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Self-Perceived Leadership Behaviors Of Collegiate Athletic Trainers And Strength And Conditioning Coaches: A Case Study

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SELF-PERCEIVED LEADERSHIP BEHAVIORS OF COLLEGIATE ATHLETIC TRAINERS

AND STRENGTH AND CONDITIONING COACHES: A CASE STUDY

By

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BS (Colby-Sawyer College) 2008
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A DISSERTATION

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The College of Graduate and Professional Studies
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Date: ___December 1, 2021___

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Acknowledgments

The outcomes of this process are for my son, Jameson; to provide him inspiration, motivation, and future opportunity. I had hoped to have finished this process before he was born, however, being able to share the celebration with him will make it that much sweeter. Being your father is my life's greatest achievement. Thank you for perspective as I worked on this.

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Nothing is perfect. Everything grows. It's destined to change.

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Abstract

The purpose of the case study was to examine the self-perceived leadership characteristics, behaviors, and communication styles of professionals within the pillars of the high-performance sport model, specifically athletic trainers, and strength and conditioning coaches, to gain perspective on their ability to influence student-athletes and colleagues at the NCAA DIII level. A qualitative case study format allowed the researcher to engage with a small sample of participants and explore the differences and similarities between the participant groups. Participants were selected based on their primary job title and setting at over 80 institutions of higher education that participate in NCAA Division III institutions within the extended New England region. A total of 331 individuals were sent an electronic survey by email. Twelve participants (six athletic trainers, six strength and conditioning coaches) agreed to and completed a semi-structured, follow-up interview to gain perspective on their ability to influence student-athletes through their own displayed leadership. Interview audio was transcribed and analyzed through three levels of coding. Six themes were developed from the data analysis (caring/relationship, educate/teaching, culture, leadership, communication, conflict). The data revealed very few differences in the leadership perspective of the certified athletic trainers and strength and conditioning coaches that participated. Participants exhibited a lack of knowledge and experience when it came to leadership theory and leadership training in their professional careers while still aspiring to fulfill their professional obligations of mentoring younger and less experienced staff members. Further research should be conducted to establish a standard for leadership education, development, and implementation within the pillars of high-performance sport, specifically athletic training and strength and conditioning.

Keywords: high-performance, leadership, sport, student-athlete

CHAPTER ONE

INTRODUCTION

The fields of physical performance and rehabilitative medicine date back to ancient

times, where conflict and athletic competition were closely tied together (Nomikos et al., 2010).

Warriors, soldiers, and athletes alike required top physical conditioning to succeed in their

respective fields and thus sought every physical advantage possible over their respective

competition. For example, research from Losch et al. (2014) has suggested that Roman

Gladiators, dating back to the second and third century A.D., tailored their diet with mineral

supplementation and specific hydration to enhance recovery after training. While the

opportunistic nature of seeking advantage to succeed is not exclusive to athletics, the fields of

physical performance and rehabilitative medicine have continued to evolve since the beginnings

of Galen, the first "doctor to the gladiators" (Scarborough, 1971, p. 100). Accordingly, these

fields experienced change through the growth of technology and research (Dijkstra & Pollock,

2014). Significant conceptualizations of this field suggest that understanding athletes' physical,

emotional, and psychological demands are crucial to their success and change how they are

supported by professional staff (Bishop, 2008; McLean, 2018). The ways in which the athletes'

health, safety, wellness, and overall development are managed and delivered is unique in the 21st

century at each level of competition and call for continued research into this important area of

academic study (Sotiriadou & De Bosscher, 2018).

The *high-performance* sport management model is a catch-all term that demonstrates the

hierarchy of vast resources of support available within competitive athletic organizations, which

has been reported to be a billion-dollar industry (Sotiriadou & De Bosscher, 2018). This model

encompasses the fields of sports medicine, athletic training, strength and conditioning, nutrition,

mental training, sport psychology, sleep, analytics, organizational management, and other examples of restorative medicine and measurables (Smith & Smolianov, 2016). When performance management is directed specifically to sport, the model of high-performance sport management has developed from two ideals: economic/political success and player health and safety (Kim & Trail, 2010; Smith & Smolianov, 2016). This model is strongly based on the high-performance model, which was developed and first utilized in the business realm (Smith & Smolianov, 2016). Badau et al. (2010) discussed performance management as "one of the most important and positive developments in the sphere of human resource management in recent years" (p. 83). Badau et al. (2010) also emphasized the "sustained success from an important strategic process of developing the performance and the capabilities of the individual contribution" to the team (p. 83). The structure of athletic performance is important to its delivery, and the positive impact it can provide stretches from each individual to the entire organization. To further understand how the performance model relates specifically to sport, it is important to identify the origin of the model.

Several years prior to the implementation of the mass-production assembly line by Henry Ford, industry required a management model that would support the calls by President Roosevelt for the conservation of national resources and the increase of national efficiency (Salimath & Jones, 2011). In his work, *The Principles of Scientific Management*, Taylor (1911) explained how the use of the scientific method would optimize manufacturing performance. Production was increased by allowing laborers to focus on their specialized task rather than the entire start to finish fabrication process. The result of this application of scientific management strategies then helped to narrow the vocational focus for each individual laborer thus yielding more productive output from each factory (Salimath & Jones, 2011). When this same theory is applied to athletic

performance, that is, when each individual field or pillar is able to focus on their specialization, the high-performance sport model likewise structures each field or pillar of athletic performance individually but focuses their progress in a system-based approach (Young, 2015). Badau et al. (2010) noted that:

> Performance management in sport activities cannot be accomplished without the use of scientific methods and techniques, which can ensure the knowing and the efficient application of objective economical laws, efficient and rational resource administration, stimulation and creativity use of sport instructor-managers, proper evaluation of results, decision making optimization and of all management functions, technical, economical, social-political and human dimensions integration for sportive structures (p. 90).

The structure of such a model, which follows the scientific method, allows for the knowledge, skills, and abilities of professionals employed in each pillar to be unique but also focused on the end goal (Smolianov & Zakus, 2006).

In the 1950s, several decades after F. W. Taylor's publication, athletic success in many countries, but in particular those with socialist political organizations, was used to push a diplomatic agenda and to serve as a global source of recognition (Riordan, 1977; Smolianov & Zakus, 2006; Sotiriadou & De Bosscher, 2018). To boost both international and Olympic presence and results, several countries developed national sporting federations to provide athletes with the very best services that the country had to offer. By the 1980s, the traditional model of high-performance sport appeared in the West and offered athletes access to a team of specialists focused on their overall health, wellness, and performance. Sotiriadou and De Bosscher (2018) explained that the high-performance model in sport could be viewed as the top end in sport development. This model is utilized heavily in Europe, especially in the English

Premier League, but has received little attention or study across all levels of sport in the United States (Smith & Smolianov, 2016).

While the concepts leading to the high-performance sport model began in the 1950s, the subfields within the model have seen continual evolution and developments inside of the established pillars of the high-performance (Smolianov & Zakus, 2006). Between how injuries are treated, the key role that nutrition and sleep play both before and after an injury has occurred, and how performance professionals provide leadership to student-athletes and colleagues, the high-performance sport model continues to evolve through continued research (Smith & Smolianov, 2015). Many of the fields that establish the pillars of the high-performance model of sport can often be found housed within a collegiate athletics department at least to some degree in the present day, especially at the National Collegiate Athletic Association (NCAA) Division I level, where resources for student-athletes are much more prevalent (Smith & Smolianov, 2015). However, regardless of the amount and type of resources, the use of the high-performance sport model within the United States is small compared to Europe (Smith & Smolianov, 2016). Smith and Smolianov (2016) further posit that the methodology of performance management within sport is evolving internationally, yet the use of the model continues to be low in the US collegiate setting.

In light of this, Gillett (2014) suggested that a trickle-down effect would occur once professional organizations within the United States start to incorporate this structure which would "catapult" the high-performance management of sport methodology into the collegiate ranks. His theory was established through his experience working with his club, West Bromwich Albion Football Club of the English football league system, because the club was unable to buy the best (i.e., most expensive) players and they were unable to keep the younger players whom

they worked to develop with the intention of selling their rights for revenue. As a result, they had to adopt the high-performance structure to keep the players that they did have healthy, and could afford, competing at a high level. A benefit that Gillett (2014) discovered from the high-performance structure was that it ultimately allowed the sport coaching staff more time to spend on the technical aspect of development rather than on other decisions impacting the club like whether to fly or drive to the next match, pre-game meal timing, and other logistical issues. Those decisions could be left up to the high-performance sport staff, who could formulate decisions based on best practices and data.

While implementation of the high-performance sport model was first recognized in collegiate athletics by Smith and Smolianov (2015), it is not currently a commonly practiced supervisory chain of command model in the collegiate athletic setting (Smith & Smolianov, 2016; Sausaman & Goodin, 2016). At the time of this study, the National Athletic Trainers' Association (NATA) acknowledges that several different supervisory models are in use within collegiate athletics but supports the use of such a model where independent medical care for student-athletes is "patient-centered," meaning that services are rendered based on the patient's needs and concerns and not on external factors (e.g. return to play, monetary value, winning) (Courson et al., 2014, p.129). Nonetheless, the high-performance model should be recognized as an essential piece of growth for the welfare of student-athletes because it is known that healthy, successful athletic programs are linked to the overall success of an institution (Benedict & Keteyian, 2014).

Through the coordination of efforts by professionals in the fields of athletic performance, the development of a cultural shift to this model will result in a better environment for student-athletes health and wellness (Sausaman & Goodin, 2016). This change will increase the

continuity of performance staff, the professional development of staff members, communication between staff and outside staff, and ultimately allow student-athletes to operate with optimal health, preparation, and performance to achieve academic and athletic success (Smith & Smolianov, 2016). Arnold and Fletcher (2015), Smith and Smolianov (2016), and Sotiriadou and De Bosscher (2018) explained how the assignment of a high-performance manager (HPM) could allow for more synergy between professionals within the organizational pillars. Smolianov and Zakus (2006) point out the importance of "both sport management and coaching management knowledge, skills, and abilities (KSAs)" (p. 39) within the scope of a high-performance manager of sport. Smith & Smolianov (2016) further investigated the KSAs and found that *coaching* was an important attribute of a successful HPM, creating a better environment for employees and athletes. These coaching behaviors related to not only physical development training advice but also to "full support covering all aspects of life" (p. 11). It is of note that the professionals involved within the high-performance sport model often serve in roles far beyond what their job descriptions require. These professionals develop a relationship with these student-athletes, which exhibits mutual care, respect, and trust (Grant & Hartley, 2013; Magnusen, 2010).

These findings highlight the ability of a professional employed within the high-performance model to connect with an athlete, going beyond just sport development but into fostering their overall well-being as a person. Regardless of whether the high-performance sport model is adopted or not, the emphasis on communication, competent leadership, and oversight of the health and wellness of collegiate student-athletes is paramount (Sausaman & Goodin, 2016). Professionals who work within the pillars of high-performance sport must demonstrate an eagerness to improve their knowledge and develop their leadership abilities in efforts to champion student-athlete health and wellness (Voight et al., 2017).

Statement of the Problem

The absence of appropriate leadership, communication, and synergy between professionals within the high-performance sport model (e.g. sports medicine, strength and conditioning, nutrition, sport psychology) can result in poor physical results of athletes due to a lack of nurturing (Sotiriadou & De Bosscher, 2018). Dijkstra et al. (2014) expressed that professionals operating in a health system that was not integrated lacked effective communication and operated independently of each other. Similarly, the departmental hierarchy of many collegiate athletics departments does not reflect these cooperative goals. In order to appropriately support the overall well-being of the student-athlete, it is imperative that collegiate athletics personnel have clear and descriptive expectations set before them to motivate their practice (Doherty & Danylchuk, 1996). Managing the health and welfare of hundreds of athletes is complex, and all groups involved must improve their practice and should be guided by the same goals (Badau et al., 2010).   Furthermore, the development of team culture is often driven by the head sport coach and team captains (Kao & Cheng, 2005). However, high-performance sport support staff like athletic trainers and strength and conditioning coaches are able to spend more time with student-athletes than sport coaches, depending upon the level (National Collegiate Athletic Association, 2018).

By examining the leadership and communication styles of the professionals involved in the fields within the high-performance model, and of those departments that have already adopted the model's reporting structure, the results of this study aimed to create insight into the leadership practices of professionals from two pillars of high-performance sport. This has provided a better understanding of how leadership can be developed and delivered to create best practices for model implementation and interdepartmental cooperation. The results of this study

focused on the impact that the leadership of athletic trainers and strength and conditioning coaches have on student-athletes.

Purpose of the Study

The purpose of this qualitative case study was to investigate the self-perceived leadership characteristics, behaviors, and communication styles of professionals within two pillars of the high-performance sport model to gain perspective on their ability to influence student-athletes. This research is being conducted by the researcher as part of a larger research strategic plan to determine the best way to establish and integrate the fields of athletic performance together at the collegiate level and inform the respective governing bodies. This study investigated practices of leadership utilized in the athletic healthcare and performance model and further developed the value of this model. The goal of this study was to adopt and increase the use of transformational leadership of the staff and promote interdepartmental cooperation between staff to succeed in the collective goal of healthier, more efficient, and successful staff members and student-athletes.

Research Questions

The following research questions were investigated and were used to guide the research performed through a qualitative case study:

RQ$_1$: What characteristics and behaviors do athletic trainers and strength and conditioning coaches possess and utilize that they believe make them a qualified leader for the student-athlete populations with whom they work?

RQ$_2$: What are the similarities and differences, if any, between the leadership characteristics and behaviors of athletic trainers and strength and conditioning coaches at the NCAA Division III level?

RQ₃: What factors impact communication between professionals in the performance model

fields and between professionals and the student-athlete populations with whom they

work?

Conceptual Framework

This study was based on the conceptual framework that characterizes leaders as those

deeply concerned with the needs and wants of their followers, a concept found in Burns (1978).

The conceptual framework was used to drive the research based on concepts within the current

research field surrounding themes, particularly for this study, of leadership. Acquired data on the

types of leadership and communication strategies expected and practiced by those in the field

helped to narrow the focus of athletic performance programs and allowed for better adherence to

best practices in the respective professions. Bandura (1994) pointed out, "people with high

assurance in their capabilities approach difficult tasks as challenges to be mastered rather than as

threats to be avoided" (p. 71). By establishing the impact that athletic trainers and strength and

conditioning coaches have on their colleagues and the student-athletes that they work with, this

study examined the areas in which leadership techniques can be improved via the high-

performance sport model.

As Burns (1978) found, a leader must value the wants and needs of their followers.

Additionally, Burns explained that the transformational aspect of leadership must demonstrate

that efforts between leaders and followers are made to elevate each separate party to change the

organizational culture. Bass and Riggio (2014) added to this idea by noting that employees who

feel that their leaders operate in a transformational fashion are higher performing and are more

satisfied in their position. This study intended to investigate the partnership between

performance model staff to show how collective efforts can strengthen the personal and

professional environment in athletic healthcare and performance. At the time of this writing, few studies had documented high-performance model professional leadership and communication styles (Laurent & Bradney, 2007; Szedlak et al., 2015; Yates, 2013). This current study helped fill a significant gap in the research, as little to no extended research on the leadership styles of any performance model field staff has been conducted in the recent past. Additionally, no research has actively compared the leadership and communication styles of both athletic trainers and strength and conditioning coaches.

Laurent and Bradney (2007) concluded that leadership, specifically transformative leadership, is an important area of study for athletic trainers because of their influence on the student-athletes they work with on a continual basis. According to Brooks et al. (2000, p. 490), a majority of strength and conditioning coaches utilized a similar "democratic" leadership style, which creates an atmosphere of growth for both parties involved. Additional research presented by Brooks et al. (2000) and Laurent & Bradney (2007) noted how both athletic trainers and strength and conditioning coaches can use strong leadership techniques in their roles with both colleagues and student-athletes. To influence change in an organization, proper leadership and communication are necessary. Illustrated by the movement of larger institutions and professional organizations to the performance model (as detailed by Gillett (2014)) and the accompanying leadership framework, change is necessary throughout collegiate athletics to implement this model in efforts to advance the care provided to student-athletes (Smith & Smolianov, 2015). Thus, a deeper understanding of the components of this model, as well as methods for widespread application on a practical level, warrant further exploration. As Fullan (2001, p. 78) describes, it is important to foster the "social context" insofar as the implementation of the model because making the "why" understood to those in the relationship will increase the "degree of

commitment" both leaders and followers have to the change. This change needs to be further broadcast, understood, and developed across the collegiate landscape to foster this "social context" as Fullan (2001) described; for the model to be better implemented as solid practice.

Assumptions, Limitations, and Scope of the Study

Limitations within quantitative research are variables that were not able to be controlled by the researcher and may influence the outcome of the study. As this research was a qualitative study, there was no necessity to control or study possible variables. The nature of studying working professionals led to the inability to conduct research within a controlled setting. As a result, discussing potential limitations upfront allowed the research to be devised in a way so as to control as many as possible and establish parameters for the study. The lack of previous research and lack of comparison of leadership abilities between fields of the athletic performance model limits this study because it did not provide any basis to study change over time. However, this lack of previous research did provide the potential for a much larger scope for these results and may increase the potential implications of the results of this study on the field. The study was limited by the number of participants and their personal bias, such as their personal belief in their leadership, their feelings about their own profession, and the impact that they believe they have on those who they work with. The sample was limited by the constraints of the bounded groups in the research. Without a brick-and-mortar site, the study was limited by geographical region and athletic level to provide a snapshot of one area of the leadership spectrum within high-performance sport.

Assumptions within research can be difficult to realize because of beliefs, knowledge, and/or unintentional bias by the researcher. The role of stipulating assumptions in this research allowed the researcher to better understand the participant selection and data collection process

(Walters, 2001). This level of understanding provided the research with the most honest and pure data from the participants. Assumptions included that the participants completed the survey and the interview to the best of their ability. It was also assumed that the data collected was truthful and forthright. The researcher assumed that the participants did not have any motives other than sharing their experiences regarding leadership in their field.

Significance

The findings of this research helps professionals within the field of high-performance sport as well as student-athletes gather tactics and combat the challenges that may arise when trying to develop the performance model in smaller collegiate settings where resources are less than that of larger institutions and other professional organizations (Won & Chelladurai, 2016). In promoting leadership and congruence with these performance professionals, the ultimate goal of helping student-athletes to be healthier, safer, and more robust, both mentally and physically, will be achieved. This is important for the athletic success of student-athletes because many high school and college students will possess a different occupation than "professional athlete". Performance professionals will have more experience and support in their positions, allowing them to better influence the overall health and wellness of the student-athletes. More involved professionals will put in place the building blocks for successful student-athletes, even beyond sport, and align with the mission of the NCAA by creating more well-rounded individuals (National Collegiate Athletic Association, 2017).

Definition of Terms

Analytics: A collection of relevant, historical, statistics that when properly applied can provide a competitive advantage to a team or individual (Shahzeb, 2017).

Certified athletic trainer (ATC): A highly qualified, multi-skilled health care professional who collaborates with physicians to provide preventative services, emergency care, clinical diagnosis, therapeutic intervention, and rehabilitation of injuries and medical conditions. Athletic trainers work under the direction of a physician as delineated in state licensure statutes (National Athletic Trainers Association, 2021).

High-performance sport model: A multi-disciplinary approach to supporting the health, wellness, and performance of student-athletes. Fields/pillars within this model include but are not limited to: Athletic training, sports medicine, strength and conditioning, nutrition, sport psychology, analytics, exercise science/biomechanics, sleep (Sausaman & Goodin, 2016; Smith & Smolianov, 2016).

National Collegiate Athletic Association (NCAA): A member-led organization dedicated to the well-being and lifelong success of college athletes (National Collegiate Athletic Association, 2018).

Sport coach: An individual who instructs players, especially in the fundamentals of a sport/activity, and directs team strategy (Merriam-Webster, n.d.).

Sports medicine: A field of medicine concerned with the prevention and treatment of injuries and disorders that are related to participation in those that are physically active, specifically sport or athletic competition (Merriam-Webster, n.d.).

Strength training: A method of improving muscular strength by gradually increasing the ability to resist force through the use of free weights, machines, or the person's own body weight. Strength training sessions are designed to impose increasingly greater resistance, which in turn stimulates the development of muscle strength to the added demand (Mosby, 2021).

Student-athlete: A person enrolled in an institution of higher education that currently participates in an NCAA sanctioned event/sport under the supervision of an institutional member and utilizes services provided by the institution to benefit their performance in said event/sport (National Collegiate Athletic Association, 2018).

Conclusion

The importance of leadership and communication cannot be overstated in the fields of athletic training and strength and conditioning, as well as within the entire high-performance sport model (Dijkstra et al., 2014; Fletcher & Arnold, 2011). These behaviors are crucial to the proper functioning of all fields, businesses, and interactions, including those that were presented in this study between athletic performance personnel. To support the student-athletes that these high-performance personnel are tasked with caring for, they must establish clear lines of communication and demonstrate effective leadership. Kotter (1996) points to the importance of stamping out complacency and raising awareness surrounding this issue to create change. The efforts behind this research provided more information for the betterment of leadership within the pillars of the high-performance sport model.

The professionals within the pillars of high-performance sport hold a great responsibility in the success of the student-athlete, similar to that of a sport coach (Brooks et al., 2000; Gilbert & Baldis, 2014; Misasi et al., 2016; Pido, 2014; Szedlak et al., 2015). Without proper communication from coaches/staff, continual professional development, and appropriate leadership, the student-athletes are at a disadvantage performance-wise and at an increased risk of injury (Szedlak et al., 2015). The future of these fields and that of the student-athletes' health and success depends on the development and practice of appropriate leadership and communication between these groups of professionals.

CHAPTER TWO

LITERATURE REVIEW

The current scholarly literature relevant to athletic training, strength and conditioning, and leadership is segmented and does not establish any comparison between the two fields, even while compared to other medical professionals (Laurent & Bradney, 2007). The field of research displays investigations of leadership in sport, specifically among athletic performance support staff such as athletic trainers and strength and conditioning coaches but does not exclusively compare the leadership styles of these two groups (Brooks et al., 2000; Doherty & Danylchuk, 1996; Yates, 2013). The initial approaches to the field in the existing body of research include reflective leadership behaviors of athletic performance staff members and personality traits of the personnel, as well as the perceptions of these leaders by student-athletes themselves (Arthur et al., 2017; Beam, 2001; Becker, 2009; Cummins et al., 2018; Ignacio III et al., 2017; Magnusen, 2010). The objective of this literature review was to detail the athletic performance model that is prevalent in many professional and collegiate athletic organizations and to demonstrate what past and current literature show about the leadership styles and behaviors of those who work to support student-athletes in this domain, like athletic trainers and strength and conditioning coaches. This review provided information on the importance of displayed leadership from professionals in the high-performance sport model.

Student-athletes are allowed to spend more time with support staff in the fields of athletic performance than what is permitted with their respective sport coaching staff, mainly due to NCAA rules governing what is known as *countable hours* (National Collegiate Athletic Association, 2018). As referenced in Figure 2.1, certain "athletically related activities" are

counted towards the 20 hours per week in-season that student-athletes are allowed to take part.

The leadership styles of athletic

Figure 2.1

NCAA Bylaw 17.02.1.1 Athletically Related Activities

Bylaw 17.02.1.1

17.02.1.1 Athletically Related Activities. The following are considered athletically related activities: *(Adopted: 1/10/91 effective 8/1/92)*

(a) Practice, which is defined as any meeting, activity or instruction involving sports-related information and having an athletics purpose, held for one or more student-athletes at the direction of, or supervised by, any member or members of an institution's coaching staff. Practice is considered to have occurred if one or more coaches and one or more student-athletes engage in any of the following activities:

(1) Field, floor or on-court activity;

(2) Setting up offensive or defensive alignment;

(3) Chalk talk;

(4) Lecture on or discussion of strategy related to the sport;

(5) Activities using equipment related to the sport;

(6) Discussions or review of game films, motion pictures or videotapes related to the sport; or *(Revised: 10/17/06)*

(7) Any other athletically related activity. *(Revised: 10/18/04)*

(b) Competition;

(c) Required weight-training and conditioning activities held at the direction of or supervised by an institutional staff member;

(d) Participation in a physical-fitness class (including a summer class) conducted by a member of the athletics staff not listed in the institution's catalog and not open to all students. Such a class may not include practice activities conducted under the guise of physical education class work; *(Adopted: 1/10/95, Revised: 10/17/06)*

(e) Required participation in camps, clinics or workshops;

(f) Individual workouts required or supervised by a member of the coaching staff. An institutional staff member may design a voluntary (see Bylaw 17.02.14) individual-workout program for a student-athlete, but cannot conduct the individual's workout outside the declared playing season; *(Adopted: 1/10/91 effective 8/1/91, Revised: 1/12/04, 1/17/09)*

(g) On-court or on-field activities called by any member(s) of a team and confined primarily to members of that team that are considered requisite for participation in that sport (e.g., captain's practices);

(h) Visiting the competition site in cross country, golf and skiing; *(Adopted: 1/16/93)*

(i) Reservation or use of an institution's athletics facilities when such activities are supervised by or held at the direction of any member of an institution's coaching staff; *(Revised: 1/10/92, 1/16/93)*

(j) Involvement of an institution's strength and conditioning staff with enrolled student-athletes in required conditioning programs; and *(Revised: 1/10/92, 10/17/06)*

(k) Observation by an institution's coaching staff member of enrolled student-athletes in nonorganized sport-specific activities (e.g., "pick-up games") in the coaching staff member's sport, except as permitted in Bylaw 17.02.1.1.1-(k). *(Adopted: 1/10/05, Revised: 10/17/06, 1/16/10, 7/20/10)*

performance support staff members are essential to understand because of the additional impact

they may have on student-athletes and what leadership the student-athletes receive from their

sport coaches (Misasi et al., 2016; Morin & Kwasnowski, 2016).

Involvement of an institution's strength and conditioning staff with student-athletes in

voluntary strength and conditioning programs and medical examinations or treatments (e.g.,

physical rehabilitation, treatment by athletic training personnel) are not considered athletically

related activities and therefore are not counted towards the in-season limit of 20 hours per week.

It is also important to recognize the similarities and differences in leadership behavior of professionals in these fields because they have the ability to impact and interact with student-athletes in different capacities than sport coaches (Pido, 2014; Riemer & Chelladurai, 1995; Sharma, 2015). As discussed previously, these professionals have the ability to interact with student-athletes more frequently, for more time, and develop different professional types of relationships than those which a student-athlete may have with a sport coach. While no one particular leadership style was discovered to be superlative in general, it is critical to measure and compare the leadership styles and behaviors of the athletic performance support staff to provide a clear, unified message to the student-athletes (Beam, 2001). Furthermore, it is significant to establish which leadership styles are more prevalent in members of particular fields of that athletic performance model, insofar as it will allow a better understanding of the identity of leadership within these fields. Breaking down the research history of different types of leadership (transformational, transactional, and servant) that are prevalent in the fields related to performance provides insight and a baseline to what has been studied in the past (Charbonneau et al., 2001; Doherty & Danylchuk, 1996; Rieke et al., 2008; Yates, 2013). The literature review examined how certain types of leadership are developed through education in these fields. Knowing how these types of leadership are developed in each field will allow practitioners to reinforce the types of leadership that are perceived as most effective. Staff members and coaches will then be able to develop an understanding of the differences and similarities between leadership styles of athletic trainers and strength and conditioning coaches and inform their practice based on research outcomes.

Coaching and working with student-athletes in a challenging environment while pushing them to excel requires coaches to establish a relationship of trust, understanding, and acceptance

(Nazarudin et al., 2009). The relationship between two individuals, such as a coach and student-athlete, who are like-minded and possess the same goal is a close partnership where each individual complements the other through a commitment to the goal and a belief in cooperation (Jowett & Poczwardowski, 2007). Professionals in the fields of athletic training and strength and conditioning assume the roles and the great responsibilities of developing the whole student-athlete (Brooks et al., 2000; Gilbert & Baldis, 2014; Misasi et al., 2016; Pido, 2014; Szedlak et al, 2015). Thus, this group of people is tasked with serving as confident and close advisors to these student-athletes while safely pushing them to their physical and mental limits in efforts to help them surpass their goals. Along these lines, Fransen et al. (2017) studied the importance of perceived athlete leadership on team effectiveness. Their research found that by using a sense of shared leadership among the team members, coaches and staff could help create an optimal team environment.

Since the work of Case (1987), followed closely by Doherty and Danylchuk (1996), leadership skills and displayed behaviors of athletic personnel have been closely studied. Their findings supported the continued study of leadership in athletic personnel because they found varying leadership styles correlated with success rates of coaches. Furthermore, a great interest in the leadership styles and behaviors of athletic performance support staff currently exists, specifically pertaining to strength and conditioning coaches (Bartholomew, 2017, Szedlak et al., 2015, Voight, 2016). The NCAA stipulates that student-athletes are only permitted participation in *countable athletic-related activities* for four hours per day, and not to exceed 20 hours of contact per week, during the competitive in-season. While in-season, required strength and conditioning sessions do count toward this total. However, treatment, recovery, and rehabilitation with the athletic training staff are not time-restrictive and can occur as often and as

frequently as necessary. Furthermore, during the non-competitive season, strength and conditioning personnel are able to interact with the student-athletes on an unlimited basis, as long as the contact is initiated by and voluntary on the part of the student-athlete (National Collegiate Athletic Association, 2018). Based on the quantity of time that they are allowed to work with the student-athletes, it appears that the opportunity for student-athletes to be impacted by the leadership of the members of the athletic performance support staff would be increased. In a study by Radcliffe et al. (2016), the strength and conditioning coaches, who served as participants, were found to be able to provide emotional support to student-athletes, act as a sounding board, promote team dynamics, and serve as mentors. The impact that members of the athletic performance support staff can have on student-athletes even outside of their perceived job duties is vital to their success.

History of the Performance Field

The field of athletic performance is ever-evolving and has changed tremendously, even in just the past twenty years (Dijkstra & Pollock, 2014). These changes have evolved from years of academic study and are rooted in scientific data of the following: cross-disciplinary staff collaboration, programming and load patterns that are movement/individual specific to assist in preventing injuries, the way that injuries are treated after occurring, the key role that nutrition and sleep play before and after an injury has occurred, training the mind for peak performance, and how performance professionals provide leadership to student-athletes and colleagues (Brooks et al., 2000; Dijkstra et al., 2014; Radcliffe et al., 2016).

As it continues to evolve today, the athletic performance model extends to include support staff members in sports medicine, athletic training, strength and conditioning, nutrition and hydration, mental training, sport psychology, sleep hygiene, analytics, and other

measurables. Through all of the advances in technology and education, the most important feature of the fields falling underneath the athletic performance umbrella must be the support of the health and welfare of the athlete/patient. Each sector of this model must continue to advance itself while enhancing the others in an effort to support the overall health and safety of the student-athlete and contribute to a positive increase in their performance attributes (Sotiriadou & De Bosscher, 2018; Smolianov & Zakus, 2006; Smith & Smolianov, 2016; Young, 2015). Sausaman and Goodin (2016) explained how many large colleges and universities in the United States and many professional sport organizations have displayed the importance of overall athletic development. This importance has been shown through the positioning of a high-performance manager (HPM), monetary investments in the athletic performance model, and the implementation of additional support staff. Professionals who work in these fields must demonstrate an eagerness to improve their knowledge and provide leadership to develop others in the ultimate effort to support student-athletes in their ventures of achievement.

Leadership and Leadership Development

Transformational Leadership

 Leadership is a difficult ideal to define as it can be interpreted in many different ways depending upon the reader and the context of the situation. Burns (1978) discussed the importance of leadership and connecting with one's followers to demonstrate efforts towards achieving their wants and needs. Developed by Burns and furthered by the work of Bass and Riggio (2014), transformational (also referred to as transformative) leadership establishes a leader who seeks to develop leadership skills in the group of their followers as a priority. As the leader balances the goals of the organization and the wants/needs of their followers, they can demonstrate the value of each follower in this equation. Burns (1978) continued to display the importance of

transformational leadership by writing that this relationship "engages" a leader and follower(s) to "raise one another to higher levels of motivation and morality" (p. 20). Conclusions of why transformational leadership is important to the impact that athletic trainers and strength and conditioning coaches have on student-athletes were further defined by Bass and Riggio (2014). Their writings state that transformational leaders "motivate others to do more than they originally intended and often even more than they thought possible" (p. 4). Empowering followers and paying attention to their individual wants and needs creates an environment for shared progress and inspired commitment towards the goal.

Followers in this relationship are challenged to be more innovative problem solvers and develop better leadership abilities through coaching, mentoring, and support (Burns, 1978; Bass & Riggio, 2014). The study authored by Arthur et al. (2017) represents the most current research on transformative leadership in sport and is used as a guideline for how the study of this type of leadership will continue to evolve. In their work, Arthur et al. (2017) found that while transformational leadership does exhibit flaws in how it is studied in athletics, it still offers a relevant framework. The authors emphasized that future research in the field of athletics should require additional study of transformational leadership in particular.

The importance of the use of multiple leadership tactics and evaluation from multiple perspectives was concluded by Arthur & Lynn (2017):

> It appears that transformational leadership theory offers a sound theoretical platform to build on for future coaching-related research. Transformational leadership offers much promise with regard to exploring the inspirational effects of great coaches and thus can inform the best coaching practice which will help develop better coaches. However, the sole adoption of transformational leadership theory and/or the sole adoption of follower

perspective are not recommended, just as the sole adoption of observational approaches

is not recommended. A balanced approach that adopts multiple perspectives would seem

to offer the optimum way forward to coaching-related research. (p. 195)

This research shows that, as a coach, one single type of leadership should not be utilized

because each student-athlete will require different needs and certain circumstances may call for

the use of different types. Smith and Moore (2019) established the understanding that while each

sport team has a limited number of formal leadership roles (coach, captain, upperclassmen), the

whole team does possess a countless number of rotating leadership roles and practice

opportunities for student-athletes. This research found that by providing opportunities for

student-athletes to practice leadership, especially within the strength and conditioning setting,

these developed traits will translate into better team cohesion and performance during sport

competition.

Transactional Leadership

Burns (1978) also suggested that most relationships between leader and follower are

typically transactional, and Northouse (2013) further suggests that this style is where the bulk of

leadership models stem from. These types of relationships are fostered through leaders working

with followers in exchange of rewards/payment for services, such as additional vacation time for

exceeding sales quota. This leadership style establishes both sides of the relationship as

necessary and worthy of their end goal. Some difficulty can come from the overuse of this type

of leadership or the use of this leadership style in the wrong setting because transactional

leadership does not "bind" the leader and follower together "in a mutual and continuing pursuit

of a higher purpose" (Burns, 1978, p. 20). Bass (1990) offered a take on this leadership style as a

"prescription for mediocrity" (pp. 20-21). The follower, in this transactional relationship, works

only hard enough to achieve their reward. For example, if leaders set expectations too high with unattainable rewards to boost productivity, followers may become frustrated and produce the opposite outcome of what the leader was attempting to achieve. Doherty & Danylchuk (1996) focused their research on both transformational and transactional leadership in interuniversity athletics management, finding that transactional leadership relationships were more scarce in this environment than in business, industry, and some community settings (e.g. school and police hierarchy). The researchers concluded that transactional leadership was not more prevalent in the athletic realm because of the autonomy that most coaches and support staff have to complete their job responsibilities without the need for further external motivation.

Servant Leadership

Greenleaf (1970) initially used the phrase "servant leadership" in an essay describing the difference between leaders and servants. In servant leadership, the leader is perceived as someone who is attempting to gain power and material possessions while the servant leader is truly helping others, making sure that other people's highest priority needs are being served. In an example using a candle flame, the leader works to make their flame the largest and the brightest while the servant leader looks to share and spread their flame with others. Greenleaf (2002) discussed the necessity of each role of leader and follower in the relationship going so far as to state that "these two roles be fused in one real person" (p. 21). According to Northouse (2013), servant leaders, somewhat unlike transformational leaders, do not account for their own self-interests within the leader-follower relationship and additionally emphasize follower development. Most notably, Northouse (2013) treated servant leadership as a behavior rather than a trait.

Rieke et al. (2008) cited that servant leadership in athletics exploits the trust, inclusion, humility, and service principles that Greenleaf (2002) first set. Their research found that high-school basketball student-athletes preferred servant-leader coaching styles over more traditional types of leadership. They concluded that the servant leader style might be more effective than others in an athletics setting. Hammermeister et al. (2008) have concluded that many authors of research on servant leadership in sport have called for more qualitative study of the topic. Research from Schary (2019) recently stated that servant leadership styles are best suited to promote the overall well-being of the student-athlete. Durden (2016) pointed to the importance placed on the individuals within the organization as the leading power of servant leadership and a significant factor for why it has such a practical application within athletics.

Trait, Skill, and Style Approach to Leadership

It is difficult to ascertain where the concept of leadership comes from, whether innate or learned. While leadership development has been heavily studied, especially in athletics (Navarro & Malvaso, 2015; Voight, 2014), Northouse (2013) summarized the trait approach of leadership theory as the belief that some are born with special traits and characteristics that allow them to be great leaders. Northouse (2013) established the standard for five leadership traits, through empirical research, that are central to the field of research surrounding trait approach: intelligence, self-confidence, determination, integrity, and sociability. Additionally, Northouse (2013) provides personality factors as major contributions to effective leadership, such as neuroticism, extraversion, openness, agreeable, and conscientiousness. The last portion of the trait approach relates to the importance of emotional intelligence in leadership potential.

Beyond the research written on the trait approach, the development of leadership through the skills approach continues to be heavily researched (Bass, 1990). With this approach, there is

a careful distinction between styles that can be made as "skills are what leaders can accomplish, whereas traits are who leaders are" (Northouse, 2013, p. 44). Technical skill, human skill, and conceptual skill are necessary at various levels depending upon the level of management. Leadership development, which was detailed previously in this literature review, can help increase the prevalence and level of these skills in leaders.

Since the late 2000s, researchers began to explore whether leadership can be developed in an individual or whether specific innate characteristics must be present (Avolio et al., 2009). The review performed by Avolio et al. (2009) studied several types of leadership and concluded that leadership is and will continue to evolve. The attempt to develop leadership as a tangible practice will continue, especially through seminars and online services. Finally, considering the relationship between leader and follower, more attention has recently shifted to the latter relational partner as particularly salient in evaluating the effectiveness of leadership skills and practice. For example, one of the more important points advocating for the use of transformation leadership comes from the research of Shamir (2007), who directly connects the effectiveness of a leader to the effectiveness and success of the followers. Support, acceptance, values, attitudes, and confidence are characteristics that are now known to be evaluated and examined by both leaders and followers of their counterparts. These characteristics played a significant role in the behaviors of each party.

Caldwell et al. (2012) developed a new model of transformative leadership that showed that when leaders act with virtue and with their followers in mind, higher customer satisfaction and lower turnover were found. In the current research project, the stakeholders should be viewed as the student-athletes, as they are the group that will benefit the most from the appropriate leadership of the athletic performance support staff being studied. Caldwell et al.

(2012) explained that in order to produce higher profits, it is essential that leaders are perceived as dedicated to their organization and who put their organization's needs before their self-interests. While the current research study will only be measuring self-perception of leadership behaviors, future research should be performed on the perception of leadership by the student-athletes. Chan's (2010) doctoral dissertation revealed an important piece surrounding the use of self-perceived leadership behaviors. They found that those who had served in a leadership role did not consider self-reflection an important quality necessary for strong leadership. Conversely, the group from Chan's research that held little to no leadership experience did consider self-reflection as a technique to improve one's leadership skills. This dramatic difference points to a lack of knowledge regarding leadership development tactics, even to those that serve in leadership roles.

High-Performance Model Leadership

The body of research shows that leadership behaviors among sport coaches and those who interact with athletes have been studied at length (Becker, 2009; Brooks et al., 2000; Dale & Weinberg, 1989; Ignacio III et al., 2017; Pido, 2014). Additional research was conducted as to how to develop leadership in our student-athletes (Navarro & Malvaso, 2015). Charbonneau et al. (2001) asserted that athletes might not benefit from a leader's vision because athletes are already aware of the purpose of winning. However, more recent research by Voight et al. (2017) on the leadership techniques and practices in elite collegiate strength and conditioning reported that leadership was integral to the team's success. This research speaks to the innate motivational and leadership traits that some possess in order to perform internally.

Leadership in Sport Coaches

To understand how the needs of student-athletes are typically met, evaluation of the head sport coach's role must be performed specifically to differentiate from that of the athletic trainers and strength and conditioning coaches. Head sport coaches have traditionally assumed the leadership role for student-athletes. Research from Trikojus (2003) found that the root word 'coche' (French)/'kotsche' (German), where 'coach' is derived, originally meant to physically carry, as in a carriage. 'Coach' was later adopted as slang in Oxford during the early 1800s to define a means to transform or carry a person through a difficult task, such as that of an academic examination. The head sport coach can assume the role of many things depending on the perspective of the player, but the coach typically is able to focus the goals of the collective team, appropriately motivate the individual athletes, and demonstrate the skills and tactics necessary to accomplish these goals successfully (Amorose & Horn, 2000). Smith & Smoll (2017) stated that the sport coach plays a significant role in shaping the overall athlete experience. Misasi et al. (2016) further acknowledged through their research that coaches directly impact athletes in different ways, though the level of that impact is often unknown without the complete understanding of the coach's self-perception and without the athlete's review of the coach.

Great examples of head sport coaches are often synonymous with outstanding leadership. In the public consciousness, names of coaches like Lombardi, Wooden, and Summit, are each widely believed to be exemplary representatives of such a leader. While a coach is often said to maintain a leadership role because of the power and authority they hold in the relationship they have with student-athletes, not all power wielders serve as true leaders. Occupying a position of power does not always equal leadership in the coaching realm as well. Good leadership is a necessary portion of good coaching in sport (Cummins et al., 2018). As such, Misasi et al.

(2016) noted that a distinct difference between an effective coach and a successful coach does exist. A successful coach may not truly impact their players, thus not serving as a leader but rather just be serving in a power role.

Bass (1985) applied the theory of transformational leadership to organizational psychology. Yet, Arthur and Lynn (2017) have pointed out that transformational leadership is fairly new in its incorporation into sport despite a growing amount of research on the topic. Arthur and Lynn (2017) continued to discuss the implications for further research between transformational leadership and sport coaching. They noted that the previous research has relied solely on reports of their coaches by athletes. While this research study will solely focus on the self-perception of athletic trainers and strength and conditioning coaches, it should be noted that future research on this topic from the student-athletes' perspective should be compared with the current findings.

Servant leadership in sport coaching has also been revealed as a trending topic according to the research of Rieke et al. (2008). While few studies on the topic specific to sport have been completed, Rieke et al. (2008) concluded, from the perspective of student-athletes, that sport coaches who exhibited more characteristics of servant leadership had stronger "potential to influence the emotional, social, and moral development of young sport performers" (p. 186). Jenkins (2014) revealed that John Wooden, UCLA men's basketball coaching pioneer, utilized many concepts later described by Greenleaf (1970) as "servant leadership." Leadership studied in and exhibited by sport coaches can take many forms, has been well researched, and can often be found as the source of leadership in sport research.

Leadership in Strength and Conditioning

Strength and conditioning personnel at the NCAA level are certified fitness specialists who utilize their knowledge and their motivational skills to help improve student-athletes' overall well-being and athletic performance. The value of a qualified leader as an NCAA institution's strength and conditioning coach was recently quantified in that five individuals that solely support Division I Football Bowl Subdivision programs have eclipsed the $400,000 base annual salary mark. This figure does not include bonuses, endorsements, and other work-related earnings. In the arms race that is NCAA athletics, good leadership is hard to find and even harder to keep. The rise of the strength and conditioning coach has been slow to this point since its inception in collegiate football in the 1960s at the University of Nebraska (Massey et al., 2009). Sausaman and Goodin (2016) pointed to a growing divide between athletic administrators and practicing athletic performance professionals stemming from the reporting structure of most athletic departments, whereas athletic directors typically do not have the appropriate credentials to appropriately evaluate high-performance sport professionals. Many university presidents and athletic directors have begun to understand the value that athletic performance support staff members provide in terms of knowledge, character, and leadership to their institutions (Myerberg et al. 2016; Winkler, 2013).

Motivating others takes a general sense of trust, care, and commitment (Heavey et al., 2011). Studies by Becker (2009) and Szedlak et al. (2015) found that it was important to student-athletes that their strength and conditioning coaches made connections with them rather than merely imparting knowledge onto them. Szedlak et al. (2015) found that "trust, respect, role modeling, authenticity, motivation, and inspiration" (p. 968) were held in higher regard to student-athletes than "instruction, technical knowledge and feedback" (p. 967). These findings

suggest something important about the specific relationship between strength and conditioning coaches and the students with whom they work. Namely, that their assumed knowledge base takes a backseat to the more impactful relational dynamics that can be cultivated between the two. Brooks et al. (2000) surmised that regardless of the exact title of the strength and conditioning coach (e.g. assistant, associate, head), leadership behaviors did not vary significantly. This finding is important to the body of knowledge because it demonstrates that members of the athletic performance support staff at any ranking can all serve as leaders.

As leaders practice transformative properties with the wants and needs of their followers in mind, the benefits are not only perceived by the followers. Massey et al. (2009) found that 88.89 percent of participant strength and conditioning coaches surveyed felt that they made a positive contribution to their team's overall success. Furthermore, greater than 95 percent of participants in the same study felt satisfaction stemming from the relationship they shared with their student-athletes. These findings demonstrate the reciprocal nature of leadership performed by strength and conditioning coaches. The results of Massey et al. (2009) differed from the work of Sartore-Baldwin (2013) wherein one hundred twenty-five Division I strength and conditioning coaches were counted as participants and completed an online survey tool. The most pertinent finding was that many strength and conditioning coaches "struggled with their role in each athlete's life," mainly attributing this professional hardship to being "unsure as to how much of a role (sport) coaches wanted them to play" (p. 835). Without effective communication denoting pointed emphasis from the sport coaches, this organizational struggle for role determinacy may negatively impact high-performance staff and student-athletes.

There are many factors that contribute to biases of how others perceive leadership in the field of athletics. According to Shuman & Appleby (2016) who focused on the Division I level

only, student-athletes, regardless of gender, displayed more compliance and perceived higher levels of motivation from male strength and conditioning coaches in comparison to working with female strength and conditioning coaches. Magnusen and Rhea (2009) further explored this gender divide. In the 476 Division I student-athletes surveyed, most men reported negative attitudes towards female strength and conditioning coaches. Additionally, males preferred to work with male strength and conditioning coaches because they were more apt to buy in and felt more motivated (p. 1088). These findings differed from the study previously conducted by Beam (2001), which found in both Divisions I and II student-athletes that type of leadership behavior exhibited by the coaching staff to the student-athletes was a more important variable than the preference of the coach based on gender. Powers (2008) found that female strength and conditioning coaches, on average, possessed more degrees and more certifications than their male counterparts. The research on gender preference of strength and conditioning coaches has not yet been performed at the Division III level, where athletic resources are not typically as readily available compared to Division I institutions. No such research has been conducted on the gender preference of athletic trainers and related comfort among student-athletes, which creates a strong reason for the current study to be performed in comparison.

Leadership in Athletic Trainers

Athletic trainers are "highly qualified, multi-skilled health care professionals who collaborate with physicians to provide preventative services, emergency care, clinical diagnosis, therapeutic intervention and rehabilitation of injuries and medical conditions" (National Athletic Trainers Association, 2021). According to Yates (2013), transformational leadership is the most popular type of leadership amongst athletic trainers sampled. The study conducted by Kutz and Mensch (2008) found several overarching themes tied to quality leadership in athletic training:

initiative, strategic thinking, and people skills and communication. As a vital member of the athletic performance support staff, athletic trainers must understand the role that they play in the development of the student-athletes and the effects of how student-athletes perceive their leadership, given the stress and known high rate of burnout in the profession (Laurent & Bradney, 2007).

The study by Laurent and Bradney (2007) has served as the cornerstone of research in the field of athletic training leadership. Over 500 athletic training leaders (both head athletic trainers and athletic training education program directors) were surveyed using the *Leadership Practices Inventory* from Posner and Kouzes (1990). The findings showed that leadership could and should be studied to further our understanding and development of the process. This study contradicted the work of Chan (2010) where leadership behaviors were demonstrated as learned and experiential. Reflection on these experiences helped to reinforce the behaviors among the athletic training leaders. Experience was not correlated with the learned behaviors or self-reflection in this study. Kutz and Doherty-Restrepo (2017) pointed out that the body of research within athletic training education leadership has validated 49 different leadership characteristics that athletic trainers possess with regard to their interaction with students. Research on the leadership of athletic trainers within the clinical education setting and their impact on athletic training education program students is more prevalent than on the leadership outcomes of athletic trainers on student-athletes (Durst, 2016; Kutz, 2012; Odai & Doherty-Restrepo, 2013; Sauer, 2013).

Athletic trainers serve as the primary health care providers for many collegiate student-athletes through their day-to-day physical pursuits. With the rising prevalence of mental health issues in the student-athlete population, athletic trainers provide a necessary role in the sports medicine continuum through recognition of mental health concerns and referral to other qualified

professionals to treat (Wolanin et al., 2016). Research from Zhang et al. (2018) showed that athletes since the times of Ancient Greece have dealt with both fear (as a directly linked reaction to an identified object) and anxiety (as a perceived pre-encounter defense), which has had an impact on their sport performance. Student-athletes who suffer serious musculoskeletal injury also often deal with psychological issues related to these injuries (American College of Sports Medicine, 2006). By establishing a strong, professional, trusting relationship with their athletic trainer, a student-athlete may feel more comfortable discussing these mental health concerns and recognizing them in their fellow student-athletes. The leadership of the athletic trainer is critical in establishing this trust with the student-athlete, as Bennis and Goldsmith (2003) established in their four "ingredients" for establishing trust: competence, congruity, constancy, and caring. Athletic trainers must be able to demonstrate their competence with the subject matter, their congruity as they embody the same integrity which they preach, their constancy as they serve to support the student-athlete, and their caring nature as they understand the implication of action and the decisions that they make as health care professionals and how those decisions affect the student-athlete. These research outcomes provide support for the continuation of leadership development as a type of continuing education for both clinical sports medicine professionals and strength and conditioning coaches as gaps in the current research do exist (Tod et al., 2012; Voight, 2014; Warren & Carnall, 2011).

Conclusion

From youth recreation to the professional leagues, coaches are often described as teachers (Drewe, 2000). Though the research by Szedlak et al. (2015) points out that coaching is performed at a different level than that of teaching (reciprocal vs. one-way), research by Winston & Patterson (2006) established that "it is important for leaders to not only speak the vision but

also that followers can understand what to do in order to make the vision become a reality" (p. 15). Effective sport coaches must be capable of communicating effectively with their colleagues and student-athletes. An important question asked by Reel (2015) in his research was regarding leadership differences depending upon the setting practiced. These differences were based on amount and type of previous work experience, job title, and their current job setting. This could allude to differences found between Division I and Division III institutions as well as between the athletic training room and the strength and conditioning facility.

All personnel involved with the success of the student-athletes, including athletic trainers, strength and conditioning coaches, athletic directors, nutritionists, sport psychologists, and other performance model support staff, would benefit from continued research on the topic of leadership. Much of the research on leadership in the field of athletic training and comparing athletic training leadership to other professions would benefit from being updated, as significant gaps in the research exist. For this reason, research conducted to study current leadership strategies should be performed to address contemporary issues in the field. Namely, to respond to the fact that no research could be located on the comparison of leadership behaviors between athletic trainers and strength and conditioning coaches at this time. With the continued evolution of the athletic performance model, relevant research is required to appropriately understand the differing impacts that these types of professionals have on student-athletes through their leadership.

CHAPTER THREE

METHODOLOGY

Student-athletes who compete in intercollegiate athletics sponsored by the National

Collegiate Athletic Association (NCAA) can spend more time with support staff in the fields of

athletic performance than they are allowed to spend with their respective sport coaching staff,

mainly due to NCAA rules governing what is known as "admissible contact time" (National

Collegiate Athletic Association, 2018). During the traditional competitive in-season, required

strength and conditioning sessions count towards this 20 hour-per-week countable total (National

Collegiate Athletic Association, 2018). However, treatment, recovery, and rehabilitation with the

athletic training staff are not time-restricted and can occur as often and as frequently as

necessary. Furthermore, during the non-competitive season, at the NCAA Division III level,

strength and conditioning personnel can interact with the student-athletes on an unlimited basis,

as long as the contact is voluntarily initiated by the student-athlete (National Collegiate Athletic

Association, 2018).

The purpose of this qualitative case study was to investigate leadership in sport,

specifically the self-perceived leadership traits and behaviors among athletic performance

support staff like athletic trainers and strength and conditioning coaches. All personnel involved

with the success of the student-athletes, including athletic trainers, strength and conditioning

coaches, athletic directors, nutritionists, sports psychologists, and other performance model

support staff, may benefit from research on this topic of leadership because these staff members

can influence the success of student-athletes, albeit in varying ways. By evaluating the

leadership and communication styles of the professionals who practice within the pillars of the

high-performance model, this research provides a better understanding of how leadership can be developed within these fields.

At the time of the study, much of the research surrounding leadership in the field of athletic training and the research comparing athletic training leadership to other professions was not current. Significant gaps in the research existed and for this reason, research to study leadership strategies in the field should be performed to make the topic of leadership current within the field. There is no evidence of any previous work which compared leadership behaviors of athletic trainers and strength and conditioning coaches currently. This exposed a gap in the research which the proposed study hoped to fill.

The guiding questions of the research were:

RQ$_1$:   What characteristics and behaviors do athletic trainers and strength and conditioning coaches possess and utilize which they believe makes them a qualified leader for the student-athlete populations with which they work?

RQ$_2$:   What are the similarities and differences between the leadership characteristics and behaviors of athletic trainers and strength and conditioning coaches at the NCAA Division III level?

RQ$_3$:   What factors impact communication between professionals in the performance model fields and between professionals and the student-athlete populations with which they work?

Case Study

This study sought to understand the self-perceived leadership behaviors and characteristics of athletic trainers and strength and conditioning coaches; therefore a case study design was selected for the methodology. Case study allowed for investigation of the self-

perceived leadership behaviors and characteristics of athletic trainers and strength and conditioning coaches because of the lack of information surrounding the comparison of leadership behaviors among these two groups. A qualitative case study allowed the researcher to engage with a small sample of participants and explore the differences and similarities between the participant groups. Performing a case study and analyzing data from a small subset of participants based on their involvement in roles within the high-performance sport model could help initiate the development of a professional best practice. This research was the first known study to compare the self-perceived leadership behaviors of athletic trainers and strength and conditioning coaches.

The development of a practice in fields with a heavy background in science is typically founded on evidence-based practice, which "requires that clinicians be guided by the best available evidence" (Lee & Hunsley, 2015, p. 534). Grounded theory was considered for this research; however, it was not suitable for the case study format. Since little to no research on the comparative leadership behaviors and characteristics of professionals with athletic training and strength and conditioning currently exists, this research provided a basis for further investigation to develop a practice for the field.

Setting

This study did not use a physical site or setting to conduct the research, however, participants were selected based on their primary job title and setting. The National Athletic Trainers' Association and the National Strength and Conditioning Association membership lists were to serve as the participant pool originally, however, cost and lack of access limited those means. NCAA Division III institutions within the extended New England region served as the

primary site as all participants had a primary role within an athletic department. This setting was chosen due to convenience.

Participants/Sample

A criterion or purposive sampling technique was used for this research. This sampling method provided a direct link from the conceptual framework. Criterion purposive sampling is a type of sampling where specific criteria must be met to be considered a participant. This type of sampling can reduce the variability of the participants and focus the research specifically on their leadership characteristics and behaviors (Palinkas et al., 2015). This sampling method was utilized because it allowed only specific types of individuals, with specific job titles and experience levels, to participate in the research.

Exclusion criteria was determined by participants who did not fully complete the initial survey. Participants were also excluded if they served in a role that was supervised by the primary researcher at the time of the research study. Participants were only allowed to report data within their primary role as not to skew the data when a participant was dual certified and practiced as both an athletic trainer and a strength and conditioning coach. Participants must have been certified in their current profession for at least three years in order to have a depth of experience working with student-athletes.

A total of 331 individuals were sent an electronic survey (certified athletic trainers and strength and conditioning coaches) by email. These email addresses were collected from the athletic department websites of every institution participating in NCAA Division III athletics within the target area of the extended New England region. All respondents to the electronic survey from each group (athletic trainers and strength and conditioning coaches), were contacted for follow-up interviews to account for participant attrition. Participants of at least 18 years of

age were used for this qualitative case study, and there was no bias based on gender. This group

of participants was important to the research of this bounded study because the leadership of

athletic trainers and strength and conditioning coaches has the potential to positively impact

student-athletes in the same ways that sport coaches can. In addition, athletic trainers and

strength and conditioning coaches at the collegiate level have the ability to spend more time with

student-athletes than sport coaches may be able to, due to restrictions set by NCAA legislation

(National Collegiate Athletic Association, 2018).

Data Collection

The data collection of this study provided a broad look at how personnel believe that they

exhibit leadership behaviors towards colleagues and student-athletes. The qualitative nature of

the survey and individual, follow-up interviews created an extensive worth of data, allowing the

researcher to work from each theoretical framework that supports this study. This research

compared the results from athletic trainers with the results from strength and conditioning

coaches and allowed the opportunity for a broader study across a larger geographical area in an

effort to create a best practice for relationships between all athletic performance staff and

student-athletes.

Pilot Test

A small pilot test was utilized for the survey and the interview questions on a

convenience sample of eight professionals within the athletic training and strength and

conditioning community. This group was considered a convenience sample because they worked

directly with the primary researcher or had a personal relationship with the researcher but were

outside of the geographic bounds and were disqualified from the main research study. A pilot

study allowed the survey and interview questions to be reviewed by other professionals in the

field. Corrections to the survey and the interview questions were made following the pilot study in an effort to increase the validity of the questioning.

Surveys

An electronic survey was emailed out to 331 participants selected as a criterion purposive sample, based on their primary job title (athletic trainer or strength and conditioning coach), geographic region of practice, and membership within their respective professional organization. E-mail addresses of those who held a position of an athletic trainer and/or strength and conditioning coach were obtained from the athletic department directories of over 80 institutions of higher education that participate in NCAA Division III athletics within the extended New England region. Participation was not limited based on gender. Participants read and signed an electronic informed consent agreeing to participate. After signing, they completed an electronic survey delivered through a secure web-based survey platform, RedCAP. This tool was utilized to host the survey and collect the responses because it was the required tool by the institution. The electronic survey (Appendix A), which contained up to 20 questions, collected demographic information about the participant, their primary job position, their past involvement with leadership education, and their perception of leadership in their respective position. This information was necessary to collect in order to disqualify potential candidates who did not meet the research criteria, as well as to provide background information for their interview answers. Each participant who agreed to be contacted to conduct an individual follow-up interview was asked for their contact information. Each participant who began the electronic survey was tagged with a participant number, regardless of the survey completion status or agreement to be contacted further. This will explain why participant numbers were not in consecutive order in Chapter 4.

Semi-structured interviews

Both athletic trainers and strength and conditioning coaches were asked to provide

information during an interview, where questions (Appendix B) were adapted from the Strength

and Conditioning Coaches' Leadership Scale for Sport (SCCLSS) (Brooks et al., 2000), which

was originally based off of the Leadership Scale for Sport (Chelladurai & Saleh, 1980), as seen

in Figure 3.1. The questions were divided into three different sections, each based on the three

research questions proposed for the research to help answer. The research of Chelladurai & Saleh

(1980) evaluated both preferred leader behavior of coaches by athletes and coaches' perception

of their own leader behavior. This research focused on five dimensions of leadership, some of

which were the basis of the current research. Amongst others, these included: social support

which was related to the coach's concern for the welfare of their athletes, creating a positive

environment and interpersonal relationships with student-athletes, and positive feedback, which

refers to the coach's behavior of reinforcing athletes and recognizing and rewarding good

performances. While the current research did not evaluate the perceptions of student-athletes,

that is an intended source for future research on the topic.

The semi-structured interviews were hosted on a video conferencing platform and were

recorded for video and audio. The interviews consisted of 19 questions and lasted approximately

60 minutes in length. According to Hancock & Algozzine (2017), semi-structured interviews

allow interviewees the flexibility and freedom to express themselves and feel comfortable in the

interview setting. The interview was conducted in the same manner for each participant, where

the same manner of questioning was used. The consistency of questioning increased the

reliability of the study. The video interviews were recorded, and the audio was transcribed

through the use of MaxQDA 2020, a qualitative and mixed-methods data analysis software

(AQAD). The video was analyzed by the lead researcher and observations were added as non-indexical data.

Transcription and Analysis

A transcription software service was utilized to produce written transcripts of each recorded interview. The audio of each interview was uploaded to Transcribe.com, and written transcriptions were then produced. These raw transcriptions were then clarified by the lead researcher and through member checking. The transcriptions were then coded using MAXQDA 2020. Multiple levels of coding took place to align with qualitative research case study methodology, according to Saldana (2015). The first level of coding utilized open coding, also known as initial coding. Saldana (2015) provided the rationale that open coding should be used for all interview data but only with proposed and tentative codes, as to not lead the analysis but to let the data speak for itself. Line by line open coding broke down the interview transcription data into relatable parts, known as codes.

The second level of coding used was focused coding or selective coding, which is defined as a process of seeking thematic similarity within the data. This was a more streamlined version of axial coding and served to develop categories in the data where they are clustered together based on how they relate to these specific categories (Saldana, 2015). The third and final layer of coding for this research study was theoretical coding. Though it is closely related to specifically grounded theory, as a third layer of coding for this research, theoretical coding highlighted possible relationships between the categories from the previous layer. These relationships assisted in moving this study towards the development of a theory and practice.

The use of MAXQDA 2020, a desktop application of a qualitative data analysis software (QADS) distributed by VERBI Software GmbH, allowed the researcher to transcribe each

interview from the audio files and code the themes of these transcriptions. This allowed the researcher to draw out themes and concepts from the interview transcripts. An individual license for MAXQDA Analytics Pro Version 2020 was purchased by the researcher and the application was downloaded onto the password-protected, personal computer of the lead researcher. The electronic survey collected demographic information about the participants, their primary job position, and their perception of leadership in their respective position. Each participant was asked for their contact information to conduct an individual follow-up video interview. Some participants chose not to have their video recorded or did not turn their video on, so only the audio data was able to be collected and analyzed. The video recording of those participants who chose to turn their video feature on was also reviewed by the lead researcher. The video was assessed for observational, non-verbal communication which was included in the data from each participant.

Participant Rights

Participation in this research study was strictly voluntary, both in nature and in principle, and participants were able to opt out of data collection methods or withdraw from the study at any time, without penalty. All participants were volunteers with no coercion by faculty, the researcher, or superiors, and no compensation of any form was provided to any of the participants at any time.

Participants signed an informed consent form, which included privacy protections but could not ensure complete confidentiality. Every attempt to preserve participants' privacy was made, however. The data gathered was cataloged and utilized without individual identification markers. Transcriptions of interviews were shared with participants for ongoing response validation. Throughout the data collection and analysis, and up to a five-year period following the completion of this dissertation, transcripts, coding analysis, and all associated documents will

be kept on a password-protected device. The recordings were deleted immediately after verification from participants that their interview transcription was accurate. The use of third-party recording software, transcription software, and /or coding analysis was used under signed confidentiality. A copy of the completed study was also made available to the participants.

Potential Limitations and Delimitations

To begin, the researcher has a vested interest in the outcomes of this study because of their role as an athletic trainer and strength and conditioning coach at a Division III institution within the research site area. Participants were excluded if they were in a role that was supervised by the researcher. As participants were recruited for this qualitative case study, participation rates of both athletic trainers and strength and conditioning coaches were unable to be controlled. Participants had varying levels of experience serving in a leadership position, which limits the research data. Examination and interpretation of the interview transcripts may not be exact, though attempts were made to ensure accuracy. While collecting and analyzing the data, every effort at maintaining confidentiality was made.

Specific choices were made by the researcher to delimit the research study and the outcomes. Only certified athletic trainers and strength and conditioning coaches were chosen to participate in this qualitative case study. Participants were active employees of a college and/or university that participates in NCAA Division III athletics, is employed within the research site of the extended New England area, and whose primary job title was athletic trainer and/or strength and conditioning coach. The research was not a longitudinal study and only took place over a small time frame. In order to understand the perspective of the professionals in this field, this study was delimited to self-perceived characteristics and behaviors. While the perspective of the student-athletes that these professionals serve is a vital data set, student-athletes' perspectives

are an area where future research should be conducted. Conflict of interest was managed by committee members who understand both fields which are represented by participants within the study. The main researcher is a certified professional with working knowledge in both fields. Participant validation/ member checking was used to produce the most credible results. Participants received copies of their transcribed interviews to verify accuracy. Additionally, a copy of the completed study was made available to the participants. Lastly, any research outcomes may be published in academic journals in order to positively impact the fields involved within athletic performance.

Reliability and Validity

Bloomberg and Volpe (2016) found that qualitative research typically does not provide enough information from its participants to provide sufficient reliability. However, data can still be considered consistent because the goal is that the researcher understands when inconsistencies occur. The researcher provided each participant their own credible bias to increase the credibility of the results. The research study was transcribed and coded at each level by the primary researcher, which created strong dependability. Regarding validity and credibility, after self-reflection, the primary researcher clarified any bias upfront and utilized member checking to provide strong validity throughout the interview and transcription process. The interview protocol was modified from other research tools and these modifications were necessary to change the previous research tools into the current interview protocol. Copyright permission was granted for the use of each tool modified, which increased the credibility of the researcher and the overall validity of the instrument.

Member Checking

In an effort to reduce any bias on participant perspective on behalf of the researcher, member checking was used (Bloomberg & Volpe, 2016). This consisted of correspondence with each participant after the interview was conducted. Each participant received an audio version of their individual interview with a transcription. Participants were asked to review the transcriptions for any errors of speech or intent. The electronic survey collected demographic information about the participant, their primary job position, and their perception of leadership in their respective position. Finally, each participant was asked for their contact information to conduct an individual, follow-up phone interview.

Summary

The importance of further research in the fields of athletic training leadership and strength and conditioning leadership is necessary to continue to fill the gaps which currently exist. The current body of research does not possess any literature where leadership behaviors between groups of the athletic performance domain are comparatively studied. As such, the current research has demonstrated that appropriate and effective leadership exhibited by athletic trainers and strength and conditioning coaches can lead to more successful athletic programs and student-athletes.

CHAPTER FOUR

DATA ANALYSIS

Through qualitative methods, this case study intended to examine the self-perceived leadership characteristics and behaviors exhibited by certified athletic trainers and strength and conditioning coaches at the NCAA Division III level within the greater New England area. In the first area of study, data was collected using an online survey questionnaire that addressed the participants' demographic information as well as their past experience/education of leadership theory, leadership positions, and continuing education. Information from this first phase questionnaire was used to qualify and recruit participants for the second phase. In the second phase, semi-structured interviews were used to probe more specific aspects of the leadership experience for the participants. The reason for following up with a qualitative research section in the second phase was to dive further into how the leadership of the participants was influencing their interaction with student-athletes and colleagues at their respective institutions. The following research questions were addressed in this study:

RQ1: What characteristics and behaviors do athletic trainers and strength and conditioning coaches possess and utilize that they believe make them qualified leaders for the student-athlete populations with which they work?

RQ2: What are the similarities and differences, if any, between the leadership characteristics and behaviors of athletic trainers and strength and conditioning coaches at the NCAA Division III level?

RQ3: Which factors impact communication between professionals in the performance model fields and between professionals and the student-athlete populations with which they work?

Purpose of the Study

The purpose of this qualitative case study was to investigate professionals within two pillars of the high-performance sport model to gain perspective on their ability to influence student-athletes through their own displayed leadership. This research served as a portion of a larger research strategic plan to determine the best way to establish and integrate the fields of athletic performance together in support of student-athletes and coaches at the collegiate level. This study investigated current practices of leadership utilized in the athletic healthcare and performance model and further developed the value of this model. The goal of this study was to adopt and increase the use of transformational leadership by the staff and promote interdepartmental cooperation between staff as a means to succeed in the collective goal of healthier, more efficient, and successful staff members and student-athletes.

Aim of the Study

The aim of this study was to provide evidence-based recommendations which inform best practices that can be published by the professional journals associated with the National Athletic Trainers Association and the National Strength and Conditioning Association, so high-performance staff are able to educate themselves and exhibit leadership characteristics to better serve student-athletes.

Survey Data

Pilot Survey

The pilot survey was conducted to validate the initial survey and interview questions. The pilot consisted of eight participants; three identified their primary role as strength and conditioning coaches and five identified their primary role as certified athletic trainers. Of the pilot participants, three identified with the female gender, and five identified with the male

gender. One pilot participant reported possessing a doctoral degree, five reported a master's degree, and two reported a bachelor's degree as their current, highest completed level of education. Participants were certified in their respective field for a cumulative total range of 34-71 years, with four participants reporting that they currently held a leadership position or had previously held a leadership position within their field. Five of eight participants agreed to participate and completed the entire interview portion of the study.

Following the interviews, the participants provided feedback to the researcher about the type of questions asked, their perspective on the quality of questioning and delivery, and the importance of including or excluding certain questions from both the initial online survey and the interview questions. For example, participants of the pilot study were excluded from the research study because of their geographic location outside of the established research area or because of their reporting relationship to the lead researcher at the time the research was conducted.

Participant Information

Participants were selected from the eight NCAA Division III athletic conferences that compete in the extended New England region, as seen below in Figure 4.1. Over 80 unique institutions were current full members or associate members within the eight athletic conferences. The following states represented where participants for the research study were recruited: Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. Participants were selected based on their posted job titles and the researcher collected the contact information from their respective athletic department's staff directories.

Figure 4.1

NCAA Division III athletic conferences within the extended New England region

Athletic Conferences	Membership
Commonwealth Coast Conference (CCC)	10 full-time, 2 associate
Great Northeast Athletic Conference (GNAC)	13 full-time
Little East Conference (LEC)	9 full-time
Massachusetts State Collegiate Athletic Conference (MASCAC)	8 full-time, 3 associate
North Atlantic Conference (NAC)	12 full-time, 1 associate
New England Collegiate Conference (NECC)	7 full-time
New England Small College Athletic Conference (NESCAC)	11 full-time
New England Women's and Men's Athletic Conference (NEWMAC)	11 full-time, 6 associate

The initial survey was distributed through Research Electronic Data Capture (REDCap), a secure web-based survey platform, to a sample of 331 individuals in early September 2020. Because of a poor initial response rate, several rounds of reminders were sent out to participants. Forty-five participants fully completed the survey (45/331, 7.3 percent response rate), one additional participant partially completed the survey. One participant who completed the survey was disqualified because their primary role was neither a certified athletic trainer nor a certified strength and conditioning coach.

As seen in Figure 4.2, of the 44 remaining total participants, 29 participants characterized their primary position containing duties within the scope of a certified athletic trainer (65.9

percent). In addition, 15 participants characterized their primary position containing duties within the scope of a certified strength and conditioning coach. Of the 44 total participants, 20 identified their gender as female, and 24 identified their gender as male.

    A total of 28 participants agreed to be contacted for a follow-up interview. All 28 participants were contacted, however, only 12 interviews were scheduled and conducted, for a total response rate of 3.6 percent of total invited participants (12/331). Both the online survey only (7.3 percent) and the online survey accompanied by completed interview response rates (3.6

Figure 4.2

Demographic information of participants that fully completed the initial survey

44 participants total

Gender	Profession
20 Females	29 Athletic Trainers
24 Males	15 S&C Coaches
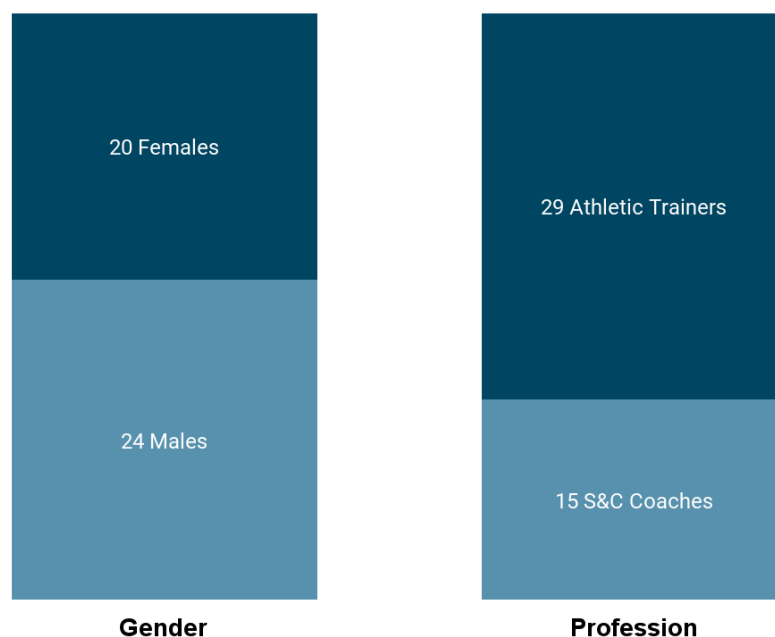
percent) was well below the average research response rate of 10-30 percent; however, this qualitative case study sought out insight rather than statistical significance, so the response rate was adequate.

Athletic Trainer Demographics. Of the 29 participants who characterized their primary position as a certified athletic trainer, four reported serving a secondary duty as a strength and conditioning coach. Sixteen identified with the female gender, and 13 identified with the male gender. One participant reported having a doctoral degree, 23 reported a master's degree, and five reported a bachelor's degree (16.6 percent) as their highest completed level of education. Seventeen athletic training participants reported that they would be interested in a follow-up interview to discuss their leadership. All interested participants were contacted to set up the follow-up interview although only seven participants corresponded and completed an interview.
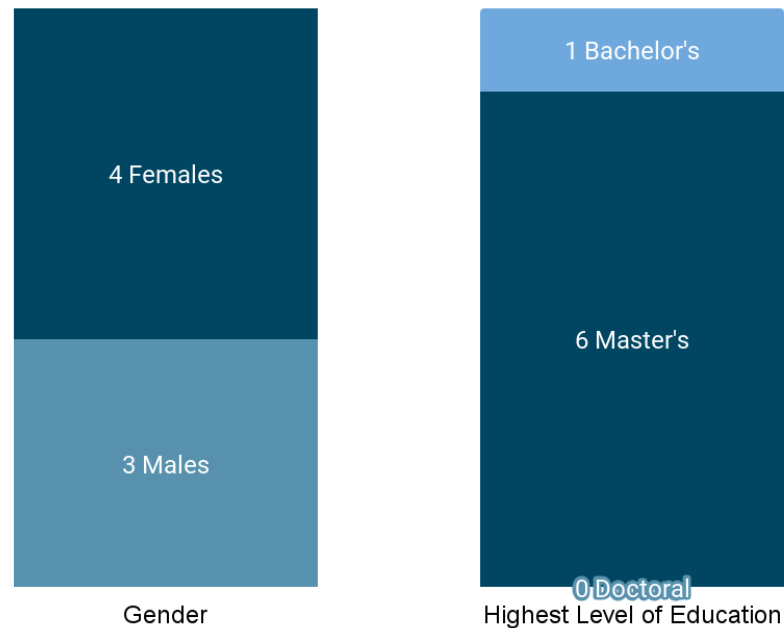
Of the seven interviewed participants (Figure 4.3) characterized as certified athletic trainers, four identified with the female gender, and three identified with the male gender. Six reported a master's degree, and one reported a bachelor's degree as their current highest completed level of education. Athletic trainers who were interviewed averaged at least 9.28 years of experience since being certified, with a total of greater than 65 years of experience between the seven participants in this group. Only one athletic trainer in this group considered their current position a "leadership position". Participants in this group also reported working with a total of 310-430 student-athletes daily, among all participants, with an average of 44-61 individual student-athletes daily.

Strength and Conditioning Coach Demographics. Of the 15 participants that had a primary responsibility as a certified strength and conditioning coach, four identified with the female gender, and 11 with the male gender. Two reported a doctoral degree, 11 reported a

Figure 4.3

Demographic information of athletic training interview participants

7 participants total

master's degree, and two reported a bachelor's degree as their highest completed level of education. Twelve strength and conditioning participants reported that they would be interested in a follow-up interview to discuss their leadership. All interested participants were contacted to set up the follow-up interview, however only five participants corresponded and completed an interview.

Of the five interviewed participants (Figure 4.4) characterized as certified strength and conditioning coaches, one identified with the female gender and four identified with the male gender. Four reported a master's degree, and one reported a bachelor's degree as their current

Figure 4.4

Demographic information of strength and conditioning interview participants

5 participants total

1 Female	1 Bachelor's
4 Males	4 Master's
	0 Doctoral
Gender	Highest Level of Education
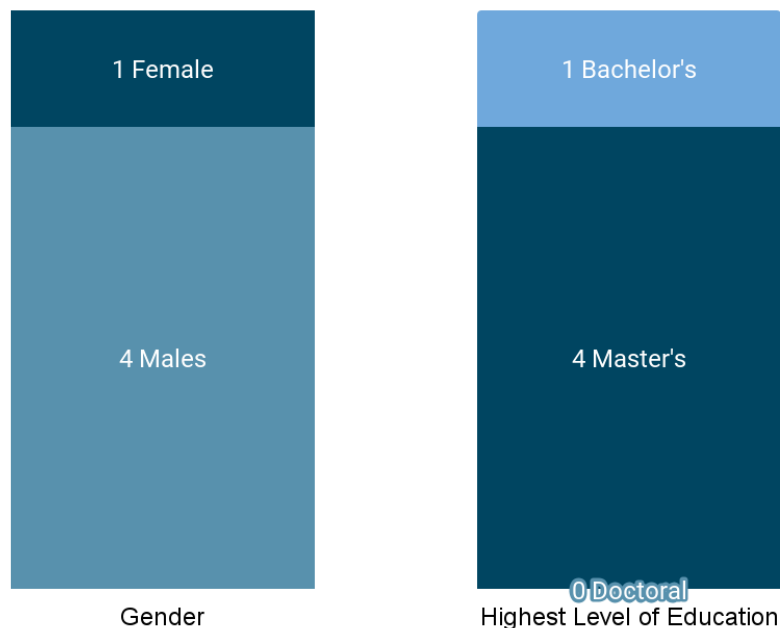
highest completed level of education. Strength and conditioning coaches interviewed averaged at

least 9.6 years of experience since being certified, with a total of greater than 48 years of

experience between the five participants in this group. Two strength and conditioning coaches in

this group considered their current position a "leadership position". Participants in this group

also reported working with a total of approximately 875-1080 student-athletes daily, among all

participants, with an average of 175-216 individual student-athletes each day.

Open Coding Analysis

To provide clarity from the qualitative data, several levels of coding were used to

extrapolate themes to answer the research questions. Thematic codes were preset, based on the

established body of knowledge and conceptual framework, to code the interview transcripts. The

six themes discovered were: caring/relationships, education/teaching/ team culture, leadership,

communication, and conflict. Each interview transcript was coded in MAXQDA 2020

appropriately, based on established codes, and then these themes were developed.

Qualified Leadership

This qualitative case study was developed on the basis of what athletic performance

professionals thought of their ability to lead, specifically what characteristics and behaviors they

possessed and utilized to make them qualified leaders for the student-athlete populations with

whom they work.

The third question of the first section of the semi-structured interview asked, "Do you

believe the position you currently hold is a leadership position?" Of the 12 participants that

completed the interview, six answered in an affirmative fashion, three in a negative fashion, and

three answered "both" depending on certain factors (Figure 4.5). Further breakdown of these

numbers provides some interesting perspective.

Strength and conditioning coaches were more likely to answer affirmatively to this

question than were athletic trainers. Three participants answered, "both" (yes <u>and</u> no) to this

question, and subsequently discussed how they felt about their answer. Participant #24

responded by stating:

> I think the position in itself, in a department stance, isn't a leadership position. I think
>
> being somebody who interacts with student-athletes on a regular basis, you do have
>
> leadership responsibilities to hold yourself in a certain manner and to represent, you
>
> know, the department as a whole.

Figure 4.5

Results of leadership interview question

Do you believe the position you currently hold is a leadership position?

Legend: ■ Yes ■ No ■ Both

3 Yes
2 No
2 Both
4 Yes
1 Both
0 No

Athletic Trainers | Strength & Conditioning Coaches
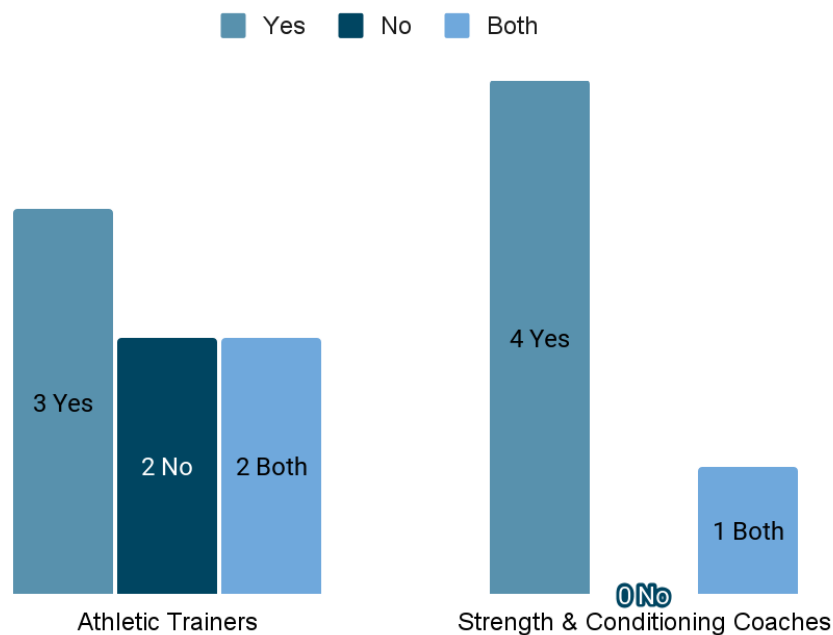
Participant #27 offered a similar answer, focusing on the difference in the status of their position within their athletic department versus the impact that their role has on student-athletes:

> I would say, in terms of the department, no….But in terms of my responsibilities to developing the students, I would say yes, so I'm not sure exactly what context you're looking at that. If like, okay, yeah, you're an assistant athletic director or associate athletic director and are in on all the, you know, major decisions with the department. No, but in terms of, like my, value towards leadership towards the student-athletes, I would say yes, because of the amount that I come in contact with and the nature of my position.

Lastly, Participant #29 pointed out a common misconception about leadership. This participant struggled to recognize the leadership role they are in because they do not directly make decisions within the department:

> Yes, and no because when you ask, when that question was asked at the beginning I was

just like well, I am technically, like I guess you would say a leader for like the students, but like there aren't any, like, I don't have any other duties other than, like, what all the other assistant athletic trainers have. So it's not like I'm making, like, decisions based on, like, protocols or anything like that. So I guess not really.

Because of their title, some athletic performance professionals either felt that they were not currently in a leadership role or felt that they needed to answer "both" (yes and no) because they, at the very least, recognized the impact that they may have on student-athletes even though they were not in a supervisory role within their department/institution. The feeling of lacking a leadership role could have existed because all five strength and conditioning participants currently had titles that included "Head" or "Director". Only one athletic trainer was titled with "Head" and five had "Assistant" included in their title. This is an important characterization that should be further discussed: role/impact vs. title on leadership status and ability.

Both groups produced a consistent list of characteristics and behaviors that they felt they should exhibit to best lead student-athletes. Participant #19 stated their belief in two important behaviors, remaining calm and actively listening:

I've somewhat alluded to it being the one that stays calm. When everybody else is losing their heads around you, you be the one that's keeping yours….Well, the first thing that comes to mind is listening. If someone comes to you and even if it's not even related to your specific set of skills, they come over and just want to talk. Listen.

Likewise, Participant #27 discussed the importance of listening while also highlighting the behaviors of patience and modeling:

One of the things I've learned is to be patient, to listen, not make assumptions first and gather information….Personally, I feel modeling is the most important thing

especially for this generation, I think, of youth. How you carry yourself and how you act

I think resonates a lot more than what you say.

The last behavior that was the most frequently mentioned by both groups of participants was

adaptability, stated here by Participant #32: "You kind of have to change a little bit for each one.

So, learning how to be adaptable has kind of been one of the big things that I've had to learn."

To demonstrate certain behaviors, participants drew attention to characteristics that were

important to their leadership of student-athletes. Participants #26 and #29, respectively, stated

the significance of respect during interactions and how that can help develop trusting

relationships:

> I would say respect would be one of the ones that I really want from my athletes and ones
>
> that I give towards my athletes. Just make sure that you know, we're respecting each
>
> other. We're respecting the equipment, respecting fellow interns, respecting fellow
>
> teammates. I think that it can go a long way to building a good culture.

> I want them to make sure that they see me as a professional and kind of respect me for
>
> that and then kind of going into that…... Having them trust me with like what I'm doing.

Participant #32 stated how they felt about the characteristics of consistency:

> I try to be consistent with my athletes and consistent with the coaches that I talk to and,
>
> like I mentioned earlier, both with how I communicate to them and my expectations of
>
> them, and the main reason I think that's the important one is because that's what I expect
>
> out of them. I think consistency, especially at the Division III level, is going to be one of
>
> the keys to their success, both on and off the field and they cannot be consistent if that's
>
> not being demonstrated to them, and many of them, at least at our school, come from

homes where consistency is not, doesn't always happen so I really, it's kind of one of my

big words is consistency, but I really feel like we've got to be consistent in how we treat

them to be effective leaders.

Lastly, though athletic performance staff often are viewed as serious professionals, driving their

student-athletes, Participant #6 states the value of humor:

Humor is one that has gotten me very far. I'm being able to not always be so serious, you

know, be able to kick into seriousness when we need it, and obviously require it when it's

necessary for safety and those pieces, but to have humor and levity and what you do is

critical and not being able to you know, not just taking yourself too seriously.

Figure 4.6 outlines the entire list of most frequent characteristics and some behaviors.

Figure 4.6

Self-perceived leadership characteristics and behaviors provided by participants

Accepting/Being open	Accountability	Adaptability
Approachable	Attention to detail	Calm
Caring	Communication	Confidence
Consistency	Fun/Humor/Levity	Genuine
Laid Back	Listening	Modeling
Motivated	Patient	Rapport/Trust
Respectful	Serving/pleasing	Warmth/Compassion

Each of these characteristics and behaviors contained components of others, so as the

third level of coding was completed, themes were developed from those codes that were closely

related.

Theme #1- Caring/Relationship

The similarities and differences between the leadership characteristics and behaviors of athletic trainers and strength and conditioning coaches were an important factor of this research. In response to the second research question, the data showed several similarities between the two groups regarding their leadership abilities. Two similarities that were the most consistent in the participants' responses, regardless of profession grouping, regarding leadership characteristics and behaviors, were being yourself/being genuine and caring for student-athletes. Several participants quoted Roosevelt's "People don't care how much you know, until they know how much you care", about their interactions with student-athletes. Participant #6 mentioned a key factor; namely that the technical knowledge and ability of these high-performance sport staff members were not as important as the relationships they were able to foster:

> But in terms of performance, I think that's one of the best ways, best routes, I've been able to take is just really letting them know that I care about them and then figuring out what makes them tick individually so that I can best prepare them for their biggest stage. I think that's where I hang my hat as a strength coach on many fronts. It's just a matter of I am not going to be a person who's just dictating volume and weights and sets and reps and [have a] get in, get out factory. You know, I like it when they linger and they hang out. I want to talk and they want to debrief what they did, but also fill me in on their life, you know?

Participant #32 also explained how they acknowledge certain student-athletes that they work with:

> You know, there are some athletes who are really receptive to what I have to say and what I have to give them and those kids are the ones that usually hang out in my office and they're talking to me extra and I believe that those young men and young women I make an impact on.

Another factor of building relationships with student-athletes was being accessible and genuine. Some participants discussed the importance of being true to yourself and not trying to become a figure that you think the student-athletes are seeking because it is not attainable. "Just be yourself ", was the advice provided by Participant #11 to a new colleague. Participant #27 fleshed out the interaction between themselves and the student-athletes and why it is so important:

What happens the more you interact with them, if people are coming into your weight room or facility and you don't know their name and you don't ever talk to them, whether it be about exercise or show some sort of vulnerability and open yourself up to them trusting you, you're not going to figure out anything about that person. One of the first things I like to do is no matter how many times I'm going to call you the wrong name. I'm going to try and learn. I'm going to try and learn your name and then I'm going try and Coach you up while trying to learn your name. And then I'm going to try and learn a little bit about you. I'm going to try and tell you a little bit about me and hopefully along that process, I'm able to create some trust with that person. And then the more I trust them the more, I'm going to find out what there. What their desired mode of leading and coaching is going to be.

Theme #2- Educate/Teaching

A majority of the participants (11 of 12) reported having no formal training, education, or credentialing in the theory or practice of leadership. While most of the leadership ability from the participant group was either trait leadership or learned experiential leadership, participants were not willing to state that athletic trainers and strength and conditioning coaches varied vastly in their leadership styles as a group. Several participants cited individual bias and subjectivity during that interview question.

The researcher found it interesting that "knowledge" or "competence" was not a characteristic listed by the participants with regard to leadership, but yet the perception that staff were able to be confident and willing to take the time to educate and teach their student-athletes. For example, athletic performance staff must earn continuing education credit throughout their careers to maintain certification in their respective fields. Yet, it was clear that the relationship between staff and student-athletes was based more so on care and less on knowledge of the craft. Participant #24 defined the importance as: "If you can get people to understand why you're doing what you're doing and understand the value, that's how you're going to get kids to be motivated to commit themselves and their time to what you're trying to accomplish."

Two factors related to this theme that emerged from the coding were the number of individuals each professional works with and the type of care provided. Some participants noted that athletic trainers typically work one on one with student-athletes in a clinical care, controlled setting and were able to provide a different type of communication, urgency, and service, whereas, traditionally, a collegiate strength and conditioning coach is interacting with student-athletes in a team setting. These strength and conditioning professionals are coaching one on one however it is typically in a group of 10-50 student-athletes at one time. The way that strength and conditioning coaches communicate, teach, and motivate their student-athletes in that setting may be different from what an athletic trainer would carry out in their respective setting. The majority of participants shared that communication, teaching, and motivation styles were based more on individual to individual, rather than a comparison between an athletic trainer and a strength and conditioning coach. Participant #11 emphasized that while generalizations can be made about both groups, it comes down to the individual:

I don't know, that's I think a very individual question. You know, I know some athletic

trainers who are very kind of passive with how they approach getting student-athletes to

do what they need them to do with rehab and you know protocols or whatever, you know,

and I know some that take more of like a what you would think of as a typical strength

coach type of approach and they're super aggressive, so I don't know…. It's hard to put

that into overall categories. I think it's really based on the person.

Participant #27 added the importance of avoiding bias with answering this particular question:

You know, I don't know. I don't want to make any assumptions like to put myself in the

position of an athletic trainer, so I don't think I have a great answer for that one because

I'd have to walk in their shoes.

Theme #3- Culture

As previously mentioned in Chapter 2, the NCAA does not restrict the amount of time

that student-athletes can spend with athletic trainers or in voluntary sessions with strength and

conditioning, like they restrict against specific amounts of time with sport coaches. This

unrestricted time could be viewed as an advantage; to student-athletes, in order to receive

appropriate healthcare and training, to high-performance staff members, in order to enhance

student-athlete wellbeing and performance as well as to influence team culture, and to sport

coaches, to utilize the high-performance staff as an extension of the coaching staff for team

culture and accountability purposes. Participant #4 acknowledges the potential for this advantage

when asked whether he believes that he has an ability to influence team culture:

They say if you if we lump together strength and conditioning and athletic training as a

whole [student-athletes] probably spend more time within that, within that let's say block

of athletic training / strength conditioning per day than they do sometimes on the field,

especially if especially if they're rehabbing an injury or trying to maintain their performance and health through normal bumps and bruises that occurred during the season. So I think the way that athletic trainers and the strength conditioning coaches are perceived within the team, I think goes a long way to helping shape the culture of the team and I think ultimately they help with the success because if the athletes don't trust the support staff, then they're obviously not going to get the care or the training that they need to get to their ultimate goal, which should be a win.

Participant #6 shared a similar perspective :

We spend more time with [student-athletes] than their head coaches do and I think that's the crux of it, you know, obviously the coaches are with them for their practices. They're on the road with them. So there's those pieces. Athletic trainers probably more so because they are traveling with them and those pieces but when you break down the idea that we're with them, you know, three to three to five times a week depending on the team and athlete you know, what they want to do how much they hang out in the weight room, if it's their living room or not. I think it really does make a huge impact on on their team culture and I try to mesh that with the team…you know, the head coaches' expectations as best I possibly can….Yeah, I think we have a tremendous impact our ability to impact them.

Several of the participants mentioned the terms 'rapport' or 'trust' when asked about relationships and team culture. These also relates to Theme #1. Participant #17 explained it in this way:

I have to provide trust. I think being a leader is you know, sometimes have to be outspoken, but it probably wouldn't be helpful if you know, I don't tell them the truth

about something. Then I'm just hurting their, you know, ability, to you know, be better at

their sport, especially when they get hurt and things like that…...But I think it's important

to make things fun and you know be energetic and you know get the point across that yet,

you know, it stinks you sprained your ankle, but things are going to get better.

The positivity and perspective that Participant #17 mentions when working to build and maintain

trust directly reflects the findings of Arnold & Fletcher (2015) which pointed out the possession

of "positivity, resilience, and ability to cope with pressure" by high-performance staff, as factors

that would direct impact the outcome of their performance (p. 289).

This theme also highlighted how the differences between leadership styles of athletic

trainers and strength and conditioning coaches revolves around the outcomes that both types of

professionals are trying to achieve. Participant #35 provided insight into their opinions on the

matter, stating:

We've had three strength and conditioning coaches in three years, and they all seem to get

better related, like a quicker, better relationship with the athletes than we do. At the end

of the day, you have to look at the goals, like [student-athletes] are going down [to

strength and conditioning], they're already healthy typically. Either getting better or

[student-athletes] are coming to [athletic training] under negative circumstances for the

most part, where something's bothering them. We're still making them better. But like

we're getting them better to the point where they can go to the strength and conditioning

coach and he or she makes them even better. I think they have more positive results in

terms of what they gain from strength and conditioning because of that.

Participant #18 also recognized the importance of success in building team culture:

I think success, you know if teams are winning they'll buy into whatever they're doing

and try to keep that going. As an athletic trainer or strength and conditioning coach,

you're a part of that so they can see you know see your input into that with dealing with

the coaches and stuff like that. I mean, I think a lot of it comes from success….[On-field

success is] a huge huge part. But I mean the success in like rehab, you know, you have

that kid come back from an ACL injury, you know and athletes will see, you know,

they've, they buy into it because they see their teammates getting better. So they know

you know what you're doing. They know they can trust you. They know if they have an

issue so I mean like if other athletes see you working well and getting somebody back on

the field or the court or whatever it's easier to lead them because they've seen it work with

other people.

Typically, when a student-athlete is working with an athletic trainer, they are trying to

return an injury or some ailment back to at least baseline function and asymptomatic otherwise.

Therefore, the act of strength and conditioning is often viewed as true performance enhancement

because student-athletes are progressing past baseline and making significant gains beyond what

they would be normally capable of performing.

Theme #4- Leadership

Participant #27 stated one of the behaviors important to their leadership style was

modeling good behavior for their student-athletes. While modeling does have a level of

accountability to it, it also can be viewed as leading by example, which is heavily contested as

not effective leadership in some research. Modeling must consist of more than just modeling

good behavior, although when it does, it is very effective (Qiu et al., 2018). Leading by example,

leading and expecting others to follow because of the leader's demonstrated behavior, implies a

certain level of trait theory within the followers, assuming that followers have the capacity to recognize the leader's behaviors as beneficial on their own. Participant #24 defined leading by example as, "being committed to the same repetitive behaviors that you define are standards that you want met from those that you're interacting with." This definition could be more appropriate as being synonymous with accountability, another characteristic that is important to leadership.

The strongest similarity found in the second transition of questioning was unanimous among all of the participants. Each participant felt that not only their leadership had an impact on the student-athletes that they worked with but also that leadership of athletic performance staff, in general, had a strong impact on student-athletes. This idea is reinforced by the fact that athletic performance staff have the ability to spend more time with student-athletes compared to sport coaching staff, per the NCAA. Participant #35 expressed that high-performance sport staff had a positive impact on the student-athletes that they work with: "I believe that wholeheartedly they do. And I think that's because athletes are in season for ⅓ of the year, but they have access to the strength and conditioning coach and the athletic training staff for the whole year." Given the profession all participants are classified within, bias does exist in these findings, however, it is interesting to compare this with the findings between those who did and did not identify as being in a leadership position.

Theme #5- Communication

Effective communication among athletic performance staff as well as with sport coaches and student-athletes is vital to the success of the high-performance sport model. The participants' responses indicated that the frequency of communication between athletic performance staff and student-athletes and the consistency of that messaging was important to relationship building, trust/rapport, and their overall leadership abilities. Participants did not feel that the type or style

of communication was as important as how often and how consistent the messaging was.

Participant #32 summed this feeling up, regarding communication, when they stated:

> With what [student-athletes] are hearing from both the head coach and from [athletic
> performance staff]. I've had instances where you know, I'm saying one thing in the
> weight room and then one of the sport coaches is sitting there saying, "[They] don't know
> what [they] are talking about". So there's no consistency there. So that kind of interferes
> with the culture, but if we're both being able to talk about the same things and spitting out
> the same message, even if it includes different communication styles then I think that's
> where the consistency piece helps.

> Participant #35 added the importance of self-perception and teaching style when

discussing with others, specifically student-athletes:

> Optimal communication. Not just in how we communicate but what we are trying to
> communicate and how we are communicating that with the athlete because I can ramble
> on about how good some things are for people to do. But if I don't say it in a way that
> they understand, they're not going to buy in.

The consistency of communication and messaging from the sport coaches ties back to good

culture and helped to reinforce the goals of the athletic performance staff and their respective

goals. Participant #32 describes the connection:

> With what their hearing from both the head (sport) coach and from myself. I've had
> instances where you know, I'm saying one thing in the weight room and then one of the
> (sport) coaches is sitting there saying, "(S&C) Coach doesn't know what he's talking
> about". So there's no consistency there. So it kind of interferes with the culture, but if
> we're both being able to talk about the same things and spitting out of the same message,

even if it includes communication and whatnot. Then I think that's where the consistency

piece helps (trust) help out.

Good communication can help to enhance team culture (Choi, 2020). Without it, little

trust translates between the sport coaches, athletic performance staff, and student-athletes.

Participant #4 mentioned the importance of trust and perception among the high-performance

sport staff and the sport coaches when they stated:

> So I think the way that athletic trainers and the strength conditioning coaches are
>
> perceived within the team, I think goes a long way to helping shape the culture of the
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> team and I think ultimately they help with the success because if the athletes don't trust
>
> the support staff, then they're obviously not going to get the care or the training that they
>
> need to get to their ultimate goal, which should be a win.

Consistent messaging, both in terms of timing and messaging was an important part of what

Participant #6 stated:

> I think it really does make a huge impact on their team culture and I try to mesh that with
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> the team…you know, the head coaches' expectations as best I possibly can. There are
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> some teams where there's already a set culture and you know, all we do is fit into that and
>
> then grow it. There are some teams where you know, they wouldn't come to the weight
>
> room if I didn't hunt them down and kind of bring them along. I kind of become their
>
> surrogate like, you know, a person who pushes them because their head coach doesn't, so.
>
> Yeah, I think we have a tremendous impact on our ability to impact them.

Theme #6- Conflict

An additional finding woven throughout the interview data was the mentions of conflict.

The concept of conflict was often discussed with a negative connotation. Three participants

suggested that conflict can propel a person, idea, or organization forward however it was noted by one participant that conflict is something that they have to deal with. No participants openly embraced conflict as a significant interpersonal event that shaped their leadership styles. Burns (1978, p. 37) states that conflict is a constant within the relations of humankind and that potential is a force for health and growth as well as destruction. It is the duty of the leader to be able to shape, harness, and keep in check that conflict, to calculate the best plan of action, with the wants and needs of the followers in mind. Participant #18 was reflective when asked about conflict, though it was evident that each participant defined professional conflict differently:

> I don't think it's helpful to have conflict but you can be questioned. I mean, it just gives you a way to explain and have somebody else see your point of view in order to resolve something or maybe a different way of thinking. So I think conflict can be handled in many different ways. I don't think it's an explosive thing say if you're going head-to-head with a coach like on a field or at a practice if you would, you know, trying to hold an athlete back or limit what they can do, I think there's a time and place for conflict so it could be beneficial but it has to be handled in the right way. And I think like putting it into perspective of leadership….. I think conflict does have a place but it needs to be controlled.

> Participant #6 viewed a small growth opportunity but was hesitant to fully embrace the outcomes of conflict:

> I hate conflict… When in terms of welcoming conflict and breaking it, being able to change my mindset, when it arises or like, alright, this isn't going to be enjoyable. But there's a lesson here, you know for me or for [the student-athlete] or for the coach or whoever it is and thankfully that's not often at all.

When communication is inconsistent, inappropriate, or not valid in some way, conflict often is an unwelcome result. Conflict was a theme of the third transition of questioning for participants and while all participants have had experience dealing with conflict in their professional setting, very few, like Participant #29, felt that conflict is an important aspect of decision-making: "I don't really like conflict. But I know that that comes with the job."

Conclusion

This qualitative case study was impactful in understanding how athletic performance staff demonstrate more similarities than differences based on their professional goals and not necessarily their individual differences. Both groups of professionals viewed being genuine and caring for the student-athletes as their priority leadership characteristics. Participants had little to no leadership training/education in their professional careers while still aspiring to fulfill their professional obligations of mentoring younger and less experienced staff members. Additional findings from this research suggest that many see their role as an important one within the ability to influence team culture and student-athlete leadership, though perhaps do not feel empowered enough in their current positions. The results of this study recommend that formal leadership education and training becomes a continuing education standard for all athletic performance staff. This chapter reported participant responses to interviews concerning their experiences with leadership and interactions with student-athletes. Chapter Five will include an analysis of findings, implications, and limitations of the study, and recommendations for future study and action.

CHAPTER FIVE

DISCUSSION

This qualitative case study, which compared leadership behaviors and characteristics of athletic trainers and strength and conditioning coaches, is the first known of its kind for the field of high-performance sport. While several research studies focused on the field of strength and conditioning, few studies are dedicated to the field of athletic training, and none have been found that compared professionals in these two fields. In reflecting upon the responses from the online survey and interviews, the findings revealed that athletic trainers and strength and conditioning coaches who participated in the research felt similarly in how they demonstrate leadership toward their student-athletes. Six major research themes (caring/relationships, education/teaching/ team culture, leadership, communication, conflict) were extracted from the interview transcriptions revealing the participants' emphasis when it came to their leadership with student-athletes.

Notably, participants exhibited a lack of knowledge and experience when it came to leadership theory and leadership training. The qualitative data revealed that participants shared the beliefs that the student-athletes are impacted less by programming or relevant knowledge from the high-performance staff members and more so by the care that they exhibit and the relationships, personal connections, and rapport that they built with them through listening, patience, adaptability, and sometimes, humor.

Overall, the most important conclusion from this qualitative case study was that regardless of the length of experience in the field or position title, participants had very little exposure to leadership education or training, where many of these themes could be enhanced appropriately. Professionals within the high-performance sport fields must complete continuing

education credits during each reporting period in order to maintain their current certification. These continuing education credits are focused on expanding knowledge within the field and gaining new credentials. While continuing education is required, professionals should recognize the benefit of non-clinical continuing education in areas such as relationship building, dealing with conflict, communication, etc. The professional organizations and licensing boards should also recognize these "soft" skills as essential to the growth of these professionals and for the benefit of the student-athletes and patients which they serve. There is an opportunity for the fields of athletic training and strength and conditioning to integrate leadership education into their academic programs as well as increase continuing education offerings for those professionals already practicing in the field. Student-athletes will continue to require care, guidance, mentorship, and leadership, and high-performance sport staff members should be prepared to help fulfill those needs alongside sport coaches and other administrators.

Review of Research Questions and Summary of Responses

The intent of this qualitative case study was to evaluate the self-perceived leadership behaviors and characteristics of athletic trainers and strength and conditioning coaches in the Division III setting in the extended New England region. In the first phase, a preliminary research questionnaire addressed the demographic information and experience of participants. Information from this first phase was utilized to provide context to who the participants were as well as their background. This information was important to the study to qualify them for further study, based on the research requirements. In the second phase, semi-structured interviews were used to probe more specific aspects of the participants' leadership styles. The reason for employing an interview in the second phase was to specifically address how each participant felt their leadership impacted the student-athletes with whom they work.

Thematic Findings

Theme 1- Caring/Relationships

Based on the conceptual framework of this research, which characterizes leaders as those deeply concerned with the needs and wants of their followers (Burns, 1978) athletic trainers and strength and conditioning coaches both recognized the importance of needing to serve their student-athletes, though they did not all see themselves as leaders in doing so. Participants acknowledged the importance of having appropriate, professional relationships with the student-athletes with who they work.

Participant #6 mentioned a key factor that was also a thematic finding of the research; namely, that the technical knowledge and abilities of these high-performance sport staff members were not as important as the relationships they were able to foster. Studies by Becker (2009) and Szedlak et al. (2015) found that it was important to student-athletes that their strength and conditioning coaches made connections with them rather than merely imparting knowledge onto them.

Theme 2- Educate/Teaching

When Drewe (2000) examined teaching and coaching, the research found that coaches should continue to develop the entire person; not just the athlete. The current research found that the number of student-athletes that athletic trainers and strength and conditioning coaches work with at one time was a difference in communication type and teaching style. Though, it was not a consistent finding. The need for more education in emotional intelligence and didactic teaching styles would benefit both athletic trainers and strength and conditioning coaches. This points to the importance of utilizing mentorship within the high-performance sport model, especially among young professionals.

Theme 3- Team Culture

Athletic trainers and strength and conditioning coaches, regardless of experience, need to recognize the importance of the role that they have in impacting student-athletes and team culture. Kao and Cheng (2016) found that team culture is often reflective of the culture of the larger organization or local values. By integrating themselves into good team culture, high-performance sport staff have the ability to reinforce coaching standards and add to the success of the team.

Theme 4- Leadership

A central theme to current leadership research is the type of leadership being exhibited. Throughout the qualitative research, participants discussed characteristics and behaviors consistent with transformational leadership with an emphasis on servant leadership. As previously discussed in Chapter 2, transformational leadership has seen recent growth in popularity but is not often understood.

Transformational leadership establishes a leader who seeks to develop leadership skills in the group of their followers as a priority (Bass, 1985). Transactional leadership relationships are fostered through leaders working with followers in exchange for rewards/payment for services, such as additional vacation time for exceeding sales quota. This type of leadership is often widely accepted and effective in sales and other business-to-business commercial transactions (Burns, 1972; Bass & Riggio, 2014). While transformational leadership was prevalent amongst the high-performance sport staff participants and transactional behaviors are seldomly used, the data shows that servant leadership was the most common. Servant leaders truly help others, to make sure that other people's highest priority needs are being served. Similar to transformational

leadership, servant leadership considers no ulterior goals or motives, and serves the followers indiscriminately.

Lombardi stated "Leaders aren't born, they are made. And they are made just like anything else, through hard work", exemplifying the skills approach to leadership development. Though, as indicated, the development of leaders through learned skills is much more difficult and time-consuming as opposed to those leaders born with innate abilities. Yet Moldoveanu & Narayandas (2019), indicate that developing leaders is exactly what should continue because of the urgent need.

Furthermore, as pointed out by Rowland (2016), leadership development often has poor outcomes because everyone requires a different type of leadership in their particular setting. Leadership education for athletic training and strength and conditioning coaches should prioritize the importance of self-perception and the necessity to analyze one's own environment before implementing particular leadership strategies. These leadership education programs should emphasize the role that these staff members have in developing team culture, mentoring and serving as advocates for their specific student-athletes, and providing the necessary skills to reflect on one's own leadership. Rowland (2016) further explains that far too often leadership development seminars are based on curricula that are not one-size-fits-all. Leaders must dynamically experience leadership to effectively develop it; not just hear about it during a lecture. Leaders must actively engage in relationships with their followers.

Theme 5- Communication

Effective communication within leadership can come in many forms. This research found that the frequency of communication between athletic performance staff and student-athletes and the consistency of that messaging was important to relationship building, trust/rapport, and their

overall leadership abilities, though the participants did not feel that the type or style of communication was as important as how often and how consistent the messaging was. Eccles and Tran (2012) revealed that effective communication within a team is an essential element for the development and maintenance of team structure and culture. Choi et al. (2020) found that one of the most important reasons why communication is essential in high-performance sport is "the atmosphere of practice and training, participation, and performance are affected by how athletes perceive the coach's method of communication" (p. 2).

Participants did specifically mention the importance of building relationships with student-athletes and asking them about things outside of sport (i.e. family, academics, interests); not always specifically about the task at hand. Bippus et al. (2003) found that athletes who utilize opportunities to engage in similar, mutual communication with their sport coaches in situations outside of practice, training, and competition, were more likely to have effective communication with their coaches during practice, training, and competition, and were more likely to find their coaches trustworthy and reliable, because of their accessibility.

Theme 6- Conflict

Conflict was also a factor in answering the third research question surrounding effective communication. The timing of communication, as well as type, tone, frequency, and quality, appears unique to each high-performance staff member, though is vital for the successful leadership and mentorship of student-athletes. When communication is late or inappropriately timed, it often leads to unnecessary conflict that could have been avoided. The type and frequency of communication should be specific to the respective interlocutor. Lastly, the required tone and quality of the communication, especially with student-athletes, varied.

Conflict must be a topic that is better accepted by high-performance sport staff, especially young professionals. All too often, young professionals view difficult conversations with sport coaches, student-athletes, and administrators as something to avoid at all costs, and it significantly limits their leadership abilities and their perceived role as leaders.

Interpretation and Alignment of Findings with Literature

These results are tied to the research to reflect their overall meaning, point to relevant ideas, raise future research questions, and apply the practical uses they have for the addition to the existing body of knowledge (Hancock & Algozzine, 2017). While much of the past research has examined leadership styles in sport and has made a shallow dive into the leadership styles preferred by student-athletes of their sport coaches, relatively minimal research has been conducted on the self-perceived leadership characteristics of high-performance sport staff (Jowett & Poczwardowski, 2007; Pido, 2014; Misasiet al., 2016; Ignacio III,. et al., 2017; Berry & Fowler, 2019). No research has been found on how these leadership characteristics and behaviors have compared different groups of staff members within the same management model. From the research presented by Brooks et al. (2000) and Laurent and Bradney (2007), it was noted that both athletic trainers and strength and conditioning coaches have the potential to use strong leadership techniques in their roles with both colleagues and student-athletes, therefore the leadership of these groups must be evaluated, opened to continued education, and compared against other fields.

As Burns (1978, p. 19) stated, a leader must value the wants and needs of their followers, and the transformational aspect of leadership must demonstrate that efforts within the relationship between leaders and followers are made to elevate each separate party to change the organizational culture. Burns acknowledges that transactional leadership is necessary and helpful

in certain situations, like sales, yet transformational leadership, or even servant leadership, is necessary to have a positive influence on both parties within the relationship. To establish continuing education opportunities and best practices regarding leadership within the high-performance sport model, research must be conducted, seeking out and comparing the staff perspectives, student-athlete perspectives, and management perspectives. These results support the importance of leadership as a necessary component in not only the practice of high-performance sport staff members but also in the education of these professionals (Kutz, 2010). These findings also support the generally accepted idea that leadership is an important aspect of all allied health professions (Kutz, 2004). These research outcomes provide support for the continuation of leadership development as a type of continuing education for both clinical sports medicine professionals and strength and conditioning coaches as gaps in the current research exist (Tod et al., 2012; Voight, 2014; Warren & Carnall, 2011).

Several participants did not characterize themselves as leaders or were unclear how to answer the interview question about how they perceive themselves as leaders. When asked, they felt this way mainly because they were not the main decision-makers within their area, department, or division. These participants failed to recognize their impact on student-athletes and others and only attributed leadership to their role. Burns (1978, p. 18) defines the difference between a leader and a "power-wielder" based on treating people like people versus treating them as things. This is a common misconception when conceptualizing leadership. Sinek (2014) added to Burns' findings when he explains the difference between a leader and an authority figure:

> Leadership is the choice to serve others with or without any formal rank. There are people with authority who are not leaders and there are people at the bottom rungs of an organization who most certainly are leaders. (p. 66)

To effect change through the leadership of high-performance sport staff, these professionals must understand the type of leader they are, how to utilize emotional intelligence through conflict, and the impact that they have on others.

Recommendations for further study

It is the duty of the leader to be able to shape, harness, and keep in check that conflict, to calculate the best plan of action, with the wants and needs of the followers in mind. One of the markers of research is that sometimes it uncovers more questions that are deserving of additional scholarly investigation. This research is no exception. While reviewing the behaviors and characteristics from this research study, trait theory and behavior theory must be considered and continue to be studied in this context as well. As previously mentioned in Chapter 5, additional research on how high-performance staff members can educate themselves and others about effectively developing leadership skills will strengthen the validity of a best practice in the model.

Further research is recommended to be conducted within the high-performance sport model with a focus on how members are evaluated for their performance. Exploring the procedures for performance appraisals of staff across a convenience population could inform a best practice as how to evaluate high-performance sport staff. Are leadership abilities considered or are staff mostly evaluated on their application of knowledge? If the latter is the case, we see in this research case study that there was hardly any mention of the importance of cognitive knowledge or physical general ability.

This research examined the self-perception of staff members' leadership within the high-performance sport model fields, although the other half of the leadership relationship is imperative to explore. Correlating the perspective of what student-athletes are looking for in a high-performance sport staff leader to what the leaders feel of themselves is an important next step for this research. As Burns (1978) points out, in both transformational and servant leadership, the outlook of the follower is the most important. Furthermore, expanding the research of self-perceived and student-athlete perceived leadership to other athletic conferences, geographical areas, and NCAA Divisions would increase the reliability of the outcomes.

Yin (2013) described case study research as the discovery of contemporary phenomena within their natural context. The use of an exploratory case study for this research helped to introduce a question posed by the problem seen in a small sample. This research also helped to introduce the topic to readers who may be unaware of the subject material. The conclusion of this data called for more research on a greater scale to further inform the professional practice, including gathering research from the perspective of the student-athlete.

Conclusion

By establishing the impact that athletic trainers and strength and conditioning coaches have on their colleagues and the student-athletes with whom they work, this study was able to examine the areas in which leadership techniques can be improved within the high-performance sport model. This research builds off of the base of research that has been conducted and calls for further research into the leadership perspective of student-athletes. Arthur et al. (2017) and others have examined the role of sport coaches and the influence of their leadership on participants, however, at the time of this study, no research has compared the leadership

behaviors and characteristics of high-performance staff members, nor has any research correlated these findings with the perceptions of student-athletes.

This research found very few differences in the leadership perspective of the certified athletic trainers and strength and conditioning coaches that participated. This result is supported in the body of current knowledge. Laurent and Bradney (2007) concluded that leadership, specifically transformative leadership, is an important area of study for athletic trainers because of their influence on the student-athletes with whom they work on a continual basis. According to Brooks et al. (2000), a majority of strength and conditioning coaches utilized a similar "democratic" leadership style, which creates an atmosphere of growth for both parties involved. This research speaks to the importance of building good team culture and relationships between colleagues and with student-athletes. This research looked to address gaps in the management model at the collegiate level as well. A benefit that Gillett (2014) discovered from the high-performance structure was that it ultimately allowed the sport coaching staff more time to spend on the technical aspect of development rather than on other decisions impacting the club. Implementation of the high-performance sport model was first recognized in collegiate athletics by Smith and Smolianov (2016). At the time of the study, the National Athletic Trainers' Association (NATA) acknowledges that several different supervisory models are in use within collegiate athletics but supports the use of such a model where independent medical care for student-athletes is "patient-centered," meaning that services are rendered based on the patient's needs and concerns and not on external factors (e.g. return to play, monetary value, winning) (Courson et al., 2014). Athletic trainers and strength and conditioning coaches clearly did not recognize the importance of their impact on student-athletes and on each other.

An important consideration for the outcomes of this research is how easily they can be incorporated into the daily processes of high-performance sport staff members. Avolio et al. (2009) concluded that leadership will continue to evolve and the attempt to develop leadership as a tangible practice will continue, especially through seminars and online services. The NATA and NSCA both currently produce position statements that address things like student-athlete safety, welfare, and professionalism. With the new accreditations standards for the NSCA CSCS exam eligibility, and the advancement of athletic training to a minimum of a Master's degree to be eligible for certification, these recommendations should be easily integrated into our education. To create a standard for leadership education, development, and implementation, the NATA and NSCA should incorporate this research and other future research into a new professional best-practice that provides professionals a basis of understanding of leadership and examples of how it can be employed. The intent of this best practice should not be to standardize the type of leadership used by high-performance staff members or the way in which it is practiced but to provide the necessary education to certified professionals regarding leadership based on the current knowledge. When the recommendations resulting from this research study are integrated into the high-performance sport fields, both student-athletes and staff will be positively impacted.

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APPENDIX A

Initial Survey

Initial Survey- Self-perceived leadership behaviors and characteristics of collegiate athletic trainers and strength & conditioning coaches: A case study

Please complete the survey below to the best of your ability. Your participation is greatly appreciated. Thank you!

Self-perceived leadership behaviors and characteristics of collegiate athletic trainers and strength & conditioning coaches: A case study

Informed Consent

Please read this form. The purpose of this form is to give you information about this research study, and if you choose to participate, document that choice. You are encouraged to ask any questions that you may have about this study, now, during or after the project is complete. You can take as much time as you need to decide whether or not you want to participate. Your participation is voluntary.

Why is this research study being done?
The purpose of this case study is to investigate the self-perceived leadership characteristics, behaviors, and communication styles of professionals within the pillars of the high-performance sport model to gain perspective on their ability to influence student-athletes. This research will also be used as part of a larger research strategic plan, to determine the best way to establish and integrate the fields of athletic performance together at the collegiate level. This study will investigate current practices of leadership utilized in the athletic healthcare and performance model and further develop the value of this model. The goal of this study will be to adopt and increase the use of leadership practices by staff and promote interdepartmental cooperation between staff as a means to succeed in the collective goal of healthier, more efficient, and successful staff members and student-athletes.

Who will be in this study?
 Participants will be selected from the National Athletic Trainers' Association and the National Strength and Conditioning Association membership lists based on their primary job title and setting. NCAA Division III institutions will serve as the primary sites as all participants will have a primary role as either a certified athletic trainer and/or certified strength & conditioning coach as part of an athletic department within the greater Northeast region. Participants of at least 18 years of age will be used for this case study and there will be no bias based on gender.

What will I be asked to do?
 If you agree to be a participant in this study, you will be asked to complete a survey regarding self-perceived characteristics and behaviors of leadership among certified athletic trainers and strength & conditioning coaches. In order to fully participate in the research, you will be asked to participate in a one-time, recorded interview and will take approximately 60 minutes. Interviews will be conducted via video conference.

What are the possible risks of taking part in this study?
 This study does not have any foreseeable risks in participating in this study.

What are the possible benefits of taking part in this study?
 By participating in this research, participants can contribute to the general field of study.

What will it cost me?
 There are no foreseen costs to participants other than their time.

How will my privacy be protected?
 The researcher will make every attempt to protect participant privacy. The researcher will not be collecting or retaining any sensitive information about your identity. Participants will be coded.

How will my data be kept confidential?
 Participants will sign an informed consent form, which will include privacy protections but cannot ensure complete confidentiality. However, every attempt for participants' privacy will be made, including the use of pseudonyms for interview participants, and de-identification of any site information. The data gathered will be cataloged and utilized without individual identification markers. Transcriptions of interviews will be shared with participants for on-going responded validation. Throughout the data collection and analysis, and up to a 3-year period following the completion of this dissertation, transcripts, coding analysis, and all associated documents will be kept on a password protected device. The recordings will be deleted immediately after verification from participants that their interview transcription is accurate. The use of third-party recording software, transcription software, and /or coding analysis will all be used under signed confidentiality. A copy of the completed study will be made available to the participants, upon request.

What are my rights as a research participant?
• Your participation is voluntary. Your decision to participate will have no impact on your current or future relations with the University.
• Your decision to participate will not affect your relationship with the researcher.
• You may skip or refuse to answer any question for any reason.
• If you choose not to participate there is no penalty to you and you will not lose any benefits that you are otherwise entitled to receive.
• You are free to withdraw from this research study at any time, for any reason.
• If you choose to withdraw from the research, there will be no penalty to you, and you will not lose any benefits that you are otherwise entitled to receive.
• You will be informed of any significant findings developed during the course of the research that may affect your willingness to participate in the research.
• All interview recordings from the study will be destroyed upon transcription and all identifying information will be removed from the transcript.

• Only the researcher's advisor and the IRB Committee at the University of New England have the right to review the study data.

What other options do I have?
 You may refuse to take part in the study at any time without affecting your relationship with the investigator of this study or the University of New England. Your decision will not result in any loss of benefits to which you are otherwise entitled. You have the right not to answer any single question, as well as to withdraw completely from the survey or interview at any point during the process; additionally, you have the right to request that the interviewer not use any of your demographic or interview material.

Whom may I contact with questions?
• The researcher(s) conducting this study are Mr. James Daley.
• For more information regarding this study, please contact James Daley at jdaley2@une.edu.
• If you choose to participate in this research study and/or believe you may have suffered a research-related injury, please contact Dr. Brianna Parsons at bparsons@une.edu
• If you have any questions or concerns about your rights as a research subject, you may call Mary Bachman DeSilva, Sc.D., Chair of the UNE Institutional Review Board at (207) 221-4567 or irb@une.edu.
Will I receive a copy of this consent form?
• You may request a written copy of this consent form at any time. Consent forms will be agreed to electronically.

I understand the above description of this research and the risks and benefits associated with my participation as a research subject.

Please complete the following statement.

_____ to take part in the research and do so voluntarily.

○ I agree
○ I do not agree

Please provide your first name.

_____

[first_name], what is your current job title? Please be specific.

_____
(Job title only*)

What is your primary job responsibility?
(Please choose only one).

○ Certified Athletic Trainer
○ Certified Strength & Conditioning Coach

Do you currently serve in a secondary role other than [primary_job]?

○ Yes
○ No

What is your secondary role?
_____

How long have you been certified as a [primary_job]??

○ 0-2 years
○ 3-8 years
○ 9-12 years
○ 12-15 years
○ 15+ years

[first_name], where within the greater Northeast region is your current job position?

○ Connecticut
○ Maine
○ Massachusetts
○ New Hampshire
○ New York
○ Pennsylvania
○ Rhode Island
○ Vermont

How long have you held your current job position in [job_location]?

○ 0-2 years
○ 3-8 years
○ 9-12 years
○ 12-15 years
○ 15+ years

[first_name], do you currently hold a leadership position at your institution or within your professional field?

○ Yes
○ No

Have you ever completed a leadership seminar/program or certificate?

○ Yes
○ No

What was the name of the most recent leadership seminar/program or certificate that you completed?

_____

When was your most recent leadership seminar/program or certificate completed?

_____

Please upload your leadership program completion certificate.
(If you would like to provide this information at another time, you may skip to next question.)

What is your highest, completed level of education?

○ Associate's degree
○ Bachelor's degree
○ Master's degree
○ Doctoral degree

What gender do you personally identify with?

○ Female
○ Male
○ Other
○ I'd rather not identify

Please select all of your current certifications.
((If none apply, please leave blank and scroll down to continue.))

☐ BOC-ATC
☐ EMT
☐ NASM-PES
☐ NASM-CES
☐ NASM-CPT
☐ NSCA-CSCS
☐ NSCA-CPT
☐ NSCA-CSPS
☐ SCCC-CSCCa
☐ USA-W
☐ Other

Please list your "Other" certifications.

_____

We may be interested in speaking with you further regarding your responses. Would you be willing to be interviewed by the lead researcher regarding your leadership behaviors and characteristics?
(*The interview will be conducted via video conference, last about 60 minutes, and be based on your leadership behaviors and characteristics.)

○ Yes
○ No

[first_name], what is the best contact e-mail for you?
(Your information will not be shared.)   _____

[first_name], please provide the best contact phone number for you.
(Your information will not be shared.)

_____
((The researcher will reach out to you to set up a convenient time for your interview.))

You have not agreed to the informed consent for this research and therefore are unable to participate. If you feel that this is an error, please contact the researcher at jdaley2@une.edu.

APPENDIX B

Interview Questions

Interviewee Name:
Interviewee Title:
Interview date & time:

Opening Statement:
Thank you for taking time to complete this interview with me. I hope to speak with you for approximately 60 minutes and would like to discuss aspects of your leadership style as it pertains to student-athletes. The purpose of this case study is to investigate the self-perceived leadership characteristics, behaviors, and communication styles of professionals within the high-performance sport model to gain perspective on their ability to influence student-athletes.

In his book "Leadership", James Burns, describes leadership as "one of the most observed and least understood phenomena on earth." He goes on to state that leadership can be defined over 130 different ways. During this interview, I intend to discover your perspective and your implementation of leadership as a(n) athletic trainer / strength & conditioning coach. This interview has been divided into 3 different sections: **Transition 1**: The first section will contain follow-up demographic questions **Transition 2:** The second section will focus on general leadership. **Transition 3:** Lastly, we will discuss some facets of your leadership with regard to your interaction with student-athletes, specifically.

I will be recording this interview for appropriate transcription and further educational use during my dissertation. Your answers and research results will remain anonymous. Do you have any objections to the following: a. participating in this interview, b. discussing your leadership style during this interview and /or c. having our conversation recorded? If you do at any time, please let me know.

<u>**Follow-up Demographics**</u>

#1. Can you provide me with a brief description of the responsibilities you have in your current position?

#2. Approximately how many student-athletes do you interact with on a daily basis, dependent upon the season?

#3. Do you currently hold, or have you ever held a leadership position in your current position or professional field? If so, what is/was the position?

#4. What experience, if any, do you have with the theory of leadership, meaning have you had any specialized education or training in leadership?

<u>**Leadership Theory in Athletic Performance**</u>

#5. Within the constraints of athletic performance, how do you define leadership?

#6. Do you believe an athletic trainer and a strength & conditioning coach can influence team culture? If yes, how?

#7. With that being said, as the leader, what do you feel is the primary piece to developing a culture?

#8. You work in a very emotionally charged environment. How is it that you manage conflict?

      Follow-up question: Do you see a purpose for or advantage of conflict being present in the decision-making process?

Self-Perceived Leadership

#9. As someone that works closely with student-athletes, what do you believe are the most important characteristics of your leadership?
      Possible Follow-up question: Why do you believe these characteristics are important?

#10. What behaviors do you use to exhibit the characteristics you have just named?

#11. Do you believe that in your role as a(n) athletic trainer (or strength & conditioning coach), your leadership has an impact on the student-athletes that you work with?
      Follow-up questions: How?
                           Why or why not?

#12. At the Division III level, athletic trainers and strength & conditioning coaches usually work autonomously and are not under the direction of a head sport coach. Do you believe that has an impact on their leadership ability? How?

#13. Do you believe that athletic trainers and strength & conditioning coaches differ in their leadership approach with student-athletes?

#14. How does your leadership differ from the head sport coaches that you work with?

#15. Please discuss your "coaching"/motivational style, including behaviors.

#16. What has been the most influential piece of advice that you have been giving with relation to leadership?

      Follow-up question: What advice regarding leadership would you give to someone working with student-athletes for the first time?

#17. Do you feel your leadership style has evolved since you began working with student-athletes? If so, how?

#18. What improvements do you believe that you can make to improve your impact on the student-athletes?

#19. Please think about some leaders or people that have had a positive influence on your professional career. What aspects of their leadership do you try and emulate?

Closing Statement:
Those are all the questions that I have for you this morning.

Is there anything further that you would like to add?
Do you have any questions for me?

Do you have any objection to me reaching out to you via e-mail with any follow-up questions?

Once again, thank you so very much for navigating your schedule and allocating the time to speak with me. I truly appreciate having the opportunity to speak with you and collect your perspective on your leadership within athletic performance.

APPENDIX C

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To: James Daley

Cc: Brianna Parsons, Ed.D.

From: Lliam Harrison, M.A., J.D. CIM

Date: February 24, 2020

Project # & Title: 20.02.24-025 Self-Perceived Leadership Behaviors of Collegiate Athletic Trainers and Strength and Conditioning Coaches: A Case Study

The Institutional Review Board (IRB) for the Protection of Human Subjects has reviewed the materials submitted in connection with the above captioned project and has determined that the proposed work is exempt from IRB review and oversight as defined by 45 CFR 46.104 (d)(2).

Additional IRB review and approval is not required for this protocol as submitted. If you wish to change your protocol at any time, including after any subsequent review by any other IRB, you must first submit the changes for review.

Please contact Lliam Harrison at (207) 602-2244 or wharrison@une.edu with any questions.

Sincerely,

William R. Harrison, M.A., J.D. CIM
Director of Research Integrity

IRB#: 20.02.24-025
Submission Date: 02/23/20
Status: Exempt, 45 CFR 46.104 (d)(2)
Status Date: 02/24/20