findings
					<p>important time to practice personal coping skills. Although such events are stressful throughout life, a developmental shift occurs between late childhood and early adolescence in stress reactions and coping, based on major biological, cognitive, and social developments.</p> <p>Coping encompasses a range of emotional regulation strategies, thought processes, and behaviors. Coping is founded in an individual's physiological responses to stress, their appraisals of events, their attention, and their goals or the outcomes they desire.</p>

References

- Anderson, A., Miles, A., Robinson, P., & Mahoney, C. (2004). Evaluating the athlete's perception of the sport psychologist's effectiveness: What should we be assessing? *Psychology of Sport and Exercise, 5*(3), 255–277. doi:10.1016/S1469-0292(03)00005-0
- Aoyagi, M. W., Portenga, S. T., Poczwardowski, A., Cohen, A. B., & Statler, T. (2012). Reflections and directions: The profession of sport psychology past, present, and future. *Professional Psychology: Research and Practice, 43*(1), 32–38. doi:10.1037/a0025676
- Behncke, L. (2004). Mental skills training for sports: A brief review. *Athletic Insight: The Online Journal of Sport Psychology, 6*(1), 1–19. Retrieved from <http://www.aist-pain.it/en/files/SPORTANDMENTALTRAINING/SkillsPDF.pdf>
- Bois, J. E., Lalanne, J., & Delforge, C. (2009). The influence of parenting practices and parental presence on childrens' and adolescents' pre-competitive anxiety. *Journal of Sports Sciences, 27*(10), 995–1005. doi:10.1080/02640410903062001
- Conroy, D. E., & Elliot, A. J. (2004). Fear of failure and achievement goals in sport: Addressing the issue of the chicken and the egg. *Anxiety, Stress & Coping, 17*(3), 271–285. doi:10.1080/1061580042000191642
- Conroy, D. E., & Metzler, J. N. (2004). Patterns of self-talk associated with different types of competitive anxiety. *Journal of Sport & Exercise Psychology, 26*, 69–89. doi:10.4236/psych.2014.52019
- Conroy, D. E., Willow, J. P., & Metzler, J. N. (2002). Multidimensional fear of failure measurement: The Performance Failure Appraisal Inventory. *Journal of Applied Sport Psychology, 14*, 76-90. doi:10.1080/10413200252907752

- Denny, K. G., & Steiner, H. (2009). External and internal factors influencing happiness in elite collegiate athletes. *Child Psychiatry and Human Development*, *40*(1), 55–72.
doi:10.1007/s10578-008-0111-z
- Deslandes, A., Moraes, H., Ferreira, C., Veiga, H., Silveira, H., Mouta, R., ... Laks, J. (2009). Exercise and mental health: Many reasons to move. *Neuropsychobiology*, *59*(4), 191–198. doi:10.1159/000223730
- Donaldson, S. J., & Ronan, K. R. (2006). The effects of sports participation on young adolescents' emotional well-being. *Adolescence*, *41*(162), 369–389. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/16981623>
- Eccles, J. S., Barber, B. L., Stone, M., & Hunt, J. (2003). Extracurricular activities and adolescent development. *Journal of Social Issues*, *59*(4), 865–889. doi:10.1046/j.0022-4537.2003.00095.x
- Fredricks, J., & Eccles, J. (2006). Is extracurricular participation associated with beneficial outcomes? Concurrent and longitudinal relations. *Developmental psychology*, *42*(4), 698–713. doi:10.1037/0012-1649.42.4.698
- Fredricks, J., & Eccles, J. (2008). Participation in extracurricular activities in the middle school years: Are there developmental benefits for African American and European American youth? *Journal of Youth and Adolescence*, *37*, 1029–1043. doi:10.1007/s10964-008-9309-4
- Gardner, F. (2009). Efficacy, mechanisms of change, and the scientific development of sport psychology. *Journal of Clinical Sport Psychology*, 139–155. Retrieved from <http://www.pspc.com.au/files/efficacymechanismsofchangeandthescientificdevelopmentofsportpsychology.pdf>

- Gould, D., & Carson, S. (2008). Life skills development through sport: Current status and future directions. *International Review of Sport and Exercise Psychology*, *1*(1), 58–78.
doi:10.1080/17509840701834573
- Hansen, D. M., Larson, R. W., & Dworkin, J. B. (2003). What adolescents learn in organized youth activities: A survey of self-reported developmental experiences. *Journal of Research on Adolescence*, *13*(1), 25–55. doi:10.1111/1532-7795.1301006
- Harmison, R. J. (2011). Peak performance in sport: Identifying ideal performance states and developing athletes' psychological skills. *Sport, Exercise, and Performance Psychology*, *1*, 3–18. doi:10.1037/2157-3905.1.S.3
- Holt, N. L., Tamminen, K. A., Black, D. E., Sehn, Z. L., & Wall, M. P. (2007). Parental involvement in competitive youth sport settings. *Psychology of Sport and Exercise*, *9*(5), 663–685. doi:10.1016/j.psychsport.2007.08.001
- Kanters, M. A., & Casper, J. (2008). Supported or pressured? An examination of agreement among parents and children on parent's role in youth sports. *Journal of Sport Behavior*, *31*(1), 64–81. Retrieved from <http://www.cabdirect.org/abstracts/20103087389.html>
- Kwakkel, G., van Peppen, R., Wagenaar, R. C., Wood Dauphinee, S., Richards, C., Ashburn, A., ... Langhorne, P. (2004). Effects of augmented exercise therapy time after stroke: A meta-analysis. *Stroke*, *35*(11), 2529–2539. doi:10.1161/01.STR.0000143153.76460.7d
- Markser, V. Z. (2011). Sport psychiatry and psychotherapy. Mental strains and disorders in professional sports. Challenge and answer to societal changes. *European Archives of Psychiatry and Clinical Neuroscience*, *261*, 182–185. doi:10.1007/s00406-011-0239-x

- McGregor, H. A., & Elliot, A. J. (2005). The shame of failure: Examining the link between fear of failure and shame. *Personality & Social Psychology Bulletin, 31*(2), 218–31.
doi:10.1177/0146167204271420
- Nicholls, A. R., & Polman, R. C. J. (2008). Think aloud: Acute stress and coping strategies during golf performances. *Anxiety, Stress, and Coping, 21*(3), 283–294.
doi:10.1080/10615800701609207
- O'Rourke, D. J., Smith, R. E., Smoll, F. L., & Cumming, S. P. (2011). Trait anxiety in young athletes as a function of parental pressure and motivational climate: Is parental pressure always harmful? *Journal of Applied Sport Psychology, 23*(4), 398–412.
doi:10.1080/10413200.2011.552089
- Rumbold, J. L., Fletcher, D., & Daniels, K. (2011). A systematic review of stress management interventions with sport performers. *Sport, Exercise, and Performance Psychology, 1*(3), 173-193. doi:10.1037/a0026628
- Sagar, S. S., & Lavallee, D. (2010). The developmental origins of fear of failure in adolescent athletes: Examining parental practices. *Psychology of Sport and Exercise, 11*(3), 177–187. doi:10.1016/j.psychsport.2010.01.004
- Schaal, K., Tafflet, M., Nassif, H., Thibault, V., Pichard, C., Alcotte, M., ... Toussaint, J. F. (2011). Psychological balance in high level athletes: Gender-based differences and sport-specific patterns. *PloS One, 6*(5), 1–9. doi:10.1371/journal.pone.0019007
- Stapleton, A. B., Hanks, D. M., Hays, K. F., & Parham, W. D. (2010). Ethical dilemmas in sport psychology: A dialogue on the unique aspects impacting practice. *Professional Psychology: Research and Practice, 41*(2), 143–152. doi:10.1037/a0017976

- Theokas, C. (2009). Youth sport participation--a view of the issues: Introduction to the special section. *Developmental Psychology*, *45*(2), 303–306. doi:10.1037/a0015042
- Tomlinson, A., & Young, C. (2011). Towards a new history of European sport. *European Review*, *19*(4), 487–507. doi:10.1017/S1062798711000159
- Vella, S., Oades, L., & Crowe, T. (2011). The role of the coach in facilitating positive youth development: Moving from theory to practice. *Journal of Applied Sport Psychology*, *23*(1), 33–48. doi:10.1080/10413200.2010.511423
- Zimmer-Gembeck, M. J., & Skinner, E. A. (2008). Adolescents coping with stress: Development and diversity. *Prevention Researcher*, 3–7. Retrieved from http://www.pdx.edu/sites/www.pdx.edu/psy/files/media_assets/7_Zimmer-Gembeck_Skinner_AdolCoping_PreventionResearcher.pdf

Appendix B:

Institutional Review Board Approval Notice

PEPPERDINE UNIVERSITY

Graduate & Professional Schools Institutional Review Board

September 19, 2014

Kenneth Hartline

Protocol #: P0714D02

Project Title: Development of the Athlete: A Treatment Manual for Clinicians Working with Elite Adolescent Male Athletes

Dear Mr. Hartline:

Thank you for submitting your application, Development of the Athlete: A Treatment Manual for Clinicians Working with Elite Adolescent Male Athletes, for expedited review to Pepperdine University's Graduate and Professional Schools Institutional Review Board (GPS IRB). The IRB appreciates the work you and your advisor, Dr. Erhardt, completed on the proposal. The IRB has reviewed your submitted IRB application and all ancillary materials. As the nature of the research met the requirements for expedited review under provision Title 45 CFR 46.110 (Research Category 7) of the federal Protection of Human Subjects Act, the IRB conducted a formal, but expedited, review of your application materials.

I am pleased to inform you that your application for your study was granted **Full Approval**. The IRB approval begins today, **September 19, 2014**, and terminates on **September 19, 2015**.

Your final consent form has been stamped by the IRB to indicate the expiration date of study approval. One copy of the consent form is enclosed with this letter and one copy will be retained for our records. **You can only use copies of the consent that have been stamped with the GPS IRB expiration date to obtain consent from your participants.**

Please note that your research must be conducted according to the proposal that was submitted to the GPS IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For **any** proposed changes in your research protocol, please submit a Request for Modification form to the GPS IRB. Please be aware that changes to your protocol may prevent the research from qualifying for expedited review and require submission of a new IRB application or other materials to the GPS IRB. If contact with subjects will extend beyond **September 19, 2015** a **Continuation or Completion of Review Form** must be submitted at least one

month prior to the expiration date of study approval to avoid a lapse in approval.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the GPS IRB as soon as possible. We will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the GPS IRB and the appropriate form to be used to report this information can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* (see link to “policy material” at <http://www.pepperdine.edu/irb/graduate/>).

Please refer to the protocol number denoted above in all further communication or correspondence related to this approval. Should you have additional questions, please contact me. On behalf of the GPS IRB, I wish you success in this scholarly pursuit.

Sincerely,



Thema Bryant-Davis, Ph.D. Chair, Graduate and Professional Schools IRB
Pepperdine University

cc: Dr. Lee Kats, Vice Provost for Research and Strategic Initiatives
Mr. Brett Leach, Compliance Attorney
Dr. Drew Erhardt, Faculty Advisor



Appendix C:
Interview Scripts and Data

Section A. Themes

The following section describes some common themes gleaned from the interviews conducted for this project (see section two of this appendix for interview scripts). Subjects interviewed included the following: a) A licensed clinical psychologist who has provided interventions with young athletes over the course of 20 years; b), a sport psychologist who also taught sport psychology courses at a well-known private university for over 15 years; and c) a former Division I track and field athlete at a prominent public university. Participants were all English speaking individuals over the age of 18, who agreed to be interviewed for this project. A complete description of the interview process can be found in Chapter II.

Following is a brief introduction about the individuals who were interviewed followed by a table illustrating themes emerging from each interview and how they informed the content of the manual. The table is divided into three columns, with one identifying a "theme," another providing one or more sample quotes reflecting that theme, and the third noting how that theme was integrated into or contributed to the development of the manual.

Interview One: Sport Psychologist

The first interview was with an individual who spent over 15 years teaching sport psychology at an elite private university in the northeastern United States. This individual has also consulted with athletic teams at the same university and provided individual sport psychology interventions to adolescent and young adult athletes.

Theme	Quotes Reflecting Theme	Integration into Final Manual
Mental skills training techniques are generalizable beyond the domain of athletics	<p>“I think the skills that are introduced and practiced with athletes, elite athletes in particular, is very generalizable to all walks of life.”</p> <p>“Every performance situation from my experience has provided an opportunity for these psychological phenomena or constructs to emerge and get an opportunity to work on. So I would try to make it as practical as possible. And then also to reinforce the didactic portion I would have them write a journal, a weekly journal about whatever we covered – what they learned, how they learned it, what was useful. So developing thinking skills as well which, you know, for athletes we want to promote their academic and cognitive skills in all ways and forms and generalize those sports skills to everyday life and vice versa.”</p>	Led to integrating some mental skills training techniques into module B of the manual
Peer Interactions may change after becoming an elite athlete	“He would be faced with other people that he grew up with and would have to replay some of the adolescent themes	Led to additional content on athletic identity found in module B and how an athlete’s identity may become

	that he had encountered and he had made and there was always that sense of...I think it was jealousy from his peers and he was sort of feeling intimidated because he "left the flock" and would come back."	intertwined with their sport
Utilizing cognitive methods to reappraise responses under pressure may assist with performance anxiety	"We were able to work using Suinn's <i>Seven Steps to Peak Performance</i> , him reappraising his somatic responses to his experience there...For example, he would say I would get on the track and field and I would start yawning...And I said yawning? Yawning is your body's response to getting ready to run...they're cognitive behavioral skills to penetrate what was going on and experientially change things.	Led to the inclusion of visual-motor behavior rehearsal in module A and content from Richard Suinn throughout the manual
Individual vs. team athlete differences	"With the group, you have the support as well as the diffusion of responsibility. With the individual, they don't have the support but they get to claim all the fame."	Along with responses from other psychologist interviewed, led to additional focus on how external influences may impact an athlete's mental health
Attention from others may make athletes wary of asking for help	"There would be difficulty in the identity formation because of the attention and how to really cope with that. And watching them negotiate that and then having them not always being able to know or ask themselves permission to ask for help."	Led to sections in Module B featuring additional information on how athletes may be referred for therapy and on ambivalence that young athletes may experience and how the clinician can address this
Use of drugs and alcohol to cope with anxiety and depression may occur in	"I would say pain medications are a huge problem. Alcohol a huge problem...[In terms of	Led to additional information in Module C about assisting athletes in the development of

young athletes	depression and anxiety], I see it similar to the general population but the behaviors I just talked about are ways to self-medicate for the anxiety and depression. Particularly if the athlete is away from home. They're out of their element."	adaptive coping skills in therapy
Create a contract from the beginning is useful to avoid ethical issues	"I think it's very important to be very clear. To have a contract and guidelines from the beginning that I'm entering."	Led to additional information on why clinicians should set boundaries early in treatment found in Module C
Confidentiality issues are unique with elite athletes	"You're challenged with confidentiality issues (with elite athletes). That you may not have the press hanging out with you all the time. And knowing how to deal with that. And most of us are not really accustomed to that. We're usually scientist practitioners or in academic settings."	Led to including additional information on the unique confidentiality issues when working with young athletes in Module C
Pursuing additional education and certification is important when working with young athletes	"I wish that when I started my interest in sport psychology which was in the late 80s, early 90s that it got the attention that it has today with all of the conferences and certifications and specializations because I definitely would have pursued that earlier."	Led to inclusion of additional information on competence in Module C
Involving coaches may be beneficial	"I would like to interview [coaches] too. My style is more in samples of behavior, I want to see what the story is, ecological validity...I want to go see, with their permission of course how they're interacting [with coaches] to	Led to additional focus on how external influences such as coaches and parents may impact an athlete's mental health and how the clinician can involve others in therapy to help the athlete

	help them problem solve better.”	
Manuals that are most beneficial to the clinician are pragmatic and user-friendly	“[The most useful are] user friendly and pragmatic. Especially if they had questionnaires that I could provide to the athlete.”	Led to the creation of additional figures and pragmatic tips throughout the manual
Cognitive behavioral therapy is useful for young athletes due to its pragmatism.	“I have to give it to the cognitive behavioral therapists because it’s pragmatic, it’s concrete. The language is mentally acceptable to the young individuals usually. It’s usually hands-on, interactive and there’s a lot of guidance provided.”	Led to additional section on cognitive behavioral therapy in Module A and additional cognitive behavioral strategies presented throughout Module B

Interview Two: Licensed Psychologist

The second interview was with an individual who works as a child and adolescent supervising psychologist at a major hospital in the northeastern United States. This individual provides neuropsychological testing and psychotherapy with a variety of patients, many of whom are elite adolescent athletes.

Theme	Quotes Reflecting Theme	Integration into Final Manual
Anxiety and attention difficulties are the most common psychological issues seen in young athletes	“I think anxiety and attention are two of the larger components that we uncover when we’re working together. A lot of times they’ll be referred for more of a medical issue and referred for neuropsychological testing as opposed to psychotherapy for anxiety or performance-related anxieties or attentional issues.”	Led to additional information on performance anxiety as well as tips on how clinicians can guide athletes to develop coping skills
Clinicians should guide young athletes to self-discovery even if they don’t see certain issues at first	“When they’re involved in their sports, what they’re doing and how it feels and things of that nature. And so we start to uncover or unfold you know a typical day and week and I look for any which way that I can get in there to see if I could get them to see, ‘well maybe this was related to me feeling kind of anxious’ or ‘I’ve avoided this situation because I got too overwhelmed’.”	Led to additional information about assisting athletes in the development of adaptive coping skills in therapy
Team sports may present additional issues due to pressure of being compared to teammates	“I think there’s more work to be done or more issues that come out of [team sports]. I’m not sure why. Perhaps it’s being involved in a team sport and the pressure of being	Led to additional focus on how external influences may impact an athlete’s mental health

	compared to your teammates may be something that heightens your anxiety or your level of awareness to it.”	
Anxiety may manifest in other ways with athletes	“I don’t think they’re aware of their level of anxiety and it may come out or manifest in other areas... They seem to be more comfortable expressing feelings of anger as opposed to feeling anxious.”	Led to additional resources for helping clinicians assess for anxiety and coping skills in young athletes
The safety of athletes is a key ethical issue	“I think ethically one thing that is very important is safety. In talking about providing a safe environment for them and what they’re doing. And talking about sports enhancement supplements is a big one.”	Led to additional information on ethical implications including multiple role relationships and confidentiality issues when working with young athletes due to safety concerns found in Module C
Coaches or others may try to sway the judgment of a clinician	“I was pressured by a coach to allow someone, to include in my report that they could play after they sustained a concussion.”	Led to additional focus on ethical issues in Module C regarding how external influences may impact judgment of a clinician
Clinicians would benefit from an overview of common injuries athletes have	“It would be helpful for clinicians to have more of an understanding of the common themes or issues there are in sports related activities and also the common injuries that happen to these individuals... What’s becoming quite the buzz now are concussions. I think its helpful for clinicians to understand the true impact and how prevalent it is.”	Led to inclusion of section devoted to athletic injuries and concussions
Potential usefulness of incorporating parents into treatment because they are attuned to what the athlete is experiencing	“I think a lot of parents are involved in their kids sports... And they see a lot so they’re much more in tuned to what’s going on.”	Led to additional content related to working with parents. Specifically, the Module B section labeled, “Working with Parents in

		Treatment”
CBT is most often used when intervening with young athletes	“Most often, I utilize CBT, cognitive behavioral therapies. Very structured for the athlete, you know creating like a plan of action for them. So I look at what their goals are and then start taking it apart from there and create a plan for them... You know if you’re running a marathon and your plan is to run 26.2 miles, we’re going to break that up into much shorter intervals.”	Led to additional section on cognitive behavioral therapy in Module A and additional cognitive behavioral strategies presented throughout Module B
Interventions are collaborative when treating young athletes	“It’s very interactive, very collaborative... It’s a process so we might work on the first mile, which is the first short-term goal.”	Led to increased focused on collaborative interventions throughout the manual
Resources are most helpful when they include specific, pragmatic	“I have books that I’ve read where I get strategies and tools... People want the tips so you know, these are the things you look out for, these are the things you should incorporate or do. Try these things. So very specifically laid out.”	Led to the creation of more figures and pragmatic tips throughout the manual
Resources outlining the psychological aspects of being an athlete would be beneficial for clinicians	“I think if there were resources that specifically addressed some of the psychological components to life and how it also impacts sports.”	Led to increased focus on presenting issues common to elite adolescent male athletes found in Module B
CBT is beneficial for goal setting and performance anxiety	“I think a lot of the CBT that we do in terms of performance anxiety and getting them to focus on the present and bringing them back to that and focusing on very small goals. Everyone has their goal on the prize and often lose focus on	Led to additional information on goal setting and cognitive behavioral techniques with athletes

	the right now.”	
Multiple techniques can be utilized with teenage athletes	“I utilize very specific techniques for deep breathing relaxation and mindfulness CDs that are very calming. I do visual imagery and/or progressive muscle relaxation.”	Led to inclusion of additional information on the techniques mentioned by the interviewee
Mindfulness and other spiritual techniques can be useful in getting the athlete into the present moment instead of being future oriented	“I feel that spiritual component often gets missed and it’s very valuable. Getting them to the here and now.”	Led to additional content on mindfulness in Module A and additional information about assisting athletes in the development of adaptive coping skills in therapy in Module B

Interview Three: Elite Athlete

The third interview was with an individual who competed in track and field at an elite Division I university in the western United States. This individual competed in multiple sports throughout high school and was recruited in basketball and track and field. In addition to being recruited in high school, he also transferred from one track and field program to another after his freshman year of college.

Theme	Quotes Reflecting Theme	Integration into Final Manual
Athletes may experience internal pressure to get recruited	“I definitely had it easier than the stud athlete that got all the attention...[But] I definitely put more pressure on myself to get recruited.”	Led to additional information on stress and the development of coping skills for athletes
Athletes can experience confusion and frustration during the recruiting process due to lack of knowledge of the process	“I wish I had known more about the business side [of recruiting]. I had to go through athletic programs to get a transfer. I ended up signing a letter of intent and honestly I might have been confused on it. My family hadn’t gone through the recruitment process...I definitely didn’t understand the binding elements or what it did.”	Led to additional information regarding how clinicians can help athletes cope with pressure from other individuals
Message boards can cause additional stress and anxiety in athletes	[When asked about message boards and media] “For me that was such a tie in with the sport itself. Having these track and field message boards where people didn’t know you, that was definitely very interesting.” “Fans feel like because they see you on TV and they know your stats, they feel like they	Led to additional focus on how external influences may impact an athlete’s mental health

	can say anything about you.”	
Coaches impose additional structure and pressure on academics	“Academics were a high priority and your coach would check in on you to make sure you were going to class and they were checking on your grades. In my experience it was really only positive.”	Led to additional focus on how external influences may impact an athlete’s mental health
Treatment of elite team athletes by other people differs from the average student	“The football and basketball guys on campus...were almost treated like pros.”	Led to more information regarding the impact of interpersonal interactions that athletes may experience
Poor performance may be associated with a tendency to blame oneself	“I definitely was very hard on myself with failure. During a big game, my mind would be right and then I would start overthinking things and I would get jittery...My personality was to blame myself for not playing up to potential.”	Led to increased focus on self-belief in fear of failure interventions found in Module B
Certain strategies may be helpful to deal with internal pressure	“I would try to shake it out and breath...A lot of the pressure came from myself.”	Led to additional information about assisting athletes in the development of adaptive coping skills in therapy
Parents are highly influential on a young athlete and can be a calming presence when validation is utilized	“Probably Mom, Dad [were the biggest influences]. It was pretty much just my parents. I think their validation of ‘you can do this’...is very calming.”	Led to additional content related to working with parents. Specifically, the section labeled, “Working with Parents in Treatment” in Module B
Coaches can have significant positive and negative impact on their players	“For good or bad, I don’t think a lot of high school coaches think about the impact they have on kids...That moment shapes them in how they are, how they act. I became much more guarded, much more defensive because of that coach...They play a huge role	Led to additional information on how external influences may impact an athlete’s mental health. Specifically, it led to more in-depth information on creating a mastery climate with young athletes if that has not been created by coaches or parents

	in early development.”	
It would be beneficial for the athlete to address stress and anxiety related to sports as early as possible	“I definitely wish I would have addressed [stress and anxiety] early on. I think I was adverse when I was younger to talking to someone. That was what held me back from more athletic success.	Led to additional focus on how external influences may impact an athlete’s mental health as well as additional information regarding ambivalence and avoidance of psychotherapy in young athletes
Athletes may be wary of asking for help for mental health issues	“I think it was all outlook too. I think the thought for an athlete is that you shouldn’t be looking for help, especially for the mental aspect.”	Led to section in Module B on ambivalence that young athletes may experience regarding help-seeking and how the clinician can help address it
It would be helpful for clinicians to create strategies for dealing with anxiety for young athletes	“Looking for how people react to pressure and how they could deal with them early on and I think creating, you know, self-strategies to deal with anxiety.”	Led to additional information in Module B on assisting athletes in the development of adaptive coping skills in therapy including stress inoculation training and performance anxiety interventions

Section B. Interview Scripts

Following are the semi-structured interview scripts that the investigator used to guide the interviews. A different script was utilized for each person interviewed based on his or her experience in sports.

Script for interviewing a mental health clinician**Demographic Information****NAME:** _____**AGE:** _____**GENDER:** _____**ETHNICITY:** _____**OCCUPATION:** _____**CURRENT PROFESSIONAL SETTING:** _____

- 1) What is the length of time you have been working as a licensed mental health clinician?
- 2) What is your highest degree obtained and what license do you currently hold?
- 3) What type of specific training, if any, have you had in treating adolescents? In treating athletes specifically?
- 4) When did you first start working with adolescent athletes and in what capacity?
 - a) How many adolescent athletes have you worked with over the course of your career?
 - b) How many athletes that you have worked with would be considered elite (recruited by a major university)?
 - c) Are you currently working with adolescent athletes?
- 5) What sports have the adolescent athletes you've treated participated in?

Challenges

- 6) Based on your experience, what are some of the most significant challenges faced by elite level adolescent athletes?
- 7) What are some of the most common issues addressed in your previous therapeutic work with elite adolescent athletes?
- 8) Were there differences in treating athletes who participated in individual sports compared to team sports? If so, how would you describe those differences?
- 9) What are the most common challenges the athletes themselves faced as perceived by you, the clinician? As perceived by the athlete?
- 10) What are the primary mental health issues that you focused on in your treatment of athletes?
 - a) What have you found to be the most common mental health issues among elite adolescent athletes?
- 11) What do you see as some of the main ethical issues relevant to mental health clinicians working with elite adolescent athletes?
 - a) As a clinician working with athletes, were you every placed in an ethically ambiguous or compromised situation?
- 12) How have issues related to ethnicity, economic status, or religious background been relevant to your clinical work with elite adolescent athletes?
 - a) Did such issues ever pose challenges in treatment?
 - b) If so, how?
- 13) What information and/or guidance do you wish you had had in terms of facilitating your work with this population when you began working with them?
- 14) How often are you dealing with parents over the course of treatment?

- a) Are there specific challenges associated with working with parents of elite adolescent athletes?

15) How often are you dealing with coaches over the course of treatment?

- a) Are there specific challenges associated with working with coaches?

16) How often are you working with other individuals such as teammates, trainers, and teachers over the course of treatment?

- a) Are there specific challenges associated with working with [named group(s)]?

Interventions and Tools for Treatment

17) What type of interventions do you utilize most often when working with young athletes?

18) What type of treatment resources (e.g., manuals, books, websites) have you consulted in the past?

- a) What did you like most/least about them?

19) Looking back on your experience in intervening with athletes, what type of treatment resources do you wish were available in terms of format and content?

20) How often does your treatment of elite adolescent athletes focus specifically on performance enhancement (as opposed to traditional psychological interventions)?

21) How do you focus on performance enhancement?

22) When treating elite adolescent athletes, do you have contact with an athlete's current sports psychologist? If yes:

- a) Have you coordinated treatment directly with an athlete's sports psychologist?
- b) How frequent or extensive is such contact?
- c) What are your typical goals with respect to these contacts with sports psychologists?

What are the typical content areas you are discussing with sports psychologists?

23) Are there treatment techniques that are particularly well-suited to meeting the needs of elite teenage athletes?

a) If yes, what are they?

24) Do you have any additional comments or suggestions that you believe might be helpful in the development of this resource manual?

Thank you very much for participating in this interview.

Script for interviewing a sport psychologist**Demographic Information**

- **NAME:** _____
 - **AGE:** _____
 - **GENDER:** _____
 - **ETHNICITY:** _____
 - **OCCUPATION:** _____
 - **CURRENT PROFESSIONAL SETTING:** _____
 - **PROFESSIONAL ORGANIZATION MEMBERSHIPS:** _____
- 1) What is your highest degree obtained and what license do you currently hold?
 - 2) How long have you have been working as a licensed sports psychologist?
 - 3) When did you first start working with adolescent athletes and in what capacity?
 - a) How many adolescent athletes have you worked with over the course of your career?
 - b) How many athletes that you have worked with would be considered elite (recruited by a major university)?
 - c) Are you currently working with adolescent athletes?
 - 4) In addition to the academic work you completed related to sports psychology, what type of specific training, if any, have you had in treating adolescent athletes?
 - a) Did you complete specific fellowships or internships involving the treatment of adolescent athletes?
 - 5) What were the common sports played by the adolescent athletes you treated?

Challenges

- 6) Based on your experience, what are some of the most significant challenges faced by elite level adolescent athletes?
- 7) What are some of the most common issues addressed in your previous therapeutic work with elite adolescent athletes?
- 8) Were there differences in treating athletes who participated in individual sports compared to team sports?
- 9) What are the most common challenges the athletes themselves faced as perceived by you, the clinician? As perceived by the athlete?
- 10) What are the primary mental health issues that you focused on in your treatment of athletes?
 - a) What have you found to be the most common mental health issues among athletes?
Young elite athletes?
- 11) What do you see as some of the main ethical issues relevant to sports psychologists working with elite adolescent athletes?
 - a) As a sports psychologist, were you every placed in an ethically ambiguous or compromised situation with a young athlete?
- 12) How have issues related to ethnicity, economic status, or religious background been relevant to your clinical work with elite adolescent athletes? Did such issues ever pose challenges in treatment?
 - a) If so, how?
- 13) What information and guidance do you wish you had had in terms of facilitating your work with this population when you began working with them?
- 14) How often are you dealing with parents over the course of treatment?

- a) Are there specific challenges associated with working with parents of elite adolescent athletes?

15) How often are you dealing with coaches over the course of treatment?

- a) Are there specific challenges associated with working with coaches?

16) How often are you working with other individuals such as teammates, trainers, and teachers over the course of treatment?

- a) Are there specific challenges associated with working with [named group(s)]?

Interventions and Tools for Treatment

17) What type of interventions do you utilize most often when working with young athletes?

18) What type of treatment resources (e.g., manuals, books, websites) have you consulted in the past?

- a) What did you like most/least about them?

19) By your estimation, what percentage of your work with adolescent athletes focuses exclusively on performance enhancement? On emotional or behavioral issues that wouldn't fall directly under the label of performance enhancement?

- a) How do you focus on performance enhancement?
- b) How often does treatment focus on psychological interventions that are not related directly to performance enhancement?

20) When treating elite adolescent athletes, do you have contact with an athlete's current primary mental health clinician/psychologist? If yes:

- a) How frequent or extensive is such contact?
- b) What are your typical goals with respect to these contacts with mental health clinicians?
What are the typical content areas you are discussing with mental health clinicians?

21) Looking back on your experience in intervening with athletes, what type of treatment resources do you wish were available in terms of format and content?

22) Are there treatment techniques that are particularly well-suited to elite teenage athletes?

a) What are those?

23) Do you have any additional comments or suggestions that you believe might be helpful in the development of this resource manual?

Thank you very much for participating in this interview.

Script for interviewing a current/former male athlete**Demographic Information**

- **NAME:** _____
- **AGE:** _____
- **GENDER:** _____
- **ETHNICITY:** _____
- **OCCUPATION:** _____
- **CURRENT PROFESSIONAL SETTING:** _____

- 1) When did you first start playing sports?
- 2) What is your sport of preference?
- 3) Which sport were you recruited in?
- 4) What division in college did you compete in?
- 5) Are you still engaged in competitive sports at either a college or professional level?
 - a) If so, for how long have you been competing?
 - b) If not, how long was your competitive sports career (including college)?

Challenges

- 6) Can you describe your experience being recruited and how it impacted your day-to-day life as a student athlete?
- 7) Were there any challenges or difficulties you encountered during the recruitment process you wish had known about before the process began?
 - a) What were they and how did you deal with them?
- 8) Can you describe your experience with the media and sports message boards?

- a) Did you read message boards and if so, what impact did the content have on you emotionally?
- 9) Were there challenges around being identified as an athlete during adolescence?
 - a) If yes, please describe what they were and how you coped with them.
- 10) Can you describe your relationships with school administrators and teachers?
 - a) Was there pressure placed on you to obtain a certain grade point average?
- 11) Did you face challenges related to ethnicity or socioeconomic status during your athletic career?
 - a) What were those challenges and when and where did they occur?
- 12) What were some of the social or personal activities that provided you with a sense of identity away from your sport?
- 13) How did you deal with failure?
 - a) Did you fear failure?
- 14) How often did you experience pressure related to performance in your athletic career?
 - a) Describe the type of pressure you experienced during competition.
 - b) How did you cope with performance related pressure in sports?
- 15) How did you handle pressure from parents, coaches, and other individuals?
- 16) Who were the predominant individuals in your life (e.g., coaches, parents, psychologists) that helped you learn coping skills to deal with athletic pressure?
- 17) What role did external influences such as coaches and trainers play in your development as an athlete?
- 18) Can you describe your relationships with non-athlete peers?
 - a) Can you describe your romantic relationships while you were an athlete?

Interventions and Tools for Treatment

- 19) Have you ever worked with a sports psychologist or other mental health clinician?
- 20) What strategies worked best to deal with the stress and anxiety that come from high level sports participation?
- 21) If you were to start over and work with a mental health clinician or sports psychologist when you were a young athlete, what type of performance enhancing interventions do you believe would be most helpful?
 - a) What other type of psychological interventions, not directly related to performance enhancement, do you believe would be most helpful?
- 22) Do you have any additional comments or suggestions that you believe might be helpful in the development of this resource manual?

Thank you very much for participating in this interview.

APPENDIX D:

Manual

Development of the athlete:

A resource manual for clinicians working
with elite adolescent male athletes

By Kenneth D. Hartline, M.A.

About the Author

Kenneth D. Hartline is a Doctor of Psychology candidate at Pepperdine University's Graduate School of Education and Psychology. He was born and raised in Salem, Oregon and attended the University of Oregon for his undergraduate studies. While at the University of Oregon he received concurrent Bachelor's degrees in psychology and journalism. He completed his undergraduate honor's thesis on the interpretation of human action and memory encoding based on the perceived goals of other individuals. He was also the assistant managing editor at Mosaic Newsmagazine within the Allen School of Journalism and Communication. Following his undergraduate studies, Mr. Hartline completed his master's degree in clinical psychology at Pepperdine University's Graduate School of Education and Psychology. While enrolled at Pepperdine University's Doctor of Psychology program, Mr. Hartline conducted psychotherapy and neuropsychological evaluations with numerous adolescent athletes at Southern California Neuropsychology Group and Children's Hospital Los Angeles. He completed an APA internship at Rusk Rehabilitation at New York University Langone Medical Center in 2015. He currently lives in New York City and travels to as many Oregon Ducks athletic events as possible.

Table of Contents

INTRODUCTION.....	1
Nick Saban’s Process.....	1
Jim Larranega’s Career Crossroads.....	4
Joe Maddon’s Psychology.....	6
Sport Psychology’s Rapid Growth.....	9
Adolescent Sports Participation.....	10
Adolescent Athletes Seeking Psychological Interventions.....	11
Assisting Mental Health Clinicians Working with Adolescent Athletes.....	12
Goals of Manual.....	12
Organization of Manual.....	13
MODULE A: Mental Skills Training.....	14
Overview.....	15
Mental Skills Training Modalities.....	16
Cognitive Behavioral Therapy For Athletes.....	18
Description.....	18
Stages of Self-Regulation.....	22
Outcome Studies.....	25
Resources for Further Study.....	26
Imagery.....	27
Description.....	27
Common Mental Imagery Models.....	29
Outcome Studies.....	31
Resources for Further Study.....	31
Visuo-Motor Behavior Rehearsal.....	32
Description.....	32
Outcome Studies.....	34
Resources for Further Study.....	34
Self-Talk.....	35
Description.....	35
Outcome Studies.....	37
Resources for Further Study.....	39
Goal Setting.....	40
Description.....	40
Outcome Studies.....	42

Common Goal Setting Principles.....	43
Resources for Further Study.....	45
Biofeedback.....	46
Description.....	46
Outcome Studies.....	49
Resources for Further Study.....	50
Organizations and Education.....	50
Mindfulness.....	52
Description.....	52
Moore’s Phases of Mindfulness Training.....	54
Outcome Studies.....	55
Resources for Further Study.....	56
Stress Management Training.....	57
Description.....	57
Eight Modules of SMT.....	59
Outcome Studies.....	61
Resources for Further Study.....	61
Physical Relaxation Training.....	62
Description.....	62
Physical Relaxation Techniques.....	64
Outcome Studies.....	65
Resources for Further Study.....	66
Conclusion.....	67
MODULE B: Intervening with Adolescent Athletes.....	69
Male Adolescents in Sports.....	70
Unique Issues and Interventions to Assist Young Athletes.....	74
Common Issues.....	74
Parental Pressure.....	74
Creation of a Mastery Climate.....	78
Assessment.....	78
Intervention.....	80
Working with Parents in Treatment.....	82
Resources.....	83
Fear of Failure.....	85
Reducing Fear of Failure.....	87
Assessment.....	87
Intervention.....	88

Identity Development.....	92
Identifying Athletic Identity.....	94
Interpersonal Therapy for Athletic Identity Changes.....	95
Developing Integrated Identity.....	97
Goals.....	97
Intervention.....	97
Resources.....	99
Development of Coping Skills.....	100
Developing Coping Strategies.....	103
Rationale.....	103
Assessment.....	104
Intervention.....	105
Strategies to Cope with Performance Anxiety.....	108
Assessment.....	109
Intervention.....	111
Additional Topics for Treatment.....	112
Athletic Injury Including Concussion.....	112
Concussion.....	116
Coping with Anxiety after Concussion/Injury.....	117
Rationale.....	117
Intervention Considerations.....	118
Resources.....	119
Ambivalence or Avoidance of Treatment.....	121
Tips to Reduce Ambivalence & Avoid Unplanned Termination.....	123
 MODULE C: Cultural and Ethical Considerations.....	 124
Introduction and Module Overview.....	125
Cultural Considerations.....	126
Multicultural Competence.....	129
Cultural Differences Between Ethnic Groups.....	132
Multicultural Guidelines when Working with Young Athletes.....	137
Acknowledging Own Biases and Assumptions.....	137
Developing Knowledge and Skills.....	140
RESPECTFUL Model and Development of Skills and Knowledge.....	140
Ethical Considerations.....	144
Purpose of Ethics Codes.....	146

Ethics Applied to Interventions with Athletes.....	149
Confidentiality.....	149
Boundaries and Multiple Role Relationships.....	152
Competence and Marketing.....	154
Conclusion.....	158
Resources.....	159
REFERENCES.....	161

"I want you to do something. Before you put your head to the pillow tonight, I want you to sit on your bed, close your eyes and visualize yourself in tomorrow's game. Visualize it deeply and specifically, so you can feel yourself there. You're running through the plays in the scouting report. You're guarding the man you're going to guard. You're getting back and getting stops."¹

-Jim Larranaga, head coach, University of Miami

* * *

Nick Saban had a problem. The year was 2003 and the Louisiana State University Tigers were coming off back-to-back SEC championships. Saban was considered one of the hottest coaches in the college game going into that 2003 season. The Tigers began the year ranked 14th in the nation in the Associated Press poll. Yet there were doubts. Nick Saban had lost several key members of his team and was facing pressure regarding how he would replace players that had led the team to those titles. On top of this, there may have been a bigger problem. Despite having tremendous success at multiple schools, Saban was feeling the pressure of delivering a national championship to the LSU faithful. This was the SEC where success was measured by national championships, not just conference titles.

Nick Saban's problem needed a solution. He had befriended a psychologist along the way who would help to shape how he motivated his team. While other

¹ Winn, L. (2013)

coaches focused primarily on recruiting, performance on the field, and X's and O's, Saban knew that he needed to address an athlete's mental state. To help him to do so, Saban reached out to Lonny Rosen, a sport psychologist he had met while head coach at Michigan State University. In his book *How Good Do You Want to Be? A Champion's Tips on How to Lead and Succeed at Work and in Life*, Saban reflected on a time at Michigan State when a trusted psychologist's input altered the way he approached coaching.

"One year at Michigan State we won our first six games for a 6-0 start; we were ranked in the top ten in the nation. Things were going well. But after our sixth win, the players began to make statements in the paper about the winning streak and the national championship, and this was barely halfway through the season. My good friend, the sport psychologist, Dr. Lonny Rosen of Michigan State called me and told me to beware. He could anticipate a problem for us when we played our next opponent, Purdue. He could tell from the quotes in the paper that the team had lost focus, something that was hard for me to pick up on. The next week, we trailed Purdue 28-0 in the first quarter. We managed to battle back but still lost. Dr. Rosen had been right."²

Saban continued to struggle to get over the hump required to reach the national championship. His teams were having great success. Two SEC

² Saban & Curtis, 2007

championships proved that. Yet players were inevitably looking ahead and struggling to handle the mounting success as seasons went on. Saban notes that leaders have the capacity to anticipate problems and foresee long-term gains. However, athletes in competition struggle to perform at their highest level if they aren't focused on the task at hand. Thus began the wholistic approach to coaching that Saban would come to describe as "the process."

Saban's process involves providing athletes with tools needed to succeed including mental health interventions, nutrition education, and other services that allow players to concentrate solely on competition when they step on the field. Notably, the process endeavors to position athletes to successfully address multiple aspects of their lives so that they are free to focus effectively on preparation for competition.

With respect to the psychological components involved in "the process," Saban noted, "Your mental conditioning was an important part of being successful, how you thought, the habits that you created with your thoughts and positive energy and all of that."³

Flashback to 2003. Nick Saban is 6-0 again. This time, it's Florida who upsets Saban's team in the seventh game of the season. However, unlike his time at Michigan State, LSU was fully invested in "the process." Each player was given the tools they needed to put distractions aside and focus on preparation. Anticipation and the end

³ Saban & Curtis, 2007

result was not the primary goal each day. Getting their minds primed to perform at the highest level each day was. Results and winning came secondarily to the work done within “the process.” In January 2004, Nick Saban won the first of his four college football national championships.

* * *

Jim Larranega was at a career crossroads. As age crept up on the college basketball coach, he still found himself leading a mid-major university with little historical success. In 2005, Larranega was in his 50s coaching George Mason University, a program with limited prior experience in the NCAA tournament. In fact, going into the 2005-2006 season, George Mason had never won a single NCAA tournament game and was often overshadowed by the ACC and Big East schools that were located near their campus in northern Virginia. The players on the team were those passed over by the big schools in the area and went into the season with few expectations placed upon them by the national media. Yet Larranega had a way of getting the most out of his overlooked players; a skill that he could trace back to an individual he met as an assistant coach at the University of Virginia (UVa) many years before.

That individual was Dr. Bob Rotella, then a professor of psychology at the school, who has since gone on to work with numerous professional golfers to enhance their performance by focusing on mental skills. In 2005, before the season began, Dr.

Rotella stood before the George Mason basketball team and instructed them to close their eyes and do a simple visualization technique. Larranaga was first introduced to visualization techniques when he noticed a tennis lesson being given by Dr. Rotella at UVa.⁴ Dr. Rotella was telling his players to picture their strokes—to see their racket in slow motion, catching and throwing a topspin forehand back over the net—and Larranaga was so fascinated that he walked over and introduced himself. Now, years later, Dr. Rotella asked Larranaga’s George Mason players to share what they had visualized when asked to imagine their goals for the season. One player announced that he saw the team in the Final Four. Other teammates joined in with their visions of the season and soon an exercise was borne that would be continued throughout the year. Players would not only watch tapes of the powerhouse teams around the country, they would visualize stepping on the court with those opponents. They would also visualize what it would take to play at those teams’ levels and what it would be like to beat them. In March of 2006, George Mason became the first mid-major university to go to the Final Four.

Years later, Larranaga had parlayed his success into a head coaching job at the University of Miami in Florida. In 2013, Miami captured their first ACC title with many players that, like their George Mason counterparts years before, had been overlooked by other schools. Despite never having been in this position before, Miami was playing

⁴ Winn, 2013

as if they were perennial league leaders and that other programs were looking up at them. The Hurricanes had visualized their success and parlayed the early mental imagery exercises into becoming college basketball's most surprising team.⁵

* * *

Joe Maddon had to try something that had never been done. He was the manager of the Tampa Bay Devil Rays, a former expansion franchise in Major League Baseball (MLB), which had a long history of consistent failure on the field. Not only had the Devil Rays never won, they lacked the financial resources needed to compete with large market teams in their division such as the New York Yankees and Boston Red Sox. Maddon was not your typical manager in Tampa Bay. He couldn't be. He didn't have the resources to get the best talent in baseball. He had to get the most out of the talent he had.

Maddon, an avid reader of psychology and social sciences, made sure that the Devil Rays had the mental tools to compete at the highest level. Maddon covered the Devil Rays' clubhouse with inspirational quotes from a wide range of thinkers, including UCLA icon John Wooden, Alan Greenspan, and Albert Camus.⁶ Inside the entrance of the clubhouse, near the day's line-up card, he posted the "thought of the day" throughout his term as manager. "Pitchers," the sign read one day early in training camp, "during a side session, how many pitches did you 'will' to the spot versus how

⁵ Winn, 2013

⁶ Canella, 2008

many did you 'hope' would get there?"⁷ Maddon's approach emphasized the mental aspect of sports and sought to develop in players a sense of control over their performance. Visualization and goal setting were considered the norm for preparation in the Rays clubhouse. Much like Nick Saban's "process," the goal was for players to go into each game or practice in the best frame of mind possible with a sense that they completed everything needed in preparation to perform.

Despite having one of the lowest payrolls in baseball, Tampa Bay started winning with Maddon's unique style. In 2008, after finishing the previous year with the worst record in MLB, the Rays had the best record in baseball after the first two months of the season. The success continued throughout the rest of the regular season as Maddon's Rays edged the Red Sox and Yankees for the American League East division title, earning their first trip to the postseason. The success didn't stop there. The Rays ousted the White Sox and division rival Red Sox to win the American League and punch their ticket to the World Series against the Phillies. Despite losing to Philadelphia in the fall classic, Maddon had changed the culture of Tampa Bay baseball. Between 2009 and 2014, when Maddon left to manage the Chicago Cubs, the Rays averaged over 90 wins per season and have never finished lower than third in their division. This all despite having a payroll significantly lower than their division rivals and playing in what many consider the worst stadium in baseball. Maddon's

⁷ Verducci, 2013

belief was that doing something different to change the Ray's culture paid dividends. His philosophy involves giving the players the tools needed to succeed mentally and then stepping aside. Although many of the game's most intelligent managers love to tinker, Maddon prefers to put his tools down and let those of his players take over. "I'm so not into controlling this," Maddon said in 2008. "I don't want my players afraid of making mistakes."⁸

* * *

As these stories illustrate, training the mind to perform at its best in sports is critical. These three coaches, each of whom ultimately experienced great success, had varying levels of experience and success when they decided to elicit the help of sport psychologists in order to help their athletes reach higher levels of performance. While sports have been a part of human experience for thousands of years, sport psychology is at a stage of relative infancy. Only in recent years has the use of sport psychologists become a common component of helping athletes reach their best level of play. By taking care of the mind, athletes can concentrate on their bodies and perform without the restraints of self-doubt, and anxiety that reduce performance levels. Nick Saban, Jim Larranega and Joe Maddon realized that providing resources to enhance players' mental skills gives them the best opportunity to optimize their performance and the team the best chance to win.

⁸ Schwartz, 2008

Sport Psychology's Rapid Growth

In the past, sport psychology was not considered a part of mainstream athletics. However, sport psychologists have become increasingly sought after to the point where, today, it is commonplace for professional teams to have a full time sport psychologist on staff. While elite professional athletes used to be the only people to seek out sport psychologists, they are now considered necessary components of training for many collegiate, elite high school, and even younger high-level athletes.

Accompanying this rapid growth has been the emergence of a distinct knowledge base pertaining to understanding and enhancing athletic performance from a psychological perspective.⁹ Literature reviews pertaining to sport psychology have focused on evaluating interventions that are focused solely on improving performance-related outcomes.¹⁰ For example, approaches that involve mental skills training tailored to the needs and abilities of athletes have been found to improve performance levels.¹¹ By designing ways for athletes to increase their awareness of performance states and develop their performance-related psychological skills through cognitive and behavioral strategies, sport psychologists can play a vital role in helping them achieve to their potential.¹²

⁹ Aoyagi & Portenga, 2010

¹⁰ Rumbold, Fletcher, & Daniels, 2011

¹¹ Vealey, 2007

¹² Harmison, 2011

Adolescent Sports Participation

The widening availability of psychological services for athletes is occurring at a time when adolescent participation in sports is increasing. A 2008 report from the National Federation of State High School Associations (NFHS) noted that the number of students participating in high school athletics increased for the 19th consecutive year.¹³ According to the NFHS, high school sports participation reached 7,667,955 participants for the 2010-2011 school year, which represented the largest participation rate in United States history and constituted an increase of 39,578 participants from 2009-10.¹⁴ Overall, the NFHS estimates that over 50% of high school students participate in sports in a given year. Participation in collegiate athletics has also increased significantly. Since the National Collegiate Athletic Association (NCAA) began collecting yearly athletic participation statistics in 1981, annual participation has grown by over 200,000 total student-athletes.¹⁵ Despite the parallel growth in athletic participation rates and the use of sport psychologists, the use and efficacy of mental health treatment among athletes remains relatively unstudied, especially among younger participants.

¹³ Theokas, 2009

¹⁴ "High School Sports Participation," 2011

¹⁵ Irick, 2011

Adolescent Athletes Seeking Psychological Interventions

The rise in sports participation along with the reduced stigma associated with seeking psychological services means that mental health clinicians who work with adolescents are likely increasingly coming in contact with young athletes facing challenges directly related to sports. Yet mental health clinicians who have treated such athletes may well have been frustrated in their pursuit of helping these teens as much as possible. The unique issues facing adolescent athletes create additional challenges that should be addressed in treatment to improve overall psychological well-being and to promote healthy development. In order to best meet the general mental health needs of these clients, clinicians need to be aware of the unique stressors and issues they frequently face. Furthermore, clinicians will be better positioned to understand and support the performance enhancement interventions being implemented by sport psychologists working with these athletes if they have a general understanding of the mental skills training typically used to bolster performance.

Elite adolescent athletes have become increasingly likely to seek sport psychologists for performance enhancement. However, the unique issues adolescents encounter in high-level athletics engender a need for treatment in addition to the performance-related interventions typically provided by sport psychologists. Without treatment designed to address the unique challenges and risks of high-level sports

participation, young athletes will have difficulty realizing the potential benefits of sports, be more susceptible to adverse psychological consequences associated with high level sports participation, be less likely to reach optimal performance levels, and may experience decreases in overall emotional well-being.

Assisting Mental Health Clinicians Working with Adolescent Athletes

Thus, it appears that mental health clinicians working with elite-level adolescent athletes would benefit greatly from a manual that outlines the issues faced by this population and provides guidelines for addressing them in the context of outpatient psychotherapy. To the author's knowledge, no resource currently exists to help clinicians understand and address the unique issues elite adolescent athletes confront so as to help optimize the benefits they experience through sports.

Goals of Manual

The goal of this manual is to assist mental health clinicians in helping young athletes realize the benefits and avoid the adverse consequences that may be associated with elite-level sports participation. In order to achieve this goal, the specific aims of this manual are to (1) educate clinicians about the unique stressors and challenges faced by elite-level adolescent athletes, (2) identify therapeutic interventions likely to be effective in helping young athletes cope with those stressors and challenges, and (3) familiarize clinicians with the mental skills training typically

conducted by sport psychologists so as to position them to support these performance enhancement efforts.

Organization of Manual

This manual is divided into three parts. The first section focuses on mental skills training and other interventions used by psychologists treating athletes to enhance performance. It explores the most common types of mental skills training currently used by sport psychologists and how athletes train their minds to perform at their best. The second section examines how mental health clinicians can best provide treatment for male adolescent athletes (defined, for our purposes, as ages 12-18). It provides an overview of common issues faced by young athletes that may impede physical performance and potential interventions to address those issues. The third section provides an overview of ethical issues faced by clinicians working with young athletes along with a discussion of cultural considerations that are often vital to providing young athletes with the best possible treatment.

Importantly, readers should be aware that this resource manual is not designed to provide a step-by-step treatment protocol. Moreover, this manual is not designed for clinicians seeking to provide sports psychology interventions to young athletes. Instead, it is designed to be a single resource that provides an overview of the unique issues and sports psychology interventions young male athletes may be experiencing while also participating in psychotherapy or counseling.

Module A

Mental Skills Training

Overview

Sport psychologists can play an important role in helping athletes reach peak performance levels. Targeted interventions within sport psychology identify the individual and task-specific mental and emotional states most conducive to athletes achieving their best in competitive situations. Mental skills training, defined as cognitive strategies and other techniques developed to enhance performance, has been found to be effective in enhancing performance success in athletes.¹ Multimodal interventions, which combine several mental training techniques into an integrated strategy that targets specific goals, have been shown to enhance an athlete's attentional focus, self-confidence, motivation, energy management, anger management, productive thinking, and performance.²

Mental skills training techniques can be grouped into two broad categories: cognitive methods and somatic methods. Cognitive methods address the thought processes that impact behavior while somatic methods focus on bodily sensations and physical interventions that impact behavioral responses. Cognitive methods include mental rehearsal, mental imagery and visualization, visuo-motor behavior rehearsal, and cognitive-behavior therapy (CBT). Somatic methods include biofeedback, progressive muscle relaxation, and elements of mindfulness/meditation.³ Sport

¹ Behncke, 2004; Vealey, 2007

² Vealey, 2007

³ Behncke, 2004

psychology practitioners use a combination of these cognitive and somatic methods to help athletes become more aware of their ideal performance states and develop the necessary coping skills and mental strategies to achieve and maintain peak performance levels.⁴

This module will focus on common mental skills training techniques used by sport psychologists to enhance performance. It provides not a formal manual for conducting mental skills training but rather an overview of both cognitive and somatic techniques commonly used in sport psychology. The most common or easily implemented techniques are presented first, followed by mental skills training techniques that are less frequently used. An overview outlining each technique is provided, followed by a brief summary of the outcome data pertaining to that technique along with suggestions for further study and/or resources related to that technique. Although this list of common mental skills techniques is not exhaustive, it is intended to help you better understand the nature of the interventions that your adolescent clients are likely to be receiving from sport psychologists.

Mental Skills Training Modalities

There are numerous mental skills training modalities to choose from, both as a sport psychologist conducting the intervention and an athlete seeking performance

⁴ Harmison, 2011

enhancement.⁵ The selection of an intervention should be based on the individually targeted goals identified for each athlete as well which method has the best empirical support for its efficacy.⁵ When efficacy has not been demonstrated, the sport psychologist should reconsider intervention options.⁵ The American Board of Sport Psychology's approach to intervention and mental skills training is based on the athlete's profile model of individual differences that involves incorporating key factors related to performance (e.g., attention, physiological reactivity, strategic planning and coping) into the intervention.⁵ That is, each athlete's unique profile helps determine which intervention or mental training to apply in treatment. Just as importantly, the sport psychologist must consider the intervention outcome including how the athlete responds to interventions behaviorally and how he performs.⁵

Researchers and sport psychologists often utilize many of the techniques listed below as part as a comprehensive plan for intervention. That is, many sport psychologists have developed their own conceptual models encompassing many of the listed interventions as part of their broader treatment of an individual.⁶ Further, these multimodal treatments have numerous empirical studies supporting performance enhancement of athletes.⁷ The following sections will guide you through the more

⁵ Carlstedt, 2013

⁶ Vealey, 2005; Martin, Thompson, & McKnight, 1998; Danish & Nellen, 1997; Danish, Petitpas, & Hale, 1992; Singer, 1988

⁷ see: Vealey, 2007

common mental skills techniques utilized by sport psychologists, beginning with cognitive behavioral interventions.

Cognitive Behavioral Therapy For Athletes

Description

Cognitive behavioral therapy (CBT) has been used successfully to treat a wide range of psychological problems with great empirical support. CBT has also been one of the most frequently employed approaches in sport psychology practice and is commonly cited in the sport psychology literature.⁸ Additionally, contemporary CBT approaches are better validated than any other therapeutic method, both generally and in terms of sport psychology interventions.⁹ The CBT approach has been preferred among many sport psychologists for pragmatic reasons (e.g., time-limited, skill-building focus) and because it provides the framework to alter perceptions about given situations so as to create a psychological atmosphere conducive for other mental skills techniques (e.g., mental imagery).¹⁰ Before discussing several cognitive change methods (e.g., self-talk, imagery) used within CBT, it is important to present an overview of CBT with athletes due to the prevalence of its use among sport psychologists and its favorable performance enhancement outcomes in sport psychology research.

⁸ Mcardle & Moore, 2012

⁹ Roth & Fanagy, 2005; Westbrook & Kirk, 2005 as cited in Mcardle & Moore, 2012

¹⁰ Behncke, 2004

A central tenet of CBT is that systematic information-processing biases play a role in the development and/or maintenance of psychological problems.¹¹ Specifically, CBT proposes that psychological problems result from the interaction of various aspects of life experience including biased or distorted thinking, unpleasant emotions, physiology, behavior, and environmental factors.¹² Due to the reciprocal influences among thoughts, emotions, behavior, and physiological responses, changes in behavioral, emotional, and somatic symptoms can be achieved by modifying the mediating cognitive processes and structures. Interventions work to achieve changes in cognitive, affective, and/or behavioral variables through cognitive restructuring/modification methods, traditional behavioral methods, or their combination.

CBT in sport psychology focuses primarily on methods that strengthen adaptive thoughts and behaviors toward a desired goal while reducing maladaptive thoughts.¹³ Over time, it attempts to condition the individual to think in adaptive ways to create desired psychological and physical states for performance.¹³ In order to accomplish this goal, the sport psychologist's major task is to help the patient think of reasonable responses to negative automatic thoughts while learning to differentiate between a

¹¹ Beck, 1987 as cited in Mcardle & Moore, 2012

¹² Beck, 1995 as cited in Mcardle & Moore, 2012

¹³ Behncke, 2004

realistic understanding of events and distorted negative thoughts.¹⁴ For example an athlete may lament “never” being successful despite mounting evidence to the contrary. The sport psychologist may challenge the overgeneralized assertion of “never” being successful by Socratically guiding the client toward recognizing contrary evidence and reconsidering extreme self-imposed standards for “success.”

To facilitate cognitive change, the CBT sport psychologist will intervene in numerous ways. The first task of treatment involves educating and socializing athletes to the cognitive model. This often starts with the identification of negative automatic thoughts since they are considered more accessible and amenable to change than other “deeper” types of thoughts. Automatic thoughts are quick, reflexive thoughts that appear rapidly and spontaneously, without deliberation or reasoning, and which may be in or outside of an individual’s awareness.¹⁵ When an individual experiences a situation or event, automatic thoughts are triggered, which elicit a reaction, which can be emotional, behavioral, and/or physiological in nature.¹⁵ Identification of thoughts can be done in a number of ways including recognizing mood shifts and using them as cues for self-questioning about contributing thoughts, guided discovery (i.e. questions to introduce more flexible ways of thinking), thought records, and role-play exercises.¹⁶ For example, a sport psychologist may guide the athlete to notice a time during

¹⁴ Mcardle & Moore, 2012

¹⁵ Beck, 2011

¹⁶ Wright et al., 2006 as cited in Mcardle & Moore, 2012

practice that he¹⁷ experiences an increase in anxiety or shift in confidence. An athlete may say, “I noticed that when I went to the free throw line, I was much less comfortable than during the rest of the game.” A sport psychologist would use this observation to help identify the relevant automatic thoughts by asking, “What was the first thought you remember having when you noticed the change in your comfort level?” As characteristic automatic thoughts become evident to clients, they can begin to recognize themes and particular types of cognitive distortions to which they are prone.¹⁸ For example, a common cognitive distortion may be all or nothing thinking (e.g., “If I don’t make all of my free throws, then I am a failure as a basketball player”) or catastrophizing (e.g., “If I miss this free throw, my coach will bench me for the rest of the game”). The goal of the CBT sport psychologist is to challenge those cognitive distortions and help the athlete come up with more adaptive thinking (e.g., “I may miss free throws but that does not mean that I am a bad basketball player.”)

An additional technique commonly used by CBT sport psychologists involves introducing self-regulation strategies to assist with behavioral modification. For example, a player may notice that he struggles to perform every time his mindset shifts from what he needs to do in the moment to the potential outcome of the game. Self-regulation might involve teaching him to monitor his triggers (e.g., racing thoughts,

¹⁷ Since the manual is designed for work with adolescent male athletes, male pronouns will be used throughout the remainder of this manual

¹⁸ Beck, 1995 as cited in Mcardle & Moore, 2012

increased heart rate) that lead to changes in his actions. This exercise would help him notice a shift in his physiology and alter his thinking back to the present moment. Self-regulation is based on the premise that altering habits, whether psychological or physical, depends on the individual's ability to monitor and alter their behavior.¹⁹ The steps of promoting self-regulation involve identifying and committing to altering the psychological and behavioral aspects of a given problem. The following figure illustrates the stages involved in the development of self-regulation strategies for athletes.

Problem identification: The goal of this stage is to assist the athlete in evaluating his training and behavior for possible ways to enhance performance. It does not analyze the specific task for improvement, but attempts to identify ways the athlete can alter his psychological approach to the given task, which would open up new and possible paths to increase performance.

Commitment: If the athlete does not want, or does not see the need for changing behavior, then no CBT method will work.²⁰ At this stage, the sport psychologist assists in motivating the athlete to commit to schedules and training sessions, taking responsibility for his behavior, and to having a desire to succeed. The sport psychologist encourages the athlete to set goals that he wants to achieve and is willing to follow through with.

Execution: This stage concerns the actual method of regulating an athlete's behavior in order to change it. This can be accomplished in several ways including observation of one's behavior (self-monitoring) and evaluating one's behavior in relation to the set goal (self-evaluating), which is then coupled with communicating feedback to oneself. For example, after self-monitoring and evaluating a specific behavior that has been identified as positive in light of the expected goal (e.g., training for 60 minutes), affirmation and reinforcement of that behavior can be given in the form of positive self-

(Continued)

¹⁹ Behncke, 2004

²⁰ Behncke, 2004

consequating, such as saying to oneself “keep up the good work!” Behavior identified as negative in light of the expected goal can be negated by negative self-consequating and redirecting, such as “it’s not working. Let’s try something else to help reach that goal.”

Environmental management: This stage can affect all others if not properly done.²¹ The athlete’s environment including the social and physical support networks associated with attaining the desired goal, such as friends, family, colleagues and coaches, are the foundations for psychological and physiological well-being. Without this support, anxiety levels may adversely affect attempts at self-regulation. Therefore, when the first three stages have been identified and mapped out, environmental management is necessary to allow concentration on the important aspects of CBT. The sport psychologist and athlete collaboratively address potential obstacles in the athlete’s environment (e.g., unsupportive peers) that may impact reaching one’s goals and how those obstacles can be addressed.

Generalization: In order to change behavioral habits in the long term, and maintain a consistent CBT strategy in multiple domains of an athlete’s life, the specific CBT method can be generalized or translated into multiple aspects of life, such as work and study. Altering behavior is a time-consuming effort that should be promoted into as many aspects of the athlete’s life as possible to ensure the greatest success. The sport psychologist and athlete may collaboratively develop experiments to utilize CBT strategies in other areas of life. For example, a student athlete feeling anxious about an exam may develop an action plan utilizing skills gained from interventions to address sports performance to improve performance in the academic domain.

Figure 1.01. Stages of Self-Regulation²²

Eventually in treatment, the CBT sport psychologist aims to guide clients to recognize the link between an external/internal stimulus, his thoughts about the stimulus, and an emotional/physiological response.²³ For example, helping the athlete notice how crowd noise affects one’s heart rate and the thoughts regarding the task they are about to perform. Wells’ metacognitive theory argues that to effect change

²¹ Behncke, 2004

²² Kirschenbaum & Wittrock, 1984

²³ Mcardle & Moore, 2012

not only must a new declarative belief be developed (e.g., “I am good at shooting free throws”) but procedural memory must also be changed through the repeated implementation of a new skill or behavioral plan.²⁴ Using the aforementioned example, rather than avoiding contact, an athlete might be encouraged to be more aggressive in drawing contact on the court in order to help instill the new adaptive belief regarding free throw shooting into procedural memory.

A significant step in any CBT intervention is to assess the effectiveness of the intervention against its intended goals.²⁵ An athlete undergoing sport psychology interventions will want to see improved performance (among other improvements such as decreased anxiety, and increased confidence) and treatment should be guided based on that goal. In the event that the evaluation process reveals limited progress, the CBT literature encourages the practitioner to question his or her formulation because the formulation provides the rationale for the intervention.²⁶ In other words, in the event that the goals of the intervention (e.g., performance enhancement) are not being met, CBT does not look to strategies employed but instead looks to the formulation and makes changes to facilitate progress.²⁷ For example, the core beliefs or schemas that are believed to result in the athlete’s maladaptive thoughts may not be

²⁴ Wells, 2000 as cited in Mcardle & Moore, 2012

²⁵ Mcardle & Moore, 2012

²⁶ Beck, 1995 as cited in Mcardle & Moore, 2012; Grant et al., 2009 as cited in Mcardle & Moore, 2012

²⁷ Mcardle & Moore, 2012

entirely correct and the clinician should work to develop a more accurate conceptualization.

Outcome Studies

Despite the popularity of CBT interventions in sport psychology, there are no studies looking specifically at the efficacy of strict CBT interventions for performance enhancement with athletes. Thus it is difficult to directly speak to the outcome of specific CBT interventions in sport psychology. However, there have been numerous outcome studies that examined multimodal sport psychology interventions that included CBT techniques, which have shown positive effects on a wide range of outcomes.

A 2011 meta-analysis of 64 studies examined cognitive and multimodal intervention studies for performance enhancement among adult athletes.²⁸ The content of treatment interventions consisted of cognitive-behavioral therapy, coping, goal setting, hypnosis, imagery, rational-emotive therapy, and self-talk. The analysis revealed that there were 23 positive effects, six null effects, and one negative effect for stress reduction and performance. Effects of multimodal treatments were noted in reduced anxiety perceptions, cognitive anxiety, somatic anxiety, and increased positive affect.²⁸ One researcher discussing the literature on CBT in sport psychology noted

²⁸ Rumbold et al., 2011

that multimodal interventions²⁹ have also enhanced athletes' attentional focus³⁰, self-confidence,³¹ motivation,³² energy management,³³ and performance.³⁴ Despite the positive outcomes of multimodal interventions, sport psychology research is in need of more direct tests of the efficacy of CBT with the athletic population.

Resources for Future Study

Beck, J. S. (2011). *Cognitive behavior therapy: Basics and beyond* (2nd edition). New York, NY: Guilford.

McArdle, S., & Moore, P. (2012). Applying evidence-based principles From CBT to sport psychology. *The Sport Psychologist*, 26, 299–310. Retrieved from http://www.americankinesiology.org/AcuCustom/Sitename/Documents/DocumentItem/08_TSP%2026-2_McArdle%20299-310.pdf

Hays, K., Thomas, O., Maynard, I., & Butt, J. (2010). The role of confidence profiling in cognitive-behavioral interventions in sport. *The Sport Psychologist*, 18, 393–414. Retrieved from <http://www.cabdirect.org/abstracts/20103354657.html>

²⁹ Vealey, 2007

³⁰ e.g., Kerr & Leith, 1993 as cited in Vealey, 2007

³¹ e.g., Prapavessis, Grove, McNair, & Cable, 1992; Savoy, 1997 as cited in Vealey, 2007

³² e.g., Beauchamp, Halliwell, Fournier, & Koestner, 1996; Holm, Beckwith, Ehde, & Tinius, 1996 as cited in Vealey, 2007

³³ e.g., Crocker, Alderman, & Smith, 1988; Hanton & Jones, 1999; Holm et al., 1996; Kerr & Goss, 1996; Kerr & Leith, 1993; Kirschenbaum, Owens, & O'Connor, 1998; Mamassis & Doganis, 2004; Prapavessis et al., 1992; Savoy, 1993, 1997; Thomas & Fogarty, 1997 as cited in Vealey, 2007

³⁴ e.g., Bakker & Kayser, 1994; Beauchamp et al., 1996; Daw & Burton, 1994; Gros Lambert, Candau, Grappe, Dugue, & Rouillon, 2003; Hanton & Jones, 1999; Kendall, Hrycaiko, Martin, & Kendall, 1990; Kerr & Leith, 1993; Kirschenbaum et al., 1998; G. L. Martin & Toogood, 1997 as cited in Vealey, 2007

Luiselli, J. K. (2012). Behavioral sport psychology consulting: A review of some practice concerns and recommendations. *Journal of Sport Psychology in Action*, 3(1), 41–51. doi:10.1080/21520704.2011.653048

Moran, A. (2009). Cognitive psychology in sport: Progress and prospects. *Psychology of Sport and Exercise*, 10(4), 420–426. doi:10.1016/j.psychsport.2009.02.010

Imagery

Description

Mental imagery is the most popular training technique used by athletes as well as the most widely studied technique in the psychological skills training literature.³⁵ Imagery involves the mental creation or re-creation of sensory experiences.³⁶ Athletes use mental imagery for performance enhancement by imagining engagement in all or part of the behaviors associated with their targeted activity.³⁷ For example, a golfer can use imagery to reinforce a new swing technique developed on the driving range by imagining utilizing that move on specific areas of the golf course. Not only can mental imagery be used for performance enhancement but it can be useful in developing new sports related skills, game preparation, and strategizing.³⁸ Athletes who have recently

³⁵ Morris et al., 2005 as cited in Vealey, 2007

³⁶ Vealey, 2007

³⁷ Jones & Stuth, 1997

³⁸ Vealey, 2007

been introduced to new plays by coaches can use imagery to prepare for where they need to be on the court or field when those plays are run.

The hypothesized mechanism through which mental imagery impacts performance is that some of the same neural operations underlie both representing actions imaginally and executing actions motorically.³⁹ However, simply imagining the physical environment or action is not adequate. Like motor skills, if the mental imagery technique is performed inadequately without sufficient attention on appropriate execution, subsequent motor gains will not likely be made.³⁹ In order to facilitate the motor gains, sport psychologists teach the athlete to utilize as much sensory information related to the actual skill as possible. Athletes are often asked to imagine not only visual but also temporal, acoustic (hearing), olfaction (smell), gustation (taste), and kinesthesia (body awareness) data.³⁹ For example, a golfer preparing for a tournament may be asked to visualize the first tee shot, imagining the sounds on the course, the smells in the air, and the feel of the club in his hands. Additionally, the sport psychologist encourages athletes to see their performance from multiple perspectives (e.g., first and third person).

Sport psychologists and athletes often utilize mental imagery to assist in developing a specific part of pre-performance routines. A pre-performance routine is a set pattern of cues in the form of thoughts, actions, or images that are performed prior

³⁹ Behncke, 2004

to the execution of a physical movement.⁴⁰ Pre-performance routines are thought to enhance athletic performance by diverting attention away from irrelevant information and assisting in developing an optimal physiological and mental state for the targeted competition-related goal.⁴¹ For example, an athlete imagining a dribbling routine while evoking an image of a specific part of the rim before a free throw attempt may eliminate the distractions of the environment and establish increased focus on the task at hand when eventually exposed to the situation.

Common Mental Imagery Models

The figures below provide brief, simple overviews of two of the most common mental imagery techniques. Each of the articles presented in Figures 1.02 and 1.03 provides an in depth overview of one of these imagery-based treatment models for working with athletes.

The PETTLEP model utilizes seven distinct factors to facilitate mental imagery: physical, environment, task, timing, learning, emotion, and perspective. For each mental imagery intervention, the athlete is guided through each of the steps (corresponding to the seven aforementioned factors) to establish increased focus on the mental image.

- Physical refers to the physical nature of imagery (i.e. increased arousal or being relaxed)
- Environment refers to the use of stimulus materials that mimic motor performance.
- Timing relates to the importance of the imagery times that mimic actual performance durations.

(Continued)

⁴⁰ Gayton, Cielinski, Francis-Keniston, & Hearn, 1989 as cited in Jones & Stuth, 1997

⁴¹ Jones & Stuth, 1997

- Task includes the nature of imagery to be performed, the expertise level and the mental imagery perspective.
- Learning relates to the use of imagery in the acquisition of new motor skills and for the correction of the technical aspects of the movement.
- Emotion refers to the individual integration of emotional components in mental images.
- Perspective provides guidance for the use of internal imagery without excluding external imagery regarding the characteristics of the motor skill.

Figure 1.02. PETTLEP model⁴²

Five step routine to mental imagery that includes the following steps

Step 1: Readyng

Developing mechanical, mental and emotional routines

Step 2: Imaging

Visualizing performance

Step 3: Focusing Attention

Staying focused on relevant cue

Step 4: Executing

Performing the act

Step 5: Evaluating

Providing self-feedback regarding imagery technique used

Figure 1.03. Five-Step Strategy⁴³

⁴² Holmes & Collins, 2001

⁴³ Singer, 1988

Outcome Studies

The efficacy of mental imagery for athletic purposes is well documented.⁴⁴ Imagery training is effective in enhancing athletes' performance on sport-specific skills.⁴⁵ Using imagery immediately before performance has been found to improve performance on strength tasks, muscular endurance tasks, and golf putting.⁴⁶ Imagery has also been shown to be effective in enhancing self-confidence,⁴⁷ motivation,⁴⁸ attentional control,⁴⁹ and visual search abilities⁵⁰ of athletes during competition.⁵¹

Resources for Further Study

Holmes, P. S., & Collins, D. J. (2001). The PETTLEP approach to motor imagery: A functional equivalence model for sport psychology. *Journal of Applied Sport Psychology, 13*, 60–83. doi:10.1080/104132001753155958

Murphy, S. (1990). Models of imagery in sport psychology: A review. *Journal of Mental Imagery, 14*, 153-172.

Singer, R. N. (1988). Strategies and metastrategies in learning and performing self-paced athletic skills. *Sport Psychologist, 2*, 49–68.

⁴⁴ Vealey, 2007

⁴⁵ Feltz & Landers, 1983; Martin, et al., 1999; Morris, et al., 2005 as cited in Vealey, 2007

⁴⁶ Vealey & Greenleaf, 2009

⁴⁷ Callow, Hardy, & Hall, 2001; Evans et al., 2004; Garza & Feltz, 1998; Hale & Whitehouse, 1998; McKenzie & Howe, 1997; Short et al., 2002 as cited in Vealey, 2007

⁴⁸ Martin & Hall, 1995 as cited in Vealey, 2007

⁴⁹ Calmels, Berthoumieux, & d'Arripe-Longueville, 2004 as cited in Vealey, 2007

⁵⁰ Jordet, 2005 as cited in Vealey, 2007

⁵¹ Vealey, 2007

Visuo-Motor Behavior Rehearsal

Description

Visuo-motor behavior rehearsal (VMBR) is an extension of mental imagery that combines the psychological aspect of generating the mental image with feedback from the performance of the physical skill.⁵² VMBR, which was originally pioneered by Suinn,⁵³ is useful as a technique to practice an athletic skill or to manage the stress associated with an athletic event. VMBR involves three phases: An initial relaxation phase to induce a psychological state conducive for mental imagery, visualizing performance through various imagery techniques, and performing the actual skill under realistic conditions.⁵⁴

Using Suinn's guidelines for VMBR, the sport psychologist has the athlete pick a quiet place and a scene that evokes a relaxation response (e.g., a beach that he has visited).⁵⁵ Then, the athlete is encouraged to let the scene develop, noticing details that may emerge and the physical and mental relaxation that may be occurring. The second step involves visualizing performance through various imagery techniques.⁵⁶ Suinn suggests entering the relaxed scene developed in the first stage for 30 seconds before switching to a success competition scene (e.g., a specific scene where the body

⁵² Lane, 1980 as cited in Behncke, 2004

⁵³ Suinn, 1972; Suinn, 1976

⁵⁴ Behncke, 2004

⁵⁵ Suinn, 1986

⁵⁶ Suinn, 1986; Behncke, 2004

was performing at its peak in the past).⁵⁷ A teenage athlete may imagine sitting on the beach, where he is encouraged to take in the surrounding sand and water. Then the sport psychologist cues the player to think of a previous time when they were successful such as a time when they got on base facing a strong pitcher (which likely has been discussed in the past). During this stage, the athlete is encouraged to imagine being on the field where their next competition or practice will take place and visualizing success, capturing what is called the “winning feeling.”⁵⁸ The third and final stage involves performing the actual skill under realistic conditions. By repeating this process and performing the intended skill in-vivo, the athlete is able to associate the imagery component with actual performance.⁵⁹ Thus, minor changes in either the skill, and/or the imagery process, can be maintained in parallel.⁶⁰ The key to VMBR is keeping mental imagery and skill performance closely associated in training, meaning that visualization should immediately precede the action. The fact that the individual can adjust both processes simultaneously should help to facilitate an increase in performance.⁶¹ Thus, the next time the player steps into the batter’s box against a tough pitcher, he can easily recall the feeling of relaxation from the beach scene and the “winning feeling” from previous successes as he faces a new challenge.

⁵⁷ Suinn, 1986

⁵⁸ Suinn, 1986; Behncke, 2004

⁵⁹ Behncke, 2004

⁶⁰ Suinn, 1986

⁶¹ Behncke, 2004

Outcome Studies

VMBR has been used successfully to promote the development of specific motor skills, in a number of sports including karate,⁶² basketball,⁶³ racquetball,⁶⁴ and tennis.⁶⁵ Further, research found VMBR to lead to improvements in performance with athletes in cross-country running, golf, track and field, gymnastics, and diving.⁶⁶ Numerous researchers have suggested that practice in mentally rehearsing while relaxed may facilitate serving performance among tennis players under actual tournament conditions, but only for high-ability players.⁶⁷ Additionally, one study suggested that lower-ability players could benefit more from actual practice than from mental rehearsal.⁶⁸

Resources for Further Study

The seminal source for VMBR is Suinn's early work⁶⁸ that utilized the interventions with a range of athletes including ski racers and Olympic athletes. Additionally, Suinn's book *Seven Steps to Peak Performance* features several mental skills training modules for athletes including VMBR.⁶⁹ Each mental skills module is

⁶² Weinberg, Seabourne, & Jackson, 1981

⁶³ Gray & Fernandez, 1989

⁶⁴ Gray, 1990

⁶⁵ Noel, 1980

⁶⁶ Behncke, 2004; Lohr & Scogin, 1998

⁶⁷ Weinberg et al., 1981

⁶⁸ Suinn, 1972; Suinn, 1976

⁶⁹ Suinn, 1986

broken down into small, simple goals designed for ease of use by both athletes and sports psychology practitioners.

Suinn, R. M. (1972) Behavior rehearsal training for ski racers. *Behavior Therapy*, 3, 519.

Suinn, R. M. (1976) Body thinking: Psychology for Olympic champs. *Psychology Today*, 10(2), 38-44.

Suinn, R. M. (1986). *Seven Steps to Peak Performance*. Toronto: Hans Huber.

Suinn, R. M. (1987). Behavioral approaches to stress management in sport. In J. R. May & M. J. Asken (Eds.), *Sport Psychology* (pp. 59-75). New York, NY: PMA.

Self-Talk

Description

Self-talk is defined as “an internal dialogue [in which] the individual interprets feelings and perceptions, regulates and changes evaluations and convictions, and gives him/herself instructions and reinforcement” (p. 355).⁷⁰ The idea that attending to and modifying self-talk can have benefits in performance is among the fundamental principles underlying the development of cognitive therapy for athletes, which includes treatments aimed at changing individuals’ thoughts and interpretations.⁷¹ For athletes,

⁷⁰ Hackfort & Schwenkmezger, 1993 as cited in Gammage, Hardy, & Hall, 2001

⁷¹ Hatzigeorgiadis, Zourbanos, Galanis, & Theodorakis, 2011

self-talk can be thought of as a multidimensional phenomenon focusing on self-verbalizations, which can serve both instructional and motivational functions.⁷²

Motivational self-talk includes cues aimed at psyching up (e.g., "let's go"), maximizing effort (e.g., "give it my all"), building confidence (e.g., "I can do it"), and creating positive moods (e.g., "I feel good").⁷³ Instructional self-talk includes self-guiding cues aimed at focusing or directing attention (e.g., "see the target") and providing instruction with regard to technique (e.g., "high elbow"), strategy (e.g., "push"), or movements of a skill (e.g., "smoothly").⁷³ Sport psychologists work collaboratively with players to choose which type of self-talk exercise should be addressed. Players struggling with belief in their own abilities may benefit from motivational self-talk while players focused on improving specific performance related goals may benefit from instructional self-talk interventions.

In order to facilitate self-talk interventions with athletes, sport psychologists can also often address both motivational and instructional aspects of self-talk. Sport psychologists can assist in developing self-talk that assists athletes to train to the best of their abilities, to control their arousal level, and to remain motivated to continue to exercise. This can be useful when working with athletes in the field, where the sport psychologist helps the athlete to clarify the type of self-talk they are experiencing before, during, and after their workouts or practices. For example, athletes may have

⁷² Hardy, Hall, & Hardy, 2004

⁷³ Hatzigeorgiadis et al., 2011

self-defeating talk that lowers motivation and confidence levels (e.g., "I'm not going to be able to finish," "I'm not good enough."). Cognitive restructuring is commonly used to promote awareness of the self-defeating thoughts and developing more adaptive ways of thinking.⁷⁴ This approach confronts the irrationality, validity, or usefulness of the athlete's thoughts and promotes restructuring them to be more adaptive.⁷⁵ For example, the sport psychologist could challenge the athlete's perception that "I'm not good enough" by asking the athlete to state times when they performed well in their sport. Then, the sport psychologist could point out seemingly disconfirming information to the athlete and ask him to come up with a more adaptive thought, such as "there are times when I may not be at my best but I know that I am good." If negative self-talk is affecting performance, the sport psychologists can assist the athlete in developing more adaptive self-talk (e.g., "I'm going to do my best this workout," "I know I can finish.").

Outcome Studies

Outcome studies have revealed that both self-talk strategies (viz., motivational and instructional) are effective at improving performance. However, instructional self-talk has been found to be more effective than motivational self-talk for fine motor skills,

⁷⁴ Beck, 1985 as cited in Suinn, 2005

⁷⁵ Suinn, 2005

with motivational and instructional self-talk being equally effective for motor skills requiring strength and endurance.⁷⁶

Additional research in sports self-talk has focused on the influence of positive versus negative self-talk on performance. However, the results have been equivocal with regards to which is better for performance.⁷⁷ Although experimentally-based research has lent support for the contention that positive self-talk improves performance,⁷⁸ field-based research has yielded less definitive results.⁷⁹ Some studies suggest that some athletes believe that negative self-talk may actually improve their performance.⁸⁰ Other researchers have found that positive and negative self-talk do not differentially influence performance.⁸¹

Results of a meta-analysis of 32 studies on the use of self-talk interventions in sport psychology highlight the importance of training in mediating their efficacy.⁸² They noted that coaches and athletes should be strongly advised to practice and persist with their self-talk plans in order to maximize possible gains.⁸³ Further, these gains appear to be larger when new skills are taught, meaning that self-talk during skill

⁷⁶ Theodorakis, et al., 2000 as cited in Gammage et al., 2001

⁷⁷ Gammage et al., 2001

⁷⁸ e.g., Dagrou, Gauvin, & Halliwell, 1992; Weinberg, Smith, Jackson, & Gould, 1984

⁷⁹ Gammage et al., 2001

⁸⁰ Highlen & Bennett, 1983 as cited in Gammage et al., 2001

⁸¹ Dagrou, Gauvin, & Halliwell, 1992; Rotella, Gansneder, Ojala, & Billing, 1980

⁸² Hatzigeorgiadis et al., 2011

⁸³ Gammage et al., 2001

acquisition may have immediate effects.⁸⁴ For self-talk strategies to be effective, selecting the appropriate type and content of self-talk in relation to the characteristics of the task and the needs of the individuals may be key.⁸⁵ A baseball player seeking improvement with confidence while batting may be guided through the specific self-talk he has recently experienced while facing a tough pitcher and encouraged to find ways to adapt those targeted thoughts for future use.

Resources for Further Study

Gammage, K. L., Hardy, J., & Hall, C. R. (2001). A description of self-talk in exercise.

Psychology of Sport and Exercise, 2(4), 233–247. doi:10.1016/S1469-0292(01)00011-5

Hardy, J., Hall, C. R., & Alexander, M. R. (2001). Exploring self-talk and affective states

in sport. *Journal of Sports Sciences*, 19(7), 469-475. Retrieved from

<http://www.ncbi.nlm.nih.gov/pubmed/11461050>

Hardy, J. (2006). Speaking clearly: A critical review of the self-talk literature. *Psychology*

of Sport and Exercise, 7(1), 81-97. Retrieved from

[http://www.researchgate.net/profile/James_Hardy6/publication/222277408_Speaking_clearly_A_critical_review_of_the_self-](http://www.researchgate.net/profile/James_Hardy6/publication/222277408_Speaking_clearly_A_critical_review_of_the_self-talk_literature/links/53fc70c00cf2dca8ffff1fb2.pdf)

[aking_clearly_A_critical_review_of_the_self-](http://www.researchgate.net/profile/James_Hardy6/publication/222277408_Speaking_clearly_A_critical_review_of_the_self-talk_literature/links/53fc70c00cf2dca8ffff1fb2.pdf)

[talk_literature/links/53fc70c00cf2dca8ffff1fb2.pdf](http://www.researchgate.net/profile/James_Hardy6/publication/222277408_Speaking_clearly_A_critical_review_of_the_self-talk_literature/links/53fc70c00cf2dca8ffff1fb2.pdf)

⁸⁴ Hatzigeorgiadis et al., 2011

⁸⁵ Highlen & Bennett, 1983 as cited in Gammage et al., 2001

Hatzigeorgiadis, A., Zourbanos, N., Galanis, E., & Theodorakis, Y. (2011). Self-talk and sports performance: A meta-analysis. *Perspectives on Psychological Science*, 6(4), 348–356. doi:10.1177/1745691611413136

Theodorakis, Y., Weinberg, R., Natsis, P., Douma, I., & Kazakas, P. (2000). The effects of motivational versus instructional self-talk on improving motor performance. *Sport Psychologist*, 14(3), 253-271. Retrieved from http://lab.pe.uth.gr/psych/images/stories/publications/Theodorakis_et_al_2000.pdf

Goal Setting

Description

Research with elite adult, collegiate, and adolescent athletes has confirmed that almost all athletes set goals and most competitors rate goals as moderately effective in enhancing their performance.⁸⁶ When used systematically, goal setting works because it focuses attention on specific task demands, increases effort and intensity, encourages persistence when adversity is encountered, and promotes the development of strategies and problem solving to move toward goal achievement.⁸⁷

⁸⁶ Burton et al., 2008; Weinberg, Burke, & Jackson, 1997; Weinberg, Burton, Yukelson, & Weigand, 1993, 2000 as cited in Vealey, 2007

⁸⁷ Locke & Latham, 1990 as cited in Vealey, 2007

There are three common types of goals that can be incorporated into sport psychology: outcome, performance and process goals.⁸⁸ Outcome goals focus on the end result of a competition and are therefore primarily concerned with winning and losing. An athlete is not in total control of reaching his or her outcome goal, since winning or losing depends, at least in part, on the performance of the opponent.⁸⁸ Performance goals refer to an individual athlete's performance independent of the other competitors or the team. For example, a performance goal might be for the young athlete to improve his free throw percentage to at least 75%.⁸⁸ An athlete is in control of achieving a performance goal because the performance of other players or competitors does not affect whether the goal is attained.⁸⁸ Process goals are usually concerned with how an athlete performs a certain skill.⁸⁸ A process goal could involve a golfer stating that he wants work on decrease their angle of attack into the ball. Thus, it is much more common for sport psychologists to help athletes develop performance and process goals (rather than outcome goals), both of which may promote self-efficacy among athletes due to increased control over goal achievement.

When working with athletes, there are several guidelines that sport psychologists use to help athletes develop achievable goals that enhance performance. It is important to first assess situational constraints (e.g., time limits on practice) and individual differences (e.g., physical ability) that play a role for the

⁸⁸ Weinberg, 2010

individual and team.⁸⁹ In the beginning phase, it is important to help athletes develop goals that are specific, realistic, and attainable under their current circumstances. One of the reasons that goals need to be specific is that they also need to be measurable so that performers know when they are making progress.⁸⁹ The goals that sport psychologists help athletes to set should be also be challenging. If goals are too easy, individuals have a tendency to become complacent and may not put in consistent effort since they think that they can reach the goal without great effort.⁸⁹ Conversely, if goals are too difficult, individuals will have a tendency to lose motivation and possibly give up when they fall short of their goal.⁸⁹ Research has also indicated that it is important for athletes to set a variety of goals for performance. Some recommend setting short- and long-term goals, noting that long-term goals provide individuals with a direction and destination whereas short-term goals help athletes notice progress and maintain motivation.⁸⁹ A short-term goal could include running 20 sprints after practice that day and a long-term goal could involve running sprints after practice at least 50% of the time over the course of the season.

Outcome Studies

The beneficial effects of goal setting have been demonstrated in both business and physical activity settings.⁹⁰ Goal setting is thought to work through its positive effects on attention to task demands, effort and intensity, persistence in the face of

⁸⁹ Weinberg, 2010

⁹⁰ Burton et al., 2008

adversity, and the use of problem-solving and other strategies that facilitate goal attainment.⁹¹ When compared to no goals or “do-your-best” goals, specific goal setting enhances athletes’ performance.⁹² Further, goals must be incorporated into a systematic mental training program that enables athletes to plan, set, focus on, evaluate, and manage their behavior and thoughts in relation to their goals.⁹³

Robert Weinberg⁹⁴ has contributed significantly to the research regarding goal setting in sports. He has found that performance is enhanced when goals are moderately difficult, challenging, realistic, and when they provide athletes with direction and focus. He has also found that goals plus feedback produce better performance than either goals alone or feedback alone. Time pressures, stress, tiredness, academic pressures and social relationships negatively affect goal achievement.⁹⁵

Common Goal Setting Principles

The following figures illustrate two of the more common goal setting principles utilized when helping athletes to establish goals. SMART goals (Figure 1.04) were originally created for use in business but have been adapted to a variety of professions and activities including sports.

⁹¹ Locke & Latham, 1990

⁹² Burton & Naylor, 2002; Kylo & Landers, 1995 as cited in Vealey, 2007

⁹³ Burton, 1989; Burton, Naylor, & Holliday, 2001; Gould, 2006; Vealey, 2005 as cited in Vealey, 2007

⁹⁴ Weinberg, 2010; Weinberg & Butt, 2005

⁹⁵ Weinberg, 2010

Specific – target a specific area for improvement.

Measurable – quantify or at least suggest an indicator of progress.

Assignable – specify who will do it.

Realistic – state what results can realistically be achieved, given available resources.

Time-related – specify when the result(s) can be achieved.

Figure 1.04. SMART Goals⁹⁶

- Set Specific, Measurable Goals
- Use Short-Term and Long-Term Goals
- Make Goals Challenging But Realistic
- Write Goals Down
- Use a Combination of Process, Performance and Outcome Goals
- Use Individual and Team Goals
- Set Practice Goals
- Develop Plans to Reach Goals

Figure 1.04. Weinberg's principles of goal setting with athletes⁹⁷

⁹⁶ Doran, 1981

⁹⁷ Weinberg, 2010

Resources for Further Study

Burton, D., Gillham, A., Weinberg, R., & Weigand, D. (2008). Goal setting styles:

Examining the role of personality factors on the goal practices of prospective Olympic athletes. *Journal of Sport Behavior*, 36(1), 23–45. Retrieved from <http://www.readperiodicals.com/201303/2890345131.html>

Doran, G. T. (1981). "There's a S.M.A.R.T. way to write management's goals and objectives". *Management Review*, 70(11), 35–36.

Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting and task performance*. Englewood Cliffs, NJ: Prentice-Hall.

Vealey, R. S. (2005). *Coaching for the inner edge*. Morgantown, WV: Fitness Information Technology.

Vealey, R. S. (2007). Mental Skills Training in Sport. In G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of Sport Psychology* (3rd Ed.) (pp. 287-309). Hoboken, NJ: John Wiley & Sons.

Weinberg, R. (2010). Making goals effective: A primer for coaches. *Journal of Sport Psychology in Action*, 1(2), 57–65. doi:10.1080/21520704.2010.513411

Weinberg, R. S. & Gould, D. (2010). *Foundations of sport and exercise psychology* (5th Ed.). Champaign, IL: Human Kinetics.

Biofeedback

Description

Whereas the above cognitive methods work to alter thoughts in order to affect emotions and behavior, biofeedback interventions assist in the development of an awareness of physiological functions and the ability to control them.⁹⁸ The goal of biofeedback is to shape mind-body responses by establishing baseline autonomic and/or central nervous system activity and then reinforcing physiological responses that fall into a targeted range.⁹⁹ The targeted physiological response is shaped over time through operant conditioning, where athletes eventually learn how to optimize their body's reaction to stimuli.⁹⁹

In order to increase an athlete's ability to shape his physiological reactions into a target range deemed optimal for performance, sport psychologists design biofeedback interventions to address specific maladaptive physiological reactions athletes deal with in their sport (e.g., heart rate variability). For example, an athlete suffering from severe performance anxiety and panic attacks would have a goal of reducing sympathetic nervous system flooding by learning to increase parasympathetic nervous system

⁹⁸ Behncke, 2004

⁹⁹ Carlstedt, 2013

response.¹⁰⁰ Practically speaking, the athlete learns to lower his heart rate through relaxation exercises described elsewhere in this module.

Athletes (with the assistance of a sport psychologist certified in biofeedback) first establish baseline levels of autonomic activity through various computerized or electronic methods (e.g., heart rate monitors). Among the methods to measure physiological activity, Heart Rate Variability (HRV) analysis represents the most reliable and quantitative assessment of autonomic nervous system functioning.¹⁰¹ The heart rate may be increased by slow-acting sympathetic activity or decreased by fast acting parasympathetic activity.¹⁰² Higher HRV indicates an optimal interplay between the sympathetic and parasympathetic nervous system and thus can be used to track optimum levels of physical functioning.¹⁰³

One way to increase parasympathetic nervous system response compared to baseline is through paced stimulus breathing. The goal of paced stimulus breathing is to assist athletes with inducing HRV that is at an optimum level for performance and stress management. Athletes are instructed to reach a respiration rate of six breaths per minute so that the heart rate varies in phase with the tempo of breathing (i.e. heart rate rises with inhalation and decreases with exhalation).¹⁰⁴ Learning to control one's

¹⁰⁰ Carlstedt, 2013

¹⁰¹ Sutarto et al., 2010 as cited in Paul & Garg, 2012

¹⁰² Paul & Garg, 2012

¹⁰³ Lagos et al., 2008 as cited in Paul & Garg, 2012

¹⁰⁴ Paul & Garg, 2008 as cited in Paul & Garg, 2012

own physiological reactions helps athletes change their level of physiological arousal by increasing HRV amplitude, hence directly resulting in training and exercising the bodies' own physiological control mechanisms.¹⁰⁵ HRV biofeedback training also helps to restore the balance between the sympathetic and parasympathetic nervous system and improves autonomic control.¹⁰⁶ The increased control of physiological responses is believed to support emotional regulation and performance coordination.¹⁰⁶

For example, the aforementioned athlete presenting with performance anxiety and subsequent panic attacks may undergo HRV biofeedback that involves breathing training to increase parasympathetic activity. Initially, the athlete would be educated on the cardiovascular mechanisms associated with heart rate deceleration as well as the impact of inhalation and exhalation on cardiac responses.¹⁰⁷ Perhaps just as importantly, the sport psychologist should educate the athlete about the impact physiology has on performance. Following psychoeducation, the athlete would be familiarized with the biofeedback computer program, which usually includes software that monitors breathing levels using a pacer bar as well as heart rate. After establishing baseline HRV readings, the athlete is instructed to breathe at a rate that corresponds with the pacer bar on the computer screen. The target breathing pace is usually

¹⁰⁵ Sutarto, et al. 2010 as cited in Paul & Garg, 2012

¹⁰⁶ Paul & Garg, 2012

¹⁰⁷ Carlstedt, 2013

considered to be between six and eight breaths per minute at an even pace.¹⁰⁸ Once the athlete becomes adept at controlling heart rate using breathing techniques and utilizing feedback from the computer software, biofeedback is incorporated into an athlete's training regimen. It is becoming more common to have athletes wear portable sensors that monitor heart rate or even HRV during physical exercise. During this time, athletes are asked to engage in breathing techniques before competition or during timeouts to decelerate their heart rate, which increases the parasympathetic response and reduces the likelihood of experiencing panic symptoms.¹⁰⁹

Outcome Studies

Biofeedback has been shown to increase performance and decrease anxiety among athletes in numerous sports. Biofeedback has been demonstrated to improve performance in basketball free throws,¹¹⁰ mental skills training,¹¹¹ arousal regulation,¹¹² and anxiety reduction¹¹³ in athletes.¹¹⁴ Biofeedback has also been found to increase running efficiency in long distance runners.¹¹⁵ Biofeedback that employed treadmill running with additional electromyogram (EMG) data has also been found to lead to

¹⁰⁸ Paul & Garg, 2012; Carlstedt, 2013

¹⁰⁹ Carlstedt, 2013

¹¹⁰ Kavussanu, Crews, & Gill, 1998 as cited in Behncke, 2004

¹¹¹ Blumenstein, Bar-Eli, & Tenenbaum, 1997 as cited in Behncke, 2004

¹¹² Gould & Udry, 1994 as cited in Behncke, 2004

¹¹³ Costa, Bonaccorsi, & Scrimali, 1984; DeWitt, 1980; Prapavessis, Grove, McNair, & Cable, 1992; Sahni, 1996 as cited in Behncke, 2004

¹¹⁴ Behncke, 2004

¹¹⁵ Caird, McKenzie, & Sleivert, 1999 as cited in Behncke, 2004

significant increases in running efficiency.¹¹⁶ In addition, biofeedback as part of multimodal treatment has been shown to enhance athletes' abilities to manage their physiological energy as well as to enhance performance.¹¹⁷

Resources for Further Study

Books/Journal Articles

Carlstedt, R. A. (2013). *Evidence-based applied sport psychology: A practitioner's manual*. New York, NY: Springer Publishing.

Davis, P. A., & Sime, W. E. (2005). Toward a psychophysiology of performance: Sport psychology principles dealing with anxiety. *International Journal of Stress Management*, 12(4), 363–378. doi:10.1037/1072-5245.12.4.363

Paul, M., & Garg, K. (2012). The effect of heart rate variability biofeedback on performance psychology of basketball players. *Applied Psychophysiology and Biofeedback*, 37(2), 131–144. doi:10.1007/s10484-012-9185-2

Organizations and Education

Association for Applied Psychophysiology and Biofeedback (AAPB)

AAPB's mission is to advance the development, dissemination and utilization of knowledge about applied psychophysiology and biofeedback to improve health and

¹¹⁶ Hatfield, Spalding, Mahon, & Slater, 1992 as cited in Behncke, 2004

¹¹⁷ Blumenstein, Bar-Eli, & Tenenbaum, 1995; Landers et al., 1991; Petruzzello, Landers, & Salazar, 1991 as cited in Vealey, 2007

the quality of life through research, education and practice.¹¹⁸ Membership in AAPB is open to professionals interested in the investigation and application of applied psychophysiology and biofeedback, and in the scientific and professional advancement of the field. AAPB has more than 2,000 members representing the fields of psychology, medicine, nursing, social work, counseling, physical therapy, education and other health care areas.

Biofeedback Certification International Alliance (BCIA)

The BCIA was created in 1981 with the primary mission to certify individuals who meet education and training standards in biofeedback and progressively recertify those who advance their knowledge through continuing education.¹¹⁹

The website also features:

- Ways to become certified in biofeedback and related fields
- Journal articles and blogs related to biofeedback and related fields
- Continuing education opportunities
- Certified clinician directory

International Society for Neurofeedback and Research (ISNR)

The ISNR is an organization devoted to the training and certification of clinicians utilizing neurofeedback and related treatments.¹²⁰ The goals of the organization are to:

¹¹⁸ See www.aapb.org

¹¹⁹ See www.bcia.org

¹²⁰ See www.isnr.net

- Improve lives through neurofeedback and other brain regulation modalities
- Encourage understanding of brain physiology and its impact on behavior
- Promote scientific research and peer-reviewed publications
- Provide information resources for the public and professionals
- Develop clinical and ethical guidelines for the practice of applied neuroscience

Mindfulness

Description

The primary focus of mindfulness and acceptance-based models is to promote a modified relationship with internal experiences (e.g., cognitions, emotions, and physiological sensations), rather than seeking to change their form or frequency.¹²¹ The theoretical tenet behind mindfulness in sport psychology is that optimal performance does not require the reduction or control of internal states. Instead, mindfulness in athletes requires a nonjudgmental (e.g., not good, not bad) moment-to-moment awareness and acceptance of one's internal state and an attentional focus on task-relevant external stimuli and behavioral choices that support one's athletic goal.¹²² Mindfulness models help individuals, through meditative and other experiential exercises, develop a different relationship with their internal experiences rather than

¹²¹ Gardner & Moore, 2007 as cited in Gardner & Moore, 2012

¹²² Moore, 2009

emphasizing control or reduction of them.¹²³ In this regard, mindfulness is significantly different from the interventions described in this module, which are typically oriented around helping athletes to more effectively control (e.g., CBT, self-talk, biofeedback) or reduce (e.g., relaxation training) internal experiences.

According to one researcher, mindfulness-based interventions offer two major benefits for athletes: (a) they do not involve discussion of the sport or performance, making them generalizable to other aspects of the athlete's life, and (b) they offer tangible benefits in the form of improved mood,¹²⁴ heightened immune functioning,¹²⁵ and enhanced alertness.¹²⁶

Zella Moore's Mindfulness-Acceptance-Commitment (MAC) training with athletes utilizes a structured 8-session format, which is broken down into five distinct intervention phases. In addition to mindfulness, Moore's MAC program incorporates Acceptance and Commitment Therapy (ACT), which emphasizes accepting that one cannot change certain aspects of life and focuses on living in accordance with one's values.¹²⁷

¹²³ Gardner & Moore, 2012

¹²⁴ Teasdale et al., 2002 as cited in Marks, 2008

¹²⁵ Davidson et al., 2003 as cited in Marks, 2008

¹²⁶ Jha, Krompinger, & Baime, 2007 as cited in Marks, 2008

¹²⁷ Moore, 2009

1. Psychoeducation Phase
2. Mindfulness Phase
3. Values Identification and Commitment Phase
4. Acceptance Phase
5. Integration and Practice Phase

*Figure 1.05. Moore's phases of mindfulness training*¹²⁸

The first element of treatment involves psychoeducation regarding the model and the distinct aspects of the interventions (e.g., values-based approach, nonjudgmental stance) involved in the training. The next stage involves the development of mindfulness in which the sport psychologist works with the athlete to enter a state where he notices his thoughts and feelings without judgment and without attempting to control them. This can be done in a variety of ways including deep breathing exercises, mental imagery, and body scanning. The third stage assists in helping the athlete to examine his values (e.g., expressing gratitude to teammates, being patient with self and others) and to commit to live in accordance to those values in his athletic career and in life. The fourth stage involves acceptance in which the sport psychologist works with the athlete to accept those things that he cannot change and to commit to working toward living in accordance with the values established in phase three. The final stage involves the integration and practice of all of the elements

¹²⁸ Moore, 2009

listed above. The sport psychologist using this approach assists athletes in utilizing a nonjudgmental, values driven approach to increase their performance on the field. Instead of responding to maladaptive thoughts while in competition in an effort to modify them, the athlete is encouraged to simply notice the thoughts he is having without judgment or attempting to change them. This, in theory, puts his mind at ease and allows him to perform at peak levels during competition.

It is important to have flexibility in the protocol, which allows the practitioner to allot additional time (and attention) to some particularly salient facets of the program (e.g., values-driven behavior vs. emotion-driven behavior, experiential acceptance, mindfulness) with those individuals whose personal issues suggest the need for greater attention to these variables.¹²⁹ Additionally, MAC, as is the case with Acceptance Based Behavioral interventions in general, targets psychological processes that mediate the more obvious psychological problems.¹³⁰

Outcome Studies

A number of studies using different methodologies (e.g., case studies, open-trial, randomized control trials) have demonstrated the efficacy of mindfulness and closely related interventions for the enhancement of athletic performance and overall well-being.¹²⁹ Case studies¹³⁰ conducted with high-level competitive athletes have suggested that mindfulness leads to enhancements in awareness and attention, as well

¹²⁹ Moore, 2009

¹³⁰ Gardner & Moore, 2004; Gardner & Moore, 2007; Schwanhausser, 2009 as cited in Moore, 2009

as in outcome measures related to performance during competition. One research study involving an open trial of mindfulness and acceptance therapy demonstrated an increase in self- and coach-ratings of performance, as well as self- and coach-ratings of attention and practice intensity as compared to treatment controls.¹³¹

An additional research study examined the efficacy of the MAC program compared to a traditional psychological skills training program with 19 NCAA Division II collegiate athletes from various sports.¹³² Results indicated that compared with athletes in the psychological skills training group (who received goal-setting, imagery, relaxation, positive self-talk, and arousal control interventions), the athletes in the MAC group demonstrated (a) a significantly increased ability to describe and be nonreactive to their internal experiences; (b) an increase in experiential acceptance; and (c) an increased ability to commit to behaviors directly related to achieving their athletic goals and values.¹³² In addition to such process-oriented results, numerous studies have shown mindfulness training to lead to increased performance.¹³³

Resources for Further Study

Gardner, F. L., & Moore, Z. E. (2012). Mindfulness and acceptance models in sport psychology: A decade of basic and applied scientific advancements. *Canadian Psychology/Psychologie Canadienne*, 53(4), 309–318. doi:10.1037/a0030220

¹³¹ Wolanin, 2005 as cited in Moore, 2009

¹³² Hasker, 2010 as cited in Gardner & Moore, 2012

¹³³ Gardner & Moore, 2004, 2007; Schwanhausser, 2009 as cited in Moore, 2009

Kabat-Zinn, J. (1994). *Wherever you go, there you are*. New York, NY: Hyperion.

Marks, D. R. (2008). The Buddha's extra scoop: Neural correlates of mindfulness and clinical sport psychology. *Journal of Clinical Sport Psychology, 2*, 216–241.

Retrieved from

<http://web.b.ebscohost.com.lib.pepperdine.edu/ehost/pdfviewer/pdfviewer?vid=32&sid=1e540856-beae-47d5-aa0a-c4395444ff7a%40sessionmgr113&hid=101>

Moore, Z. E. (2009). Theoretical and empirical developments of the Mindfulness-Acceptance-Commitment (MAC) approach to performance enhancement.

Journal of Clinical Sports Psychology, 4, 291–302. Retrieved from

<http://xa.yimg.com/kq/groups/8446968/1567797681/name/Theoretical+and+Empirical+Developments.pdf>

Stress Management Training

Description

Athletes must manage a wide range of environmental demands and psychological responses if they are to enhance their athletic performance and sport experience.¹³⁴ While some athletes are able to manage the causes and consequences of stress, many others struggle, resulting in impairments to their performance and health (e.g., burnout, depression, illness).¹³⁴ Thus, sport psychologists often

¹³⁴ Rumbold et al., 2011

incorporate stress management interventions to facilitate optimal performance levels and enhance overall health for athletes.

Stress management interventions often involve intervening in one of the following ways: (a) reduction in stressors, (b) modification of cognitive appraisals, (c) reduction in negative affect and an increase in positive affect, and/or (d) facilitating effective coping behaviors.¹³⁵ Indeed, stress management training may include other interventions discussed earlier in this module (e.g., CBT, self-talk) to facilitate positive coping skills. Perhaps the most common sport psychology intervention in this area is Stress Management Training (SMT).¹³⁶ SMT is a coping skills program designed to teach the athlete specific coping responses that involve both relaxation and cognitive components used to manage physiological and emotional arousal.¹³⁷ It is conceptually similar to stress inoculation training in that it is a cognitive-behavioral program consisting of three overlapping stages: conceptualization, skill acquisition and rehearsal, and skill application.¹³⁸ A distinct feature of the skill rehearsal phase of SMT is induced affect, which involves having the athlete imagine distressing situations and generating high levels of emotional arousal. The athlete then uses the acquired coping skills to reduce the emotional arousal.¹³⁸

¹³⁵ Rumbold et al., 2011

¹³⁶ Smith, 1979

¹³⁷ Smith, 1979; Smith & Smoll, 1982 as cited in Crocker, Alderman, & Smith, 1988

¹³⁸ Crocker et al., 1988

The following figure provides a brief overview of the eight modules utilized by Crocker and colleagues intervening with youth volleyball players. SMT, as originally conceptualized by Smith, is structured into eight one-hour sessions focused on the following modules.

1. Conceptualization and introduction to relaxation training
2. Role of cognitive mediation and identifying trigger thoughts
3. Role of irrational beliefs and developing substitution statements
4. Relaxation and induced affect
5. Self-instructional training
6. Self-talk and induced affect
7. Integrated coping response
8. Meditation

Figure 1.06. Eight modules of SMT¹³⁹

The conceptualization session of SMT involves an introduction to the transactional model of stress in which cognitive appraisal and coping processes are highlighted and relaxation responses are developed.¹⁴⁰ The second module highlights the role of cognitive evaluation in stress and emphasizes identifying thoughts or feelings that trigger the stress process. The third module introduces Ellis's ideas on

¹³⁹ Smith, 1979; Crocker et al., 1988

¹⁴⁰ Crocker et al., 1988

how irrational beliefs (e.g., "I am never successful") can contribute to the stress process.¹⁴¹ The fourth module presents the idea of induced affect, when players are instructed to "turn off" (or reduce) stress by using the relaxation response. For example, an athlete is asked to imagine a distressing situation in competition (e.g., missing a free throw to lose the game) to induce emotional arousal and, in turn, utilize learned relaxation to calm down.

The fifth module consists of learning personally relevant self-statements (e.g., "I can help the team") to control the stress cycle. The sixth module involves using self-talk in the induced affect procedure. Using the same general procedure as module four, players use self-statements to "turn off" the emotional arousal during imagined distressing events (e.g., stating, "I will make the next one" after imagining missing a free throw in a late game situation). The seventh module introduces the integrated coping response, which involves using self-statements during the inhalation cycle and relaxation response during the exhalation cycle of breathing. Players are further instructed to attempt to use the coping skills in practice games and competitive games. Throughout treatment, physical relaxation techniques such as progressive muscle relaxation are incorporated to help athletes "turn off" the stress as well as eventually teaching athletes meditation to further reduce stress levels.¹⁴²

¹⁴¹ Ellis, 1977 as cited in Crocker et al., 1988

¹⁴² Smith, 1979

Outcome Studies

Research on SMT has found it to be associated with reduced stress and/or improved performance in physical activity groups including football players,¹⁴³ figure skaters,¹⁴⁴ and cross-country runners.¹⁴⁵ Additionally, there is evidence that the SMT program is effective across sport populations in modifying variables (e.g., increased emotional and physical arousal) related to the stress process, as well as performance itself.¹⁴⁶ Additionally, SMT has been shown to help athletes and coaches acquire coping skills to manage distressing athletic situations, and to potentially generalize to aid in managing predictable and unpredictable events in life.¹⁴⁷

Resources for Further Study

Crocker, P. R. E., Alderman, R. B., & Smith, F. M. R. (1988). Cognitive-affective stress management training with high performance youth volleyball players: Effects on affect, cognition, and performance. *Journal of Sport & Exercise Psychology, 10*, 448–460. Retrieved from <http://psycnet.apa.org/psycinfo/1989-23318-001>

Rumbold, J. L., Fletcher, D., & Daniels, K. (2011). A systematic review of stress management interventions with sport performers. *Sport, Exercise, and Performance Psychology*. doi:10.1037/a0026628

¹⁴³ Smith, Smoll, & Curtis, 1979

¹⁴⁴ Smith, 1979

¹⁴⁵ Ziegler, Klinzing, & Williamson, 1982 as cited Crocker et al., 1988

¹⁴⁶ Crocker et al., 1988

¹⁴⁷ Smith, 1986 as cited in Crocker et al., 1988

Smith, R. E. (1979). A cognitive-affective approach to stress management training for athletes. In C. Nadeau, W. Halliwell, K. Newell, & G. Roberts (Eds.), *Psychology of motor behavior and sport*. Champaign, IL: Human Kinetics.

Suinn, R. M. (2005). Behavioral intervention for stress management in sports. *International Journal of Stress Management*, 12(4), 343–362. doi:10.1037/1072-5245.12.4.343

Physical Relaxation Training

Description

Since the stressors inherent in sport often create physical tension in athletes, relaxation techniques may be useful to help athletes manage their energy levels, reduce tension in muscles and allow them to perform at peak levels.¹⁴⁸ Research has revealed that many stressors are present (e.g., uncertainty about being selected to compete, pressure to perform) within the everyday environments of athletes.¹⁴⁹ Despite not being a mental skill per se, physical relaxation training assists in the development of cognitive coping responses (by teaching one how to think about relaxing the body) and other mental skills (e.g., mindfulness, self-talk). A 2013 study found that a primary function of relaxation as reported by athletes was to cope with anxiety during competition. Thus, it is advantageous for athletes to develop strategies,

¹⁴⁸ Vealey, 2007

¹⁴⁹ Kudlackova, Eccles, & Dieffenbach, 2013

including relaxation skills, to cope with anxiety resulting from these everyday stressors.¹⁵⁰ Indeed, most mental training programs incorporate relaxation as one of several techniques within a multimodal approach.¹⁵¹

Perhaps the most common form of physical relaxation training used by sport psychologists is progressive muscle relaxation (PMR). PMR is performed by instructing the athlete to contract then relax specific muscles in a specific order, working through separate muscle groups. Normally, this starts with the facial muscles because of their role in gesture and expression of psychological states, and then progresses to larger muscles that have a lesser role in body awareness.¹⁵² Depending on the sport and individual the sequence may change to address the specific needs and goals of the athlete. For example, a weightlifter may need to relax specific muscles not associated with the lifting movement to allow an energy efficient execution during performance.¹⁵² Conversely, an archer may need to focus on relaxing facial and upper extremity muscles to assist in concentration when pulling and releasing the arrow.¹⁵² PMR is often combined with biofeedback methods to enhance self-awareness during training that can be transferred to the competitive environment where biofeedback equipment is impractical.¹⁵² It is important to note that PMR requires a time commitment outside of therapy in order for the athlete to become proficient at the technique. Indeed,

¹⁵⁰ Kudlackova et al., 2013

¹⁵¹ Vealey, 2007

¹⁵² Behncke, 2004

athletes would benefit from practicing progressive muscle relaxation daily after learning the skills and techniques from a sport psychologist. Additionally, there are numerous resources including Mp3 audio files, YouTube videos, and smartphone apps that can guide the athlete through muscle relaxation exercises outside of therapy.

Numerous other types of physical relaxation techniques have been used with athletes. The following figure lists several common techniques used by sport psychologists to assist with physical relaxation.

- Diaphragmatic breathing
- Body Scanning
- Flotation REST (Athletes immersing themselves in a water tank filled with saltwater of an extremely high salt concentration, with the objective of inducing a deep state of relaxation by reducing external stimuli and preserving warmth).
- Meditation
- Mindfulness
- Yoga
- Tai Chi

Figure 1.07. Physical relaxation techniques

Outcome Studies

Since most mental training programs incorporate relaxation as one of several techniques within a multimodal approach, it is difficult to ascertain the specific effectiveness of physical relaxation as a mental training technique.¹⁵³ However, several studies indicate that successful elite athletes regularly use relaxation techniques to manage their physical energy levels during competition.¹⁵⁴

Research has also indicated that the physical relaxation training may be most useful for specific types of anxiety or recovery from intense physical activity. Specifically, muscle relaxation appears to be most efficacious in coping with competitive anxiety, especially for professional athletes, whereas meditation and autogenic relaxation (e.g., visual relaxation techniques) were more useful than the use of physical relaxation to cope with everyday anxiety.¹⁵⁵ Physical relaxation strategies specifically targeted for athletes experiencing somatic anxiety were found to be more effective than cognitive relaxation strategies (e.g., imagery) in reducing this type of anxiety, although the physical relaxation intervention did not enhance the athletes' performance.¹⁵⁶ Some contend that there might be support for the matching

¹⁵³ Vealey, 2007

¹⁵⁴ Durand-Bush & Salmela, 2002; Gould, Eklund, & Jackson, 1993; Gould et al., 1993 as cited in Vealey, 2007

¹⁵⁵ Kudlackova et al., 2013

¹⁵⁶ Maynard & Cotton, 1993; Maynard, Hemmings, & Warwick-Evans, 1995; Maynard, MacDonald, & Warwick-Evans, 1997 as cited in Vealey, 2007

hypothesis,¹⁵⁷ which states that physical relaxation skills are most effective at reducing physical responses to stress (i.e. arousal) and mental relaxation skills are most effective at reducing mental responses to stress (i.e. anxiety). It is also assumed that competing induces more intense arousal than everyday stressors (e.g., uncertainty about playing time).¹⁵⁸

Resources for Further Study

- Kudlackova, K., Eccles, D. W., & Dieffenbach, K. (2013). Use of relaxation skills in differentially skilled athletes. *Psychology of Sport and Exercise, 14*(4), 468–475. doi:10.1016/j.psychsport.2013.01.007
- Onestak, D. M. (1991). The effects of progressive relaxation, mental practice, and hypnosis on athletic performance: A review. *Journal of Sport Behavior, 14*(4), 247-282. Retrieved from <http://www.cabdirect.org/abstracts/19911898756.html>
- Vealey, R. S. (2007) Mental Skills Training in Sport. In G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of Sport Psychology* (3rd Ed.) (pp. 287-309). Hoboken, NJ: John Wiley & Sons.

¹⁵⁷ Davidson & Schwartz, 1976; Hardy et al., 1996 as cited in Kudlackova et al., 2013

¹⁵⁸ Kudlackova et al., 2013

Conclusion

Overall, mental skills training interventions have been found to be effective in enhancing cognitive skills and performance in athletes.¹⁵⁹ The external validity of intervention research has been enhanced by focusing on behavior in competitive contexts, using athlete-centered approaches in which mental training is individualized based on the needs and abilities of athletes and utilizing idiographic designs to assess intervention effects with individual athletes.¹⁵⁹ Although this chapter was organized into sections, each addressing a different mental skills training technique, many sport psychologists adopt a multimodal approach by using elements of several of the aforementioned interventions in their work with athletes. Despite their different approaches, cognitive and somatic mental skills training methods are thought to have considerable overlap due to the intertwined nature of psycho-somatic function.¹⁵⁹ Additionally, cognitive and somatic mental skills training methods are often utilized in conjunction with one another due to the presumed increased benefit of combining modalities. This chapter was designed to provide a brief overview of the mental skills training methods that are commonly used among sport psychologists. However, there are numerous other mental skills modalities not addressed in this chapter that may be useful for certain groups of athletes. The resources provided for further study should

¹⁵⁹ Vealey, 2007

enable clinicians to obtain a more detailed familiarity with these common sports psychology interventions.

Module B
Intervening with Adolescent Athletes

Male Adolescents in Sports

As noted in the introduction, adolescent athletic participation has grown among both boys and girls in the United States over the past several decades. Researchers have suggested that this increased participation presents an opportunity to positively impact both the current and future health and well-being of young people. Adolescent sport participation has been associated with self-reports of positive health behaviors, such as consumption of fruits and vegetables,¹ and with a lower rate of some negative health behaviors, such as risky sexual activity and substance use.² By participating in sport, the individual learns valuable lessons transferable to other life situations.³ These lessons take the form of “life skills;” attitudes and behaviors that enable individuals to succeed in their living environments, including families, schools, workplaces, neighborhoods, and communities.³ The development and application of these life skills is seen as the lasting value of sport.³

Despite the potential for the development of life skills, sport participation involves risks that must be considered. One study found that athletes in certain ecological contexts (e.g., highly competitive environments, presence of deviant peers) could experience negative outcomes such as increased rates of risky behaviors.⁴

Increases in the level of competition in sports has produced an environment in which

¹ Pate, Trost, Levin, & Dowda, 2000 as cited in Stainback, Moncier, & Taylor, 2007

² Kulig, Brener, McManus, 2003 as cited in Stainback et al., 2007

³ Stainback, et al., 2007

⁴ Fredricks & Eccles, 2008

individuals involved in athletics are required to devote more time, energy and mental capacity to their sport. Young athletes often have intense pressure placed on them by other people (e.g., coaches, teammates, parents). It appears that competition and winning at all costs often supersedes the broader developmental goals of sport including the development of attitudes and behaviors needed when working with others.⁵

With the abundant opportunities for experiencing positive developmental outcomes, the need for positive influences within a sporting context becomes clear. It is important to note that, rather than occurring automatically, many of the benefits of sports participation may need to be specifically targeted and taught in environments that are conducive to doing so (e.g., supportive coaches, clear rules and responsibilities, emphasis on growth and improvement rather than winning, positive social norms).⁶ Mental health clinicians appear to be well positioned to help cultivate the type of conditions that promote the acquisition of life skills through sport, thereby helping to facilitate positive outcomes for young athletes with respect to their psychological adjustment.

Despite the potential benefits from psychological treatment, unmet treatment needs and low rates of help seeking have been noted among athletes, both

⁵ Theokas, 2009

⁶ Gould & Carson, 2008

historically⁷ and currently.⁸ It has also been suggested that there is a tendency among athletes to deny emotional problems and stigmatize help seeking-behavior.⁹

Furthermore, it has been noted that for specific groups of athletes (e.g., male athletes, younger athletes, and athletes socialized in sports involving physical contact), there might be a stigma associated with seeking sport psychology consultation.¹⁰

Yet the need for psychological services for athletes remains high for a variety of reasons (e.g., performance enhancement, emotional well-being). As noted in the introduction to this manual, elite adolescent athletes have become increasingly likely to seek sport psychologists for performance enhancement despite the potential stigma involved. Whereas athletes often seek psychological services for performance enhancement, emotional issues have become increasingly common presenting problems for athletes. A group of notable sport psychologists noted that the reasons athletes approached them for services varied:

“Problems strictly related to performance enhancement compose 43% of the presenting problems. An equal number (42%) involve more personal issues, including depression, anxiety, anger management problems, substance abuse, eating disorders, and deficient life skills. Finally, 15% are initially represented by

⁷ Pierce, 1969 as cited in Stainback et al., 2007

⁸ Howland, P. S. personal communication, May 27, 2005 as cited in Stainback et al., 2007

⁹ Schwenk, 2000 as cited in Stainback et al., 2007

¹⁰ Martin, 2005 as cited in Stainback et al., 2007

the athlete as a performance enhancement issue but later are disclosed to be personal issues that may underlie the performance problem.”¹¹

The above statement illustrates the vital need to address the psychological needs of athletes in therapy in addition to performance enhancement. The unique issues adolescents encounter in high-level athletics engender a need for mental health interventions in addition to the performance-related goals typically focused upon by sport psychologists. The following section will provide an overview of some of the most common issues faced by adolescent athletes as well as intervention techniques and tips to assist clinicians working to address them. The choice of which interventions to include was informed by the existing scholarly literature on working with athletes as well as by interviews conducted by the author with a former elite adolescent athlete and with both a mental health clinician and a sport psychologist who have experience working with adolescent athletes. Common issues and considerations will be identified via headings while interventions will be denoted with headings that are underlined. There will be figures throughout the chapter with important tips and information to guide clinicians in treatment. Finally, resources will be provided in areas where further reading may be helpful to further understand the intervention techniques presented.

¹¹ Leffingwell, Weichman, Smith, Smoll, and Christensen, 2001, p. 533 as cited in Stainbeck et al., 2007

Unique Issues and Interventions to Assist Young Athletes

Common Issues

Athletes of all ages often must learn to cope with performance anxiety, high stress levels during competition, and psychological symptoms (e.g., generalized anxiety, depression) resulting from performing in a high stress atmosphere on a regular basis. In addition to dealing with similar challenges as their adult counterparts, adolescents face challenges related to their physical, cognitive and social-emotional development. Young athletes are typically participating in sports during critical developmental periods for cultivating skills that they will need well into their adult years. As a result, clinicians have an opportunity to play a pivotal role in helping young athletes realize potential benefits and avoid risks associated with sports. The following issues have been cultivated from a variety of sources including existing peer-reviewed research on adolescent athletes. Following the description of each issue will be intervention techniques, tips, and resources informed largely by the scholarly literature as well as from interviews noted above.

Parental pressure

Although the level of involvement varies, parents often play a significant role in competitive youth sports settings.¹² Parent involvement in children's sport experiences is neither inherently good nor bad. Rather, the effect of parental involvement appears

¹² Holt, Tamminen, Black, Sehn, & Wall, 2007

to be mediated by a host of factors, including the child's perceptions of the involvement,¹³ the type of pressure applied by the parents, and the context within which that pressure occurs.¹⁴ For example, positive effects are most often found when the pressure being applied focuses on aspects of performance that the child can control (e.g., effort, motivation). Conversely, negative effects often result from pressure placed on the child's performance (e.g., individual achievement) or external factors largely out of the athletes' control (e.g., playing time, outcome of games). Additionally, the type of pressure applied as well as the context in which it occurs may impact an athlete's well-being and result in the development of psychological problems (e.g., development of performance anxiety).¹⁵ For example, when parents provide a climate of high engagement and supportive encouragement, positive results are more likely to occur.

In one study, researchers examined the role of perceived parental behaviors on sport performance anxiety in a sample of elite adolescent swimmers. They found that positive parental effects on adolescent athletes were associated with the development of a mastery climate within the household.¹⁵ A mastery climate is defined as an environment in which effort, enjoyment, and self-improvement are emphasized, mistakes are not punished but viewed as a medium for learning, and the criterion for

¹³ Kanters & Casper, 2008

¹⁴ O'Rourke, Smith, Small, & Cumming, 2011

¹⁵ O'Rourke et al., 2011

success is internal instead of external.¹⁶ Parents who engage more intensely with their child to encourage effort, learning from mistakes, and focus on self-improvement may essentially be pressuring their child in an adaptive manner.¹⁶ It appears that a mastery climate promotes positive effects rather than the negative effects that can result from other forms of parental pressure. In addition, a high level of engagement by parents within a mastery climate enhances the impact they have on their children in a positive way.¹⁶

Conversely, the development of a “high pressure-ego climate” often leads to negative outcomes.¹⁶ An ego climate develops when the focus of athletic success is on outperforming others and mistakes are considered unacceptable.¹⁶ The absence of a mastery climate combined with high parental pressure appears to elicit evaluation pressure and increases the potential for anxiety exacerbation. Anxiety was highest when both pressure and ego climate were high, indicating that parental pressure heightens the impact of an ego climate. Under such conditions, children may perceive the need to outperform other children for parental approval, and they are driven toward goal standards (e.g., winning, individual accolades) over which they have limited control.¹⁶

Excessive parental interest in their children’s athletic achievement may have negative consequences, such as a decreased motivation and enjoyment, and a

¹⁶ O’Rourke et al., 2011

negative emotional experience, which may lead to children dropping out of sport altogether.¹⁷ Researchers have hypothesized that three parental practices have negative effects on young athletes: punitive behavior, controlling behavior, and high expectations for achievement.¹⁸ These parental practices are believed to lead to a variety of negative outcomes such as experiencing negative affect, impaired sporting experience (i.e. less enjoyment), and decreased overall well-being.¹⁹

Even if parents are aware of the issues associated with excessive involvement, they may be unaware of the pressure they themselves are placing on their children. In a study on how parental attitudes and behaviors influence children's emotional reactions to sports performance, researchers hypothesized that parents and their children may have incongruent views regarding how much pressure is applied. The results supported this hypothesis, as parents' perception of the amount of pressure they imposed on their children was significantly lower than the pressure reported by their children.¹⁹ Consequently, parents who believe they are creating a positive and nurturing environment for their child to enjoy and excel in sports may in fact be decreasing the enjoyment their child derives from sports and possibly contributing to his withdrawal from sports. Parents may fail to recognize that increasing their involvement in their child's sport may be viewed as stressful rather than supportive.¹⁹

¹⁷ Bois, Lalanne, & Delforge 2009

¹⁸ Sagar & Lavallee, 2010

¹⁹ Kanters & Casper, 2008

Parents with a healthy perspective, one not based primarily on success, are able to emphasize balance in the child's life, thus limiting the pressure and enhancing the child's satisfaction. Parents with a healthy perspective are also able to maintain emotional control while watching their child's sporting events, which contributes to a healthy, less pressurized sport experience.²⁰

Creation of a Mastery Climate

As the above research illustrates, creating a mastery climate for an athlete helps develop a mindset where he is better able to focus things he can control instead of focusing on events that may be outside of his control (e.g., opponent performance, playing time). Mastery-oriented athletes are concerned with development of their competence and ability to improve in a task. They tend to view ability as being determined by their improvement and are satisfied if their performance reflects extracting the best out of their current ability by mastering a particular technique, increasing tactical awareness, or making improvements in learning or performing a task.²¹

Assessment

Before beginning any intervention with a young athlete, it is wise to conduct an assessment to better understand and treat presenting problems. When it comes to the creation of a mastery climate, a clinical interview can provide a great deal of

²⁰ Lauer, Gould, Roman, & Pierce, 2010

²¹ Brewer, 2009

information, especially when discussing an athlete's goals, current level of enjoyment, and personal performance standards. If an adolescent's goals are oriented around social comparison and outperforming other players (among other outcome-oriented goals), it could very well be the case that a mastery climate is not in place. Furthermore, if they view their performance only through quantitative criteria (e.g., points, wins), they are much more likely to have a negative experience when things do not go well in competition. It may also be informative for you to ask the young athlete about his parents' engagement in his training program as well as how the adolescent perceives his parents' views toward winning, achievement, and improvement.

A more formal way of assessing a mastery climate is by using the *Perceived Motivational Climate in Sport Questionnaire-2* (PMSCQ-2).²² Although this questionnaire focuses on the mastery climate created by coaches, many of the questions address how children perceive achievement in sports. The PMSCQ-2 is a self-report questionnaire that features a Likert scale comprising five choices ranging from strongly disagree to strongly agree. Items include: "The coaches want us to try new skills/movements," "The coaches believe that all of us are crucial to the success of a performance," and "Athletes feel good when they try their best." Results on the PMSCQ-2 can provide clinicians with data regarding the perceived motivational climate for an athlete and whether a mastery climate is already in place or if there are

²² Newton, Duda, & Yin, 2000

additional steps that need to be taken to facilitate changes in the athlete's environment.

Intervention

Clinicians can utilize a variety of methods to facilitate the development of a mastery climate. It is first important to note the athlete's current stage of development when he (or a parent) seeks therapy. Numerous researchers have posited that each child goes through sequential stages of development that impact the attributions he makes for his performance.²³ Until about age four, children are in the autonomous competitive stage, where they try to master the environment through self-testing. Around the age of five, children enter the social comparison stage and begin to directly compare their performance to other individuals. Eventually, adaptive individuals will enter the integrated stage, which involves social comparison but also self-referenced standards (e.g., comparison of performance to personal goals).²³ If an adolescent athlete still utilizes social comparison exclusively, the therapist will need to shift his thinking into self-referenced performance goals involving tasks that he can control. For example, the therapist and athlete could develop the goal of making 100 jump shots every day after practice before going home. This task is something the athlete could complete under his own control without being impacted by external factors. Often, social comparison includes tasks that an individual may not be able to

²³ Weinberg & Gould, 2010

control (e.g., skill of competitor, outcome of match), which can increase the stress and anxiety experienced by an athlete. Thus, it is often important for the therapist to intervene with cognitive reframes that shift the focus from social comparison to an integrative framework for the young athlete. For example, an athlete with a goal of outperforming his main rival will be better off shifting his thoughts to performance measures that he can control (e.g., working more on ballhandling drills).

One of the most important aspects of treatment is to help the young athlete develop task goals (where he can control the outcome). Although sports in American society often emphasize outcome related goals, the therapist should continue to redirect the adolescent to tasks that he can control (e.g., trying his best, practicing more often). Some experts suggest using the following guidelines with young athletes to foster a mastery climate.²⁴

- Emphasize mastery (task) goals and downplay outcome goals
- Monitor and alter attributional feedback
- Monitor and correct inappropriate attributions
- Determine when competitive goals are appropriate
- Enhance feelings of competence and control

Some experts note that enhancing perceived competence and feelings of control can further foster achievement motivation.²⁴ To facilitate these feelings in

²⁴ Weinberg & Gould, 2010

treatment, therapists can simply alter the feedback they give to athletes in session.

The following guidelines for feedback in treatment can provide a quick understanding of how to shift an athlete's level of competence and control.

DO

- **In the case of failure, emphasize the need to try harder. Be sure to link such attributions to individual goals and capabilities**
- **In the case of success, attribute success to ability**
- **In the case of success, attribute success to high effort**

DON'T

- **In the case of client failure, do not make low ability attributions signifying that personal improvement is unlikely**
- **Do not attribute success to luck**
- **Do not attribute success to the ease of the task**
- **In general, do not make insincere or false attributions of any kind**

Figure 2.01. Guidelines for feedback in treatment²⁵

Working with Parents in Treatment

As illustrated above, it is paramount for clinicians to consider involving parents (and possibly coaches if warranted and feasible) in treatment to assist in the establishment of a mastery climate among other treatment goals. A clinician working with teens directly can compensate for parental practices that failed to promote a mastery climate within the home. However, treatment can advance more quickly when parents are working directly with the therapist in order to learn how to promote this healthy environment themselves. When working with parents, it is important for the

²⁵ Weinberg & Gould, 2010

therapist to establish rapport early in the therapy process. It can often be helpful to align with the parents by discussing how you and the parents can work together to help their child reach his goals in therapy. Additionally, it is important to obtain the adolescent's assent to include the parents in therapy. The following resources present tips on how to best involve parents in therapy and create a mastery climate for the child at home and in athletics.

Resources

Psychologists Ronald Smith and Frank Smoll are experts on the implementation of mastery climates with coaches and parents. They also designed the Coach Effectiveness Training program (CET) to instruct youth sports coaches on team-building, esteem-nurturing, and example-setting.²⁶ According to the APA, more than 18,000 coaches in the US, Canada, and Israel have been trained in CET, and an estimated 1.5 million children have benefited from the healthy psychological environment that trained coaches create. While much of their research is designed to instruct coaches and parents, mental health clinicians can glean a great deal about interventions with young athletes. Listed below are selected books and articles by Smith and Smoll.

Smoll, F. L., & Smith, R. E. (2009). *Mastery approach to coaching: A leadership guide for youth sports*. Seattle, WA: YESports.

²⁶ Smith, Smoll, & Curtis, 1979

- Smoll, F. L., & Smith, R. E. (2008). *Coaches who never lose: Making sure athletes win, no matter what the score*. (3rd ed.). Palo Alto, CA: Warde.
- Smoll, F. L., & Smith, R. E. (2005). *Sports and your child: Developing champions in sports and in life* (2nd ed.). Palo Alto, CA: Warde.
- Smoll, F. L., Smith, R. E., & Cumming, S. P. (2007). Coaching behaviors, motivational climate, and young athletes' sport experiences. In C. E. Goncalves, S. P. Cumming, M. J. Coelho Silva, & R. M. Malina (Eds.), *Sport and education* (pp. 165-175). Coimbra, Portugal: Coimbra University Press.
- Smith, R. E., & Smoll, F. L. (2007). Social-cognitive approach to coaching behaviors. In S. Jowett & D. Lavallee (Eds.), *Social psychology in sport* (pp. 75-90). Champaign, IL: Human Kinetics.
- Smoll, F. L., & Smith, R. E. (2006). Enhancing coach-athlete relationships: Cognitive-behavioral principles and procedures. In J. Dosil (Ed.), *The sport psychologist's handbook: A guide for sport-specific performance enhancement* (pp. 19-37). Chichester, United Kingdom: Wiley.

Fear of failure

“Civilization is an aggressive, almost maniacal chronicler of success. This is understandable—but might we all be better off if failure carried less of a stigma? Some people think so...When failure is demonized, people will try to avoid it at all costs—even when it represents nothing more than a temporary setback...It seems safe to say that failure is not necessarily the enemy of success, as long as it’s given its due.”²⁷

Failure is not inherently bad. Yet failure is often regarded as unacceptable to American athletes. As a result, many young athletes try to avoid failure at all costs, which can have extremely debilitating consequences to their overall emotional well-being. When avoidance of failure becomes extremely high, athletes may either avoid competition altogether or become obsessive over tasks they may not be able to control (e.g., the outcome of the game).

Fear of failure is defined as a self-evaluative framework that influences how the individual understands, experiences and copes with failure in achievement situations.²⁸ Fear of failure can have important implications for young athletes.²⁹ In athletics, fear of failure has been associated with high levels of worry, stress, and anxiety.³⁰ High fear of

²⁷ Levitt & Dubner, 2014

²⁸ McGregor & Elliot, 2005

²⁹ Sagar & Lavalee, 2010

³⁰ Conroy, Willow, & Metzler, 2002

failure has also been associated with negative effects on an adolescent athlete's interpersonal skills, schoolwork and athletic performance.³¹

One study examined the relationship between shame and fear of failure among college undergraduates (average age: 19.8 years) in both a naturalistic and laboratory setting.³² Individuals with high fear of failure reported greater shame after failure, generalized failure to the global self, and reported more relational concerns.³² It is likely that for high fear of failure individuals, failure has implications beyond the achievement domain to outcomes such as overall psychological and physical well-being.³²

Another study focused on the impact of different patterns of self-talk associated with fear of failure, fear of success, and sport anxiety. It found that distinct patterns of self-talk were related to increases in competitive anxiety and fear of failure.³³ Specifically, athletes with increased fear of failure experienced high levels of self-blame, self-attack, and self-neglect.³³ It also found that even while succeeding, high fear of failure participants were relatively hostile toward themselves.³³ The authors hypothesized that even success can be somewhat distressful to these individuals because failure remains an ever-present possibility.³³ As a result of their difficulties

³¹ Conroy et al., 2002; Sagar, Lavalley, & Spray, 2009

³² McGregor & Elliot, 2005

³³ Conroy & Metzler, 2004

incorporating and learning from success, individuals high in fear of failure will have difficulty developing the sense of mastery that ideally results from sports participation.

Reducing Fear of Failure

Assessment

During the clinical interview, it is important for the therapist to ask questions about how an adolescent deals with failure. Does failure in a sporting event impact the athlete's mood in a maladaptive way? Does the athlete avoid situations where failure may occur? It is also important to know how the athlete views success. Adolescents with high fear of failure may not recognize their successes or may devalue their accomplishments in light of recent failure. Also, the therapist should ask about anxiety or mood changes following success. Although it may seem counterintuitive, adolescents with high fear of failure may have increased anxiety when success occurs because of perceived pressure to reach new performance goals.

In addition to the clinical interview, the *Performance Failure Appraisal Inventory* (PFAI)³⁴ is a self-report instrument that measures an individual's beliefs about the consequences of failure.³⁵ The aversive consequences of failing that make up the five subscales are: (a) experiencing shame and embarrassment, (b) devaluing one's self-estimation, (c) having an uncertain future, (d) losing social influence, and (e) upsetting important others. The PFAI is a 41-item questionnaire with each question having a

³⁴ Conroy, 2001

³⁵ Conroy et al., 2002

five-point scale ranging from “do not believe at all” to “believe 100% of the time”.

Questions include: “When I am not succeeding, I am less valuable than when I succeed,” “When I am not succeeding, I get down on myself easily,” and “When I am failing, I blame my lack of talent.”

In addition to assessing fear of failure, the PFAI may be useful for monitoring the efficacy of interventions.³⁶ More specifically, this scale may facilitate the identification of particular automatic thoughts associated with failure and may be useful for monitoring the efficacy of cognitive or cognitive-behavioral interventions aimed at reducing maladaptive cognitions.³⁷ It should be noted that the PFAI has numerous limitations including a lack of normative data for teenage athletes. However, the questionnaire could nonetheless be a valuable tool for identifying a teenager’s maladaptive thoughts about athletic failure and for evaluating the success of interventions aimed at modifying such thoughts.

Intervention

When young athletes present with high fear of failure, the goal of the mental health clinician is to help the athlete shift toward a more positive, optimistic orientation to tasks related to his sport. It has been suggested that even high-level athletes may develop destructive self-perceptions that negatively impact their motivational

³⁶ Conroy, 2001

³⁷ Conroy et al., 2002

patterns.³⁸ Two patterns are believed to be common among high failure-oriented athletes: low self-confidence and avoidance of performance tasks.³⁹ Two factors believed to be key in reducing fear of failure are enhancing self-belief and sense of control. Thus, any intervention aimed at reducing fear of failure should address maladaptive cognitions regarding success (e.g., “I will never be good”) in order to enhance the athlete’s perceived competence, sense of control, and self-belief while reducing avoidance behaviors.

- **Increase self-belief of athlete**
- **Establish a sense of control around success**
- **Challenge cognitive distortions related to athlete’s level of competence**
- **Address avoidance behaviors surrounding performance tasks**

Figure 2.02. Goals of fear of failure interventions

Self-belief is perhaps the most critical facet to develop primarily because it is one of the strongest predictors of task achievement and engagement.⁴⁰ If young athletes develop belief that they can have success, higher levels of motivation and perceived achievement are more likely to be attained. Control refers to the extent to which adolescents believe they are able to avoid failure and achieve success.

Numerous studies have been conducted examining the impact of fear failure on

³⁸ Burton et al., 2008

³⁹ Conroy, 2001

⁴⁰ Bandura, 1986, 1997; Marsh, 1990; Martin & Debus, 1998 as cited in Martin & Marsh, 2003

academic achievement in children and adolescents. The researchers note that students with high fear of failure believe they have little or no control over outcomes and are increasingly uncertain as to whether they can avoid failure.⁴¹ In addition, when students are low in perceived control, they are more likely to engage in counter-productive behavior such as self-handicapping or giving up altogether.⁴¹

To address the aforementioned issues, researchers suggest utilizing CBT strategies to challenge athletes' negative thinking regarding failure by teaching them the skills they require to observe their automatic thoughts when they are assigned tasks or receive feedback.⁴¹ This involves showing individuals how to look for the evidence that challenges their negative thinking and then encouraging them to modify these thoughts on the basis of this evidence.⁴¹ Challenging automatic thoughts about feedback from others is critical since fear of experiencing shame and embarrassment has been associated with negative self-talk (i.e. increased self-blame and reduced affirmation while failing).⁴² Clinicians can then work with athletes to shift their automatic thoughts regarding failure to more adaptive thoughts regarding success (e.g., "I will work hard to do my best on the task" instead of "I know I am going to fail.").

An additional cognitive strategy involves maximizing opportunities for success by altering an adolescent's perception of success in terms of personal bests and

⁴¹ Martin & Marsh, 2003

⁴² Conroy & Metzler, 2004

improvement, which are outcomes accessible to all individuals.⁴³ Individuals are better positioned to develop a sense of control when they focus on the connection between their effort and outcomes.⁴⁴ Research has also shown that effective goal setting combined with effective reinforcement can be a powerful way to enhance a sense of control and achievement.⁴⁴ For example, a clinician and athlete can collaboratively develop a training schedule along with a reward system that will motivate him to adhere to it. They can develop goals that are measureable and achievable in order to help develop the connection between effort and successful outcome. A track athlete may work on improving stamina by increasing the number of 800-meter sprints he completes in a given week. At the end of each week, the athlete could schedule a “celebration” for reaching his goal, which may involve going out to a nice meal or enjoying a movie with friends. Shifting the focus to something that is achievable through hard work and rewarding that hard work is key. This helps in lowering an athlete’s fear of failure by shifting his attention to tasks that are achievable.

⁴³ Covington, 1992 as cited in Martin & Marsh, 2003

⁴⁴ Martin & Marsh, 2003

Identity Development

*"I was just trying to make sense of what the hell just happened...It was sad. Not only an ego hit but a hit to my identity. Everything you work for just gone."*⁴⁵

-Landon Donovan, professional soccer player on his exclusion from the United States Men's National Team in 2014

The critical period for identity development and increased involvement in sports often overlap. Sports participation may contribute to a number of developmental outcomes including one's sense of self and identity.⁴⁶ Sports may have both positive and negative effects on identity development. With respect to beneficial effects, sports participation may enhance various aspects of self-concept. One study examined the relationship between children's sports participation and emotional well-being using multiple child self-report measures and a teacher rating scale.⁴⁷ They found that higher levels of participation in formal sport were associated with higher levels of self-perceived behavioral competence.⁴⁷ Further, children who participated in sports self-reported lower levels of externalizing and social problems and higher levels of perceived competence as compared to those with lower rates of sports participation.⁴⁷ The authors hypothesized that participating in sports, particularly those that are organized, may help adolescents gain confidence and acquire competent behaviors

⁴⁵ Drehs, 2014

⁴⁶ Eccles et al., 2003

⁴⁷ Donaldson & Ronan, 2006

such as social skills. Thus, participating in sports may contribute to positive identity development, in part, by helping adolescents gain confidence and increase their behavioral competence (e.g., social skills). The efficacy-based learning involved in developing reciprocal social skills through sports may, in turn, also help young athletes to feel better about themselves.⁴⁸

Identity development appears to be enhanced through sports participation in ways that extend beyond improved social and behavioral skills. For instance, participating in sports may increase resiliency, confidence, and self-esteem by giving adolescents the chance to belong to a group and by providing them with multiple opportunities to achieve success and receive public recognition, all of which may be particularly important during the early adolescent years.⁴⁹ When opportunities are withdrawn, unavailable, or poorly matched to the interests of the adolescents, such support for identity exploration and affirmation is likely to be lacking.⁵⁰

Despite the numerous positive effects sports may have on identity development, an athlete's identity may become intertwined with his sport, leaving him susceptible to negative consequences. For instance, surrounding oneself with other elite athletes can create a small, distinguished, comparison group for judging one's self-worth.⁵¹ In addition, having athletic success play a disproportionate role in self-concept may leave

⁴⁸ Donaldson & Ronan, 2006

⁴⁹ Fredricks & Eccles, 2008; Petitpas, 1978 as cited in Heird & Steinfeldt, 2013

⁵⁰ Eccles et al., 2003

⁵¹ Denny & Steiner, 2009

one vulnerable to excessively adverse reactions (e.g., depressive symptoms) to athletic failure.⁵²

Identifying Athletic Identity

Athletic identity has been defined as the degree to which an athlete identifies with the athlete role.⁵³ Research has shown that student-athletes may suffer negative consequences in nonathletic areas of life if they over-identify with the athlete role.⁵⁴ If one identity (e.g., athletic identity) receives greater recognition and acknowledgment than another (e.g., academic identity), then more time will be spent focusing on and developing the athletic identity at the expense of other aspects of one's life.⁵⁵ Simply getting a sense of an athlete's time allotment to different facets of their life (e.g., social, academic, athletic) will provide clinicians with information regarding one's identity.

Athletic identity can be conceptualized as both a cognitive structure and a social role.⁵⁶ As a cognitive structure, athletic identity provides a framework for interpreting information, coping, and guiding behavior consistent with the athlete role. As a social role, athletic identity may be determined by the perceptions of those close to the person when his friends, family members, or coaches emphasize the athletic

⁵² Denny & Steiner, 2009

⁵³ Brewer, Van Raalte, & Linder, 1993

⁵⁴ Heird & Steinfeldt, 2013

⁵⁵ Hoberman, 2000 as cited in Heird & Steinfeldt, 2013

⁵⁶ Horton & Mack, 2000 as cited in Heird & Steinfeldt, 2013

dimension.⁵⁷ It is important for clinicians to understand both of these dimensions and how they impact the way athlete views himself.

To assess for athletic identity in adolescents, clinicians should rely on clinical interviews (with both the athlete and parents or coaches if possible) and clinical measures. Questions to consider for the clinical interview may include asking about peer relationships inside and outside of sports, hobbies or activities pursued outside of sports, and goals for the future (both athletic and general). A more formal way to assess athletic identity is with the Athletic Identity Measurement Scale (AIMS).⁵⁸ AIMS is a 10-item self-report questionnaire that asks questions about social identity, the importance of sport in one's life, and the impact losing has on emotional well-being.⁵⁹

Interpersonal Therapy for Athletic Identity Changes

Interpersonal Therapy (IPT) is a short-term, highly structured, present-focused psychotherapy with a strong focus on the client's interpersonal problems.⁶⁰ The therapist focuses on social functioning in one of four areas: grief, role transitions, interpersonal disputes, and interpersonal deficits. Some advocate for the use of IPT when working with student-athletes because of the highly interpersonal nature of sports and IPT's time-limited structure, which works well with student-athletes' busy

⁵⁷ Heird & Steinfeldt, 2013

⁵⁸ Brewer et al., 1993; Brewer & Cornelius, 2001

⁵⁹ Brewer et al., 1993

⁶⁰ Heird & Steinfeldt, 2013

schedules.⁶¹ IPT can assist an athlete with social adjustments and role transitions both related and unrelated to athletics.

IPT can be especially helpful for athletes addressing the losses they may face, whether these losses are actual (e.g., competitive career, social relationships) or symbolic (e.g., athletic identity, self-concept).⁶¹ Athletes must learn to cope with loss throughout their careers or risk negative consequences that come from a loss of identity when losses occur. IPT assists athletes with processing these losses while developing the interpersonal skills and facilitating the role transitions that can help expand other areas of identity. In accordance with grief literature, it is important for therapists to allow athletes to sit with and experience their grief before moving on to a solution or another stage in the process.⁶² The therapist can work with the athlete to discuss his past athletic identity in detail and how a loss may have led to an adjustment in his sense of identity. Rather than attempting to move to solution-focused strategies too quickly, therapists working with athletes should prepare these clients not only to embrace loss but also to expect that grieving a particular loss may be an ongoing process that requires patience⁶³ (Note: a section pertaining specifically to loss associated with athletic injuries appears later in this chapter).

⁶¹ Heird & Steinfeldt, 2013

⁶² Worden, 2009 as cited in Heird & Steinfeldt, 2013

⁶³ Heird & Steinfeldt, 2013

For further information on IPT in general (not tailored for use with an athletic population per se) readers are referred to the book *Interpersonal Psychotherapy for Depression* by Gerald Klerman and colleagues.⁶⁴

Developing Integrated Identity

Goals

The overall goal of the therapist working with athletes when it comes to identity is to help them expand the bases for their self-concept well beyond athletics. As noted, negative consequences can occur when an athlete regards his athletic identity as the whole of his being. For adolescents in general, considering different aspects of personality and envisioning numerous self-identities can generate confusion, conflict, and self-preoccupation.⁶⁵ This discomfort is in fact a healthy development because it leads the adolescent into processes directed toward self-integration and identity resolution.⁶⁵ Thus, the therapist can help an adolescent (especially one whose identity has become intertwined with athletics) develop an explanatory framework that imparts meaning and coherence to his life with several elements being considered in addition to athletics.

Intervention

Narrative approaches to psychotherapy may achieve therapeutic goals by assisting children and adolescents to construct positive life stories that influence their

⁶⁴ Klerman, Weissman, Rounsaville, & Chevron, 1984 as cited in Heird & Steinfeldt, 2013

⁶⁵ Desocio, 2005

identity formation.⁶⁶ Some researchers contend that adolescent development supplies the motivation and tools for integrating a coherent life story: a story with a past, a present, and a future forming around explanatory themes and a theory of self.⁶⁷ In constructing an identity narrative with the therapist, the student-athlete can learn to better integrate several aspects of his life including prominent parts of his identity from outside of sports. For example, the therapist and athlete could create a life story that presents the athlete as a person with interests in athletics, social activities, and other specified hobbies. Instead of the narrative being, "I am an athlete," it could instead shift to "I am a person who loves competing in athletics, spending time with friends and traveling during summer vacation." In addition, the therapist can help the young athlete establish self-agency, which promotes an awareness of self as being capable of shaping future possibilities through personal choice, motivation, and effort.⁶⁸

As described in the example above, the expectation is that the therapist can get the athlete to develop a "multi-storied" narrative instead of a "single-storied" narrative (e.g., "I am only an athlete"). Figure 2.03 lists some suggestions for accomplishing this derived from Narrative Therapy.

⁶⁶ Desocio, 2005

⁶⁷ Habermas and Bluck, 2000 as cited in Desocio, 2005

⁶⁸ Damon & Hart, 1991 as cited in Desocio, 2005

- Encourage athlete to more richly describe the alternative stories of his life
- Step into and explore some of the neglected areas of his life
- Increase awareness of the knowledge and skills he has that may be helpful in addressing current problems
- Ask questions of the athlete that generate new action plans
- Encourage the athlete to re-author (e.g., through journaling assignments, open discussion during therapy) aspects of his identity going forward with the understanding that he has the ability to be the voice of his identity and discount other voices in regards to identity.

Figure 2.03. Keys to Narrative Therapy (Adapted from White & Epston, 1990)⁶⁹

Resources

For information on narrative therapy with adolescents, Michael White should be considered the first resource to consider for clinicians. Notably, his book titled *Narrative Means to Therapeutic Ends* provides a great overview for narrative therapy with a variety of conditions.⁶⁹ It should be noted that there are limited studies regarding the efficacy of identity work with adolescent athletes. However, numerous studies on identity development in athletes (listed on next page) can offer a well-rounded understanding of the unique challenges young athletes face.

⁶⁹ White & Epston, 1990

- Denny, K. G., & Steiner, H. (2009). External and internal factors influencing happiness in elite collegiate athletes. *Child Psychiatry and Human Development, 40*(1), 55–72. doi:10.1007/s10578-008-0111-z
- Donaldson, S. J., & Ronan, K. R. (2006). The effects of sports participation on young adolescents' emotional well-being. *Adolescence, 41*(162), 369–389. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/16981623>
- Eccles, J. S., Barber, B. L., Stone, M., & Hunt, J. (2003). Extracurricular activities and adolescent development. *Journal of Social Issues, 59*(4), 865–889. doi:10.1046/j.0022-4537.2003.00095.x
- Fredricks, J., & Eccles, J. (2008). Participation in extracurricular activities in the middle school years: Are there developmental benefits for African American and European American youth? *Journal of Youth and Adolescence, 37*, 1029–1043. doi:10.1007/s10964-008-9309-4
- Heird, E. B., & Steinfeldt, J. A. (2013). An interpersonal psychotherapy approach to counseling student athletes: Clinical implications of athletic identity. *Journal of College Counseling, 16*(2), 143–157. doi:10.1002/j.2161-1882.2013.00033.x

Development of Coping Skills

Coping has been defined as, “The use of cognitive and behavioral strategies to manage the demands of a situation when these are appraised as taxing or exceeding

one's resources or to reduce the negative emotions and conflict caused by stress."⁷⁰

Specifically, coping encompasses an individual's ability to manage physiological responses to stress, to control appraisals of events, and to achieve desired outcomes on a task.⁷¹

Adolescence is recognized as being a particularly stressful time of life as well as an important time to develop and practice personal coping skills. Stressful life experiences, including both major events and common hassles, threaten the well-being of adolescents. Approximately 25% will experience at least one significant stressor, such as the death of a loved one or witnessing a traumatic event. An even greater number of adolescents experience chronic stressors and daily hassles, many of which are interpersonal in nature.⁷¹ Compared to children, adolescents encounter many new, potentially threatening or challenging social experiences.⁷¹ A developmental shift occurs between late childhood and early adolescence resulting in greater stress reactions and greater demands on coping resources, based on major biological, cognitive, and social developments. As an adolescent's cognitive strategies for coping are improving, puberty brings biological and neurological changes that can boost reactivity to stress and also interfere with problem solving.⁷¹

In sports, competition may be appraised as challenging, beneficial, threatening (e.g., a potential for loss), and/or harmful (e.g., a loss has occurred). All of these

⁷⁰ VandenBos, 2007, p. 232

⁷¹ Zimmer-Gembeck & Skinner, 2008

appraisals require coping responses.⁷² Therefore, sports, by virtue of repeatedly presenting challenging situations where coping is required, represent a context conducive to the development of coping skills in young athletes. A 2012 study interviewed adolescent athletes along with their parents and coaches to assess how young athletes learned coping strategies through sports. Adolescent athletes who were exposed to stressful experiences in sport had opportunities to learn coping strategies that they then used to cope with stressors in the future.⁷³ Learning about coping was facilitated when athletes' attempts to cope with stressful experiences occurred in a supportive context. This involved parents and coaches establishing a psychologically safe environment in order for athletes to feel comfortable discussing stressors and coping strategies.⁷³

Some researchers hypothesize that learning about coping is a process that occurs over time, contributed to by the following variables: the athlete's sport experiences and learning through trial and error, reflective practice, and coping outcomes.⁷³ Without the development of coping skills, adolescent athletes are susceptible to a variety of negative outcomes. Since many common stressors of adolescence have been linked to mental health and behavioral problems, coping successfully with those stressors during this time of life is paramount.⁷⁴ Stressors faced

⁷² Nicholls & Polman, 2008

⁷³ Tamminen & Holt, 2012

⁷⁴ Zimmer-Gembeck & Skinner 2008

in adolescence have been associated with depression, anxiety, and other psychological problems. In addition, problems coped with inadequately by adolescents have been associated with an increase in externalizing behaviors such as aggression and other antisocial behaviors. In helping young athletes develop coping skills, it may be most important for them to have access to a sufficient range of strategies and to be able to flexibly employ them when needed.⁷⁵

Developing Coping Strategies

Rationale

In order to manage stress that is inherent in sports, athletes must deploy coping strategies.⁷⁶ Coping represents a conscious process of constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person.⁷⁷ Coping is considered a dynamic process, with individuals relying more on certain strategies at different times throughout a stressful encounter.⁷⁸ This shifting process is not random and it is the constant appraisal and re-appraisal of a stressful situation that shapes coping.⁷⁹

Researchers have proposed the automaticity perspective, which suggests that individuals with well-learned coping strategies can employ them automatically and thus

⁷⁵ Zimmer-Gembeck & Skinner 2008

⁷⁶ Nicholls & Polman, 2008

⁷⁷ Lazarus, 1999 as cited in Nicholls & Polman, 2008

⁷⁸ Lazarus and Folkman, 1984 as cited in Nicholls & Polman, 2008

⁷⁹ Nicholls & Polman, 2008

display more effective coping.⁸⁰ Mental health clinicians can play a role in assisting athletes with developing conscious coping strategies by addressing the cognitive components involved in an individual's coping strategy.

Assessment

There have been numerous attempts by researchers to assess one's ability to cope and perhaps more importantly, how they cope. One researcher noted that the hallmarks of the best assessment of stress and coping processes involve focusing on individual differences in a longitudinal framework, which allows data to be process-oriented.⁸¹ Thus, clinicians would benefit from tracking an individual's coping strategies over time to notice ways in which his cognitive process change when stressful events occur as well as how he behaves in those situations. For example, an athlete could utilize thought records (or a mobile app that allows the clinician to view his thought records) to write down moments during a game when he coped well with stress or when he could have improved in that area. This would allow both the clinician and athlete to hone in on what thoughts assist in coping effectively and allow them to track their coping responses across numerous games or practices. As noted, coping is a shifting process that changes often and it is important to track changes in an individual's coping throughout treatment.

⁸⁰ Dugdale, Eklund, & Gordon, 2002; Gould et al., 1993

⁸¹ Lazarus, 2000 as cited in Nicholls & Polman, 2008

There are numerous structured instruments to measure stress and coping in the context of sports. See Figure 2.04 for some of the most commonly used instruments.

- **Ways Of Coping Questionnaire (WOCQ)⁸²**
Measures coping strategies applicable to numerous stressful settings.
- **Ways of Coping with Sport (WOCS)⁸³**
Measures an athlete's problem-focused coping, support seeking, effort, resolve, and positive coping styles.
- **Modified Ways of Coping Questionnaire (MWOCQ)⁸⁴**
Developed by modifying the 66 items of the original WOCQ in order to make them relevant to sport settings.
- **Modified COPE Inventory (MCOPE)⁸⁵**
Theoretically-based measure assessing 15 coping strategies that are applicable across numerous stressful settings.
- **Athletic Coping Skills Inventory-28 (ACSI-28)⁸⁶**
Sport-specific questionnaire for the assessment of basic psychological skills.

Figure 2.04. Common instruments used to measure coping strategies⁸⁷

Intervention

Coping skills training (CST)⁸⁸ is perhaps the most widely used therapy for developing stronger coping skills among teenagers. CST is based on social cognitive

⁸² Folkman & Lazarus, 1985 as cited in Gaudreau & Blondin, 2002

⁸³ Madden, Kirkby, & McDonald, 1989

⁸⁴ Crocker, 1992

⁸⁵ Crocker & Graham, 1995

⁸⁶ Smith, Schutz, Smoll, & Ptacek, 1995

⁸⁷ Gaudreau & Blondin, 2002

⁸⁸ Forman, 1993

theory and stresses the use of adaptive coping methods and problem-solving skills.⁸⁹

To the author's knowledge, there are no research studies on the efficacy of coping skills training with elite-level male adolescent athletes. However, CST has been utilized with a multitude of adolescent populations and has been shown to reduce physical aggression⁹⁰ and substance abuse.⁹¹ In addition, CST has also been shown to increase coping skills and decrease negative responses to stressors.⁹² CST incorporates a vast array of skills that are designed to intervene in several areas where adolescents often face stress and anxiety.

CST can be broken down into social skills training (e.g., remediation of verbal and nonverbal behavior, expression of thoughts and feelings to others) and emotional and behavioral control mediated through cognitive activity.⁹³ A specific element of the latter is Meichenbaum's stress inoculation training.⁹⁴ This is based upon the premise that that skills learned through stress inoculation training may be transferred to other, future stressful situations.⁹⁵ Stress Inoculation Training is a form of cognitive therapy aimed on altering an individual's thoughts about anxiety-provoking situations. For example, a baseball player may have the thought, "I will fail" every time he steps into

⁸⁹ Forman, 1993

⁹⁰ Prinz, Blechman, & Dumas, 1994

⁹¹ Forman, Linney, & Brondino, 1990

⁹² Elias et al., 1986

⁹³ Forman, 1993

⁹⁴ Meichenbaum, 1985 as cited in Forman, 1993

⁹⁵ Szabo & Marian, 2012

the batter's box with runners on base. The therapist can teach the athlete coping skills such as deep breathing and how to focus on the pitcher's mechanics instead of thinking about the magnitude of the situation. Stress Inoculation Training is based on the assumption that people experience stress because they interpret an event or situation in catastrophizing ways.⁹⁶ As noted previously, coping skills are developed by learning skills that are practiced over time in a supportive environment. The therapist facilitates this learning process in therapy. The three phases of Meichanbaum's Stress Inoculation Training are listed below:

1. Conceptualization: An education phase in which he will develop understanding of relevant stressors and how the person responds to such stressors
2. Skill acquisition and rehearsal: A phase when the person will acquire relevant coping skills and adjustment mechanisms
3. Application: When the person will take part in controlled exposures to images or in vivo samples of relevant situations. The person will also be encouraged to apply knowledge from the first two stages and to generalize this knowledge to various future events.

Figure 2.05. Stress Inoculation Training Phases⁹⁶

Clinicians working with teen athletes might also draw upon elements from other coping skills programs. For instance, a program targeted to low-income adolescents divided social skill interventions into five different phases.⁹⁷ The phases listed below provide a template for what issues to address when intervening with adolescents to

⁹⁶ Meichanbaum, 1984 as cited in Szabo & Marian, 2012

⁹⁷ Velsor-Friedrich et al., 2012

assist them with the development of coping skills.

Introduction and problem solving: Session content, structure, rules, overview of CST are covered in this phase. Additionally, identification of problems, listing of alternative ways of dealing with situations and potential consequences of those alternatives are evaluated.

Communication and social skills: Helps participants express themselves in ways that are clear, appropriate, and constructive. Reviews forms of communication (passive, aggressive, and assertive) and communication guidelines for speaking and listening.

Managing stress: Teaches a variety of stress management techniques (deep breathing, muscle relaxation, and guided imagery) and explores which techniques have been helpful for each student in the past.

Conflict resolution: Focuses on reassessing conflict situations with the goal of finding a solution with a better outcome. The concept of “win-win” resolution of problems is stressed. The advantages and disadvantages of different conflict management styles (avoidance, giving in, confrontation, being humorous, and problem solving) are discussed.

Cognitive restructuring: A systematic approach designed to help participants address stressful situations through the recognition of their own thoughts and feelings, problem solving, and guided self-dialogue. Changing maladaptive thoughts into adaptive thoughts, increasing cognitions conducive to self-esteem and self-efficacy, and teaching behavior modification are also discussed.

Figure 2.06. Velsor-Friedrich and colleagues phases of coping skills⁹⁸

Strategies to Cope with Performance Anxiety

Most people are nervous before they perform. For a small number, however, the anxiety can be disabling.⁹⁹ Performance anxiety is an exaggerated, often debilitating fear of performing in public.¹⁰⁰ As with other types of phobias, the

⁹⁸ Velsor-Friedrich et al., 2012

⁹⁹ Powell, 2004

¹⁰⁰ Parncutt & McPherson, 2002

emotional response is considered an activation of the sympathetic branch of the autonomic nervous system.¹⁰¹ Some note that in the case of young performers who are high in trait anxiety and come from certain home environments (e.g., critical of performance), early self-evaluations of their performances may trigger debilitating performance anxiety.¹⁰² Anxiety may be triggered by conscious, rational concerns or by cues that trigger earlier anxiety producing experiences or somatic sensations. For example, an adolescent may think about the last time he made a mistake in a big moment or notice an increased heart rate that cues him to feel the same way he felt when he failed. Once triggered, the person shifts into a self-evaluative attention state, in which he focuses on his perceived limitations to deal with the threat of public evaluation. Attention typically narrows to a focus on catastrophic cognitive self-statements (e.g., "I will freeze and make a fool of myself") that disrupt concentration and performance.¹⁰²

Assessment

Though performance anxiety as a psychological construct has been described in the literature for more than a half-century,¹⁰³ the term does not appear in the DSM-5 or any of its predecessors. When performance anxiety is mentioned, it is usually as a

¹⁰¹ Fredrikson & Gunnarson, 1992 as cited in Parncutt & McPherson, 2002

¹⁰² Kenny, 2005

¹⁰³ e.g., Mandler & Sarason, 1952 as cited in Powell, 2004

characteristic of social phobia or social anxiety disorder.¹⁰⁴ Aspects of debilitating performance anxiety are included among the many examples of situations in which people suffering from Social Phobia have difficulty coping.¹⁰⁵ For example the DSM-IV-TR states that social phobia may include, "The avoidance, anxious anticipation, or distress in the feared . . . performance situation(s) interferes significantly with the person's occupational (academic) functioning."¹⁰⁶ It should be noted that "performance only" is a diagnostic specifier for social phobia in the DSM-5. Yet, performance anxiety can still be an issue among individuals who do not have social phobia. When assessing an adolescent athlete, it is important to ask interview questions that assess his level of anxiety in performance and social situations. The aim of the assessment is to evaluate whether the athlete has performance anxiety or a more generalized social phobia as well as to determine the amount of distress and impairment caused by that anxiety. It is conceivable that an athlete may have severe anxiety about big moments in games yet not have the same emotional reaction when speaking in front of peers at school.

For treatment planning, clinicians could benefit from specific criteria that distinguish performance anxiety from disorders with similar features.¹⁰⁷ The following

¹⁰⁴ Powell, 2004

¹⁰⁵ Powell, 2004

¹⁰⁶ APA, 2000, p. 803

¹⁰⁷ Powell, 2004

chart predates DSM-5 but is still useful in distinguishing performance anxiety from a more generalized social phobia.

Distinguishing Qualities	Social Phobia	Nongeneralized/Specific Social Phobia	Performance Anxiety
Overall impairment	More pervasive	Less pervasive	Limited
Focus of fears	Most interactions with others	One or few interactions with others	Limited to performance situations
Expectations of self	Low	Moderate	High
Fear of scrutiny by others	Primary	Primary	Secondary
Anticipatory anxiety	High	High	Variable
Commitment to feared tasks	Avoidant	Ambivalent	Committed

Figure 2.07. Distinguishing performance anxiety from Social Phobia¹⁰⁷

Intervention

Clinicians working with teenage athletes struggling with performance anxiety could incorporate cognitive and behavioral techniques designed to alter maladaptive thoughts and reduce performance anxiety as well as any unhealthy avoidance of feared situations. Behavioral techniques could include graduated exposure strategies to address previously avoided situations. For example, developing a plan for a golfer to play in less anxiety-provoking tournaments to get accustomed to performing under pressure. This could be coupled with relaxation techniques to assist in lowering physiological reactions to stress during performance.

In addition to behavioral techniques, positive thought control¹⁰⁸ has been utilized with athletes to reduce anxiety and increase performance in soccer and other sports.¹⁰⁹ Positive thought control comprises a sequenced three-stage process in treatment.¹¹⁰ Initially, the therapist helps the athlete become aware of the fact that he is having negative thoughts (e.g., “I will never do well in this game”). Then, the athlete learns how to stop the negative thought (See Figure 2.08 for examples). Finally, the therapist and athlete work to develop positive thoughts that can replace the negative thought. It is important to note that positive thought replacement is a skill that must be developed over time. It may be helpful for the therapist and athlete to utilize thought records or some other type of recording technique to write down negative thoughts, positive thoughts that could replace them, and the corresponding impact on his anxiety levels.

¹⁰⁸ Suinn, 1987

¹⁰⁹ Maynard, Smith, & Warwick-Evans, 1995

¹¹⁰ Suinn, 1987

- **Identification of negative thoughts**

One expert suggests first identifying common negative automatic thoughts and turning those thoughts into something positive (see: Figure 2.09). For example, asking an athlete what he could do if something that causes anxiety was to happen (e.g., “What could you do if you began to feel tired toward the end of the game?”). Then the therapist can assist the athlete in developing strategies to address those negative thoughts (e.g., “I could remind myself that the feeling is temporary and that I am ready to finish strong.”)

- **Thought stopping**

Intruding thoughts often become catastrophic, can interrupt one’s ability to perform, and may cause the athlete to feel like he is unresponsive to solutions that were formed in the first step. Such thoughts may involve statements like “There is no way I am going to do well” or “I want to give up.” When this occurs, there are several ways that the therapist can assist the client with coping skills (see: Figure 2.10).

- **Developing positive thoughts to replace maladaptive cognitions**

Assist the athlete in coming up with positive thoughts to replace his negative cognitions. It may be helpful to guide the athlete in noticing the progress he has made in the past to challenge current thinking.

Figure 2.08. Positive thought control for performance anxiety¹¹¹

List negative thoughts you had during competition	In the future, what should you immediately do if you have these thoughts?
“I am going to miss this free throw.”	Take a deep breath, focus on my routine
“I am a failure.”	Shift my focus to the next play, talk to my teammates to pump them up
“I can’t compete at the level of other players.”	Remind myself of the last time I was successful and visualize the next play

Figure 2.09. Training log example¹¹²

¹¹¹ Suinn, 1987

¹¹² Suinn, 1984 as cited in Suinn, 1987

- **Keep a record of what is happening before these negative thoughts occur. Notice whether the thoughts are a result of the athlete being tense or anxious and assist them with stress management techniques.**
- **Replace negative thoughts (e.g., thoughts that increase performance-related anxiety) with an adaptive plan for the future. Help the athlete set realistic goals in the face of the negative thought. For example, if the thought is, "I have been so bad this season. I will never get better," have the athlete develop attainable goals that he can achieve (e.g., "I will work harder at the next practice than I did before").**
- **Consider another person's point of view regarding the negative automatic thought. For example, having an athlete judge his thought process as if he were an objective observer. For example, "would someone who doesn't play sports think your thought is realistic?"**
- **Review the athlete's strengths and how they could be applied to the negative thought. For example, an athlete could say, "I know I have failed before but I am a really good free throw shooter who will probably make more than I miss."**
- **Substitute a neutral thought for the interfering thought. This could involve the athlete saying, "I'm going to do my best to accept the outcome" instead of "I will fail."**

Figure 2.10. Controlling automatic thoughts¹¹³

Additional Topics for Treatment

Athletic Injury Including Concussion

"When I went down with the knee, I didn't know what to expect. That night, I was thinking all these crazy thoughts in my head. 'What's going on? Why is this happening?' I just got back...'Am I ever going to play football again? What's going on

¹¹³ Suinn, 1984 as cited in Suinn, 1987

with my career?' I was just thinking things like that. You've got tears in your eyes.

You've got your trainers right there and my parents right there. I was just thinking, 'Is this it?' I didn't know what a knee injury was. I'd never felt pain like that...When stuff like that happens, it's just crazy. You don't know what to think."¹¹⁴

-Rob Gronkowski, tight end for the New England Patriots talking about a major knee injury.

Sports injuries may present adolescent athletes with unique psychological challenges because they are dealing with developmental issues such as dependence/independence, identity development, and social skills acquisition.¹¹⁵ This is due, in part, to the fact that injuries can undermine independence, threaten one's identity as a "star athlete," and remove them from social contexts including practice and competition. Estimates of sports injuries among children and adolescents are between 3.5 and 3.7 million individuals in a given year.¹¹⁶ With increased participation, the prevalence of sports injuries, including both acute injuries and overuse injuries are increasing.¹¹⁶ The following section will provide a brief overview of concussions given their prevalence in adolescent athletics. The subsequent section will provide clinicians with interventions for athletes coping with anxiety while rehabilitating from injury.

¹¹⁴ Czarniak, 2014

¹¹⁵ Manuel et al., 2002

¹¹⁶ Difiori et al., 2014

Concussion

Children ages 0-14 years diagnosed with traumatic brain injury (TBI) account for nearly a half million emergency department visits annually.¹¹⁷ Most of the TBIs that occur each year are concussions or other forms of mild TBI.¹¹⁸ By the start of high school, 53% of student athletes have reported a history of concussion.¹¹⁹ Concussions also account for 5–13% of all reported sports injuries in high-school-aged athletes.¹²⁰ However, the actual incidence of sports-related concussions during adolescence may be higher than reported.¹²⁰ Concussions can have serious effects on a young, developing brain, causing short- and long-term problems that affect thinking, language, learning, behavior, and/or emotions.¹²¹ Although the vast majority of athletes with concussion will become asymptomatic within a week of their head injury, numerous studies have demonstrated a longer recovery of full cognitive function in younger athletes compared with college-aged or professional athletes, often lasting seven to 10 days or longer.¹²¹ The prevalence of concussion among adolescent athletes means that clinicians should have some understanding of concussion symptoms. If you suspect that an athlete is suffering from a concussion, it is imperative that you encourage the athlete to seek medical consultation (preferably from a sports

¹¹⁷ Faul et al., 2010 as cited in Bloodgood et al., 2013

¹¹⁸ Bloodgood et al., 2013

¹¹⁹ Field, Collins, Lovell, & Maroon as cited in Semple et al., 2015

¹²⁰ Semple et al., 2015

¹²¹ Bloodgood et al., 2013

medicine physician or neurologist) as soon as possible before returning to normal activity.

Coping with Anxiety after Concussion/Injury

Rationale

In addition to physical rehabilitation, psychological factors are considered important in the recovery from an athletic injury.¹²² It is important for clinicians to be aware of the psychological impact injuries may have on elite athletes. When recovering from concussion or other injuries, it is common for athletes to experience significant increases in anxiety and depression. Researchers have found several factors related to the emotional recovery from sports injuries, including injury severity, high athletic identity, low social support, and high depressive symptoms.¹²³ As a result, clinicians should focus on promoting adaptive coping and social support as these factors will buffer the relationship between injury severity and adolescents' depressive symptoms.¹²³

In recognition of the role psychological factors play in mediating adjustment and recovery from athletic injury, psychological interventions with injured athletes have become a recent focus of clinical interest.¹²⁴ Research has typically utilized treatment methods for injured athletes based on cognitive appraisal theories of stress and

¹²² Ross & Berger, 1996

¹²³ Manuel et al., 2002

¹²⁴ Ross & Berger, 1996; See: Eldridge, 1983; Green, 1992; Heil, 1993; Lynch, 1988; Rotella & Heyman, 1993; Samples, 1987; Smith, Scott, & Wiese, 1990 as cited in Ross & Berger, 1996

coping.¹²⁵ Thus, clinicians can work to alter the maladaptive cognitive appraisals and subsequent coping responses that athletes have during injury recovery.

Intervention Considerations

Although psychological intervention can begin at any time following injury, it can be difficult to determine when to intervene, the type of intervention to provide, and the particular professional to deliver the intervention.¹²⁶ The type of intervention to be implemented is determined primarily by the goals or purpose of treatment (e.g., reduction of anxiety, reduction of depression, increasing social support). Interventions would be much different for an athlete who is experiencing difficulty sleeping as a result of reduced physical activity following injury than for an athlete who is having trouble adhering to the prescribed rehabilitation program.¹²⁶ As a clinician, you should focus on what is causing the athlete the most distress as he is recovering from injuries. For example, you may choose to do cognitive interventions if the athlete is having negative automatic thoughts regarding his ability to come back from injury. If an athlete has been medically cleared to resume activity but is experiencing anxiety, gradual exposure and self-calming techniques may be necessary to ease him back into sports. It is important that these interventions are not be viewed as "extra" or

¹²⁵ Andersen & Williams, 1988; Gordon, 1986; Lazarus & Folman, 1984; Rotella, 1985 as cited in Ross & Berger, 1996

¹²⁶ Brewer, 2009

“additional” or otherwise burdensome by the athletes.¹²⁷ Instead, presenting psychological interventions as just another aspect of the overall treatment program can enhance the acceptability of the interventions to the athletes.¹²⁷

Resources

At the forefront of the psychological aspects of sports injury rehabilitation is Britton W. Brewer. For more in-depth articles on a variety of sports injuries and the psychological aspects of rehabilitation, refer to the following selected articles by Brewer and colleagues.

Brewer, B. W. (1999). Causal attribution dimensions and adjustment to sport injury.

Journal of Personal and Interpersonal Loss, 4, 215-224.

doi:10.1080/10811449908409730

Cupal, D. D., & Brewer, B. W. (2001). Effects of relaxation and guided imagery on knee strength, reinjury anxiety, and pain following anterior cruciate ligament reconstruction. *Rehabilitation Psychology*, 46, 28-43. doi:10.1037/0090-5550.46.1.28

Brewer, B. W. (2003). Developmental differences in psychological aspects of sport-injury rehabilitation. *Journal of Athletic Training*, 38, 152-153. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC164904/>

¹²⁷ Brewer, 2009

Tripp, D. A., Stanish, W., Ebel-Lam, A., Brewer, B. W., & Birchard, J. (2007). Fear of reinjury, negative affect, and catastrophizing predicting return to sport in recreational athletes with anterior cruciate ligament injuries at 1-year postsurgery. *Rehabilitation Psychology, 52*, 74-81. doi:10.1037/2157-3905.1.S.38

Brewer, B. W., Cornelius, A. E., Sklar, J. H., Van Raalte, J. L., Tennen, H., Armeli, S., Corsetti, J. R., & Brickner, J. C. (2007). Pain and negative mood during rehabilitation after anterior cruciate ligament reconstruction: A daily process analysis. *Scandinavian Journal of Medicine and Science in Sports, 17*, 520-529. doi:10.1111/j.1600-0838.2006.00601.x

Brewer, B. W. (2010). The role of psychological factors in sport injury rehabilitation. *International Review of Sport and Exercise Psychology, 3*, 40-61. doi:10.1080/17509840903301207

Maddison, R., Prapavessis, H., Clatworthy, M., Hall, C., Foley, L., Harper, T., Cupal, D., & Brewer, B. (2012). Guided imagery to improve functional outcomes post-anterior cruciate ligament repair: Randomized-controlled pilot trial. *Scandinavian Journal of Medicine and Science in Sports, 22*, 816-821. doi:10.1111/j.1600-0838.2011.01325.x

Ambivalence or Avoidance of Treatment

Adolescents are often brought to treatment at the suggestion of other people such as their parents or coaches. Yet it is critical that adolescents agree to treatment even if they disagree with the referring adult's reasons for bringing them, which places increased importance on the development of therapeutic alliance.¹²⁸ There are several factors in treatment that may deter adolescents from entering into a therapeutic relationship.¹²⁹ Many adolescents may become anxious over the prospect of committing to treatment due to their developmentally-heightened need for autonomy and independence.¹³⁰ Additionally, the stigma associated with seeking mental health services may turn many adolescents away.

To address an athlete's potential ambivalence about therapy, it is important for the mental health clinician to open a dialogue immediately about the nature of therapy and who will be involved. It is important to clarify how parents are to be involved in the adolescent's treatment, what information will be shared with them, and how such information is to be shared.¹³⁰ As noted earlier, parental involvement may enhance treatment, especially in the creation of a supportive, mastery climate. The therapist can work with the athlete to discuss how parents could help them reach his goals and then reach a collaborative decision on how to proceed. Helping adolescents to choose

¹²⁸ Kline, 2009

¹²⁹ Anthony and Mann, 1974 as cited in Kline, 2009

¹³⁰ Kline, 2009

their course of action and to develop their own goals can not only bolster feelings of success and self-esteem but also build rapport so as to increase the likelihood they will commit to the current treatment and return to therapy in the future if the need arises. Not only does this approach permit a developmentally appropriate sense of control, but it also affirms the adolescent's developing emotional maturity and rational thinking.¹³⁰

Ambivalence is often notable in adolescents' verbalizations and behavior regarding therapy, where they may go back and forth on whether they want to continue treatment. Adolescents often give mixed signals about treatment and may make statements (to the therapist or parents) such as, "Therapy is so boring," "I don't have any more problems," "Why do I have to go?" "Therapy doesn't help me anyway," "It's a waste of time," and "I can talk to my friends."¹³⁴

When working with young athletes, it is important to consider these verbalizations as a part of the normal therapy process to reduce the likelihood that they elicit negative countertransference reactions. Being aware of an adolescent athlete's possible ambivalence about treatment and managing it appropriately may reduce the possibility of premature termination.¹³¹ This awareness will position you to assist the adolescent athlete in feeling like he is in control of what to work on in therapy and may provide a sense of mastery toward reaching his treatment goals.

¹³¹ Novick & Novick, 2006 as cited in Kline, 2009

- Discuss the expected length of treatment and termination early in treatment (e.g., at intake)
- Give adolescent some control of termination (with the agreement that it will be a mutual decision)
- Encourage active participation of the adolescent in establishing the parameters of treatment (e.g., length of treatment, goals to work on)
- Notice countertransference reactions regarding ambivalent behavior by adolescent
- Open a dialogue with the adolescent when he expresses statements regarding early termination
- Assist the adolescent in developing an active approach in treatment (e.g., setting own goals, developing an agenda at the outset of each session)

Figure 2.11. Tips to Reduce Ambivalence & Avoid Unplanned Termination

Module C

Cultural and Ethical Considerations

Introduction and Module Overview

The field of sport psychology is a unique interdisciplinary field, which requires proficiencies and competencies outside the traditional domain of psychotherapy. Some of these proficiencies and competencies need to be directed toward navigating issues related to diversity and ethics when working with young elite athletes. The highly diverse world of sports requires the clinician working with teen athletes to be aware of sociocultural issues relevant to many of these clients and to develop specific approaches to address such issues effectively. Although this module, for the sake of convenience, is divided into separate sections addressing cultural and ethical considerations, it is important to remember that the two are intertwined. As per the ethics code governing the field of psychology,¹ it is incumbent upon clinicians to be aware of sociocultural differences and to consider them when working with diverse populations. Psychologists who intervene with athletes may be more likely to face certain ethical dilemmas, including challenges related to maintaining confidentiality, developing multiple relationships, and setting appropriate boundaries. The following sections are designed to provide clinicians with an overview of some of the relevant cultural and ethical considerations to be considered when working with young athletes. This module should be considered a brief outline and a first step for clinicians wanting

¹ APA, 2002

to be culturally and ethically aware of salient issues associated with working with athletes. Additional resources for further study are provided throughout the module.

Cultural considerations

Sports participants are diverse, but they do not exactly mirror the broader population.² Opportunities and access to athletic competition are not evenly distributed across ethnic groups.² Even when social class is held constant, differences in African American and white participation patterns persist.³ One of the seminal articles on culture and athletics indicated that at the elite level in popular American team sports such as basketball, football, and baseball, the percentage of minority participants far exceeds their representation in the general U.S. population.⁴ Yet in many other popular American sports such as golf, tennis, swimming, and gymnastics, there is a striking underrepresentation of minorities.⁴ The following graphs show how the representation of ethnic minorities in elite level sports (i.e. NBA, NFL, Division I athletics) differs from the demographics of the United States as a whole. The first graph (Figure 3.01) shows the demographic breakdown of the United States for different minority groups. It reveals that the biggest population increases over the past decade have occurred among historical minority group.

² Gill, 2007

³ Edwards, 1981; Stamps & Stamps, 1985 as cited in Duda & Allison, 1990

⁴ Duda & Allison, 1990

United States Demographic Breakdown	2000 Population	2010 Population	Percent change from 2000-2010
Total	281,421,906	308,745,538	9.7
White	211,460,126	223,553,265	5.7
Hispanic or Latino	35,305,818	50,477,594	43.0
Black or African American	34,658,190	38,929,319	12.3
American Indian and Alaska Native	2,475,956	2,932,248	18.4
Asian	10,242,998	14,674,252	43.3
Native Hawaiian and Other Pacific Islander	398,835	540,013	35.4
Two or more races	6,826,228	9,009,073	32.0

Figure 3.01. 2010 U.S. Census data⁵

The following graphs (Figure 3.02 and 3.03) illustrate the significant difference in minority participation in the NFL and NBA compared to the general population of the United States. In addition to the professional ranks, college athletes from the NCAA “power conferences” feature significantly more black men than the general population. The ethnic breakdown of NCAA power conferences is shown in Figure 3.04.

Race	Number of Players	Percentage of Players
White	866	31.0%
African-American	1,883	67.3%
Latino	16	0.6%
Asian	19	0.7%
Other	14	0.5%
International	43	1.5%

Figure 3.02. Racial distribution among active NFL players (2013)⁶

⁵ U.S. Census Bureau, 2000; U.S. Census Bureau, 2010

⁶ Lapchick, 2014

Race	Number of Players	Percentage of Players
White	87	19.00%
African American or Black	350	76.30%
Latino	20	4.40%
Asian	1	0.20%
Other	1	0.20%
International	86	18.70%
Total	459	100%

Figure 3.03. Racial distribution of NBA players (2012-2013)⁷

Total percentage of black men seeking undergraduate degrees (full time)	2.80%
Total percentage of black men playing on basketball teams	64.30%
Total percentage of black men playing on football teams	57.10%

Figure 3.04. Distribution of Black Sports Participation in Division I Power Conferences (ACC, Big East, Big Ten, Big 12, Pac-10/Pac-12, SEC 2007-2010)⁸

Given the diversity that characterizes young elite athletes, it is vital for clinicians working with such athletes to ensure that they are practicing in a culturally competent way. Based on participation patterns, mental health clinicians must consider ethnic/racial group membership in their treatment plan or risk the possibility of not providing competent care.⁹ Cultural competence involves awareness, knowledge, and skills to treat individuals in a way that is consistent with that person's cultural background and worldview.¹⁰ Not only should cultural competence be a standard of care in the field that facilitates rapport and increases the efficacy of services, it is also

⁷ Lapchick, 2013

⁸ Harper, Williams, & Blackman, 2013

⁹ Duda & Allison, 1990

¹⁰ Sue & Sue, 2011

an ethical requirement set forth by the APA that clinicians consider cultural variables in treatment.¹¹

Following a review of the APA's current guidelines for multicultural competence, the current section will outline specific ways that clinicians working with young athletes can incorporate multicultural awareness, skills, and interventions into their work.

Online resources related to this topic are provided at the conclusion of this section.

Multicultural Competence

In traditional counseling and clinical settings, factors associated with gender, ethnicity, sexual orientation, gender identity, and culture are highly relevant to conducting effective clinical work and achieving successful outcomes.¹² Ethical standards developed by both the APA and the Association for Applied Sport Psychology (AASP) both emphasize the clinician's responsibility to develop the knowledge and skills necessary to be culturally competent to work with a specific population or to be able to make an appropriate referral. Thus, the importance of understanding the cultural background of a variety of populations is vitally important in therapeutic settings with athletes.¹²

Cultural competence has been at the forefront of psychology in recent years as clinicians seek ways of assessing their own biases, identifying culturally related blind spots, and adapting their work to the needs of diverse groups of clients. Therapists are

¹¹ APA, 2002

¹² Pauline, Pauline, Johnson, & Gamble, 2006

culturally competent when they possess knowledge of a particular culture and the skills necessary to deliver effective interventions to members of that cultural group.¹³ To elaborate, some researchers have defined cultural competence as a set of skills that includes (a) the ability to recognize and understand the interplay between the heritage and adaptation dimensions of culture in shaping human behavior; (b) the ability to use knowledge acquired about an individual's heritage to maximize the effectiveness of assessment, diagnosis, and treatment; and (c) internalization of this process of recognition, acquisition, and use of cultural dynamics so that it can be routinely applied to diverse groups.¹⁴

In an effort to guide clinicians toward cultural competence, the APA released guidelines for clinicians that are listed below (see Figure 3.05).¹⁵ These guidelines go beyond the provision of psychological services to ethnic, linguistic, and culturally diverse populations and incorporate two distinct areas of competence: (a) knowledge of self with a cultural heritage and varying social identities and (b) knowledge of other cultures.¹⁶

¹³ Sue, 1998 as cited in Whaley & Davis, 2007

¹⁴ Whaley & Davis, 2007

¹⁵ APA, 2003

¹⁶ Whaley & Davis, 2007

Guideline 1: Psychologists are encouraged to recognize that, as cultural beings, they may hold attitudes and beliefs that can detrimentally influence their perceptions of and interactions with individuals who are ethnically and racially different from themselves.

Guideline 2: Psychologists are encouraged to recognize the importance of multicultural sensitivity/responsiveness, knowledge, and understanding about ethnically and racially different individuals.

Guideline 3: As educators, psychologists are encouraged to employ the constructs of multiculturalism and diversity in psychological education.

Guideline 4: Culturally sensitive psychological researchers are encouraged to recognize the importance of conducting cultural-centered and ethical psychological research among persons from ethnic, linguistic, and racial minority backgrounds.

Guideline 5: Psychologists strive to apply culturally appropriate skills in clinical and other applied psychological practices.

Guideline 6: Psychologists are encouraged to use organizational change processes to support culturally informed organizational (policy) development and practices.

Figure 3.05. APA guidelines for cultural competence¹⁷

The APA's most recent guidelines (see Figure 3.05 above) involve more extensive benchmarks (e.g., cultural self-awareness, awareness of other people's culture, and appropriate strategies for intervention) than previous versions released by the APA and other organizations.¹⁸ The rapidly increasing sociodemographic diversity of the US population has heightened focus on the need for culturally competent mental health services. In order to meet this need, clinicians working with young athletes must consider a range of factors, including but not limited to those discussed

¹⁷ APA, 2003

¹⁸ Whaley & Davis, 2007

in the APA's model of cultural competence. A discussion of how clinicians can consider and integrate some of these factors in their work with young athletes follows.

Cultural Differences Between Ethnic Groups

Researchers have discovered significant differences between ethnic groups in their views toward athletic participation as well as broader psychological constructs. These cultural differences include relative emphasis on individualism versus collectivism, variations in beliefs, goals, and values, and diversity in expectations regarding interpersonal space and management of time.¹⁹ As noted, those working with young athletes will need to be aware of significant differences (both among their clients and between themselves and their clients) in worldviews and customs, and to use that awareness to influence how they intervene with each person. It is vital to note that while awareness of common cultural differences is critically important, clinicians need to be careful not to assume that such differences apply to each and every member of a given ethnic/cultural group. Rather, the awareness of such group differences should sensitize the clinician to examining whether or not they apply to individual clients and to respond accordingly in terms of tailoring their practice.

Sport psychology researchers have begun to examine ways that cultural differences in individualist and collectivist orientation could influence the behavior of

¹⁹ Marks, 2011

athletes.²⁰ Differences in these worldviews can affect one's sports participation habits, viewpoints regarding psychological services, and self-talk during competition. For example, there are several studies indicating that African Americans tend to be more peer-oriented and likely to use urban recreational facilities while whites are more individualistic in their behavior patterns.²¹ Other studies suggest that positive self-talk is associated with individualist cultures, while critical self-talk is associated with collectivist societies.²² Such differences may impact the choice of interventions since cognitive interventions that promote positive self-talk and discourage negative self-talk could prove ineffective with athletes from cultures that privilege interdependence.²³ It is important for the clinician to understand whether the self-talk being used is maladaptive for that individual given their cultural context. For example, an Asian-American golfer may use negative self-talk as a means of motivation, which may be adaptive given his familial and cultural values. As this athlete's therapist, it may be unwise to view these thoughts as maladaptive and challenge them with cognitive interventions. However, if the athlete reports that he is not sleeping and his parents are telling him he is being too hard on himself, it may be appropriate to utilize a cognitive intervention.

²⁰ Whaley & Davis, 2007

²¹ Refer to Hutchinson, 1987 as cited in Duda & Allison, 1990

²² e.g., Heine, 2001; Heine & Lehman, 1997; Kitayama, 2002 as cited in Marks, 2011

²³ Marks, 2011

Similarly, cultural differences exist in an individual's values and belief systems toward sport and psychological interventions. For example, the effectiveness of Eurocentric approaches to psychological skills training (e.g., imagery, goal-setting, self-talk) that are implemented without consideration for culture are inconsistent or poor at best.²⁴ An athlete with a non-European cultural tradition could experience the imposition of another cultural framework and belief system as alienating and invalidating.²⁴ For example, utilizing individual goal setting for an athlete from a more collectivistic culture may be the opposite of what he values and thus invalidate his experience. Instead, setting team-oriented goals may be a better cultural "fit" for such athletes.

Many aspects of mental skills training require the client to consider his own values and select actions that are consistent with those values.²⁴ However, values vary significantly by ethnicity and cross-cultural encounters can involve differing conceptualizations of how values should be identified (e.g., top-down or bottom-up). When working with athletes, it is important to clarify values and tailor treatment to be in line with those values. For example, using a behavioral intervention to increase assertiveness in an athlete may conflict with how his personal values manifest in the context of sports. In fact, many cultures value deference to other teammates over the

²⁴ Marks, 2011

needs of an individual. As a clinician, you must remain aware of your client's cultural values and avoid therapeutic goals or interventions that may conflict with them.

Cultural differences also exist in the context of personal space and time. Researchers²⁵ have found significant differences between so called "high-context" cultures (which make use of implicit communication through body language and other nonverbal behaviors) and "low-context" cultures (which require overt communication in language with little attention paid to nonverbal aspects of communication). High-context cultures tend to have a relatively low degree of territoriality regarding personal space, allowing others to be in close proximity without experiencing discomfort.²⁶ In addition, these cultures are likely to have flexibility around time, adopting an "event-based" relationship to time, in which the needs and priorities of the moment and other social imperatives determine the sequence of events. In contrast, low-context cultures tend to have a high degree of territoriality, with clear spatial boundaries, and relatively rigid "clock-based" conceptions of time and scheduling, expecting promptness and sequential attention to events.²⁶ When intervening with athletes with different cultural backgrounds, you need to be aware of the different norms related to time and space that may exist between you and the athlete. Clinicians working with athletes from high-context cultures need to maintain an increased level of awareness of how their body language and facial expressions may be interpreted. Further, clinicians may need

²⁵ e.g., Hall, 1983

²⁶ Hall, 1983 as cited in Marks, 2011

to be more flexible than usual in their expectations for promptness and adherence to a set schedule with some athletes.

Despite large-scale cultural differences, it is important to remember that each individual is a unique being, creating the need for flexibility as a clinician. One researcher notes that this seems impossible to do without a model of the self that can go beyond notions of an individual as someone who internalizes his or her culture as a whole entity and can immediately access every aspect of culture to each new situational context.²⁷ Since culture is much more complicated than that, attention must be paid to the cultural context of social interactions.²⁷ Despite having an understanding of a cultural group as a whole, clinicians must be aware of individual differences within groups to avoid potential adverse effects in treatment. For example, an athlete from a traditionally collectivistic society may come from a family who values a higher level of independence than tradition dictates. Conceptualizing an intervention without understanding the cultural practices of the individual athlete puts the clinician at risk of rupturing the therapeutic alliance and/or utilizing interventions that are not beneficial. When working with an athlete, continue to ask for further explanations to gain understanding of his cultural values and understanding of items discussed in treatment. It is important to continue to monitor for cultural differences and to avoid ever making assumptions when it comes to culture.

²⁷ Marks, 2011

- Individualism versus collectivism
- Variations in beliefs, goals, and values
- Diversity in expectations regarding interpersonal space and management of time
- Uniqueness of the individual

Figure 3.06. Cultural differences to consider in treatment

Multicultural Guidelines

When Working With Young Athletes

Acknowledging Own Biases and Assumptions

The first of APA's multicultural guidelines states that psychologists are encouraged to recognize that, as cultural beings, they may hold attitudes and beliefs that can detrimentally influence their perceptions of and interactions with individuals who are ethnically and racially different from themselves.²⁸ Thus, clinicians working with young athletes must consider their own biases, prejudices, and assumptions about different cultural groups before conceptualizing a client and implementing interventions. One researcher noted that textbooks addressing cultural competency routinely exhort their readers to engage in self-assessment as a means of minimizing encapsulation and increasing sensitivity to cultural difference, yet they also acknowledge the difficulty of identifying one's cultural biases and assumptions.²⁹ Further, whiteness and ethnocentric viewpoints are often deeply entrenched in society

²⁸ APA, 2003

²⁹ Marks, 2011

and psychology.³⁰ Others have noted that privileged people (e.g., those in the majority or in positions of power) are often unaware of power relations that can oppress individuals from different gender and cultural groups.³¹

Due in part to the fact that Eurocentric thinking is contingent on socio-historical and political contexts, and deeply entrenched in the worldview of the general public, psychologists must undergo the difficult process of confronting and changing the power structure they are endowed with.³² Even psychologists from ethnic minority groups are in a position of power (albeit to different degrees from Caucasian psychologists) due to high educational and often socioeconomic status. One researcher suggested that it is vital for white clinicians to list the ways in which they are privileged as a way to begin to confront and ultimately eliminate these privileges that would otherwise continue to exist.³² Privileges associated with white racial identity and larger systems of white supremacy are already woven into the existing power dynamics of other lines of identity such as gender, social class, and sexual orientation.³² When working with young athletes from any background, it is important for clinicians to understand their role in the dynamics of the relationship and to monitor how privilege may impact their perceptions, judgments, and responses. It is likely that the clinician's understanding of the racial and cultural dynamics at work in sports and the therapeutic

³⁰ Gill, 2007

³¹ Sue, 2004 as cited in Gill, 2007

³² Butryn, 2009

relationship is different than how the athlete views them. Stating that fact to the athlete and discussing the dynamics at play will help the clinician to understanding the athlete's view toward the therapist, assist in building a therapeutic alliance, and allow treatment to progress in more transparent and effective manner.

In examining privilege when working with young athletes, it is important to consider who may be excluded from an institution and who becomes the "other," without the same privileges as the majority.³³ From a systemic perspective, struggles related to social difference may be unconsciously utilized to uphold the dominant ideology of sport.³³ This may manifest in rigid gender and sexual norms for different sports including homophobia and an overvaluation of masculinity.³³ As a clinician, it is important to be mindful of these norms and discuss the differences between the athlete's viewpoints and societal norms. For example, a gay football player may be struggling with coming out because of the emphasis on stereotypical masculinity that is socially inherent in football. It is important for the clinician to always be aware of how their questions and way of speaking about sport endeavors may unintentionally reinforce existing societal norms, especially if those norms negatively impact the young athlete. One might use Socratic questioning to help the aforementioned gay athlete develop a sense of autonomy and agency with respect to the possibility of coming

³³ Fisher, Butryn, & Roper, 2003

out.³⁴ For example, you could say, “What are potential benefits and risks associated with coming out?” and “What is the effect on you as a person of thinking in a way that differs from the social norm?” The goal is to give the athlete the space to make his own decision in a way that makes him feel the most empowered and comfortable.

Developing Knowledge and Skills

Developing multicultural knowledge (e.g., learning about different worldviews, attitudes toward help seeking, levels of acculturation, communication styles, family systems) helps guide the therapist in determining the proper course of action in treatment. In working with all types of individuals, historical, economics, family, and social context are all relevant.³⁵ People from culturally diverse backgrounds may be survivors of oppression who have developed sources of resiliency and strength in dealing with power relations.³⁵ Developing the knowledge about an individual’s cultural background and the skills needed to use that knowledge in treatment is vital. The RESPECTFUL model articulated below assists clinicians by creating a framework for this.

RESPECTFUL Model and Development of Skills and Knowledge

Michael D’Andrea and Judy Daniels developed a multicultural competency model that they applied to sport psychology, using the APA’s multicultural guidelines.³⁶

³⁴ Corlett, 1996 as cited in Fisher et al., 2003

³⁵ Gill, 2007

³⁶ D’Andrea and Daniels, 2001 as cited in Gill, 2007

Their RESPECTFUL sport psychology model includes 10 factors to address when dealing with individuals whose psychological development, athletic performance, and team membership are impacted by cultural-contextual variables that have been previously underestimated or ignored in professional practice (See Figure 3.07).³⁷ The RESPECTFUL acronym listed below identifies factors one should think about when working with young athletes that supplement the cultural considerations discussed above. Each factor provides a way to organize intake interviews in order to begin to identify the cultural variables that will be vital to structuring treatment and designing interventions. Each factor noted below is accompanied by related considerations when working with young athletes.

R—Religious/spiritual identity

A young athlete’s religious/spiritual identity often plays a role in his development. As a result, it is important for the clinician to ask questions about the athlete’s religious/spiritual identity, whether religious/spiritual practices are part of his sports activities, and whether those practices differ from traditional familial or cultural norms. It is also important for the clinician to consider how religious/spiritual values may impact a young athlete’s view of psychological services and how he copes with athletic stressors.

E—Economic class identity

In addition to assessing a young athlete’s level of racial identity development, clinicians should also assess his economic class identity. Growing up in poverty can have serious implications for a young athlete’s mental health and worldview. Asking athletes about their economic background and discussing the differences between the therapist and the athlete can assist the therapist in understanding unique stressors athletes may be facing.

(Continued)

³⁷ Gill, 2007

S—Sexual identity

It is important to ask all athletes about sexuality and how issues related to sexuality may impact athletics and mental health. It is also important for therapists to learn about the coming out process as well as the types of community resources available to support athletes who are in the process of publicly acknowledging their sexual orientation. Asking questions regarding athletes' support systems and the resources they rely upon is vital.

P—Psychological maturity

It is important to be knowledgeable about both the athlete's level of psychological development so that treatment decisions can be based, in part, on developmental considerations. For example, asking questions such as, "What do you do after you win?" or "How do you deal with a loss?" can give you information about the maturity level of the adolescent. Is he able to think about consequences of his actions? Is he able to think abstractly? Does he handle frustration and disappointment in age-appropriate ways?

E—Ethnic/racial identity

It is important that mental health professionals discuss the athlete's racial and ethnic identity. Asking questions about how the athlete views his ethnic background and how that differs from friends, family, and teammates is important. Perceived differences between the athlete and significant others (including teammates) could create a conflict and be a focus of treatment. Asking questions such as, "How do you view your ethnic/racial identity?" "Do you view your ethnic/racial identity differently than your parents?" or "How does your ethnic/racial identity differ from your friends and teammates?," can open an important dialogue that can help shape the content and process of treatment.

C—Chronological challenges

Mental health professionals working with teenage athletes should try to develop intervention strategies that are intentionally designed to address the specific challenges of early, middle and late adolescence. It is important to identify the developmental period the athlete is in and look for common developmental issues faced by youth during that period. For example, athletes going through puberty face additional challenges and stressors in athletics due to changes in size, strength and emotional functioning.

T—Trauma and threats to well-being (injury, abuse)

It is important to assess for various stressors that threaten an athlete's well-being. A multifaceted approach is often indicated when an athlete's well-being may be

(Continued)

compromised. For example, a child who fears going home after school due to gang violence would benefit from the therapist finding after-school programs and taking additional steps to keep him safe (e.g., increased communication with parents, mentors).

F—Family history

Therapists must acquire the skills necessary to effectively treat athletes coming from a range of families including single-parent families, remarried families, cohabitating heterosexual families, and gay and lesbian couples. Athletes make up a heterogeneous group and it is likely that therapists working with young athletes will come in contact with many different types of families. It is also important to take into account a client's relationship with his family and potentially include family members in interventions.

U—Unique physical characteristics

Athletes may have unique physical characteristics that are a source of stress and dissatisfaction (e.g., developing earlier than peers, being physically larger than teammates). The researchers note that it is important for therapists to reflect on the ways in which the idealized view of beauty in society may have led athletes to internalize negative views of themselves.³⁸

L—Language, location of residence

An athlete's place of residence may have implications for the way individuals develop. For example, overcrowded living conditions, economic disadvantage, and limited opportunities for career and/or educational opportunities may cause some urban youth to develop psychological problems (e.g., antisocial behaviors). It is important for the therapist to assess for this and develop potential strategies to help the athlete spend more time in healthy, supportive environments (e.g., after school programs).

Figure 3.07. RESPECTFUL model³⁸

As a clinician working with young elite athletes becomes more adept at considering relevant cultural factors, the therapist should strive to further develop the skills and knowledge required to treat these individuals in a culturally competent

³⁸ D'Andrea & Daniels, 2001

fashion. Clinicians are working in a dynamic, multilingual, multicultural world in which teams of individuals from differing backgrounds participate in an ongoing process of cultural creation.³⁹ Thus, clinicians should utilize the above multicultural considerations as a start to their own journey toward cultural competence. As noted previously, no matter how much time and effort is devoted to understanding cultural and ethnic differences, each individual in treatment will present with unique circumstances that require unique treatment considerations. Using a model such as RESPECTFUL to tailor each treatment to the individual athlete's unique culture is beneficial and allows the clinician to further develop in his or her cultural competence.

Ethical considerations

When consulting with athletes, mental health practitioners may encounter certain unfamiliar ethical challenges due to some of the unique circumstances and settings associated with the athletic environment.⁴⁰ A discussion of ethical issues when treating athletes should focus on the APA code of ethics as applied to sport and exercise settings, given that the APA code governs all aspects of the practice of psychology.⁴¹ However, it should be recognized that the application of the APA code of ethics is often more challenging when applied in an athletic context due to issues such as boundaries of practice, maintaining confidentiality, cooperation with other

³⁹ Henderson, 2005 as cited in Marks, 2011

⁴⁰ Pauline et al., 2006

⁴¹ Whelan, Meyers, & Elkin, 1994

professionals, and title usage.⁴² Therefore, it is important for clinicians working with young athletes to be aware of the unique ethical situations that may present in treatment and to consider how they are going to manage them so as to adhere to ethical standards of practice. Additionally, clinicians should discuss these ethical issues directly with the young athletes with whom they are working, being sure to frame the discussions around how appropriate management of these issues serves to protect the clients' interests. For example, discussing boundaries with young athletes and their parents from the outset of treatment is important. Because parents and athletes are used to dealing with coaches and other school personnel, where boundaries are often relatively relaxed, they may remain unaware of the stricter boundaries adhered to by psychologists if the issue is not raised proactively by the clinician.

This section provides an overview of selected ethical considerations for mental health clinicians working with elite male adolescent athletes. The intent is to provide not an exhaustive discussion of the topic but rather a brief overview of the purpose of ethics codes in clinical practice, of potential ethical dilemmas, and of ways to address those dilemmas when intervening with young athletes.

⁴² Whelan et al., 1994

Purpose of Ethics Codes

The purpose of an ethics code is to provide guidance and governance for a profession's members in working settings.⁴³ Ethics codes are developed from the current values and beliefs in society as related to a profession.⁴³ Professional codes of ethics result from society's expectation that the profession will regulate itself to "do no harm" and will govern itself to ensure the dignity and welfare of individuals and the public.⁴⁴ The profession also seeks to ensure the quality of services provided its members to the general public. To do so, professional organizations must develop and enforce guidelines that regulate their members' professional conduct.⁴⁴ This is accomplished through ethics codes, which promote integrity in the practice of a profession, establish high standards for professional conduct, and foster public trust by promoting adherence to those standards.⁴⁵ Since societal values and common professional practices change over time, it is necessary for ethical codes and standards to evolve.⁴⁶

The APA ethics code is an ever-evolving document that provides ethical principles and codes of conduct to govern and guide its membership.⁴⁶ The foundational goal of the APA ethics code can be conceptualized as "do no harm," which informs the general principles outlined (see Figure 3.08). The general principles

⁴³ Pauline et al., 2006

⁴⁴ Whelan et al., 1994

⁴⁵ Fisher, 2003

⁴⁶ Pauline et al., 2006

then become specific in the form of standards, the rules and regulations that result from the application of the general principles to real-life situations.⁴⁷ Although the APA code is intended to govern the practice of psychology generally, sub-disciplines within psychology have developed their own ethics codes tailored to their unique professional contexts. Among these is the AASP's ethical code. The AASP ethics code was derived from the APA's 1992 ethics code but has not been updated since its release in 1994.⁴⁸ This code was designed for sport psychologists and featured the same six principles as the 1992 APA Ethics Code. Since this manual is designed not for sports psychologists but for mental health clinicians working with athletes, the principles from the current APA Ethics Code are listed below. For more specific information regarding the ethical practice of sport psychology, refer to AASP's ethics code.

Principle A: Beneficence and Nonmaleficence

Psychologists strive to benefit those with whom they work and take care to do no harm. In their professional actions, psychologists seek to safeguard the welfare and rights of those with whom they interact professionally and other affected persons, and the welfare of animal subjects of research.

Principle B: Fidelity and Responsibility

Psychologists establish relationships of trust with those with whom they work. They are aware of their professional and scientific responsibilities to society and to the specific communities in which they work.

Principle C: Integrity

Psychologists seek to promote accuracy, honesty, and truthfulness in the science,

(Continued)

⁴⁷ Whelan, et al., 1994

⁴⁸ Pauline, et al., 2006

teaching, and practice of psychology.

Principle D: Justice

Psychologists recognize that fairness and justice entitle all persons to access to and benefit from the contributions of psychology and to equal quality in the processes, procedures, and services being conducted by psychologists.

Principle E: Respect for People's Rights and Dignity

Psychologists respect the dignity and worth of all people, and the rights of individuals to privacy, confidentiality, and self-determination.

Figure 3.08. Principles of APA ethics code⁴⁹

Ethical practice is emphasized more today than ever before for licensed psychologists practicing in applied settings (e.g., including those working with athletes).⁵⁰ Clinicians working with athletes are often presented with unique circumstances that are challenging from an ethical standpoint and require clinicians to think carefully about how to apply the current ethical guidelines. Jeffrey Brown and Karen Cogan, who have written on the topic of ethical dilemmas in sport psychology stated, "it is requisite of the psychologist practicing with athletes or teams to be in a 'defensive stance,' ready to identify and resolve as effectively as possible those ethical situations arising in an applied setting."⁵¹ In an effort to promote such a stance along with the ability to easily identify and address the ethical challenges that may arise, the remainder of this module provides an overview of the ethical considerations most relevant for those intervening with adolescent athletes.

⁴⁹ APA, 2002

⁵⁰ Brown & Cogan, 2006

⁵¹ Brown & Cogan, 2006, p. 16

Ethics Applied to Interventions with Athletes

Some of the complexities involved when intervening with athletes create challenges for clinicians seeking to adhere faithfully to standards for ethical practice.⁵² It is essential for practitioners working with young athletes to be able to identify potentially unethical situations and to understand the nuances of these situations if they are to behave in an ethical manner. Parents and coaches may make requests (e.g., working with multiple members of the same team, treating an individual outside of the therapy office) that raise ethical concerns as they deviate from the normal practice of a mental health clinician who works with young athletes.⁵³ While a discussion on sport and performance psychology ethical guidelines is outside the scope of this module, many of the ethical dilemmas and considerations relevant to sport and exercise consultation may be applicable to or have implications for clinicians intervening with young elite athletes.

Confidentiality

Confidentiality is a central ethical issue that often arises in a variety of traditional and sport counseling settings.⁵⁴ Standard 4.01 of the APA ethics code states that practitioners “have a primary obligation and take reasonable precautions to protect confidential information obtained through or stored in any medium, recognizing that

⁵² Aoyagi & Portenga, 2010

⁵³ Brown & Cogan, 2006

⁵⁴ Pauline et al., 2006

the extent and limits of confidentiality may be regulated by law or established by institutional rules or scientific relationship."⁵⁵ However, as will be discussed, confidentiality can be tricky to navigate when providing interventions to young athletes due to a litany of unique circumstances that may be encountered by the clinician.

Performance environments are characterized by open communication between coaching staffs, support staffs, parents, and athletes. In fact, it may facilitate treatment to have regular communication between an athlete's mental health clinician, sport psychologist, and at times parents. However, coaches (and often administrators) expect to be informed by medical and support staff of any issues that might impact an athlete's ability or readiness to perform.⁵⁶ The expectation of open communication can create challenges for clinicians consulting with athletes.⁵⁶ Individuals close to young athletes may assume that the clinician will automatically share sensitive information regarding clients and their treatment.⁵⁷ The pressure to do so may be particularly salient when parents are very involved with their child's sporting activities, when an exceptional athlete has hit a slump, or when an athlete's deteriorating performance is beginning to affect a team's success.⁵⁸

As a result, the clinician must clearly establish the boundaries of confidentiality with consideration for the athlete and any referral source or involved party who is a

⁵⁵ APA, 2002 p. 7 as cited in Pauline et al., 2006

⁵⁶ Aoyagi & Portenga, 2010

⁵⁷ Brown & Cogan, 2006

coach, teammate, team physician, or athletic administrator.⁵⁸ The fact that some referral sources may be financially supporting a young athlete's treatment can introduce an additional complicating factor.⁵⁸ When this happens, referral sources may find it objectionable to be denied access to information regarding presenting problems, treatment goals, interventions, and the athlete's progress. The clinician who is initially contacted by a referral source on behalf of an athlete will find it useful to review confidentiality and its limitations with the source as soon as the referral is made.⁵⁸ Encouraging a referral source to support an athlete's treatment by honoring confidentiality can be an essential step in building an alliance with the referral source and the athlete, while at the same time protecting information the athlete may share in treatment over time.⁵⁸

Unless otherwise prescribed by legislation or professional ethics, the clinician must maintain the confidentiality of the client. It must be remembered that the professional's primary responsibility is to the athlete and that behaving ethically involves being true to the foundational principle of doing no harm to the athlete.⁵⁹ Therefore, the clinician should continue throughout treatment to not divulge information concerning the athlete without his permission (if the client is a minor, then one should get both his assent and formal permission in the form of a signed release of information form from the adult who consented to treatment, which will typically be a

⁵⁸ Brown & Cogan, 2006

⁵⁹ Whelan et al., 1994

parent). It is important to note here that there are exceptions to the dictate to maintain the client's confidentiality including situations involving dangerousness (to self and others), abuse, and neglect. If a clinician believes that sharing particular information from treatment could benefit an athlete (e.g., discussing his anxiety with his parents or sport psychologist), the clinician should first discuss with the athlete what is to be revealed and why, offer to include the athlete in the discussion with third parties, ideally obtain assent, and proceed from there.⁶⁰

Boundaries and Multiple Role Relationships.

Boundaries in sport psychology (or when intervening with athletes in general) are often more difficult to maintain and less rigid than they are in traditional psychology or counseling.⁶¹ Mental health clinicians working with athletes who are concurrently working with a sport psychologist may be asked by the athlete (or his parents) to work in a nontraditional setting or enter a multiple role relationship.

According to the APA ethics code, "a multiple relationship occurs when a psychologist is in a professional role with a person and (1) at the same time is in another role with the same person, (2) at the same time is in a relationship with a person closely associated with or related to the person with whom the psychologist has the professional relationship, or (3) promises to enter into another relationship in the future

⁶⁰ Whelan et al., 1994

⁶¹ Brown & Cogan, 2006

with the person or a person closely associated with or related to the person."⁶²

Multiple role conflicts in therapy may be encountered when clear boundaries have not been established.⁶³ When the relationship boundary between the professional and client becomes clouded, the likelihood of multiple role conflicts greatly increases.⁶³

Sport psychology professionals or mental health clinicians working with athletes may find themselves practicing in a nontraditional setting such as a gymnasium, locker room, or practice field. It is important to realize that nontraditional situations are likely to arise, which may call for a more thoughtful and proactive approach to maintaining ethical professional conduct.⁶³ When working in non-traditional setting, the clinician could discuss with the athlete ahead of time how to handle various situations that might arise (e.g., being asked by a teammate what he is doing or who the clinician is). When concerned about the ethicality of a specific practice, the clinician should always be willing to consult with a fellow practitioner.⁶⁴

Although general mental health clinicians may not be as involved as performance consultants or sport psychologists, some of the same multiple role dilemmas could apply (e.g., working with multiple players on the same team). In order to avoid potential problems, guidelines have been proposed for exercise consultants that could be applied to mental health clinicians treating athletes. Clarifying the nature

⁶² APA, 2002 p. 6

⁶³ Pauline et al., 2006

⁶⁴ Brown & Cogan, 2006

of the relationship and each person's role during the intake and informed consent process, prior to intervening with the client, is of primary importance. It is the practitioner's ethical responsibility to have a candid discussion with the client that clearly defines the therapeutic relationship and the limitations concerning personal contact outside of therapy.⁶⁵ This becomes paramount when mental health clinicians who are working with athletes are placed in nontraditional settings (e.g., schools). It is also important to maintain an appropriate distance in order to divert inappropriate attempts at romantic and other nonprofessional relationships.⁶⁵ Physical contact within the counseling and sport setting may be ethically appropriate at times. However, contact that is intended to express emotional support, reassurance, or an initial greeting can be misinterpreted as an advance.⁶⁵ If a therapist practices in a nontraditional therapy setting can lead to sexual feelings and even inappropriate advances by clients or practitioners. Recognizing and dealing with such feelings and behaviors immediately and objectively is the best approach.⁶⁵

Competence and Marketing.

Marketing oneself to the public as having a specific area of expertise in sport psychology when in actuality one does not possess such skills is considered an ethical violation.⁶⁶ Some clinicians may be inclined to consider themselves competent in sport psychology by having been a successful athlete, possessing strong interest in a

⁶⁵ Pauline et al., 2006

⁶⁶ American Psychological Association, 2005 as cited in Brown & Cogan, 2006

particular sport, intervening with athletes in the past, being well read on a particular sport topic, or joining certain professional organizations (e.g., APA Division 47, AASP).⁶⁷ However, the field of sport psychology is a highly specialized area of study, requiring specific and intensive training to satisfy the requirements to refer to oneself as a sport psychologist.

The APA ethics code specifies that in emerging areas of psychology a clinician should "take reasonable steps to ensure the competence of their work and to protect clients/patients, students, supervisees, research participants, organizational clients, and others from harm."⁶⁸ In order to practice competently utilizing sport psychology principles as well as market those specific attributes, psychologists must undergo additional training to satisfy those requirements. Due to the interdisciplinary nature of sport and exercise psychology, students will most likely need to create an individualized plan of study suited to meet their future goals and career objectives by combining courses from traditional psychology, sport sciences, and sport and exercise psychology.⁶⁹

Individuals specializing in sport and exercise psychology will have particular competencies and thus the ability to practice with different populations within an

⁶⁷ Brown & Cogan, 2006

⁶⁸ APA, 2002, p. 5 as cited in Pauline et al., 2006

⁶⁹ Pauline et al., 2006

athletic realm.⁷⁰ The term “sport psychologist” is not a legally protected term in the sense that one is not licensed as a sport psychologist per se. To help identify competency and address the issue of clinicians referring to themselves as sport psychologists without proper training, the AASP established standards for Certified Consultants.⁷¹ AASP certification requires completion of coursework and practicum experience involving specific guidelines for students who desire to specialize in applied sport or exercise psychology.⁷² This involves taking additional courses in sport psychology, kinesiology, and often sports medicine. Furthermore, practicum experience should involve working in a sport psychology setting under the supervision of a certified consultant or, at a minimum, someone with extensive experience in sport psychology. These requirements are important but reflect only minimal foundational training.⁷³ Additionally, the APA’s Division 47 developed a sport psychology self-assessment checklist intended to assist practitioners in assessing their knowledge and skills in terms of proficiency criteria.⁷⁴ The checklist is comprised of three main areas: specialized knowledge, knowledge of persons and groups, and skills.⁷⁵

⁷⁰ Pauline et al., 2006

⁷¹ Brown & Cogan, 2006; Pauline et al., 2006

⁷² Sacks, Burke, & Schrader, 2001

⁷³ Brown & Cogan, 2006

⁷⁴ Fletcher & Maher, 2013

⁷⁵ APA, 2005 as cited in Fletcher & Maher, 2013

Despite efforts by the APA and AASP, the burden of proof of competence rests with the clinician.⁷⁶ In addition to formal coursework, practical experience (viz., internships and/or practicum) focused on the application of psychological principles, theories, and practices in the sport setting is also a necessity.⁷⁷ Further, a qualified specialist (e.g., licensed psychologist, licensed mental health practitioner, or certified consultant of AASP) within the field of sport psychology must provide supervision for aspiring sport psychology clinicians.⁷⁷ It is also prudent for the clinician to document any training or supervision through transcripts or other means of formal documentation.⁷⁸

Thus, although mental health clinicians may work with young athletes regularly, they must be aware of how they present and market their services to athletes and their families. In addition, as part of professional competence noted in the APA ethics code, a clinician should not to practice with or market oneself as having expertise with a particular population without the requisite supervised training and continuing education experience. It often may the case that mental health clinicians are sought out to work with young athletes struggling with psychological issues. Although it may be tempting to consider oneself competent when working with athletes due to past experience individually or professionally in athletics, it is expected that clinicians

⁷⁶ Brown & Cogan, 2006

⁷⁷ Pauline et al., 2006

⁷⁸ Brown & Cogan, 2006

practice within their scope of competence and in a way that is commensurate with their level of expertise. Thus, one shouldn't open a specialty practice or market oneself as having expertise in working with the psychological issues of young athletes if he or she hasn't had adequate training and experience working with that population. In the end, the professional should remember the general ethical principles, which state that the primary goal of treatment is to benefit the athlete, not the professional.⁷⁹

Conclusion

In summary, it is clear that professionals intervening with young athletes may face an assortment of potential ethical dilemmas. As developing fields such as sport psychology (and intervening with athletes psychotherapeutically) emerge, ethical situations are encountered that an existing ethics code may not adequately address.⁷⁹ The professionals who practice psychology with adolescent athletes often encounter difficult ethical situations. It is clear that behaving ethically may often require more than simply following the rules of the ethics code in a rote fashion.⁷⁹ The inherent complexities of delivering services to adolescent athletes and the uniqueness of each situation mean that approaches that may be helpful in a particular situation may be counterproductive in another situation.⁸⁰ For example, creating strict boundaries that exclude or limit involvement of an athlete's coaches or parents may be appropriate in some contexts (e.g. perhaps when parents or coaches are demanding unethical

⁷⁹ Whelan et al., 1994

⁸⁰ Aoyagi & Portenga, 2010

treatment) but hinder ethical treatment in others (e.g., when social support from parents and coaches may be necessary for the safety of the athlete). The application of existing ethical standards to clinicians intervening with athletes can be a challenging process. The professional must, nonetheless, seek to understand and apply the foundational principles of the existing ethics code until such time as specific standards are created that address the particular situations of concern to the professional.⁸¹

Resources.

To assist the mental health clinician working with young athletes, the foundational principles of the APA ethics code are the first consideration when facing an ethical dilemma. However, as noted above, many particular ethical situations may present themselves for psychologists working with young athletes. As a result of the evolving fields of sport and exercise psychology, the AASP developed an ethical code derived from the APA's (1992) ethics code, which has not been updated since its inception.⁸² However, the set of guidelines is an adequate starting point for clinicians seeking ethical guidelines (in addition to those set forth by the APA) when working with athletes.

In addition to the APA and the AASP, the American College of Sports Medicine (ACSM) is recognized by health professionals as a leading organization and authority

⁸¹ Aoyagi & Portenga, 2010

⁸² Pauline et al., 2006

on health and fitness.⁸³ The ACSM's primary focus is to advance health through science, medicine, and education.⁸³ The ACSM (2003) has established a code of ethical conduct for a variety of professionals in the field specific to treating athletes. Combined, the resources listed below provides guidelines that clinicians should be familiar with when working with young athletes. Additionally, each website listed below provide a variety of resources for professionals seeking additional information regarding intervening and consulting with athletes.

American Psychological Association Code of Ethics:

<http://www.apa.org/ethics/code/index.aspx>

Association for Applied Sport Psychology Home: <http://www.appliedsportpsych.org>

Association for Applied Sport Psychology Consultant Requirements:

<http://www.appliedsportpsych.org/certified-consultants/become-a-certified-consultant/>

Association for Applied Sport Psychology Code of Ethics:

<http://www.appliedsportpsych.org/about/ethics/ethics-code/>

American College of Sports Medicine: <http://www.acsm.org/>

Figure 3.09. Online resources

⁸³ Pauline, et al., 2006

References

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). doi:10.1176/appi.books.9780890423349
- American Psychological Association. (2002). *American Psychological Association ethical principles of psychologists and code of conduct*. Retrieved from <http://www.apa.org/ethics/code2002.html>
- American Psychological Association. (2003). Guidelines on multicultural education, training, research, practice and organizational change for psychologists. *American Psychologist, 58*, 377–402. Retrieved from <http://www.apa.org/pi/oema/resources/policy/multicultural-guideline.pdf>
- Aoyagi, M. W., & Portenga, S. T. (2010). The role of positive ethics and virtues in the context of sport and performance psychology service delivery. *Professional Psychology: Research and Practice, 41*(3), 253–259. doi:10.1037/a0019483
- Beck, J. S. (2011). *Cognitive behavior therapy: Basics and beyond* (2nd ed.). New York, NY: The Guilford Press.
- Behncke, L. (2004). Mental skills training for sports: A brief review. *Athletic Insight: The Online Journal of Sport Psychology, 6*(1), 1–19. Retrieved from <http://www.aist-pain.it/en/files/SPORTANDMENTALTRAINING/SkillsPDF.pdf>
- Bloodgood, B., Inokuchi, D., Shawver, W., Olson, K., Hoffman, R., Cohen, E., ... Muthuswamy, K. (2013). Exploration of awareness, knowledge, and perceptions

- of traumatic brain injury among American youth athletes and their parents. *The Journal of Adolescent Health*, 53(1), 34–9. doi:10.1016/j.jadohealth.2013.01.022
- Bois, J. E., Lalanne, J., & Delforge, C. (2009). The influence of parenting practices and parental presence on childrens' and adolescents' pre-competitive anxiety. *Journal of Sports Sciences*, 27(10), 995–1005. doi:10.1080/02640410903062001
- Brewer, B. W. (1999). Causal attribution dimensions and adjustment to sport injury. *Journal of Personal and Interpersonal Loss*, 4, 215-224.
doi:10.1080/10811449908409730
- Brewer, B. W. (2003). Developmental differences in psychological aspects of sport-injury rehabilitation. *Journal of Athletic Training*, 38, 152-153. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC164904/>
- Brewer, B. W. (2009). *Handbook of sports medicine and science*. Oxford, UK: Wiley-Blackwell. doi:10.1002/9780470698778
- Brewer, B. W. (2010). The role of psychological factors in sport injury rehabilitation. *International Review of Sport and Exercise Psychology*, 3, 40-61.
doi:10.1080/17509840903301207
- Brewer, B. W., & Cornelius, A. E. (2001). Norms and factorial invariance of the Athletic Identity Measurement Scale. *Academic Athletic Journal*, 15, 103–113.
- Brewer, B. W., Cornelius, A. E., Sklar, J. H., Van Raalte, J. L., Tennen, H., Armeli, S., Corsetti, J. R., & Brickner, J. C. (2007). Pain and negative mood during

rehabilitation after anterior cruciate ligament reconstruction: A daily process analysis. *Scandinavian Journal of Medicine and Science in Sports*, 17, 520-529.
doi:10.1111/j.1600-0838.2006.00601.x

Brewer, B. W., Van Raalte, J., & Linder, D. E. (1993). Athletic identity: Hercules' muscle or Achilles' heel? *International Journal of Sport Psychology*, 24, 237–254.

Retrieved from <http://psycnet.apa.org/psycinfo/1994-03969-001>

Brown, J. L., & Cogan, K. D. (2006). Ethical clinical practice and sport psychology: When two worlds collide. *Ethics & Behavior*, 16(1), 15–23.

doi:10.1207/s15327019eb1601_3

Burton, D., Gillham, A., Weinberg, R., & Weigand, D. (2008). Goal setting styles: Examining the role of personality factors on the goal practices of prospective olympic athletes. *Journal of Sport Behavior*, 36(1), 23–45. Retrieved from

<http://www.readperiodicals.com/201303/2890345131.html>

Butryn, T. M. (2009). (Re)examining whiteness in sport psychology through autonarrative excavation. *International Journal of Sport and Exercise Psychology*, 7, 323–341. Retrieved from

[http://www.thefreelibrary.com/\(Re\)examining+whiteness+in+sport+psychology+through+autonarrative...-a0216352302](http://www.thefreelibrary.com/(Re)examining+whiteness+in+sport+psychology+through+autonarrative...-a0216352302)

Cannella, S. (2008, October 6). Joe Maddon has a vision. *Sports Illustrated*, 109(13).

Retrieved from

<http://www.cnnsi.com/vault/article/magazine/MAG1145955/index.htm>

Carlstedt, R. A. (2013). *Evidence-based applied sport psychology: A practitioner's manual*. New York, NY: Springer Publishing.

Conroy, D. E. (2001). Progress in the development of a multidimensional measure of fear of failure: The Performance Failure Appraisal Inventory (PFAI). *Anxiety, Stress, and Coping: An International Journal*, 14, 431–452.

doi:10.1080/10615800108248365

Conroy, D. E., & Metzler, J. N. (2004). Patterns of self-talk associated with different types of competitive anxiety. *Journal of Sport & Exercise Psychology*, 26, 69–89.

Retrieved from <http://connection.ebscohost.com/c/articles/12482373/patterns-self-talk-associated-different-forms-competitive-anxiety>

Conroy, D. E., Willow, J. P., & Metzler, J. N. (2002). Multidimensional fear of failure measurement: The Performance Failure Appraisal Inventory. *Journal of Applied Sport Psychology*, 14, 76–90. doi:10.1080/10413200252907752

Crocker, P. R. E. (1992). Managing stress by competitive athletes: Ways of coping. *International Journal of Sport Psychology*, 23, 161–175.

Crocker, P. R. E., Alderman, R. B., & Smith, F. M. R. (1988). Cognitive-affective stress management training with high performance youth volleyball players: Effects on

- affect, cognition, and performance. *Journal of Sport & Exercise Psychology*, 10, 448–460. Retrieved from <http://psycnet.apa.org/psycinfo/1989-23318-001>
- Crocker, P. R. E., & Graham, T. R. (1995). Coping by competitive athletes with performance stress: Gender differences and relationships with affect. *The Sport Psychologist*, 9, 325–338.
- Cupal, D. D., & Brewer, B. W. (2001). Effects of relaxation and guided imagery on knee strength, reinjury anxiety, and pain following anterior cruciate ligament reconstruction. *Rehabilitation Psychology*, 46, 28-43. doi:10.1037/0090-5550.46.1.28
- Czarniak, L. (2014, December 22). Gronk. *ESPN The Magazine*, 17, 30-36. Retrieved from http://espn.go.com/nfl/story/_/id/11981326/patriots-rob-gronkowski-interview
- Dagrou, E., Gauvin, L., & Halliwell, W. (1992). Effets du langage positif, négatif, et neutre sur la performance motrice (Effects of positive, negative and neutral self-talk on motor performance). *Canadian Journal of Sport Sciences*, 17, 145-147.
- D'Andrea, M., & Daniels, J. (2001). RESPECTFUL counseling: An integrative model for counselors. In D. Pope-Davis & H. Coleman (Eds.), *The interface of class, culture and gender in counseling* (pp. 417-466). Thousand Oaks, CA: Sage.

Danish, S. J., & Nellen, V. C. (1997). New roles for sport psychologists: Teaching life skills through sport to at-risk youth. *Quest, 49*, 100–113.

doi:10.1080/00336297.1997.10484226

Danish, S. J., Petitpas, A. J., & Hale, B. D. (1992). A developmental-educational intervention model of sport psychology. *Sport Psychologist, 6*, 403–415.

Retrieved from <http://psycnet.apa.org/psycinfo/1993-19761-001>

Davis, P. A., & Sime, W. E. (2005). Toward a psychophysiology of performance: Sport psychology principles dealing with anxiety. *International Journal of Stress*

Management, 12(4), 363–378. doi:10.1037/1072-5245.12.4.363

Denny, K. G., & Steiner, H. (2009). External and internal factors influencing happiness in elite collegiate athletes. *Child Psychiatry and Human Development, 40*(1), 55–

72. doi:10.1007/s10578-008-0111-z

Desocio, J. E. (2005). Accessing self-development through narrative approaches in child and adolescent psychotherapy. *Journal of Child and Adolescent Psychiatric*

Nursing, 2, 53–61. doi:10.1111/j.1744-6171.2005.00012.x

Difiori, J. P., Benjamin, H. J., Brenner, J., Gregory, A., Jayanthi, N., Landry, G. L., & Luke, A. (2014). Overuse injuries and burnout in youth sports: A position

statement from the American Medical Society for Sports Medicine. *Clinical*

Journal of Sport Medicine, 24(1), 3–20. doi:10.1097/JSM.000000000000060

- Donaldson, S. J., & Ronan, K. R. (2006). The effects of sports participation on young adolescents' emotional well-being. *Adolescence*, 41(162), 369–389. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/16981623>
- Doran, G. T. (1981). There's a S.M.A.R.T. way to write management's goals and objectives. *Management Review*, 70(11), 35–36.
- Drehs, W. (2014, December 22). The Bitter End. *ESPN The Magazine*, 17, 30-36. Retrieved from <http://www.espnfc.us/team/united-states/660/blog/post/2181055/us-forward-landon-donovans-career-comes-to-a-bitter-end>
- Duda, J. L., & Allison, M. T. (1990). Cross-cultural analysis in exercise and sport psychology: A void in the field. *Journal of Sport & Exercise Psychology*, 12, 114–131.
- Dugdale, J. R., Eklund, R. C., & Gordon, S. (2002). Expected and unexpected stressors in major international competition: Appraisal, coping and performance. *The Sport Psychologist*, 16, 20-33.
- Eccles, J. S., Barber, B. L., Stone, M., & Hunt, J. (2003). Extracurricular activities and adolescent development. *Journal of Social Issues*, 59(4), 865–889. doi:10.1046/j.0022-4537.2003.00095.x
- Elias, M. J., Gara, M., Ubriaco, M., Rothman, P. A., Clabby, J. F., & Schuyler, T. (1986). Impact of a preventive social problem solving intervention on children's coping

- with middle-school stressors. *American Journal of Community Psychology*, 14, 259–275.
- Fisher, C. (2003). *Decoding the ethics code: A practical guide for psychologists*. Thousand Oaks, CA: Sage.
- Fisher, L. A., Butryn, T. M., & Roper, E. A. (2003). Diversifying (and politicizing) sport psychology through cultural studies: A promising perspective. *The Sport Psychologist*, 17, 391–405. Retrieved from <http://connection.ebscohost.com/c/articles/11647162/diversifying-politicizing-sport-psychology-through-cultural-studies-promising-perspective>
- Fletcher, D., & Maher, J. (2013). Toward a competency-based understanding of the training and development of applied sport psychologists. *Sport, Exercise, and Performance Psychology*, 2(4), 265–280. doi:10.1037/a0031976
- Forman S. (1993). *Coping skills for children and adolescents*. San Francisco, CA: Jossey-Bass.
- Forman, S., Linney, J., & Brondino, M. (1990). Effects of coping-skills training on adolescents at risk for substance abuse. *Psychology of Addictive Behaviors*, 4, 67–76.
- Fredricks, J., & Eccles, J. (2008). Participation in extracurricular activities in the middle school years: Are there developmental benefits for African American and

- European American youth? *Journal of Youth and Adolescence*, 37, 1029–1043.
doi:10.1007/s10964-008-9309-4
- Gammage, K. L., Hardy, J., & Hall, C. R. (2001). A description of self-talk in exercise. *Psychology of Sport and Exercise*, 2(4), 233–247. doi:10.1016/S1469-0292(01)00011-5
- Gardner, F. L., & Moore, Z. E. (2012). Mindfulness and acceptance models in sport psychology: A decade of basic and applied scientific advancements. *Canadian Psychology/Psychologie Canadienne*, 53(4), 309–318. doi:10.1037/a0030220
- Gaudreau, P., & Blondin, J. P. (2002). Development of a questionnaire for the assessment of coping strategies employed by athletes in competitive sport settings. *Psychology of Sport and Exercise*, 3(1), 1–34. doi:10.1016/S1469-0292(01)00017-6
- Gill, D. L. (2007). Gender and cultural diversity. In G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of Sport Psychology* (3rd Ed.) (pp. 823-844). Hoboken, NJ: John Wiley & Sons. doi:10.1002/9781118270011.ch13
- Gould, D., & Carson, S. (2008). Life skills development through sport: Current status and future directions. *International Review of Sport and Exercise Psychology*, 1(1), 58-78. doi:10.1080/17509840701834573

- Gould, D., Eklund, R. C., & Jackson, S. (1993). Coping strategies used by U.S. Olympic wrestlers. *Research Quarterly for Exercise and Sport*, 64, 83-93.
doi:10.1080/02701367.1993.10608782
- Gray, S. W. (1990). Effect of visuo-motor rehearsal with videotaped modeling on racquet ball performance of beginning players. *Perceptual and Motor Skills*, 70, 379-385. doi:10.2466/pms.1990.70.2.379
- Gray, S. W., & Fernandez, S. J. (1989). Effects of visuo-motor behavior rehearsal with videotaped modeling on basketball shooting performance. *Psychology: A Journal of Human Behavior*, 26, 41-47.
- Hardy, J. (2006). Speaking clearly: A critical review of the self-talk literature. *Psychology of Sport and Exercise*, 7(1), 81-97. Retrieved from
http://www.researchgate.net/profile/James_Hardy6/publication/222277408_Speaking_clearly_A_critical_review_of_the_self-talk_literature/links/53fc70c00cf2dca8ffff1fb2.pdf
- Hardy, J., Hall, C. R., & Alexander, M. R. (2001). Exploring self-talk and affective states in sport. *Journal of Sports Sciences*, 19(7), 469-475. Retrieved from
<http://www.ncbi.nlm.nih.gov/pubmed/11461050>
- Hardy, J., Hall, C. R., & Hardy, L. (2004). A note on athletes' use of self-talk. *Journal of Applied Sport Psychology*, 16(3), 251-257. doi:10.1080/10413200490498357

- Harmison, R. J. (2011). Peak performance in sport: Identifying ideal performance states and developing athletes' psychological skills. *Sport, Exercise, and Performance Psychology, 1*(S), 3–18. doi:10.1037/2157-3905.1.S.3
- Harper, S. R., Williams, C. D., & Blackman, H. W. (2013). *Black male student-athletes and racial inequities in NCAA Division I college sports*. Philadelphia, PA: University of Pennsylvania, Center for the Study of Race and Equity in Education.
- Hatzigeorgiadis, A., Zourbanos, N., Galanis, E., & Theodorakis, Y. (2011). Self-talk and sports performance: A meta-analysis. *Perspectives on Psychological Science, 6*(4), 348–356. doi:10.1177/1745691611413136
- Hays, K., Thomas, O., Maynard, I., & Butt, J. (2010). The role of confidence profiling in cognitive-behavioral interventions in sport. *The Sport Psychologist, 18*, 393–414. Retrieved from <http://www.cabdirect.org/abstracts/20103354657.html>
- Heird, E. B., & Steinfeldt, J. A. (2013). An interpersonal psychotherapy approach to counseling student athletes: Clinical implications of athletic identity. *Journal of College Counseling, 16*(2), 143–157. doi:10.1002/j.2161-1882.2013.00033.x
- High school sports participation continues upward climb. (2011, August 23). Retrieved from <http://www.nfhs.org/content.aspx?id=5752>
- Holmes, P. S., & Collins, D. J. (2001). The PETTLEP approach to motor imagery: A functional equivalence model for sport psychology. *Journal of Applied Sport Psychology, 13*, 60–83. doi:10.1080/10413200109339004

- Holt, N. L., Tamminen, K. A., Black, D. E., Sehn, Z. L., & Wall, M. P. (2007). Parental involvement in competitive youth sport settings. *Psychology of Sport and Exercise, 9*(5), 663–685. doi:10.1016/j.psychsport.2007.08.001
- Irick, E. (2011). *Student-Athlete participation: NCAA sports sponsorship and participation rates report*. Retrieved from [http://www.nwcaonline.com/nwcawebsite/docs/saving-wrestling-files/pdf-.pdf?sfvrsN = 0](http://www.nwcaonline.com/nwcawebsite/docs/saving-wrestling-files/pdf-.pdf?sfvrsN=0)
- Jones, L., & Stuth, G. (1997). The uses of mental imagery in athletics: An overview. *Applied and Preventive Psychology, 6*(2), 101–115. doi:10.1016/S0962-1849(05)80016-2
- Kabat-Zinn, J. (1994). *Wherever you go, there you are*. New York, NY: Hyperion.
- Kanters, M. A., & Casper, J. (2008). Supported or pressured? An examination of agreement among parents and children on parent's role in youth sports. *Journal of Sport Behavior, 31*(1), 64–81. Retrieved from <http://www.cabdirect.org/abstracts/20103087389.html>
- Kenny, D. T. (2005). A systematic review of treatments for music performance anxiety. *Anxiety, Stress & Coping, 18*(3), 183–208. doi:10.1080/10615800500167258
- Kirschenbaum, D. S., & Wittrock, D. A. (1984). Cognitive-behavioral interventions in sport: A self-regulatory perspective. In J. M. Silva & R. S. Weinberg (Eds.), *Psychological foundations of sport* (pp. 81-90), Champaign, IL: Human Kinetics.

Kline, W. H. (2009). How do adolescents leave psychotherapy? *Journal of Infant, Child, and Adolescent Psychotherapy*, 8(3-4), 169–180.

doi:10.1080/15289160903451351

Kudlackova, K., Eccles, D. W., & Dieffenbach, K. (2013). Use of relaxation skills in differentially skilled athletes. *Psychology of Sport and Exercise*, 14(4), 468–475.

doi:10.1016/j.psychsport.2013.01.007

Lapchick, R. (2013). The 2013 racial and gender report card: National Basketball Association. Retrieved from

http://www.tidesport.org/RGRC/2013/2013_NBA_RGRC.pdf

Lapchick, R. (2014). The 2014 racial and gender report card: National Football League.

Retrieved from

<http://www.tidesport.org/The%202014%20NFL%20Racial%20and%20Gender%20Report%20Card.pdf>

Lauer, L., Gould, D., Roman, N., & Pierce, M. (2010). Parental behaviors that affect junior tennis player development. *Psychology of Sport and Exercise*, 11(6), 487–

496. doi:10.1016/j.psychsport.2010.06.008

Levitt, S. D., & Dubner, S. J. (2014). *Think like a freak: The authors of freakonomics offer to retrain your brain*. New York, NY: William Morrow.

Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting and task performance*.

Englewood Cliffs, NJ: Prentice-Hall.

- Lohr, B. A., & Scogin, F. (1998). Effects of self-administered visuo-motor behavioural rehearsal on sport performance of collegiate athletes. *Journal of Sport Behaviour*, 21(2), 206-218. Retrieved from <http://crawl.prod.proquest.com.s3.amazonaws.com/fpcache/6aeaffc868bc675c89c02e6f52c4bab1.pdf?AWSAccessKeyId=AKIAJF7V7KNV2KKY2NUQ&Expires=1438465165&Signature=uhDSqHnnEOKwN%2B7knpn380T0Fjl%3D>
- Luiselli, J. K. (2012). Behavioral sport psychology consulting: A review of some practice concerns and recommendations. *Journal of Sport Psychology in Action*, 3(1), 41–51. doi:10.1080/21520704.2011.653048
- Madden, C. C., Kirkby, R. J., & McDonald, D. (1989). Coping styles of competitive middle distance runners. *International Journal of Sport Psychology*, 20, 287–296.
- Maddison, R., Prapavassis, H., Clatworthy, M., Hall, C., Foley, L., Harper, T., Cupal, D., & Brewer, B. (2012). Guided imagery to improve functional outcomes post-anterior cruciate ligament repair: Randomized-controlled pilot trial. *Scandinavian Journal of Medicine and Science in Sports*, 22, 816-821. doi:10.1111/j.1600-0838.2011.01325.x
- Manuel, J. C., Shilt, J. S., Curl, W. W., Smith, J. A, Durant, R. H., Lester, L., & Sinal, S. H. (2002). Coping with sports injuries: An examination of the adolescent athlete. *The Journal of Adolescent Health*, 31(5), 391–393. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/12401424>

Marks, D. R. (2008). The Buddha's extra scoop: Neural correlates of mindfulness and clinical sport psychology. *Journal of Clinical Sport Psychology, 2*, 216–241.

Retrieved from

<http://web.b.ebscohost.com.lib.pepperdine.edu/ehost/pdfviewer/pdfviewer?vid=32&sid=1e540856-beae-47d5-aa0a-c4395444ff7a%40sessionmgr113&hid=101>

Marks, D. R. (2011). The polyphonic self: Interactivism and the examination of culture in clinical sport psychology. *Journal of Clinical Sport Psychology, 5*, 295–310.

Retrieved from

<http://web.b.ebscohost.com.lib.pepperdine.edu/ehost/pdfviewer/pdfviewer?vid=50&sid=1e540856-beae-47d5-aa0a-c4395444ff7a%40sessionmgr113&hid=101>

Martin, A. J., & Marsh, H. W. (2003). Fear of failure: Friend or foe? *Australian Psychologist, 38*(1), 31–38. doi:10.1080/00050060310001706997

Martin, S. B., Thompson, C. L., & McKnight, J. (1998). An integrative psychoeducational approach to sport psychology consulting: A case study. *International Journal of Sport Psychology, 29*, 170–186.

Maynard, I. W., Smith, M. J., & Warwick-Evans, L. (1995). The effects of a cognitive intervention strategy on competitive state anxiety and performance in semiprofessional soccer players. *Journal of Sport & Exercise Psychology, 17*, 428–446.

- McArdle, S., & Moore, P. (2012). Applying evidence-based principles From CBT to sport psychology. *The Sport Psychologist, 26*, 299–310. Retrieved from http://www.americankinesiology.org/AcuCustom/Sitename/Documents/DocumentItem/08_TSP%2026-2_McArdle%20299-310.pdf
- McGregor, H. A., & Elliot, A. J. (2005). The shame of failure: Examining the link between fear of failure and shame. *Personality & Social Psychology Bulletin, 31*(2), 218–31. doi:10.1177/0146167204271420
- Moore, Z. E. (2009). Theoretical and empirical developments of the Mindfulness-Acceptance-Commitment (MAC) approach to performance enhancement. *Journal of Clinical Sports Psychology, 4*, 291–302. Retrieved from <http://xa.yimg.com/kq/groups/8446968/1567797681/name/Theoretical+and+Empirical+Developments.pdf>
- Moran, A. (2009). Cognitive psychology in sport: Progress and prospects. *Psychology of Sport and Exercise, 10*(4), 420–426. doi:10.1016/j.psychsport.2009.02.010
- Murphy, S. (1990). Models of imagery in sport psychology: A Review. *Journal of Mental Imagery, 14*, 153-172.
- Newton, M., Duda, J. L., & Yin, Z. (2000). Examination of the psychometric properties of the Perceived Motivational Climate in Sport Questionnaire-2 in a sample of female athletes. *Journal of Sport Sciences, 18*, 275-290. doi:10.1080/026404100365018

- Nicholls, A. R., & Polman, R. C. J. (2008). Think aloud: Acute stress and coping strategies during golf performances. *Anxiety, Stress, and Coping*, 21(3), 283–94. doi:10.1080/10615800701609207
- Noel, R. C. (1980). The effect of visuo-motor behavior rehearsal on tennis performance. *Journal of Sport Psychology*, 2, 221–227.
- Onestak, D. M. (1991). The effects of progressive relaxation, mental practice, and hypnosis on athletic performance: A review. *Journal of Sport Behavior*, 14(4), 247-282. Retrieved from <http://www.cabdirect.org/abstracts/19911898756.html>247-282.
- O'Rourke, D. J., Smith, R. E., Smoll, F. L., & Cumming, S. P. (2011). Trait anxiety in young athletes as a function of parental pressure and motivational climate: Is parental pressure always harmful? *Journal of Applied Sport Psychology*, 23(4), 398–412. doi:10.1080/10413200.2011.552089
- Parncutt, R., & McPherson, G. (2002). *The science and psychology of music performance: Creative strategies for teaching and learning*. New York, NY: Oxford University Press.
- Paul, M., & Garg, K. (2012). The effect of heart rate variability biofeedback on performance psychology of basketball players. *Applied Psychophysiology and Biofeedback*, 37(2), 131–144. doi:10.1007/s10484-012-9185-2

- Pauline, J. S., Pauline, G. A, Johnson, S. R., & Gamble, K. M. (2006). Ethical issues in exercise psychology. *Ethics & Behavior*, 16(1), 61–76.
doi:10.1207/s15327019eb1601_6
- Powell, D. H. (2004). Treating individuals with debilitating performance anxiety: An introduction. *Journal of Clinical Psychology*, 60(8), 801–808.
doi:10.1002/jclp.20038
- Prinz, R., Blechman, E., Dumas, J. (1994). An evaluation of peer coping-skills training for childhood aggression. *Clinical Child and Family Psychology Review*, 23, 193-203.
- Ross, M. J., & Berger, R. S. (1996). Effects of stress inoculation training on athletes' postsurgical pain and rehabilitation after orthopedic injury. *Journal of Consulting and Clinical Psychology*, 64(2), 406–410. doi:10.1037//0022-006X.64.2.406
- Rotella, R. J., Gansneder, B., Oljala, D., & Billings, J. (1980). Cognitions and coping strategies of elite skiers: An exploratory study of young developing athletes. *Journal of Sport Psychology*, 2, 350-354.
- Roth, A., & Fonagy, P. (2005). *What works for whom?* (2nd ed.). New York, NY: Guilford Press.
- Rumbold, J. L., Fletcher, D., & Daniels, K. (2011). A systematic review of stress management interventions with sport performers. *Sport, Exercise, and Performance Psychology*. doi:10.1037/a0026628

- Saban, N., & Curtis, B. (2007). *How Good Do You Want to Be? A Champion's Tips on How to Lead and Succeed at Work and in Life*. New York: Ballantine Books.
- Sacks, M., Burke, K., & Schrader, D. (Eds.). (2001). *Directory of graduate programs in applied sport psychology* (6th ed.). Morgantown, WV: Fitness Information Technology.
- Sagar, S. S., & Lavalley, D. (2010). The developmental origins of fear of failure in adolescent athletes: Examining parental practices. *Psychology of Sport and Exercise, 11*(3), 177–187. doi:10.1016/j.psychsport.2010.01.004
- Schwarz, A. (2008, August 9). Rays Maddon Puts Pieces Together. *The New York Times*. Retrieved from http://www.nytimes.com/2008/08/10/sports/baseball/10rays.html?_r=1&.
- Semple, B. D., Lee, S., Sadjadi, R., Fritz, N., Carlson, J., Griep, C., ... Noble-Haeusslein, L. J. (2015). Repetitive concussions in adolescent athletes – translating clinical and experimental research into perspectives on rehabilitation strategies. *Frontiers in Neurology, 6*, 1–16. doi:10.3389/fneur.2015.00069
- Singer, R. N. (1988). Strategies and metastrategies in learning and performing self-paced athletic skills. *Sport Psychologist, 2*, 49–68.
- Smith, R. E. (1979). A cognitive-affective approach to stress management training for athletics. In C. Nadeau, W. Halliwell, K. Newell, & G. Roberts (Eds.), *Psychology of motor behavior and sport* (pp. 54-72). Champaign, IL: Human Kinetics.

- Smith, R. E., Schutz, R. W., Smoll, F. L., & Ptacek, J. T. (1995). Development and validation of a multidimensional measure of sport-specific psychological skills: The athletic coping skills inventory. *Journal of Sport and Exercise Psychology, 17*, 379–398.
- Smith, R. E., & Smoll, F. L. (2007). Social-cognitive approach to coaching behaviors. In S. Jowett & D. Lavalley (Eds.), *Social psychology in sport* (pp. 75-90). Champaign, IL: Human Kinetics.
- Smith, R. E., Smoll, F. L., & Curtis, B. (1979). Coach effectiveness training: A cognitive behavioral approach to enhancing relationship skills in youth sport coaches. *Journal of Sport Psychology, 1*, 59-75.
- Smoll, F. L., & Smith, R. E. (2005). *Sports and your child: Developing champions in sports and in life* (2nd ed.). Palo Alto, CA: Warde.
- Smoll, F. L., & Smith, R. E. (2006). Enhancing coach-athlete relationships: Cognitive-behavioral principles and procedures. In J. Dosil (Ed.), *The sport psychologist's handbook: A guide for sport-specific performance enhancement* (pp. 19-37). Chichester, United Kingdom: Wiley.
- Smoll, F. L., & Smith, R. E. (2008). *Coaches who never lose: Making sure athletes win, no matter what the score*. (3rd ed.). Palo Alto, CA: Warde.
- Smoll, F. L., & Smith, R. E. (2009). *Mastery approach to coaching: A leadership guide for youth sports*. Seattle, WA: YESports.

- Smoll, F. L., Smith, R. E., & Cumming, S. P. (2007). Coaching behaviors, motivational climate, and young athletes' sport experiences. In C. E. Goncalves, S. P. Cumming, M. J. Coelho e Silva, & R. M. Malina (Eds.), *Sport and education* (pp. 165-175). Coimbra, Portugal: Coimbra University Press.
- Stainback, R. D., Moncier III, J. C., & Taylor, R. E. (2007). Sport Psychology: A Clinician's Perspective. In G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of sport psychology* (3rd Ed.) (pp. 310-331). Hoboken, NJ: John Wiley & Sons.
- Sue, D. W., & Sue, D. (2011). *Counseling the culturally diverse: Theory and practice*. Hoboken, NJ: Wiley.
- Suinn, R. M. (1972). Behavior rehearsal training for ski racers. *Behavior Therapy*, 3, 519.
- Suinn, R. M. (1976). Body thinking: Psychology for Olympic champs. *Psychology Today*, 10(2), 38-44.
- Suinn, R. M. (1986). *Seven Steps to Peak Performance*. Toronto: Hans Huber Publishing.
- Suinn, R. M. (1987). Behavioral approaches to stress management in sport. In J. R. May & M. J. Asken (Eds.), *Sport psychology: The psychological health of the athlete* (pp. 41-57). New York, NY: PMA
- Suinn, R. M. (2005). Behavioral intervention for stress management in sports. *International Journal of Stress Management*, 12(4), 343–362.
- doi:10.1037/1072-5245.12.4.343

Szabo, Z., & Marian, M. (2012). Stress inoculation training in adolescents: Classroom intervention benefits. *Journal of Cognitive and Behavioral Psychotherapies*, 12(2), 175–188. Retrieved from <https://www.questia.com/library/journal/1P3-2803130121/stress-inoculation-training-in-adolescents-classroom>

Tamminen, K. A., & Holt, N. L. (2012). Adolescent athletes' learning about coping and the roles of parents and coaches. *Psychology of Sport and Exercise*, 13(1), 69–79. doi:10.1016/j.psychsport.2011.07.006

Theodorakis, Y., Weinberg, R., Natsis, P., Douma, I., & Kazakas, P. (2000). The effects of motivational versus instructional self-talk on improving motor performance. *Sport Psychologist*, 14(3), 253-271. Retrieved from http://lab.pe.uth.gr/psych/images/stories/publications/Theodorakis_et_al_2000.pdf

Theokas, C. (2009). Youth sport participation--a view of the issues: Introduction to the special section. *Developmental Psychology*, 45(2), 303–306. doi:10.1037/a0015042

Tripp, D. A., Stanish, W., Ebel-Lam, A., Brewer, B. W., & Birchard, J. (2007). Fear of reinjury, negative affect, and catastrophizing predicting return to sport in recreational athletes with anterior cruciate ligament injuries at 1-year postsurgery. *Rehabilitation Psychology*, 52, 74-81. doi:10.1037/2157-3905.1.S.38

U.S. Census Bureau. (2000). *Profile of General Demographic Characteristics: 2000*.

Retrieved from <http://censtats.census.gov/data/US/01000.pdf>

U.S. Census Bureau. (2010). *Profile of general population and housing characteristics:*

2010. Retrieved from <http://factfinder2.census.gov/>

VandenBos, G. R. (2007). *APA dictionary of psychology*. Washington, DC: American Psychological Association.

Vealey, R. S. (2005). *Coaching for the inner edge*. Morgantown, WV: Fitness Information Technology.

Vealey, R. S. (2007) Mental Skills Training in Sport. In G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of Sport Psychology* (3rd Ed.) (pp. 287-309). Hoboken, NJ: John Wiley & Sons.

Vealey, R. S., & Greenleaf, C. A. (2009). Seeing is believing: Understanding and using imagery in sport. In J. M. Williams (Ed.), *Applied Sport Psychology: Personal Growth to Peak Performance* (6th Ed.) (pp. 306-348). Boston, MA: McGraw-Hill.

Velsor-Friedrich, B., Militello, L. K., Richards, M. H., Harrison, P. R., Gross, I. M., Romero, E., & Bryant, F. B. (2012). Effects of coping-skills training in low-income urban African-American adolescents with asthma. *The Journal of Asthma: Official Journal of the Association for the Care of Asthma*, 49(4), 372–379.
doi:10.3109/02770903.2012.660296

- Verducci, T. (2013, April 1). The Rays Way. *Sports Illustrated*, 118(14). Retrieved from <http://www.si.com/vault/2013/04/01/106303863/the-rays-way>
- Weinberg, R. (2010). Making goals effective: A primer for coaches. *Journal of Sport Psychology in Action*, 1(2), 57–65. doi:10.1080/21520704.2010.513411
- Weinberg, R., & Butt, J. (2005). Goal-setting in sport and exercise domains: The theory and practice of effective goal-setting. In D. Hackfort, J. Duda, & R. Lidor (Eds.), *Handbook of Research in Applied Sport Psychology* (pp. 129–146). Morgantown, WV: Fitness Information Technology.
- Weinberg, R. S. & Gould, D. (2010). *Foundations of Sport and Exercise Psychology* (5th Ed.). Champaign, IL: Human Kinetics.
- Weinberg, R. S., Seabourne, T. G., & Jackson, A. (1981). Effects of visuo-motor behaviour rehearsal, relaxation, and imagery on karate performance. *Journal of Sport Psychology*, 3, 228-238.
- Weinberg, R. S., Smith, J., Jackson, A., & Gould, D. (1984). Effect of association, dissociation, and positive self-talk strategies on endurance performance. *Canadian Journal of Applied Sport Sciences*, 9, 25–32.
- Whaley, A. L., & Davis, K. E. (2007). Cultural competence and evidence-based practice in mental health services: A complementary perspective. *The American Psychologist*, 62(6), 563–74. doi:10.1037/0003-066X.62.6.563

- Whelan, J., Meyers, A. W., & Elkin, T. D. (1994). Ethics in sport and exercise psychology. *Ethics*, 431–447.
- Winn, L. (2013, March 11). Deja U. *Sports Illustrated*, 118(11). Retrieved from <http://sportsillustrated.cnn.com/vault/article/magazine/MAG1207068/index.htm>
- White, M., & Epston, D. (1990). *Narrative means to therapeutic ends*. New York, NY: Norton.
- Zimmer-Gembeck, M. J., & Skinner, E. A. (2008). Adolescents coping with stress: Development and diversity. *Prevention Researcher*, 3–7. Retrieved from http://www.pdx.edu/sites/www.pdx.edu/psy/files/media_assets/7_Zimmer-Gembeck_Skinner_AdolCoping_PreventionResearcher.pdf