

SPORT AND PERFORMANCE PSYCHOLOGY IN SECONDARY EDUCATION

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Abstract

The mission of sport and performance psychology is to facilitate psychosomatic resolutions to help boost performance and well-being in those individuals who participate in sports. The incorporation of these performance-enhancing concepts in mental training is especially important for high school student-athletes with a negative mindset. Unfortunately, at the secondary level, there are a limited number of educational processes available which formally guide student-athletes through their psychological development in sport. As a result, many student-athletes are left without the mental skills needed to cope with the physical, psychological, and socioemotional demands of competition. The development of sport and performance psychology courses in schools could help facilitate positive improvements in how student-athletes think, act, and ultimately play, by merging the informal setting of extracurricular sports with the formal setting of the classroom. In this paper, we employ a mixed methods case study to demonstrate how a high school sport psychology class could impact the mindset of student-athletes. Course curriculum and pedagogy, grounded in a number of learning theories, was designed to utilize educational and psychological principles to create a course anchored in sport and performance psychology concepts. Specifically, this case study demonstrates course effectiveness at building mental skill through the cognitive-behavioral system of 'Event + Response = Outcome' in 14 different self-actualizing constructs like goal-setting, mental toughness, and leadership. We present our results on mental skill development and draw a number of conclusions alongside several recommendations for those wishing to incorporate an innovative sport psychology course at the secondary level.

Keywords: *Sport psychology, performance psychology, sports education, high school teaching, curriculum and pedagogy.*

1. Introduction

Sport psychology is an extremely young and evolving specialization within the broader field of psychology. Psychology is the scientific study of human behavior and mental processes and is one of the most popular courses to take at the high school and collegiate level. Within the lesser-known discipline of sport psychology, definitions are wide-ranging, diverse, and difficult to pinpoint. In general, sport psychology is a science in which principles of psychology are used within a sport or exercise setting (Cox, 2012, p. 4). According to the American Psychological Association (2019), "Sport psychology is a proficiency that uses psychological knowledge and skills to address optimal performance and well-being of athletes, developmental and social aspects of sport participation, and systemic issues associated with sport settings and organization."

Most high school student-athletes can benefit from learning about sport psychology and building mental skill in constructs like goal-setting, mental toughness, and leadership (Afremow, 2018). In fact, sport psychologists and mental coaches have been working on building mental skill with college, professional, and Olympic athletes for many decades now in order to improve their athletic performance and enhance their personal well-being (Weinberg & Gould, 2019). While sports are not always directly tied to secondary education in international schools, there is still a presumed relevance for all students who perform at a competitive level. In fact, many national and international research studies have confirmed the effectiveness of different sport psychology skills training programs for various audiences (Vealey, 2007). However, only a few research pioneers have argued for bringing sport psychology into the schools (Gilbert, 2017; Rockwood, 2011; Lamberth, 2007; Gilbert et al., 2006; Maher, 2005; Weissman, 2003; Lyons, 2001). This literature, however, does not adequately address how sport psychology could be implemented into the curriculum of secondary education to benefit the almost eight

million high school student-athletes who participate in high school sports in the United States (National Federation of State High Schools Association, 2018). The rest of the paper is organized to help the reader better understand this possibility of school sport psychology based on a case study of a Sport and Performance Psychology course being taught at a high school in the Midwestern United States.

2. Background

While there is a growing base of literature in the field of sport psychology, there is a limited amount of research covering its incorporation in schools and education. In fact, school sport psychology is especially limited at the high school level where sport psychology courses are taught in a limited manner across the United States. The rest of this section provides background information related to the use of sport psychology in the school setting.

Michael Weissman became what seems to be the original pioneer for truly bringing sport psychology into high school. First, Weissman's (2003) dissertation was centered on his experience as an in-district school psychologist developing a sport psychology program at his urban high school. This program was designed and implemented within case study methodology and specifically focused on three sports teams at a New Jersey public high school. To help address student-athlete needs on these teams, Weissman's (2003) program used individual and team educational sessions alongside on-site consultations to teach student-athletes mental skills like anxiety management, motivation, discipline, confidence, intensity, focus, composure, communication, teamwork, accountability, and goal-setting. While the provision of these sport psychology services were oftentimes limited by time constraints, the main finding of this study revealed that a school sport psychology program designed and implemented for high school student-athletes was, in fact, feasible and could address the needs of those student-athletes in a satisfactory way (Weissman, 2003).

Next, Lamberth's (2007) study built upon Weissman's (2003) work in the school sport psychology literature by also designing and implementing a sport psychology program for high school student-athletes at the secondary level. Using Prochaska and Velicer's (1997) Transtheoretical Model of Change as a theoretical guide, a case study approach was implemented to understand how to design and implement three distinct sport psychology programs for Highland Park High School's (New Jersey) football, basketball, and baseball teams during the 2005-2006 school year. During this time, Lamberth attempted to build mental skill through team psychoeducational sessions, individual player sessions, onsite player and coach consultation, and player and coach feedback sessions. At the conclusion of her study, Lamberth's three sport psychology programs were endorsed by all parties involved as individuals reported gaining benefits from their participation. Specifically, her program was deemed effective in addressing specific needs and equipping them with the mental skills necessary to manage themselves appropriately and optimally (Lamberth, 2007, p. 33).

While Weissman and Lamberth's dissertations were two of the first published accounts of sport psychology programming being taught to student-athletes in the high school setting, Jenelle Gilbert proved to be a mainstay researcher in the field of school sport psychology over the next decade. Gilbert's main focus was to teach sport psychology skills in a meaningful and practical way, and believed most athletes were not mentally prepared to train and compete. As a result, Gilbert et al. (2006) had graduate sport psychology students teach a 12-week sport psychology curriculum to high school student-athletes using her innovative UNIFORM approach and Game Plan Format. This curriculum was offered in 50-minute lessons, twice per week during 6th period 'Athletic PE' classes. The curriculum consisted of three 4-week units on the following mental skills: confidence, belief, and positive attitude; desire, visualization, and commitment; and competitive greatness and character development. While no formal data collection occurred, general feedback from all parties involved within the process confirmed that high school student-athletes could successfully learn and implement sport psychology skills through Gilbert's sport psychology program. This study was the one of the first studies to document sport psychology curriculum being taught to high school students as part of a separate academic course (Athletic PE). Since this groundbreaking study, Gilbert (2011) and Gilbert and Lewis (2013) have further validated this curricular and pedagogical approach while providing further evidence of sport psychology's utility in the classroom setting, with Gilbert, Moore-Reed, and Clifton (2017) concluding: "Regardless of the teaching organization, athletes can and should be taught to use sport psychology and life skills. Though there is not one "correct" way to do this, with its multimethod approach and sport-themed activities, the Psychological UNIFORM appears to be an effective vehicle to accomplish this task" (p. 98). Interestingly, however, despite these limitations noticed by Gilbert, little is mentioned within having this approach taught by teachers within an actual sport psychology course.

3. Significance and research question

The significance of the present study is that it aims to fill a gap in the literature by exploring the process behind designing and implementing an innovative Sport and Performance Psychology course at a high school in the Midwestern United States. Specifically, this study examined how to effectively teach a course that is predicated on building mental skill and helping students with the psychological side of the game. By introducing these mental skills into a sport psychology curriculum, the course aimed to inspire and ultimately equip student-athletes with the skills necessary to chase the best versions of themselves on and off the field. Unfortunately, sport psychology research with high school student-athletes is very limited. While the effectiveness of sport psychology programming with high school student-athletes has been researched, there has never been a case study of an actual Sport and Performance Psychology course. In this case, the course was offered as an elective class within the school’s educational curriculum, providing a rare opportunity to explore the effectiveness of a sport psychology classroom in-action. Additionally, because sport psychology is rarely taught at the secondary level, curriculum guidance is limited within what content to teach and how to effectively teach it. As a result, the present case study research strived to break new ground by capturing the effectiveness of one teaching approach for others to possibly consider when designing and implementing a sport psychology course in their school district. In the end, audiences interested in this research may include future sport psychology teachers, coaches, student-athletes, guidance counselors, athletic directors, school district administrators, and sport psychology consultants.

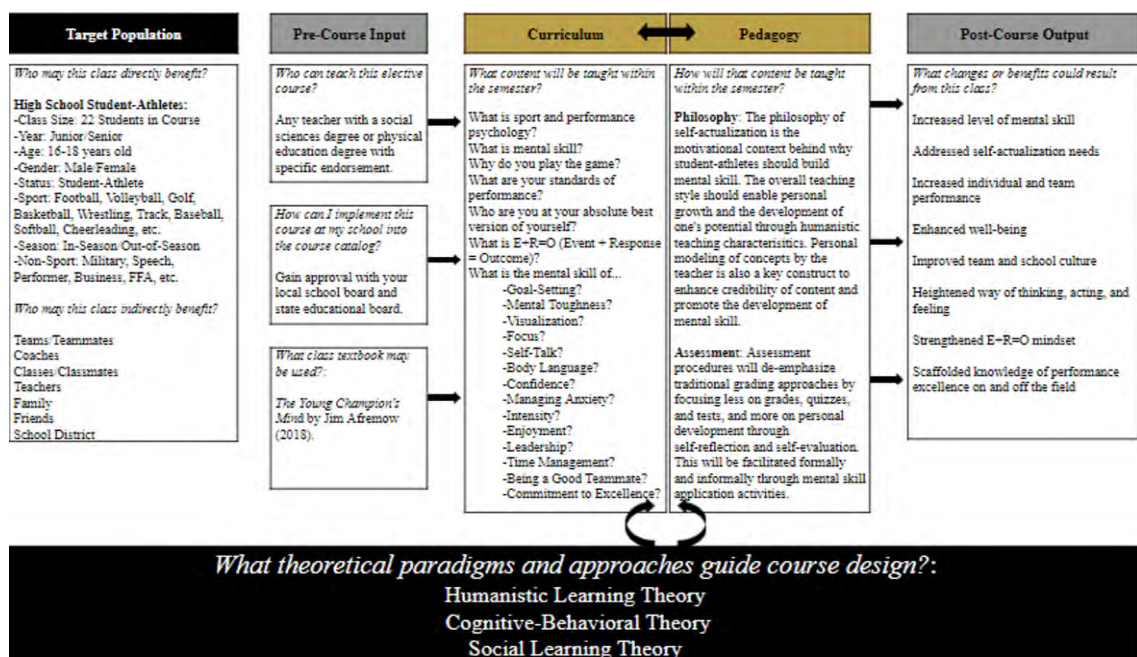
As a result, the following research question guided this case study exploration of a Sport and Performance Psychology course that was documented in this paper:

Research Question: To what extent could a Sport and Performance Psychology course be designed and implemented to build mental skill within high school student-athletes?

4. Theory

The proposed design theory utilized educational and psychological principles found within the literature to create a course anchored in mental skills related to sport and performance psychology. Specifically, humanistic learning theory was used as the main theoretical foundation for pedagogy and Maslow’s theory of self-actualization served as the central motivational tenet to inspire student-athletes to become the best version of themselves. Most importantly, cognitive-behavioral theory was used as the main underpinning for curriculum development as Event + Response = Outcome served as the primary cognitive-behavioral system to teach and apply sport and performance psychology concepts. To detail how course design theory translated to practice, a pre-course logic model was created to better illustrate how theory was transformed into practical application. This was illustrated in Figure 1.

Figure 1. Sport and Performance Psychology Course Logic Model (Rickels, 2021).



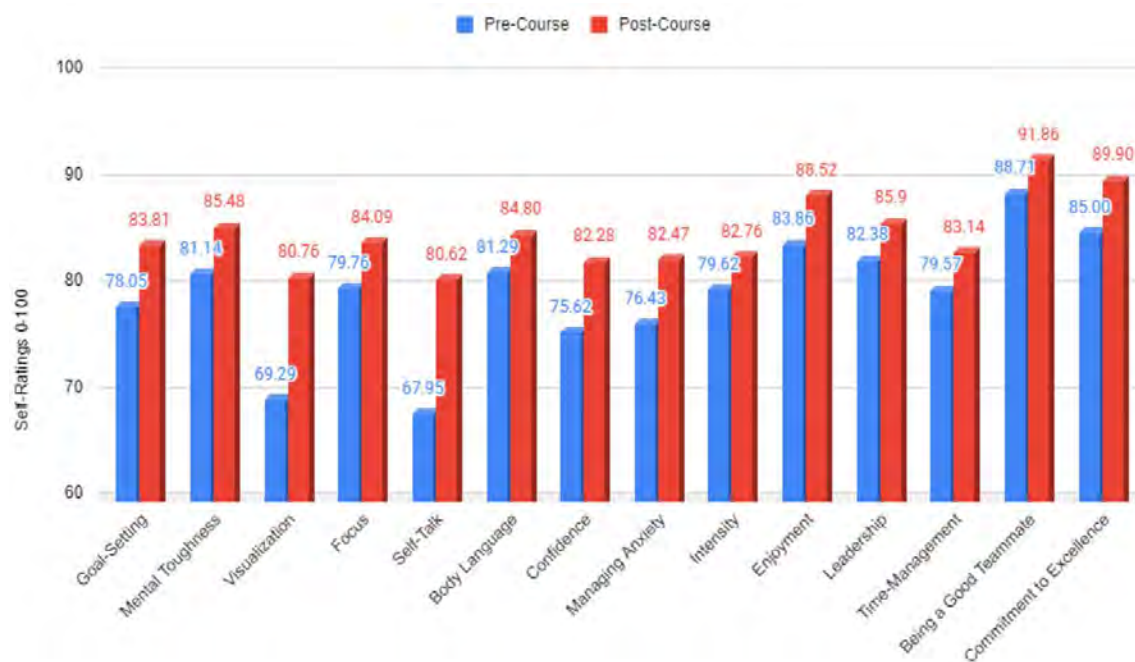
5. Methods

While physical skills in sport are external capabilities like speed, strength, and endurance, mental skills are internal psychological capabilities that contribute to success in sport, which can also be learned and improved with instruction and practice (Lesyk, 1998). As a result, case study methodology was utilized to examine the effectiveness of a semester-long elective class called *Sport and Performance Psychology* in building mental skill at a small public high school in the Midwestern United States from January 2021-May 2021. The 14 mental skills taught through the Event + Response = Outcome framework included the following: Goal-Setting, Mental Toughness, Visualization, Focus, Self-Talk, Body Language, Confidence, Managing Anxiety, Intensity, Employment, Leadership, Time-Management, Being a Good Teammate, and Commitment to Excellence. Evidence for mental skill development in 21 student-athletes was gathered using a mixed methods approach, as quantitative and qualitative data was collected through pre- and post-course surveys and participant interviews. Pre-course data included a baseline assessment of mental skill and a needs analysis. Post-course data collection included a final assessment of mental skill and participant feedback on course effectiveness.

6. Results and findings

After a thorough examination of the quantitative and qualitative data, the present study revealed substantial evidence that an effective sport psychology course could be designed and implemented at the high school level to build mental skill in high school student-athletes. When comparing the class average for pre-course mental skill to post-course mental skill, all 14 mental skills showed improvement (as illustrated in Figure 2), with an average increase of +5.56 per mental skill.

Figure 2. Side-by-Side Comparison of Mental Skill Level (Pre-Course and Post-Course).



At an individual level, student-athletes reported a positive change, on average, in 10 of their 14 mental skills (71%). This led to a measurable improvement in overall mindset for all 21 participants (100%), as determined by a participant's average self-rating for all 14 of their mental skills.

When participants were asked about effective curriculum and pedagogy, Event + Response = Outcome was commonly cited as an effective vehicle for learning, applying, and building mental skill. This mindset was overwhelmingly recognized by participants as "very helpful" and "a good framework to base every mental skill within." One of the student-athletes described it this way: "E+R=O can help anyone in any situation at any second of any day. It is literally the equation of life. You can never control the E, but you can sure as heck control the R, and how you respond with discipline or default, can shape or mold the O depending on how you respond to the E. It literally applies to every situation in life which is what I love so much about it."

7. Conclusion

Due to the fact that this was a single case study at a small public high school in the Midwestern United States, it is necessary for educators to understand the parameters of this case and determine for oneself how this paper may be relevant to their particular situation. From an educational perspective, sport psychology has not yet been established as a mainstream course within the United States' public school system; however, many believe it is only a matter of time before sport psychology programming is a normal part of the curriculum (Maher, 2005; Gilbert & Lewis, 2013; Gilbert et al., 2017). The present study contributes to the existing school sport psychology literature of Weissman (2003), Maher (2005), Lamberth (2007), and Gilbert (2011, 2017) and presents compelling evidence for sport psychology programming to take the shape of an educational sport psychology course designed and implemented to build mental skill in student-athletes. Overall, the findings of this paper suggested that a sport psychology course could be successfully designed and implemented at the high school level. Furthermore, an overwhelming majority of participants appreciated the course, quantitatively and qualitatively reporting a vast array of positive benefits from what they learned. Consequently, the rationale at the basis of this study was confirmed, as student-athletes reported improvements in athletic performance and well-being. As a result, we propose that sport psychology should be further integrated into secondary education, preferably through an actual school sport psychology course.

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