

ATHLETES' PERCEPTION OF THEIR COACHES' BEHAVIOR AT CHRISTIAN AND
SECULAR INSTITUTIONS

A THESIS

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ABSTRACT

THESIS: ATHLETES' PERCEPTION OF THEIR COACHES' BEHAVIOR AT CHRISTIAN AND SECULAR INSTITUTIONS

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The coach-athlete relationship has been identified as one of the key components of an athletes' sport experience. In the competitive collegiate sport setting, this relationship has shown to be even more influential due to the duration of the relationship of coach-athlete relationship and the challenging time of identity transition for these college athletes. Because of coach behaviors known influence on such an important relationship, research has explored the potential antecedents for why coaches engage in certain types of behaviors, specifically autonomy supportive and controlling coaching behaviors. One unresearched area of coach behavior influences is religious beliefs. Participants included NCAA DIII, NAIA and NCCAA individual sport athletes ($n=114$) and coaches ($n=77$) from both religious and secular institutions. The Athletes were surveyed using the Autonomy Supportive Behavior Scale, Controlling Coach Behavior Scale, and open-ended questions and the coaches surveyed through open-ended questions. Following the one-way MANOVA, results indicated a significant difference between athletes perceived autonomy coaching behavior in religious ($M=33.66$, $SD = 6.16$) and secular ($M=27.20$, $SD=8.99$) institutions. Additionally, results concluded there to be no significant difference between controlling coaching behavior or the controlling coaching subscales between

groups, but qualitative results show support towards a potential difference in negative conditional regard. Athletes' perception of the frequency of their coaches overall controlling coaching behavior was very low compared to prior research regarding the prevalence of controlling coaching behavior in the collegiate setting.

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CHAPTER ONE

Introduction

Forty percent of college athletes who receive an athletic scholarship either transfer, leave college altogether, or do not graduate within six years (Galehouse 2013). One of the supporting reasons for this statistic is that athletes felt they chose the wrong coach at the institution they were playing. This idea of choosing the wrong coach infers athletes' discontentment with areas like the coach's personality, coaching style, or mutual relationship (Richards et al., 2016). Research indicates that coach personality (Gabert et al., 1999; Letaweksty et al., 2003), coaching style (Pauline et al., 2008), and relationship with coach (Johnson et al., 2009; Lim et al., 2019) all play a significant role university selection and likelihood of sport burnout.

The coach-athlete relationship (CAR; Jowett & Poczwardowski, 2007) has been identified as a central feature of an athlete's sport experience (Bartholomew et al., 2009). Viewed through the lens of the framework of the Self-Determination Theory (SDT), the three basic needs (competence, autonomy, and relatedness) explain why the CAR is such an important relationship in athletes' college experience due to its impact on motivation and psychological development (Ryan & Deci, 2000). Furthermore, due to the formative developmental timing of this coach-athlete in an athlete's life, it increases the coach's influence, both positively and negatively (Arnett, 2000). With this understanding of the inherent influential relationship of the CAR, researchers have created models to understand best and identify healthy CARs. One example of this is Jowett's (2007) 3C's +1 coach-athlete relationship model. Jowett defines constructs by which the quality of the CAR can be perceived. These constructs are commitment, closeness, complementarity, and co-orientation. In further exploring these C's, research supports that one of

the most significant contributing factors to the coach-athlete relationship is coach behavior (Davis & Jowett, 2014).

Directly linked to the CAR, coach behavior is heavily researched in coaching literature (e.g., Nicholls et al., 2016; Hardelsen et al., 2019; Sari & Bavazit, 2017). Coach behavior refers to how coaches interact with their players through instruction and non-verbal and verbal communication in and outside direct sport engagement (Sari & Bavazit, 2017). Through these interactions, research demonstrates the social and psychological impacts coach behavior has on their athletes (Nicholles et al., 2016). Furthermore, the impact expands beyond the immediate years playing under the coach but can have long-term impressions (Almagro et al., 2010; Carpentier & Mageau, 2013;; Morbee et al., 2020). Coaching behavior can be broadly separated into two categories: supportive and unsupportive behavior (Côté et al., 1999). A commonly known supportive behavior is autonomy-supportive behavior, with a known antithetical behavior known as controlling coach behavior (Carroll & Allen, 2021). In comparing the utilization of these behaviors, research supports that the use of supportive behaviors, specifically autonomy-supportive behavior, are effective in increasing athlete motivation and successful in positively impacting athlete performance (Lopez-Walle et al., 2012). Research also displays that while there is a negative impact on athlete motivation and performance in controlling coach behavior, coaches still use this behavior (Bartholomew et al., 2010).

There are many theories into antecedents for coach behavior (e.g., gender of coach, age of athletes, skill of athletes, and sport setting), but one that lacks research is how religious beliefs influence a coach's behavior. For many professional athletes who identify with a religious belief, affirm that it was through the foundation of their faith they were able to have the victories that they did (e.g., Jonathan Edwards, Muhammad Ali), alluding to their religious beliefs playing a

part in their behavior in competition (Kretschmann & Benz, 2012). When it comes to religion and leadership, which could be applied to coaching, many religions have specific standards for those who hold positions of power (Gaitho 2019). For example, the Christian faith, in theory, supports a democratic approach to leadership, involving others in the decision-making process (Gaitho, 2019). On the contrary, few have abused their power by claiming that their leadership role is 'God-ordained' and have taken an autocratic leadership approach (Rule, 1984).

While each religion is unique, many hinge upon the virtue of humility (Carlson, 2014). In specifically examining Christianity, Christians leaders often adopt an approach known as servant leadership (Vinson & Parker, 2020). This approach, which emphasizes serving those they are leading rather than oneself, reflects the previously mentioned autonomy-supportive behavior, as both leadership approaches are athlete focused in seeking to meet the athlete's needs above their own. Due to this comparative match in leadership behavior, it would be hypothesized to see Christian coaches utilizing autonomy-supportive behavior. Two research studies have explored this leadership comparisons yet have not found distinguishing results in Christian coach and non-Christian coach behaviors (Burns 1983; School et al., 2020). Burns (1983) found that Christian and non-Christian high school coaches ranked specific coaching behaviors almost identically. The only noted difference in ranking was Christian coaches ranking social support as first, while their non-religious counterpart suggested social support to be third. Schools et al. (2020), who studied athletes' perception of their Christian coaches, found that while athletes felt that their coach cared for them, they still experience what would be identified as controlling coach behaviors.

Purpose of the Study

Evidence shows that religious beliefs influence behavior, yet there is still little research exploring this comparison of coaches' behaviors who work at Christian and secular universities. Furthermore, there remains a gap in how coaches perceive their religious beliefs influencing their behavior and how athletes perceive their coaches' religious beliefs playing a role their behavior. Therefore, the purpose of this study was to explore the differences in individual sport college athletes' perceptions of the frequency of specific coaching behaviors (i.e., controlling and autonomy supportive) in practice settings at secular and religious institutions, and to explore how coaches perceive their religious beliefs, or lack thereof, influencing their coaching behavior.

Research Questions and Hypotheses

To address the purpose of the study, the following questions were explored

1) Is there a difference in individual sport college athletes' perception of the frequency of controlling coaching behavior in practice settings at secular vs Christian institutions?

a. Is there a difference in individual sport college athletes' perception of the frequency of total controlling coaching behavior in practice settings at secular vs Christian institutions?

H1a- Athletes at secular institutions will report higher perceptions of controlling coaching behaviors than athletes at Christian institutions.

b. Is there a difference in individual sport college athletes' perception of the frequency in the sub-scales of controlling coaching behavior in practice settings at secular vs Christian institutions?

H1b- Athletes at secular institutions will report higher perceptions of specific controlling coaching behaviors (i.e., intimidation and negative conditional regard) than athletes at Christian institutions.

2) Is there a difference in athletes' perception of the frequency of autonomy supportive coaching behavior in practice settings at a secular institution vs a religious institution?

H2- Athletes at Christian institutions will report higher perceptions of autonomy supportive coaching behaviors than athletes at secular institutions.

3) How do athletes perceive their coaches' religious beliefs influencing their coach's behavior?

4) How do coaches perceive their religious beliefs influence their coaching behavior?

Definition of Terms

Autonomy Supportive Coaching Behavior: "coaching that means that 'an individual in a position of authority (e.g., an instructor [or a coach]) takes the other's (e.g., a student's [or an athlete's]) perspective, acknowledges the other's feelings, and provides the other with pertinent information and opportunities for choice, while minimizing the use of pressures and demands" (Black and Deci, 2000, p. 742).

Burnout: "athletes feeling physically and/or emotionally exhausted, experiencing less sport satisfaction, having decreased feelings of personal accomplishment, and devaluing their sport experience" (Ruser et al., 2021, p.40).

Christianity: religion built upon the foundation of the life, teachings, and death of Jesus Christ (of Nazerth) in the 1st century CE. Geographically, one of the most widely diffused faiths, with its largest groups identified as: Roman Catholic Church, Eastern Orthodox, and Protestant (Stefon et al., 2020).

Christian Institution: Christian universities/institution were determined by the research through analyzing school's mission statement for a mention of the involvement of the Christian faith (or Christian denomination) in schools' policies and school experience, and/or affiliation with National Christian College Athletic Association (NCCAA)

Coach-Athlete Relationship: "a situation in which a coach's and an athlete's cognitions, feelings, and behaviors are mutually and causally interrelated relationships." (Jowett, 2007, p.5).

Controlling Coach Behavior: Coaching behaviors that include "issuing demands, distributing task-contingent rewards, punishments, and guilt-inducing criticisms, using intimidation techniques, and encouraging athletes' ego-involvement". (Bartholomew et al., 2009, p. 217).

Individual Sports: Sports where, while collectively working as a team, individual athletes compete alone, without direct impact of teammate (Hamilton & Chapel, 2019). For this study individual sports will be: tennis, track and field, and golf.

National Association of Intercollegiate Athletics (NAIA): Intercollegiate athletics administration for smaller colleges and private universities. Divided into two classifications: Division I (DI) and Division II (DII) (NAIA, 2021).

National Collegiate Athletic Association (NCAA): A member-led organization which operates as administrative authority for men's and women's intercollegiate athletics. Divided into classifications known as Division I (DI), Division II (DII) & Division III (DIII) (Walker et al., 2021).

Religious Beliefs: adhering to a system of beliefs in a god or group of gods that involves practices, traditions, and rituals. Beliefs have various functions for its members and communities involved (Feezell, 2013).

Religious (Christian) Institutions: Religious-affiliated universities and colleges are private institutions that emphasize the integration of the Christian faith in academics and all institution functions, such as athletics (Schwehn, 1999).

Self-Determination Theory: Human motivation and social processes and environments that promote healthy psychological development through three basic needs: competence, autonomy, and relatedness. (Ryan & Deci, 2000).

Servant Leadership: Servant leadership is a type of leadership style where the leader places the followers at the forefront of leadership responsibilities. The leader seeks to serve the one they are leading, which means putting the needs of the group before one's own (Vinson & Parker, 2021).

Delimitations

1. College students across the United States on an athletic roster at NCAA DIII, NAIA, NCCAA Christian and secular universities who are participating in individual sport (tennis, golf, wrestling, swimming & diving, gymnastics).
2. College coaches across the United States from NCAA DIII, NAIA, and NCCAA universities of secular and religious affiliation coaching athletes who are participating in individual sport (tennis, golf, wrestling, swimming & diving, gymnastics).
3. For athlete participants included, must have played for current coach for at least one season.
4. For coach participants included, must have coached at university for at least one season.

5. Coaches at Christian schools must self-report to align with Christian faith.

Assumptions

1. It was assumed that participants were truthful in their answers.
2. It was assumed that all questions were understood by participants.
3. It was assumed that modifications made to questionnaires did not significantly alter reliability or validity of scales used.

Limitations

1. Athlete participants self-reported their perception of their coaches' behavior and religious beliefs impact on behavior
2. Coach participants self-reported their perception of their religious beliefs' impact on behavior.
3. Athlete and coach participants were only be from a sample of individual sports.
4. There is a spectrum of commitment to Christian faith, and this study operates under the idea that all Christian coaches have the same approach to their Christian faith.

Significance of Study

During the review of literature, it was identified that while autonomy-supportive coaching behavior is backed by research to be an effective approach to coaching behavior, there has not been a specific study to explore if religion, or Christian beliefs, plays a role in why coaches adopt this behavioral approach. If the research supports religious beliefs influence on coaching behavior, specifically autonomy supportive behavior, this could be important information for athletes to know to in considering playing under a coach during their collegiate sport career.

Although prior research has shown to support coaches are not aware of their own behavior (Lafreniere et al., 2011), there has been little research to date on coaches' awareness of belief system and its impact on their chosen coaching behaviors, which is another literature gap this study seeks to explore. Additionally, the exploration of this study seeks to understand how athletes perceive their coaches' religious beliefs and how this perception may impact their understanding and sensitivity to coaching behaviors. The insights gained from this study could further answer the types of behaviors perceived from individual athletes at by Christian and non-Christian universities.

CHAPTER TWO

Introduction

The National Council of Youth Sport (NCYS) reported that sport participation is higher more than ever, with over 60 million youth and adolescents engaging in an organized sport each year and growing (NCYS, 2008). Despite this continuing growth in sport participation, the youth dropout percentage has shown a similar trend. Currently, 70 percent of youth drop out of sport by the age of 13 (Wekesser et al., 2021). When surveying individuals on why they drop out of sport, some of the reasons included financial, parent involvement, and lack of sport enjoyment. One of the largely contributed reported reason for sport drop out was the athletes experience with their coach, specifically the coach-athlete relationship (Wekesser, 2021).

Across all populations in sport, the coach-athlete relationship has shown to have an impact on the athlete's sport experience (Bartholomew et al., 2009). The influence of this relationship research has noted goes beyond just their current sport environment, but can have lasting impacts, positive or negative, on their lives (Ruser et al., 2021). Due to the importance of this relationship to the sport experience, researchers have explored the fundamental aspects of this relationship, one of those being coach behavior (Nicholls et al., 2016). Certain trends in coach behavior, whether categorized as supportive or unsupportive, have concluded to foster either positive or negative coach-athlete relationships (Mageau & Vallerand, 2003). Beyond coach behavior, research argues that to better understand the coach-athlete relationship, one must consider the bias' and beliefs the coach and athlete bring into this relationship, because beliefs will influence behaviors in any relationship (Bechler et al., 2021). One specific belief system to consider is religious beliefs. To date, there have been few research studies exploring coach's

religious (i.e., Christian) beliefs and how this plays a role in their coaching behaviors. Based on this information, the researcher has reviewed literature relating to coach-athlete relationship, coaching behaviors, supportive and unsupportive, coach behavior assessment, religion in sport and coaching, and Christianity in sport and coaching.

Coach-Athlete Relationship

The coach-athlete relationship has been identified as one of the central components of an athlete's experience in sports (e.g., Bartholomew et al., 2009; Davis et al., 2018; Gardner et al., 2017). Researchers have found that it impacts athlete enjoyment (Gardner et al., 2017), dropout rate (Davis et al., 2018), and even technical development (Bartholomew et al., 2009). It has also been concluded that the coach-athlete relationship is central through every stage of an athlete's sport journey. Elite (e.g., Davis et al., 2018), college (e.g., Ruser et al., 2021), and youth sport (e.g., Wekesser et al., 2021) athletes have identified that their poor relationship with their coach was one of the significant factors for dropping out of their sport.

The coach-athlete relationship (CAR) has been defined as “a situation in which a coach’s and athlete’s thoughts, feelings, and behaviors are mutually and casually interrelated relationships” (Jowett, 2007, p. 5). One way to understand the importance of the coach-athlete relationship is through the lens of the Self-Determination Theory (Ryan & Deci, 2000; Wekesser et al., 2021). The Self-Determination theory explains how human motivation and social environments impact psychological development. Simply put, to healthily grow and be motivated in any environment, there are three basic needs an individual must experience: competence, autonomy, and relatedness (Ryan & Deci, 2000). In a sport environment, a coach plays a part in each of these needs for athletes within their sport participation. Jowett used the

Self-Determination Theory framework and this definition when creating her 3 C's + 1 coach-athlete relationship model. This model highlights three constructs both the coach and athlete need to consider to establish and maintain a quality CAR: commitment, closeness, and complementarity.

Commitment looks at both the coach and athlete's intentions or thoughts to pursue an athletic relationship throughout their allotted time. In a situation, such as collegiate athletics, where there is an expectation of a four-year commitment, the attitude and display of desired commitment is evident to both parties and will impact the CAR (Ruser et al., 2021; Schools et al., 2020). When both athlete and coach mutually sense an intentional effort towards a genuine and committed relationship, this positively affects the coach-athlete relationship (Jowett 2003). On the contrary, when either coach or athlete feels a disconnect in commitment to goals or understanding, this has a negative impact. Nicholls et al.'s (2016) study about the coach-athlete relationship further discovered that there is more than just displays of commitment for a positive and healthy CAR, but instead must consider balance in commitment. The study, which connected coach behavior, CAR, and stress appraisals, concluded that there are even negative implications if the athlete and coach display a highly committed relationship. With such commitment to a coach, athletes expressed still feeling a bond to their coach, despite the coach engaging in unsupportive behavior. It could be hypothesized that a highly committed relationship between athlete and coach can impair the athlete from correctly perceiving negative coaching behaviors, which could likely relate to the coach's perceptions of athletes' behavior as well (Nicholls et al., 2016).

Closeness considers both the coach and athlete's feeling of trustworthiness and mutual respect and care for each other (Jowett, 2007), which pairs closely with commitment (Nicholls et

al., 2016). When athletes perceive those feelings of respect, and feel as though they share overlapping values and view with their coach, this increases a sense of closeness in that relationship (Jowett 2003). On the other hand, if an athlete feels a sense of distance or unattachment with their coach, this leads to a decreased sense of relational closeness, negatively impacting the coach-athlete relationship. Schools et al. (2020) researched this question of closeness and perception of coach care qualitatively by interviewing National Christian College Athlete Association (NCCAA) Division II athletes. Many of the athletes affirmed that when they felt that their coach cared for them, in verbal or nonverbal affirmation, this led to them having more confidence in their coach-athlete relationship. This affirmation ultimately resulted in increased sport performance and an overall increase of enjoyment in sport.

Complementarity is the extent to which behaviors are reciprocal and collaborative (Jowett, 2007). When the athlete and coach's behaviors positively correspond, this positively enhances the coach-athlete relationship (Jowett, 2003). For example, the "give and take" principle (Jowett, 2003 p.454). This principle is when both the coach and the athlete recognize that their respective roles are necessary for the other to be successful. A practical example of this would be when the athlete works hard in practice because it recognizes the coach has worked hard to plan a practice for both the coach and athlete to get better. However, if either coach or athlete feels a disconnect, in having incompatible roles or differing expectations of social support, this negatively impacts the coach-athlete relationship. Goffena et al. (2021) explored this concept of athlete expectation of social support in a study of 140 National College Athlete Association (NCAA) Division 1 athletes. The study concluded that the positive coach-athlete relationships were in situations where a coach exemplified autonomy-supportive coaching behaviors (Goffena et al., 2021), which is a coaching behavior that research has shown most

athletes desire in their coaches (Cho & Baek., 2020). The athletes in these situations not only felt a greater display of trust through their coach, allowing them in decision-making processes, inherently positively impacting the CAR but additionally increased self-regulation of sport learning (Goffena et al., 2021).

Finally, the +1 in Jowett's 3 C's +1 model in the CAR is co-orientation (Jowett, 2007). Co-orientation refers to the general agreement of strength, from both player and coach, in the coach-athlete relationship. More than the state of the relationship, but co-orientation also involves having an established commonality regarding the athlete's progression (Nicholls et al., 2016). It is given the "+1" due to its through-line in the three other elements of this framework, yet co-orientation is more perceptual than the others in nature (Rhind & Jowett, 2010). Isoard-Gauthier et al. (2016) explored this idea and found that much of an athlete's burnout level was related to how they perceived the strength of their relationship with their coach. If they perceived a disconnect from how they viewed the relationship versus how they perceived their coach viewed the relationship, this resulted in a higher likelihood of burnout.

Beyond the fundamental elements of Jowett's 3C's + 1, it raises the consideration of time spent in the coach-athlete relationship. There is little conversation discussing that beyond establishing a positive coach-athlete relationship, it must be followed to maintain said relationship (Rhind & Jowett, 2010). It could be hypothesized that what makes the coach-athlete relationship impactful, specifically in collegiate athletes, is due to the longevity of the relationship (Ruser et al., 2021) and that when athletes enter into this CAR, it is during a time of personal identity exploration and transition (Arnett, 2000). Hunt and Eisenberg (2010) further express the importance of having a healthy CAR because college is the period for student-athletes where the onset of mental illness is most common.

Despite this underdevelopment, Jowett's 3 C's + 1 model for the coach-athlete relationship has been fundamental for improving impactful relationships across various settings, even outside of sport, such as marital counseling (Jowett & Meek, 2000) and executive coaching (Jowett et al., 2012). While the Jowett 3 C's +1 model continues to expand in its reach of target audiences, research supports that the most significant contributing factor to the coach-athlete relationship is the coach's behaviors and the athletes' perception of that behavior (Davis & Jowett, 2014).

Categories of Coaching Behaviors

Coaching behavior is defined as "how coaches interact with their athletes" (Nicholls et al., 2016 p. 172; Smith et al., 1977) and, as previously mentioned, directly linked to the coach-athlete relationship (Lafrenie're et al., 2011). In addition, coaching behavior refers to how coaches speak to their athletes, instruct their athletes, use non-verbal behavior when they communicate with their athletes, and interact with their athletes outside of the sport environment (Sari & Bavazit., 2017). Commonly identified coach behaviors can fall into two broad categories: supportive and unsupportive behaviors (Coaching Behavior Scale for Sport; Côté et al., 1999).

Supportive Behaviors

Supportive behaviors are defined as "a broad and multifaceted coaching style that incorporates distinct yet interrelated emotional/relational and structural/instrumental components of effective coaching" (Nicholes et al., 2011, p. 461). Côté et al. (1999) further explain this as a behavior that provides positive guidance for the athletes to develop both athletically and mentally. If executed correctly, this type of behavior is positively linked to an athlete's sport achievement (Nicholes et al., 2011) because it allows the athlete to develop problem-solving

skills, which translate to learning to adjust to stress-inducing sport competitions (Ntoumanis et al., 1999). Côté's Coach Behavioral Scale for Sport (CBS-S; 1999) categorizes supportive coaching behaviors to look like emotional, structural, or instrumental behaviors. A well-known recognized supportive behavior is autonomy-supportive coaching (Carroll & Allen, 2021).

Autonomy-supportive coaching is another commonly seen coaching behavior supported by research that contrasts with controlling coaching behaviors (Carroll & Allen, 2021; Cho & Baek, 2019). Coach-autonomy support refers to “coaches displaying attitudes and behaviors that show they value the athlete's self-initiations and involvement” (Mageau & Vallerand, 2003, p. 3). This type of support means that a coach will engage in social support and positive feedback (Sari & Bayazit, 2017), providing individual athletes opportunities to participate in team-related decision-making (Cho & Baek, 2019). Autonomy support from coaches empowers athletes to be a part of the decision-making process, allowing the athletes to feel trusted and valued on their teams. This trust and value encourage the athletes to have greater confidence in their athletic ability because of the secure and stable environment (Lopez-Walle et al., 2012). In addition, various research supports that autonomy-supportive coaching behaviors are positively related to desirable athlete outcomes related to sport performance (e.g., Nicolas et al., 2011, Gillet et al., 2010), such as meeting psychological needs (e.g., Coatsworth & Conroy, 2009), greater sport enjoyment (e.g., Conroy & Coatsworth, 2007), improvement in wholistic motivation (e.g., Carpentier & Mageau, 2013), long-term satisfaction in sport participation (e.g., Almagro et al., 2010), and increased team efficacy (e.g., Lindsey et al., 1995, Myers et al., 2004; Hampson & Jowett, 2014; Price & Weiss, 2013).

A helpful theoretically-based framework to engage with autonomy-supportive behavior is through the lens of Mageau and Vallerand's (2003) motivational model of the coach-athlete

relationship (MMCAR), which was discussed prior in this review. Maqeau and Vallerand offered three underlying determining factors for coach autonomy-supportive behavior. These factors are the coach's personal orientation, perceptions of athlete's behavior and motivation, and the coaching context (Maqeau and Vallerand, 2003, 891). Thus, understanding the antecedents for a coach's behavior through this framework helps explain why a coach would behave in an autonomy-supportive and controlling way.

Unsupportive Coaching Behavior

Although supportive coaching behaviors are typically linked to positive results, coaches can still engage in what is known as unsupportive coaching behaviors (Kristiansen & Roberts, 2010). Behaviors under this category include demonstrations of power such as: yelling, manipulating, intimidating, and threatening, which athletes can describe as pressuring (Côté et al., 1999). More than the list above, unsupportive behaviors can also involve coaches engaging in favoritism with "the best" athletes, showing an association with rewards and positive performance (Kristiansen et al., 2008), as well as punishing athletes for when they make mistakes (e.g., punitive-contingent; Partington et al., 2013). In research, a commonly identified unsupportive coaching behavior group is known as controlling coach behaviors (Caroll & Allen, 2021).

One widely accepted behavior in the coaching world is what is known as controlling coaching behavior (Haraldsen et al. 2019; Morbee et al., 2020; Ramis et al., 2017). Controlling coaching behavior can be defined as “coaches who create an environment where they pressure athletes to act a certain way, think a certain way, and feel a certain way for a specific purpose or ultimate gain of the coach” (Morbee et al., 2020, p. 89; Mageau & Vallerand, 2003). Specifically, this is displayed through issuing demands (e.g., telling the athletes exactly how they

will play the game), task-failure punishments (e.g., extra running following a mistake), task-contingent rewards, and inducing guilt through verbal criticisms (e.g., embarrassing player by emphasizing past mistakes; Bartholomew et al., 2009).

This type of behavior has been observed at various levels and forms in previous research (e.g., Cushion & Jones, 2006; Erickson & Cote, Fraser-Thomas & Cote, 2009). Coaches in all sports at the youth (Carroll & Allen, 2021; Ramis et al., 2017), high school (Kim et al., 2019), college (Amorose et al., 2017) and elite levels (Haraldsen et al., 2019; Serpell et al., 2020) have displayed this type of behavior in practice (Giesdel et al., 2019) and competition settings (Kim et al., 2019). While widely accepted at almost every level of sport, the damaging consequences of these types of behaviors do not go unnoticed for the athletes that spend time in this coaching environment (Carroll & Allen, 2021).

Controlling coaching behaviors have been linked to harmful outcomes in athletes such as: increasing the likelihood of sport burnout (Quested & Duda, 2011), a decrease in motivation (Pelletier et al., 2001), psychological need-frustration (Baleguer et al., 2012), and consequences beyond sport (e.g., eating disorders, anxiety, depression; Batholomew et al., 2011). Specifically in consequences beyond sport, these have demonstrated to follow athletes for a large portion of their lives, years after they have walked away from the sport (Batholomew et al., 2011).

There are a few theories for controlling coaching behavior antecedents, such as type of setting (e.g., competition vs practice; Giesdal et al., 2019), psychological well-being (Stebbing et al., 2011), and self-reported passion for coaching (Kim et al., 2019). One of the most common reason this behavior is seen among coaches in competition setting, is because of the power a coach can acquire when in complete control of their team (Giesdal et al., 2019). This ‘power’ means a coach has developed an environment where athletes unquestionably obey their coach

and their commands. Giesdal et al. (2019) explored this idea in a study about controlling coaching and the mastery climate. Mastery climate is used in team culture development (Duda & Treasure, 2015). It refers to a type of sport environment that centers around cooperation with emphasis on individual and team development, all while supporting objective performance goals. An example of a mastery climate would be one where the mastery of skill and tactics is the aim of the coaches practice sessions all while operating under the expectations that the players are intense and hardworking. Giesdal et al. questioned if controlling coach behavior impacted a mastery climate in male and female youth soccer players between the ages of 10-15 years old. The study found that an aspect of the strength of the mastery climate-competence satisfaction was contingent upon some piece of controlling coaching behavior. A similar study with male adolescent athletes participating in various sports displayed similar results in that the controlling coach behaviors negatively impacted the mastery climate when the athletes perceived the behavior as controlling. Implying that a coach could display controlling coaching behavior, but if the athletes do not perceive it as controlling, the impacts are not as significant (Atkins et al., 2015).

Another theory for why coaches engage in controlling coaching behavior is correlated to their own psychological well-being (Stebbing et al., 2011). Stebbing et al. (2011) found that coaches who were in contexts with greater surrounding social and emotional support for their psychological well-being, positively correlated to implementing positive coaching behaviors, while coaches that were limited in their general well-being resulted in adopting controlling coaching behaviors (e.g., increasing criticism, controlling their athletes and harsh delivery). Similarly with coach psychological well-being, other researched controlling coach behavior antecedents are pressure of coaching environment (Cushion & Jones, 2006) and coaching context

(e.g. organization administration, work-life, parents; Rocchi et al., 2017). Coaches who find themselves in a higher-pressure environment, such as professional or collegiate, where the fate of their occupation is directly correlated to their team's performances, coaches have shown to become more lenient with using controlling coaching behaviors because of their perceived effectiveness (Cushion & Jones, 2006). Additionally, coaching context has shown to influence controlling coach behavior engagement, specifically organizational support (Rocchi et al., 2017). Rocchi et al. (2017) concluded that the degree of support of the institution where the coach is employed at, plays a role in their utilization of controlling coach behaviors, because of how that social support impacts their psychological well-being.

Factors Related to Coaching Behaviors

Outside the category of coaching behaviors, many factors contribute to coaching behavior (Epitropaki & Martin, 2004; Lacy & Goldston 1990; Trudel et al., 1996; Smith & Cushion, 2006; Partington & Cushion, 2013; Nicolas et al., 2011). Research suggests that coaching behavior is dependent upon a variety of contextual variables, like coach gender (Epitropaki & Martin, 2004; Lacy & Goldston 1990), age of athletes (Partington et al., 2013), athletes' skill (Seikenska et al., 2013; Lacy and Darst 1985), and sport settings (Nicolas et al., 2011; Smith et al., 2020). These factors influencing coaching behaviors stem from a theoretical framework known as the Multidimensional Model of Leadership in Sport (MDML; Chelladurai 1984; Chelladurai & Saleh, 1980). This conceptual model explains that a coach's leadership behavior, along with the athletes' leadership needs, are influenced by contextual factors (e.g., age of athletes, the skill of athlete), situational demands (e.g. sport setting), and the coach's personal characteristics (e.g., gender of coach).

Gender of Coach

The gender of the coach has been shown to relate to coach behaviors (Chelladurai & Saleh, 1980; Lacy & Goldston, 1990; Millard 1996; Murray et al., 2018). For example, Murray et al. (2018) found that female coaches commonly depicted more sensitive and emotional coaching behaviors, such as displaying empathy, which would be identified as supportive behavior, than their male counterparts, who focused more on displaying power behaviors a considered unsupportive behavior. However, despite this emphasis on sensitive behavior, many female coaches tend to be rated as less effective than male coaches (Eagly & Karau, 2002), even when they demonstrate traditional coach behaviors and roles (Rudmen et al., 2011). Therefore, evidence suggests that women feel the need to violate traditional coaching behaviors, which leads them to be seen as 'less effective' (Eagly & Karau, 2002).

Manley et al. (2010) took the approach of considering the impact of gender perception in sports coaching based on athlete gender and how that relates to coaching behavior. This study showed that male and female athletes, at the university amateur level, commonly view female coaches to be less competent than males. Blom et al. (2011) supported a similar claim, and explained that female coaches who work with male athletes feel challenged by them and feel they need to engage in intense coaching behaviors.

Eagly and Wood (1991) concluded different results in their meta-analysis of coach behavior perception from strictly a female athlete perspective. When coaches were paired with only female athletes, male coaches tended to be rated as aggressive and blunt, while female coaches were noted as more caring and sociable (Eagly & Wood, 1991). This positive perception of female coach behavior could be explained by female coaches showing a greater focus on relationship quality due to the understanding that females display higher emotional intelligence and social skills (Mandell & Pherwani, 2003).

Age of Athletes

Another contextual variable to consider in coaching behavior is the age of the athletes (Smith et al., 1993; Segrace & Ciancio, 1990). Partington et al. (2013) explored this variable by observing 12 English youth professional soccer clubs across six different age groups. The observed behavioral analysis showed that coaches displayed more instructional-based behaviors at younger ages, yet at the older ages, they used more divergent questioning and punitive behaviors upon poor performance. During the interview process of this study, the coaches revealed that their coaching behavior was not due to the age of the athletes, but rather their coaching philosophy, which supports the prior research of Cushion and Jones (2001) stating the impact of coaches' beliefs about their coaching philosophy impacted their behavior. However, from other supportive research, evidence suggests that while the coaches contributed their behaviors to coaching philosophy, age was an underlying variable as to why these coaches engaged in more instructional behaviors (Lacy 1989; Miller 1992; Wandzilak et al., 1988).

Skill of Athletes

Similar to age, researchers have reported that athletes perceive their coaches' behavior to be different from athletes who display more significant potential in sport or skill, known as the Pygmalion effect (Chelladurai et al., 1999; Martin et al., 2009). This phenomenon explains that when coaches (as well as teachers) have expectations of achievement based on athletes' successful performance or demonstrations of skill, they inherently change their behavior towards those athletes because they have a greater belief in those athletes. This behavior change is usually positive and impacts coach engagement in affirmative communication, positive feedback, and technical instruction (Solomon et al., 1998). Siekenska et al. (2013) examined the Pygmalion effect on both male and female athletes in a qualitative study of the athletes' perception of their

coaches' behavior towards higher-achieving athletes. Both male and female athletes reported that their coaches engaged in "favoritism" behavior with more accomplished athletes and engaged in more unsupportive coaching behaviors (e.g., 'excessive criticism') with less skilled athletes. The findings of this study suggest that the highly skilled athletes perceived this difference in coaching behavior to inhibit their athletic progress than enhance it.

Sport Setting

Sport settings (i.e., practice vs. competition) play a significant role in coaching behavior, as research suggests that coaches change their behavior based on whether the sport setting is a practice or competitive match (e.g., Nicolas et al., 2011; Partington & Cushion, 2012; Smith & Cushion, 2006; Trudel et al., 1996). Smith et al. (2020), in their qualitative study on U.K. academy basketball coaches' behavior in a practice setting, found that there was a discrepancy in their supportive and unsupportive coaching behaviors between practice and competition settings, although coaches expressed they do strive for consistency in their behaviors in both. In practice, the coaches appear to be more engaging in autonomy-supportive-like behaviors, but in competition, they displayed more controlling behaviors due to the increased pressure of the situation. One coach expressed that their behavior can change depending on the team's success in both practice and competition and that practice following a match reflects that match's result. However, Smith et al. (2020) argued that a coach's practice setting behavior could more impact an athlete because of the considerably more time the athlete spends in practice than they do in competition. This argument supports Baker et al. (2003), which expressed that whichever behavior the athlete has more exposure will be the most influential.

On the contrary to Smith et al. (2020) practice setting study, Nicolas et al. (2011) examined coaching behavior in a competition setting with individual sports (i.e., gymnastics,

cycling, combat sport, track and field, racquet sports) and concluded that most athletes from France (male and females, ranging from 15 to 33) found their coach to increase in supportive behaviors during competition. While all being individual sport athletes, these participants varied in competition level, competing at the recreation, regional, national, and international level. The results from Nicolas et al.'s (2011) study displayed that an increase in supportive behaviors correlated to an increase in athlete performance. Despite this shown increase in athlete performance during a coaching engaging in supportive behaviors, there were still moments when the coach engaged in unsupportive behaviors. Conversely, when a coach engaged in unsupportive behaviors, athletes reported feeling more stressed during competition. However, this behavior was commonly noted in competition settings where the team the athlete was on was losing. Therefore, it could be concluded that due to the negative association unsupportive coach behavior has on athlete performance, coaches may engage in the opposite. Other contextual variables that are presently seen to impact coach behavior are coaches' expectation of the athletes' performance (Solomon et al., 1998; Wilson et al., 2006), division of university (Rocchi & Pelletier, 2017; Stokowski et al., 2022) and the stage of the season (e.g., pre-season, playoffs, final round of the national tournament; Potrac et al., 2002).

Coaching Behavior Assessments

From understanding the coach-athlete relationship and the role that coach behaviors play in that relationship, researchers have recognized the importance of assessing and observing coach behavior (Erickson, 2009). From this recognition has come various systematic observation instruments and surveys. Observation instruments, which involve a nonbiased observer noting different behaviors and their frequency, include: Coaching Behavioral Assessment System (CBAS; Smith et al., 1977), Arizona State University Observational Instrument (ASUOI; Lacy &

Darst 1984), Coach Analysis and Intervention System (CAIS; Cushion et al., 2012), and even a newly developed Assessment of Coaching Tone (ACT; Erickson & Cote, 2015). Coaching behavior assessment surveys take the perception of the athlete and some examples of these include: Coach Behavior Scale for Sport (CBS-S Cote et al., 1999), Controlling Coaching Behaviors Scale (CCBS; Bartholomew et al., 2010), and Coach Autonomy Supportive Behaviors (Williams et al., 1996).

One of the ways coaching behavior assessments are developed is through the lens of The Multidimensional Leadership Model (MML; Chelladurai 1993). This model proposed by Chelladurai (1993) was developed in order to provide a structure, specific to sport setting, for recognizing and implementing effecting leadership behaviors and understanding the antecedents that impact coach behavior. From this model, came the Leadership Scale for Sports (LSS; Chelladurai, 2007). It separates coaching behaviors into five dimensions of leadership: training/instruction, democratic, autocratic, social support, and positive feedback. Chelladurai recognized that coaching behaviors extend past the court or field, and that the behaviors exhibited outside sport competition setting, are just as impactful as those inside. Sari and Bayazit (2017) explored coaching behavior, specifically feedback, using this theoretical model as it's framework. The study found that the wrestlers would increase in motivation and self-efficacy when their coach would engage in positive reinforcement behavior. On the contrary, when the coach embarked in more negative feedback, wrestlers expressed thoughts of self-doubt and a general lowered motivation level. Despite researchers continued use of MML and LLS in sport coaching contexts, they were not designed sport specific (Sullivan et al., 2014). Because of this, Smoll and Smith (1989) developed what is known as the meditational modal of leadership, which was designed exclusively for sport coaching research. This model takes the focus towards

the athlete and their perceptions of the coaches' behavior, tying in both observable behaviors and the athletes' cognitive processes. Overall, research have developed multiple coaching behavior assessments that can be categorized as either observationally or survey-based assessments.

Observational Assessments

From these theoretical models, researchers created various resources to assess coaching behavior (Hardelsen et al., 2019). One of the first widely used assessment is known as the Coaching Behavior Assessment System (CBAS), which consists of twelve behaviors that observers identified coaches use often in their specified settings (Smith et al., 1997). The 12 behaviors are separated into two general categories, reactive and spontaneous behaviors. Reactive behaviors include behaviors in how a coach immediately responds to an athletes' failure (e.g., encouragement, discouragement, or corrective instruction) as well as how a coach immediately responds to an athlete success (e.g., praise, lack of acknowledgement). Spontaneous behaviors are when a coach is not responding to an event that occurred but rather 'spontaneously' interacting with their athletes, (i.e., general encouragement, instruction, motivation, and organization). The CBAS continues to be used in various levels of sport such as youth (Erickson, 2009), high school (Cumming et al., 2006), amateur (Buning 2018), and professional sports (Lemonidis et al., 2014) and across several different sports such as baseball (Curtis et al., 1979), softball (Buning, 2018; Horn et al., 1985), and basketball (Lemonidis et al., 2014; Smith et al., 1983). Where the CBAS lacks in comparison to the Multidimensional Leadership Model is that it does not factor in coaching behavior outside of the sport competition setting. Yet, it was through the development of the CBAS that resulted in Smoll and Smith's (1989) mediational model of leadership. While both Chelladurai (1993) and Smith et al. (1997)

are unable to capture all coaching behavior in their assessments, they both contributed as the starting foundation for assessments to come (Sari & Bayazit, 2017).

Like the observational structure of the CBAS, came the development of ASUOI (Lacy & Darst 1984). This focuses on observing the specific teaching behaviors of coaches during practice settings (Kahan, 1999). This development came from the hypothesis that coaches most often engage in instructional behaviors. The system contains 14 behavioral categories, and 10 of those 14 are categorized as differing instructional deliveries. These categories can be separated into three general identifying behaviors: Instructional (i.e., pre-instruction, concurrent instruction, post-instruction, questioning, manual manipulation, positive modeling, & negative modeling), noninstructional (i.e., hustle, praise, scold, management, silence, & other), and dual codes (i.e., using receiving athlete's name). Similarly, to CBAS, much of coach observation in youth sport utilizes the ASUOI (Kahan, 1999; Smith & Cushion, 2006; Raya-Castellano et al., 2020). The ASUOI has also demonstrated to be effective across various types of sport such as soccer (Cushion & Jones, 2001; Potrac et al., 2007), basketball (Becker & Wrisberg, 2008), and volleyball (Cope et al., 2017)

Survey Assessments

Still closely complimenting both the MDML and CBAS came the development of the survey based assessment Coach Behavioral Scale for Sport (CBS-S; Côté et al., 1999). Rather than reactive and spontaneous behaviors, Côté et al. (1999) developed two general categories of supportive and unsupportive behaviors. This scale is known as an athlete-centered measurement due to that it takes the athletes perspective rather than an outside observer's point view (Sullivan et al., 2014). By splitting the behaviors in supportive and unsupportive behaviors, it expands the assessment beyond competition setting, but asks its athletes to look at how the coach treats them

in every interaction setting. The 44-item questionnaire asks athletes to examine to examine their coaches' behaviors in various categories (i.e., training/planning; technical skills, mental preparation, goal setting, competition strategies, positive personal rapport, & negative personal rapport). These are split up into positive coaching behaviors (supportive) and negative coaching behaviors (unsupportive). Sullivan et al. (2014) researched this scale to see if it varies by gender but confirmed that the measurement scale showed consistency in both male and female athletes and is a reliable measure for coaches in youth sport. It has been used beyond just youth sport since its development, but in elite sport settings as well (Jain et al., 2018)

A survey assessment looking at a specific type of coaching behavior would be one known as Controlling Coaching Behavior Scale (CCBS; Bartholomew et al., 2010). This scale, grounded in the Self-Determination Theory, measures the athlete's perception of their coach's display of controlling coaching behaviors. This survey assessment scale has four subscales: controlling use of rewards (e.g., "My coach tries to motivate me by promising to reward me if I do well"), negative conditional regard (e.g., "My coach pays less attention to me if I have displayed them"), intimidation (e.g., "My coach shouts at me in front of others to make me do certain things"), and excessive personal control (e.g., "My coach expects my whole life to center on my sport participation"). Each subscale consists of four items. The CCBS has been used across various levels in sport such as youth (Carroll & Allen, 2021; Gjedsal et al., 2019), elite (Cheval et al., 2017), and other levels (Stebbing et al., 2011), and various sports such as swimming (Carroll & Allen, 2021), football (Carroll & Allen, 2021), volleyball (Karjane & Hein, 2015), and other sports (Stebbing et al., 2011).

Another survey assessment looking at a specific type of coaching behavior is one known as the Coach Autonomy Supportive Behavior scale (Stebbing et al., 2011). This scale is adapted

from the Health Climate Questionnaire (HCQ; Williams et al., 1996) and applied to a sport context. Stebbings et al. (2011) adapted the scale in this research study to reflect the perspective of the coach. The questions were designed in such a way to assess a coach's perception of their own autonomy supportive behavior. Other research studies have adapted the HCQ for autonomy-supportive behavior from the athletes' perspective (Reinboth et al., 2004). The questionnaire consists of 6 items, using a Likert-like scale, under one category of autonomy-supportive coaching behavior (e.g., "I provide my athletes with choices and options").

There are multiple facets and factors to consider when approaching and assessing coach behavior. The situational and contextual factors that motivation specific coach's behavior is an exhaustive list and go to show that complexity that the topic of coach behavior is, especially with the vital-role that it plays in the coach-athlete relationship. Beyond these situational factors, must come the consideration of the fundamental belief systems and core values influencing those behaviors in order to fully capture why coaches engage in certain behaviors.

Religion in Sport

Researchers and psychologists combined have published thousands of articles on the topic of attitudes (beliefs) and behavior (Bechler et al., 2021), making it one of the most predominately studied topics on all of psychology (Petty et al., 2013). While there is debate on the exact causal relationship between beliefs and behavior, researchers have concluded that one's values and fundamental beliefs impact their behavior. More specifically, much of where individuals' values and beliefs originate is from their views on religion (Baptiste-Roberts et al., 2021). Through national surveys over recent years, Pew Research Center (2017) gathered that most Americans express that their identified religion plays a vital role in their life, with 80%

stating they believe in God, and of the 20% that do not believe in God, 9% of those said they still believed in a higher power or spiritual force.

As Merriam-Webster dictionary defines, religion is the belief in a god or group of gods, most often accompanied by an organized system of beliefs and practices. These beliefs center around ethical standards and expectations that align with one's identified religion, and these beliefs are expected to play a vital influence on everyday choices and decisions (Baptiste-Roberts et al., 2021). For example, religious beliefs have been concluded to impact political alignment and community involvement (Glazier, 2020), ethical business decisions (Fathallah et al., 2020), and family relationships (Pearce & Axinn, 1998), to name a few areas.

Religion and sport are known to have an interesting relationship (Carlson, 2014; Coakley, 1986; Lay, 1993). For some athletes, their faith and spiritual alignment were pivotal for their success (Kretschmann & Benz, 2012). For example, Jonathan Edwards, world triple jump record holder, expressed that his Christian beliefs drove him to his athletic position, although he now professes to be an atheist. Along with Muhammad Ali, who practiced Islam, who affirmed that Allah was the foundation of any of his athletic achievements. Syed (2010) argues that when athletes are grounded in a religious belief, they have shown to be more successful in sport. It is not the truth of that religion that is important, but rather that they have something to believe in.

Athletes and coaches intertwining their religious beliefs and sport is not uncommon today, but some researchers would argue that religion and sport are incompatible (Lay, 1993). Coakley (1986) agrees that there are crucial differences in religion and sport, such as sports emphasis competition and an individualistic mindset, while religion is known to seek a peaceful and communal mindset. On the contrary, Coakley (1986) also notes that there are commonalities between sport and religion. Both have legends, both have times and places for community

gatherings, and both emphasize self-discipline. In similar alignment, Carlson (2014) noted a similar sport and religion parallel regarding the virtue of humility. Christianity, Islam, and Zen Buddhism are all religions that build upon this central theme of humility, a virtue most would not associate with sport, especially in the professional world. However, when taking a closer look, sport values humility, whether in success, place, identity and adopting a team-first mindset.

Beyond the relational intertwining of religion and sport, religion impacts how individuals view and interact with sport, or rather competition at large such as sport participation (Farzaha et al., 2012), recovery from injury (Hemmings et al. 2019), and leadership styles (Gaitho 2019). For example, one of the predominant barriers to female participation in sport in Iran is so low compared to other countries is Islamic religious beliefs and cultural norms (Farzaha et al., 2012). When it comes to recovery from injury, Hemmings et al. (2019) conducted a literature review on articles that discussed how Christian athletes' faith impacts their injury rehabilitation. They found that these athletes had a healthier emotional recovery because of their purpose to their injury, which positively increased motivation in the recovery process.

While there is little literature on religion's impact on coaching styles and behaviors, there is much to consider in religion and leadership and how this can translate into coaching.

Autocratic leadership, a leadership style where the leader is given complete decision-making control, is a commonly exercised leadership style reflected by leaders in the Bible (e.g., King Solomon, King David; Gaitho 2019). Due to the power of decision-making residing solely with the leader and not the input of other group members, it makes decisions quick but breeds resentment with those under this leadership style (Laub, 2018). How autocratic leaders, such as Daniel Arap Moi of Kenya, combat this negative perspective of leadership is by abusively

attaching God's name behind their election status, paralleling the leaders in the Bible (Rule, 1984).

On the contrary, the Christian perspective on leadership can also support a democratic leadership approach (Gaitho, 2019). The democratic leadership approach, which research supports to have the most effective success (Smith et al., 2017), is a leadership style where the leader involves each group member when making decisions. While more time-consuming in the decision-making process, it fosters an environment of higher position satisfaction and productivity. Both Islam and Christianity emphasize this leadership approach in their leaders and family systems (Mohsen, 2013). In addition, the Islamic expectation of leadership involves a form of multi-level leadership and its own Islamic leadership model, consisting of four dimensions: Consciousness of God, Competency, Consultation, and Consideration (The 4C model; Abdallah et al., 2019). While the above leadership styles and virtues are not exclusive to Christianity and Islam, they are few religions with explicit expectations and explanations for adopted leadership.

Christianity and Sport

As Coakley (1986) previously mentioned, religion and sport have an antithetical relationship; Christianity has similarly doubted and challenged athletes' participation in sport. As long as elite-sport systems continue to play a dominant role in society, athletes' morality and ethical values will be challenged by competition (Kretschmann & Benz, 2012). Due to the challenge this presents, some theologians claim Christians should not compete in sport because the "intrinsic nature of competition is immoral" (Boxill 2003, 107) due to its tendency to breed prideful and tribalistic individuals, both competitors and spectators.

On the other side, those of the Christian faith cannot deny that Apostle Paul, an influential early church writer and important figure in the Christian faith, refers to sport and competition in his scripture writings (Carlson, 2014). In 1 Corinthians 9:24 (NIV), Paul writes, "Do you not know that in a race all the runners run, but only one gets the prize? Run in such a way as to get the prize." From this statement, it is evident that Paul is a sports fan and uses the illustration of sport to teach a lesson. Sportler Ruft Sportler (SRS), a German Christian sports organization, encourages Christian participation in sport due to the lessons to be learned through it and the advantages that Christians have (Sternberg, 2003). SRS argues that with faith in God, Christian athletes can better cope with losses, injuries, and failures that are inevitable in sport participation. Additionally, refuting what Boxill (2003) claims above, with faith comes the prevention from becoming prideful in one's success because participating in sport for Christians should never be solely about winning.

Despite these positives associated with the Christian faith and participating and sport, athletes and coaches report the tensions they experience in the surrounding competitive environment (Vinson & Parker, 2021). Athletes have expressed wrestling with the values of sport, such as the importance of winning, the importance of status, and dynamics with opposing teams, and how they contradict specific values of their Christian faith (Kretchmar & Watson, 2018). Some feel as if they must sacrifice their faith to be successful in sport, or vice versa (Schroader & Scribner, 2006).

Christianity and Coaching

Christian athletes are not the only ones wrestling with opposing values in the sports world, but Christian coaches as well. Many Christian coaches described themselves as a 'living contradiction' (Bennett et al., 2005, p. 289) due to their inability to resolve their religious values

and the desire to win. A well-known religious and famous football coach, Vince Lombardi, reconciled this inner contradiction by looking to give his best to honor God and the athletes he was coaching (Coakley, 1986). He famously quoted that "when we don't use our abilities to the fullest, we are not only cheating ourselves and the [team], but we're cheating the Lord" (Coakley, 1986, p. 54).

As previously touched on religion and its role in leadership, one of the common core teachings in Christian virtue for those in positions of authority, outside of democratic leadership, is a concept known as 'servant leadership' (Vinson & Parker, 2020). This type of approach to leadership emphasizes that the best way to lead is to seek to serve above all else. It means taking a posture of other-person-centeredness and seeking sacrifice for the betterment of the people they are leading, rather than oneself by: "(1) empowering and developing people, (2) humility, (3) authenticity, (4) interpersonal acceptance, (5) providing direction, and (6) stewardship" (van Dierendonck, 2011, p. 1228). This leadership style, which is effective and praised outside of Christian cultures, has also been implemented into executive leadership training positions (Bennett, 2021).

While this leadership concept has not been directly applied to coaching through the research lens, servant leadership could compare to the known successful coaching approach autonomy-supportive coaching (Greenleaf, 1977). There are overlaps in developing the individual through delegation and empowering decision making, authentically and intentionally constructing the coach-athlete relationship, and providing direction to the athletes to increase healthy motivation (Greenleaf, 1977). Due to this commonality, it would be safe to hypothesize that Christian coaches are more likely to adopt an Autonomy Supportive Coaching (ASC)

approach due to the alignment of their religion's emphasis on servant leadership and its parallel nature to autonomy support.

To date, there are only a couple of research studies comparing Christian and non-Christian coaches. Burns (1983) studied how Christian and non-Christian high school female coaches ranked their ideal leadership behaviors (rewarding, training, social support, democratic, and autocratic). The results concluded not to have much significant difference in the Christian and non-Christian ranking outside of social support, which predominately ranked one for Christian and averagely ranked three for the non-Christian. Both groups indicated a similar ranking order in the remaining behaviors, with rewarding behavior being first, following training, democratic, and autocratic behavior last. While one of the few studies comparing Christian and Non-Christian coaching approaches, there are still limitations in a small sample size (N=89), only surveying female coaches, and how coaching behaviors have changed the past thirty years.

In more recent research about the topic, Schools et al. (2020) took a differing approach by surveying the athletes' perceptions of their Christian coaches' behavior rather than the coaches'. This qualitative study asked eleven, male and female, National Christian College Athletic Association (NCCAA) athletes across four different sports (soccer, basketball, cross country, and tennis) how much they felt their coach cared for them and the impact of this 'felt caring' on their coach-athlete relationship. More specifically, questions were asked on how they perceived a 'lack of care' and the expression of care in a Christian environment. Athletes defined a lack of care from their coach when their coach expressed a greater focus on winning, displaying negative coaching behaviors, lack of communication, and showing favoritism. Most athletes responded positively to a feeling of coach care, yet eight out of the eleven reported

experiencing the feeling that their coach had a greater winning mindset, and six reported experiencing negative coaching behaviors. Despite these behaviors, all eleven athletes reported that they perceived their coaches' religious beliefs impacted their intent to display care to their athletes. However, limited in its small sample size, this study raises thought on how this would compare to athletes in a secular setting.

Conclusion and Research Aims

Overall, there is a lack of research conducted on Christian and non-Christian approaches to coach behavior. While the literature concludes religious belief's influence on leadership and coaching behavior, there has been no research to date exploring how these beliefs influence specific coaching behavior such as autonomy supportive and controlling coaching behavior. Furthermore, there are gaps in the literature in comparing Christian and non-Christian coaching behaviors from the athlete's perspective and asking the coach to self-reflect on their own religious beliefs and how they believe this influences their coaching behavior. The purpose of this literature review is to display this area of comparing autonomy supportive and controlling coach behavior in Christian and secular universities warrants further investigation.

CHAPTER THREE

Method

Participants

Both athletes and coaches will be invited to participate in this study.

Athletes

Athlete participants consisted of a sample ($n=114$) of male and female college athletes who competed in the Spring 2022 season in tennis, golf, wrestling, swimming & diving, or gymnastics from NCAA Division III, NAIA, and NCCAA schools of secular ($n=51$) and Christian affiliation ($n=63$). Christian affiliation was determined based on the University's clear dedication to Christian faith either in the institution's mission statement and/or affiliation with National Christian College Athletic Association (NCCAA). Initial sampling began with 50 universities chosen through a random sample of all DIII, NAIA, and NCCAA institutions, of athletes participating in golf and tennis. Universities were sampled in groups of 50 until required sample size is reached. Individual sports (tennis, golf, wrestling, swimming & diving, gymnastics) were chosen due to the increasing opportunity for coach-athlete interactions. Athletic departments were contacted and asked to share the recruitment email with specified individual sport athletes. Following this method to be unsuccessful, athletes were contacted directly through public university directories. Universities were still selected in randomly chosen groups of 50. To participate in this study, athletes must have met inclusion criteria: a) be at least 18 years of age; and b) have played for their current coach for at least one season.

Coaches

Coach participants ($n= 77$) consisted of a sample of coaches who were coaches of the same schools of the athlete sampling. Coaches were contacted directly through email. To participate in this study, coaches must have met inclusion criteria: a) coached their current team for at least one season. For coaches at Christian institutions, they must additionally b) confirm alignment with Christian faith.

Instruments

The athlete participants in this study completed a demographics survey (see Appendix A), the Coach Autonomy Supportive Behavior Scale (see Appendix C; Stebbing et al., 2011), Controlling Coaching Behavior Scale (CCBS; see Appendix B; Bartholomew et al., 2010), and an open-ended question survey (see Appendix D) all through a Qualtrics survey. The coach participants completed an open-ended question survey (see Appendix E) on Qualtrics.

Demographics Survey

The demographics survey (see Appendix A) was developed by the researcher to obtain pertinent participant information. The survey includes questions related to participants' gender, sport, age in years, religious affiliation, year in school, years played for current coach, and if they know their coach's religious affiliation.

Coach Autonomy Supportive Behavior Scale

Stebbing et al. (2011) created this scale by adapting the Health Care Climate Questionnaire (HCCQ; Williams et al., 1996, see Appendix B) to the six-item behavior scale in a sport context. The original 15-item HCCQ was tested for validity and reliability on health participants and how they perceive their physician's autonomy supportive behavior. The original scale had excellent internal consistency (Cronbach's alpha (α) = .95) and a 1-factor structure

(Williams et al., 1996). The short 6-item scale (items 1, 2, 4, 7, 10, and 14) validated on a similar population of patients and health care professionals demonstrated acceptable to excellent internal consistency (.72 greater than Cronbach's α greater than .96) and also reflected a 1-factor structure (Fortier et al., 2007).

Stebbing et al. (2011) adapted the HCCQ to assess coaches' perceptions of their own autonomy supportive behavior, but other research has shown that the HCCQ can be used to survey coach behavior from the athlete perspectives. Both participants groups found them to be consistent and valid (Reinboth et al., 2004; Stebbings et al., 2011). For this study, questions will be adapted to ensure "practice setting" was mentioned. Athlete participants will be asked to reflect on coach behaviors in the practice setting and rate the frequency to which they experience each of the items (e.g. "My coach provides me and my teams with choices and options") on a seven-point scale anchored by 1 (*never*) and 7 (*always*). The instrument will be scored by calculating the total of all the individuals answers to the 6 items and may range from 6-42; a higher score will mean a coaching style with more autonomy supportive behaviors.

Controlling Coach Behavior Scale

Athletes' perception of their coaches' frequency of engaging in controlling coach behavior will be assessed using the Controlling Coach Behavior Scale (CCBS; Bartholomew et al., 2010; see Appendix C). Bartholomew et al. (2010) created this 15-item scale was reported valid and consistent using a sample of male and female athletes of both individual and team sports. The scale measures four sub-types of controlling behaviors, each including 3 or 4 items: *controlling use of rewards* (e.g., "my coach tries to motivate me by promising to reward me if I do well"), *negative conditional regard* (e.g., "My coach is less friendly with me if I don't make the effort to see things their way"), *intimidation* (e.g., "My coach shouts at me in front of others

to make me do certain things.”), and *excessive personal control* (e.g., “My coach expects my whole life to center on my sport participation). In the CCBS validity, each subscale has demonstrated good internal consistency ranging Cronbach’s alpha .74-.84 (Bartholmew et al., 2010). The scale has been adapted to reflect frequency of coach behaviors in practice and athletes will complete items using a seven-point Likert-type scale anchored by 1 (*never*) and 7 (*always*). Average scores will be calculated for each subscale and added together, with a higher score meaning a greater controlling coaching style. Scores for this can range from 15-105. Each subscale will be separately averaged and scored to consider differences within specific controlling coaching behaviors. Each subscale score will range from 4-28, except for excessive personal control, which only has 3 items, and will range from 3-21.

Open-Ended Survey Questions

Athletes. The aim of the open-ended questions for the athletes was to understand how athletes perceive their coach’s religious (or lack of) beliefs influencing their coach behaviors. Open-ended survey questions for athletes (see Appendix D) were developed through a pilot study with a current DIII college athlete from a Christian University ($n=1$) to modify and edit questions. Following pilot study, questions were refined again by the research team. An example of an open-ended question developed is “How does your coach respond to mistakes?” to gauge the athlete’s personal reflection of this behavior and belief relationship from an alternative perspective.

Coaches. The aim of the open-ended questions was to learn about how coaches perceive their religious beliefs, or lack of, influence their coaching behaviors (see Appendix E). The reason for the inclusion of open-ended questions in this study was due to the lack of available surveys to answer the specified research question, and to explore coaches’ personal experiences

in how they perceive their beliefs influencing their coach behavior. Open-ended survey questions were developed through a pilot study with a college coach to ensure that the open-ended questions were easy to understand, in the correct order, written in a way to answer the research question, and determined necessary (Van Teijlingen & Hundley, 2001). Following pilot study, questions were refined again by the research team. An example of an open-ended question is “How much do you believe that your previously mentioned (religious/non) beliefs influence your coaching behaviors” to explore the perceived magnitude of influence and overall perception of how beliefs and behaviors relate.

Procedures

Prior to data collection, approval was gained from the researchers' university Institutional Review Board (IRB) for the study. Upon approval, from a list of all possible scores, a random sample of 50 schools were selected for DIII ($n=414$), NAIA ($n=181$), and distinguished DIII, NAIA and NCCAA Christian institutions ($n=202$). Universities were contacted through the athletic department contact, either athletic director, athletic director's secretary, or senior women administrator with a request to forward email to both men's and women's specificized individual sport (golf, tennis, swimming and diving, wrestling and gymnastic) athletes. This recruitment email included a link to the informed consent (which was obtained via electronic signature), inclusion criteria, and survey questions. The first few weeks of recruitment by these means concluded to be unsuccessful. Athletes ($n = 1576$) were then directly recruited via a public university directory where athlete emails are publicly posted and can be accessed. A recruitment email was sent to the religious ($n= 269$) and secular school ($n= 962$) coaches of the same universities with study information, request for their participation, and link to informed consent, inclusion criteria, and open-ended questions. For both athletes and coaches, a reminder email

was sent one week after initial recruitment email date. Towards the end of data collection when university lists were almost exhausted, follow up reminder emails were sent out to all recruited participants. Initial recruitment began in February 2022 and ended April 2022. Surveys were counterbalanced so that the potential influence of the order of the questions were controlled. Following the first round of sampling, response rates were analyzed to see if there needed to be adjustment to sampling procedures (e.g., adding more individual sports like swimming and diving, gymnastics, wrestling). Due to the initial low response rate, additional individual sports were added. Informed consent, inclusion criteria, surveys, and open-ended questions were completed through Qualtrics, with an estimated total completion time to be approximately 15 minutes.

Design and Analysis

This study consisted of both quantitative and qualitative elements.

Quantitative descriptive analysis

Descriptive statistics were run for both athletes and coaches and separately between religious and secular universities. The comparisons between school religious affiliation and athletes perception of their coaches' behavior survey scores, research questions 1 and 2, were explored through a one-way multivariate analysis of variance (MANOVA). Before running MANOVA, normality was checked and affirmed to be acceptable for statical analysis. All alpha levels were set to .05 and the statistical analyses were run using SPSS 27.0.

Qualitative descriptive analysis

The open-ended questions were analyzed using a procedure based on a basic thematic analysis from Vaismoradi et al. (2016). Before thematic analysis, responses were read multiple times, thoroughly examined, and then coded. Following this initial process, thematic analysis

consisted of: construction (i.e., classifying; comparing; labelling; translating & transliterating; defining & describing) and rectification (i.e., immersion and distancing; relating themes to previous literature; stabilizing). Core ideas and categories were then organized based on domains (or themes) that originated from the research questions. Domains were then compared between groups, further establishing thematic through line and related to previous research.

CHAPTER FOUR

Research Manuscript

Athletes' Perception of Their Coaches' Behavior at Christian and Secular institutions

(To be submitted to Journal for Advancing Sport Psychology in Research)

Athletes' Perception of Their Coaches' Behavior at Christian and Secular institutions

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Abstract

The coach-athlete relationship has been identified as one of the key components of an athletes' sport experience. In the competitive collegiate sport setting, this relationship has shown to be even more influential due to the duration of the relationship of coach-athlete relationship (and the challenging time of identity transition for these college athletes). Because of coach behaviors known influence on such an important relationship, research has explored the potential antecedents for why coaches engage in certain types of behaviors, specifically autonomy supportive and controlling coaching behaviors. One unresearched area of coach behavior influences is religious beliefs. Participants included NCAA DIII, NAIA and NCCAA individual sport athletes ($n=114$) and coaches ($n=77$) from both religious and secular institutions. The Athletes were surveyed using the Autonomy Supportive Behavior Scale, Controlling Coach Behavior Scale, and open-ended questions and the coaches surveyed through open-ended questions. Following the one way MANOVA, results indicated a significant difference between athletes perceived autonomy coaching behavior in religious ($M=33.66$, $SD = 6.16$) and secular ($M=27.20$, $SD = 8.99$) institutions. Additionally, results concluded there to be no significant difference between controlling coaching behavior or the controlling coaching subscales between groups but qualitative results show support towards a potential difference in negative conditional regard. Athletes' perception of the frequency of their coaches overall controlling coaching behavior was very low compared to prior research regarding the prevalence of controlling coaching behavior in the collegiate setting.

Introduction

The coach-athlete relationship (CAR) has been identified in research as one of the fundamental features in an athlete's sport experience (Bartholomew et al., 2009). In the collegiate setting, where there is a high frequency of coach-athlete interaction, the CAR plays a significant role in the athletes' motivation and overall psychological development (Arnet, 2000; Ryan & Deci, 2000). To better understand the impact of the CAR, researchers have created models to best identify and incorporate positive and healthy CARs (e.g., 3 C's +1, Jowett, 2007; COMPASS; Rhind & Jowett, 2010). The underlying principles of these models are directly related to coach behavior (Nicholls et al., 2016).

Coach behavior can be defined as the way in which coaches interact with their players through instruction, communication (verbal and non-verbal), and engagement outside of sport (Sari & Bavazit, 2017). Coaching behavior can be simply categorized into two broad labels: supportive and unsupportive behavior (Côté et al., 1999). A commonly known supportive coaching behavior is known as autonomy-supportive coaching behavior, with a known antithetical behavior being controlling coaching behavior (Carroll & Allen, 2021). Coach-athlete autonomy support refers to "coaches displaying attitudes and behaviors that show they value the athlete's self-initiations and involvement" (Mageau & Vallerand, 2003, p. 3). This type of behavior involves coaches integrating athlete opinion and desires into decision making and team decisions to foster a sport environment with greater social support and positive feedback (Sari & Bayazit, 2017). Autonomy-supportive coaching behavior has been shown to be related to desirable athlete sport performance outcomes (Nicolas et al., 2011), such as meeting psychological needs (e.g., Coatsworth & Conroy, 2009), greater sport enjoyment (e.g., Conroy & Coatsworth, 2007), improvement in wholistic motivation (e.g., Carpentier & Mageau, 2013),

long-term satisfaction in sport participation (e.g., Almagro et al., 2010), and increased team efficacy (Hampson & Jowett, 2014).

On the contrary, controlling coaching behavior can be defined as “coaches who create an environment where they pressure athletes to act a certain way, think a certain way, and feel a certain way for a specific purpose or ultimate gain of the coach” (Morbee et al., 2020, p. 89; Mageau & Vallerand, 2003. Beyond the collegiate environment (Amorose et al., 2017), controlling coach behavior has presented itself across many settings, such as youth (e.g., Carroll & Allen, 2021; Ramis et al., 2017), high school (e.g., Kim et al., 2019), and elite (e.g., Haraldsen et al., 2019), at both the practice (e.g., Gjesdel et al., 2019) and competition setting (e.g., Kim et al., 2019).

In comparing the utilization of these behaviors, research supports that the use of supportive behaviors, specifically autonomy-supportive behavior, is effective in increasing athlete motivation and successful in positively impacting athlete performance (e.g., Lopez-Walle et al., 2012). Research also displays that while there is a negative impact on athlete motivation and performance in controlling coach behavior, coaches still engage in these identified behaviors, consequently leading to poor athletic performance and increase the likelihood of athlete burnout (e.g., Bartholomew et al., 2010). These coaching behaviors influence athletes more than just in their immediate sport context but have shown to have been linked to other harmful outcomes beyond sport such as: eating disorder, anxiety, depression (Bartholomew et al., 2011). There is still question into what influences behavior and why some behaviors are widely accepted.

There are many theories unpacking the antecedents for coach behavior (e.g., gender of coach, age of athletes, skill of athletes, and sport setting), but one that lacks research is how

religious beliefs influence a coach's behavior. When it comes to religion and leadership (like coaching), many religions have specific standards for those who hold positions of power (Gaitho 2019). While each religion is unique, in specifically examining Christianity, Christians leaders often adopt an approach known as servant leadership (Vinson & Parker, 2020). This approach, which emphasizes serving those they are leading rather than oneself, reflects the previously mentioned autonomy-supportive behavior, as both leadership approaches are athlete-focused in seeking to meet the athlete's needs above their own (Greenleaf, 1977). Due to this comparative match in leadership behavior, one might expect to see Christian coaches utilizing autonomy-supportive behaviors. Two research studies have explored differences between Christian and non-Christian coaches; neither study found distinguishing (Burns 1983; School et al., 2020). More specifically, Burns (1983) found that Christian and non-Christian high school coaches ranked specific coaching behaviors on importance of usage almost identically. The only noted difference in ranking was Christian coaches ranked social support first, while their non-religious counterpart suggested social support to be third in their rank list Schools et al. (2020), who studied athletes' perception of their Christian coaches, found that while athletes felt that their coach cared for them, they still experienced what would be identified as controlling coach behaviors.

To expand upon these two studies and further explore how coaches' religious beliefs might contribute to their behavior, researchers examined four main areas in this study: 1) the relationship between school religious affiliation and athletes' perception of their coaches' controlling coaching behavior; 2) the relationship between school religious affiliation and athletes' perception of their coaches' autonomy supportive behavior, 3) athletes' perceptions of how their coaches' religious beliefs influence their coaching behavior; and 4) coaches

perceptions of how their own religious beliefs influence their coaching behavior. The researchers hypothesized that there would be a higher perception of autonomy supportive coaching behaviors in coaches at religious universities and that coaches at secular universities would have a higher perception of controlling coaching behaviors. Additionally, the researchers hypothesized that coaches at secular universities would have higher perception in specific controlling coaching behaviors of intimidation and negative conditional regard.

Method

Participants

For this study, a sample of athletes and coaches was taken from NCAA Division III, NAIA and NCCAA universities. The final sample included 114 athletes (51 males, 60 females, and 3 who identified as non-binary) ranging in age from 18-25 years with a mean age of 20.58 years (SD= 1.23). Athletes included 63 participants from a religious affiliated school, and 51 from a secular school. For the coaches, 77 participated (49 males and 28 females), ranging in age from 23-74 years with a mean age of 42.61 years (SD = 13.52). Fifty-nine of the coaches were from a religious affiliated school while 18 were from secular schools, ranging in sports coached with tennis (n=21), swimming/diving (n=15), golf (n=27), wrestling (n=11), and gymnastics (n=1)

Instruments

The athlete participants were asked to complete a demographic questionnaire, open ended questions about their perception of their coaches' behavior and religious influences, and two coach behavior questionnaires: The Controlling Coach Behavior Scale (CCBS; Bartholomew et al., 2010) and Coach Autonomy Supportive Behavior Scale (Stebbing et al., 2011). The coach

participants were asked to complete a demographic questionnaire and open-ended questions about their perception of their religious beliefs influence on their coaching behavior.

Demographic Questionnaire

The demographic survey for the athletes included items related to age, gender, year in school, sport played at university, religious affiliation, years played under current coach, and if they knew their coach's religious affiliation. The demographic survey for coaches included items related to age, gender, years coaching at university, sport coached at university, religious affiliation, years coaching sport in general, and if religious, level of involvement.

Coach Autonomy Supportive Behavior Scale.

Athlete participants perception of their coaches' autonomy supportive behavior was assessed using the Coach Autonomy Supportive Behavior Scale. Stebbing et al. (2011) created this scale by adapting the Health Care Climate Questionnaire (HCCQ; Williams et al., 1996) to the six-item behavior scale in a sport context. The original 15-item HCCQ was tested for validity and reliability with health care patients and their physicians and had excellent internal consistency (Cronbach's alpha (α) = .95) and a 1-factor structure (Williams et al., 1996).

Stebbing et al. (2011) adapted the HCCQ to assess coaches' perceptions of their own autonomy supportive behavior, but other research has shown that the HCCQ can be used to survey coach behavior from the athlete perspectives. Participants groups from both perspectives have found to be consistent and valid (Reinboth et al., 2004; Stebbings et al., 2011). In this study, athlete participants were asked to reflect on coach behaviors in the practice setting and rate the frequency to which they experience each of the items (e.g., "My coach provides me and my teams with choices and options") on a seven-point scale anchored by 1 (*never*) and 7

(*always*). The instrument is scored by calculating the total the items, with possible scores ranging from 6-42; a higher score indicates more autonomy supportive behaviors.

Controlling Coach Behavior Scale

Athletes' perception of their coaches' frequency of engaging in controlling coach behavior was assessed using the Controlling Coach Behavior Scale (CCBS; Bartholomew et al., 2010). Bartholomew et al. (2010) created this 15-item scale measuring four sub-types of controlling behaviors, each including 3 or 4 items rated on a scale anchored by 1 (*never*) and 7 (*always*). Example items include: *controlling use of rewards* (e.g., "my coach tries to motivate me by promising to reward me if I do well"), *negative conditional regard* (e.g., "My coach is less friendly with me if I don't make the effort to see things their way"), *intimidation* (e.g., "My coach shouts at me in front of others to make me do certain things"), and *excessive personal control* (e.g., "My coach expects my whole life to center on my sport participation"). Each subscale has demonstrated good internal consistency with Cronbach's alpha between .74-.84 (Bartholmew et al., 2010). The scale was adapted to reflect frequency of coach behaviors in practice. Mean score were identified (possible range 1-7) for total controlling behavior and each subscale, with a higher score meaning more frequent behavior.

Open-Ended Survey Questions

Open-ended survey questions for athletes were developed through a pilot study with a current DIII college athlete from a Christian University to modify and edit questions. Open-ended questions included: "How does your coach respond to mistakes?" "What do you think success means to your coach?" "What are some common behaviors you experience with your coach during practice?" "Describe what do you know about your coach's religious (or lack of) beliefs?" and "How do you perceive your coach's religious beliefs influencing his/her behavior?"

Open-ended survey questions were developed through a pilot study with a college coach to ensure that the open-ended questions were easy to understand, in the correct order, written in a way to answer the research question, and determined necessary (Van Teijlingen & Hundley, 2001). Open-ended question were as follows: “Describe what led you to your current position as a college coach?” “What are 4 or 5 values that underline your coaching style?” “What specific types of behaviors do you try to implement during practice?” “Please describe your religious affiliation or beliefs” “How do you believe that your religious beliefs influence your coaching behaviors and values you listed above? Can you provide a couple of examples?” and “Do your beliefs HAVE to influence your coaching style because of the University values?”

Procedures

Prior to data collection, approval was gained from the researchers’ university Institutional Review Board (IRB) for the study. Upon approval, from a list of all possible schools, a random sample of 50 schools was selected from 414 DIII, 181 NAIA, and 202 designated DIII, NAIA and NCCAA Christian institutions. Christian affiliation was determined based on the University’s clear and currently active dedication to Christian faith either in the institution’s mission statement and/or affiliation with National Christian College Athletic Association (NCCAA). Universities were contacted through the athletic department contact with a request to forward email to both men’s and women’s specific individual sport (golf, tennis, swimming and diving, wrestling and gymnastic) athletes. This recruitment email included a link to the informed consent (which was obtained via electronic signature), inclusion criteria, and survey questions. The first few weeks of recruitment by these means concluded to be unsuccessful. Then 1576 athletes were then directly recruited via a public university directory where athlete emails are publicly posted and can be accessed. A recruitment email was sent to the 269 religious and

962 secular school coaches of the same universities with study information. For both athletes and coaches, a reminder email was sent one week after initial recruitment email date. Towards the end of data collection when university lists were almost exhausted, follow up reminder emails were sent out to all recruited participants. Initial recruitment began in February 2022 and ended April 2022.

Design and Analysis

Descriptive statistics were run for both athletes and coaches and separately between religious and secular universities. The comparisons between school religious affiliation and athletes' perception of their coaches' behavior survey scores, research questions 1 and 2, were explored through a one-way multivariate analysis of variance (MANOVA). Before running MANOVA, normality was checked and affirmed to be acceptable for statistical analysis. All alpha levels were set to .05 and the statistical analyses were run using SPSS 27.0.

The open-ended questions were analyzed using a procedure based on a basic thematic analysis from Vaismoradi et al. (2016). Before thematic analysis, responses were read multiple times, thoroughly examined, and then coded. Following this initial process, thematic analysis consisted of construction (i.e., classifying; comparing; labelling; translating & transliterating; defining & describing) and rectification (i.e., immersion and distancing; relating themes to previous literature; stabilizing). Core ideas and categories were then organized based on domains (or themes) that originated from the research questions. Domains were then compared between groups, further establishing thematic through line and related to previous research.

Results

Before running descriptive statistics, survey results that were incomplete were removed ($n=94$). Descriptive statistics were then run to reveal athlete participants' mean age, strength of

personal religious affiliation, and approximate hours of religious involvement (see Table 1) along with year in school, sport played, and school religious affiliation (see Table 2). Table 3 displays athlete participants religious affiliation, knowledge of coach's religious affiliation and team's engagement in religious activities grouped by school religious affiliation. Descriptive statistics were run to reveal coach participants' mean age, strength of personal religious affiliation, approximate hours of religious involvement, years coaching at university, and years coaching sport at collegiate level (see Table 4). Table 5 displays coach participants religious affiliation, gender, and team's engagement in religious activities grouped by school religious affiliation.

Table 1

Athlete Participate Age (years), Strength of Personal Religious Affiliation, and Hours of Religious Involvement (hrs per week)

	Athletes		
	<i>M</i>	<i>SD</i>	<i>Range</i>
Strength of Personal Religious Affiliation (scale 1-7, 1 not strong at all, 7 very strong)	4.32	2.27	6
Hours of Religious Involvement (hrs per week)	2.82	3.16	12

Table 2

Athlete Participants Year in School, Sport Played, School Religious Affiliation

Year in School	<i>n</i>	<i>%</i>
	Freshman	14
Sophomore	24	21.1
Junior	44	38.6

Senior	26	22.8
Super-Senior	6	5.3
Total	114	
Sport Played		
Tennis	30	26.3
Swimming/Diving	35	30.7
Golf	40	35.1
Wrestling	5	4.4
Gymnastics	4	3.5
Total	114	
School Religious Affiliation		
Religious	63	55.3
None	51	44.7
Total	114	

Table 3

Athletes Personal Religious Affiliation, Knowledge of Coaches Religious Affiliation, and Team's Engagement in Religious Activities.

Personal Religious Affiliation	Total		Religious		Secular	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Religious	84	73.7	60	95.2	24	47.1
None	29	25.4	3	1.59	26	51.0

Missing	1	.9			1	1.96
Total	114		63		51	
<hr/>						
Knows Coach's Religious Affiliation	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Yes	55	48.2	45	71.4	10	19.6
No	45	45	9	14.3	36	70.6
Maybe	14	12.3	9	14.3	5	9.80
Total	114		63		51	
<hr/>						
Does team spend time in religious related activities	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Yes	41	36.0	36	57.1	5	9.80
No	73	64.0	27	42.9	46	90.2
Total	114		63		51	

Table 4

Coach Participants Age (in years), Strength of Personal Religious Affiliation, Years Coaching at Current Program, Years Coaching Sport at Collegiate Level.

	Coaches		
	<i>M</i>	<i>SD</i>	<i>Range</i>
Strength of Personal Religious Affiliation (scale 1-7, 1 not strong at all, 7 very strong)	5.35	1.88	6
Hours of Religious Involvement (hrs per week)	4.01	3.40	15
Years at Current Program	7.61	6.81	31
Years Coaching Sport at Collegiate Level	9.23	7.09	34

Table 5

Coach Participant Personal Religious Affiliation, Gender, and Team Engagement in Religious Activities.

	Total		Religious		Secular	
Personal Religious Affiliation	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Religious	69	89.6	58	98.3	11	61.1
None	8	10.4	1	1.69	7	38.9
Total	77		59		18	
Gender	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Male	49	63.6	35	59.3	14	77.8
Female	28	36.4	24	40.7	4	22.2
Total	77		59		18	
Does team spend time in religious related activities	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Yes	39	50.6	36	61.0	3	16.7
No	38	49.4	23	39.0	15	83.3
Total	77		59		18	

Data Analysis

Prior to conducting the multivariate analysis of variance (MANOVA), assumptions were tested to ensure that the MANOVA test was appropriate, and results would be reliable (Finch & French, 2013). Preliminary checks were performed to assess normality, outliers, linearity, homogeneity of variance-covariance matrices, and multicollinearity. Normality was assessed using Shapiro-Wilk's test, which indicated that all dependent variables were not normally

distributed ($p < .001$) and variable histograms show positive skewness. To test outliers, Mahalanobis distance values were below 20.52, which was the critical value for Mahalanobis distance with sample degrees of freedom. Scatterplots, used to assess linearity, indicated that the dependent variables were linearly related in both the religious and secular school groups. A series of Pearson correlations were performed between all the dependent variables (autonomy supportive coaching behavior, controlling coaching behavior, use of rewards, intimidation, negative conditional regard and personal control) in order to test the MANOVA assumption that the dependent variables should be correlated with each other (multicollinearity). There were correlations amongst most of the dependent variable, suggesting that running the MANOVA test is appropriate in this circumstance. Lastly, Box's M Test was unable to be performed due to the difference in scoring of dependent variables, so a Levene's test was more appropriate to be performed.

Levene's test for quality of variances was found to be violated for autonomy supportive coaching behavior ($p = .035$), with a moderate effect size, and negative conditional regard ($p = .028$), with a large effect size. Owing to this violated assumption, a one-way ANOVA with a Welch's test was performed for autonomy supportive coaching behavior and negative conditional regard. The univariate analyses affirmed statistical significance in autonomy supportive coaching behavior (Welch's $F(1, 74.37) = 5.70$, $p = .019$, est. $\omega^2 = .025$) but not for negative conditional regard (Welch's $F(1, 51.76) = 3.38$, $p = .07$, est. $\omega^2 = .086$).

Dependent variable means and standard deviations can be found in Table 6. A one-way MANOVA was conducted to determine the differences in athletes' perception of frequency in autonomy supportive coaching behaviors (RQ1), total controlling coaching behaviors (RQ2) and the four subscales within controlling coaching behavior (use of rewards, negative conditional

regard, personal control, and intimidation; RQ3) in coaches at religious institutions and secular institutions. The test results concluded there was a difference between athletes' perceived frequency of coaching behaviors between coaches at religious and secular institutions (Wilk's $\lambda = 0.809$, $F = (2, 63) = 2.69$, $p = 0.03$). The MANOVA results showed main effects in autonomy supportive coaching behaviors ($F(1, 63) = 11.47$, $p = .001$, $\eta_p^2 = .158$) and negative conditional regard ($F(1, 63) = 4.79$, $p = .032$, $\eta_p^2 = .073$), but not for overall controlling coaching behavior ($F(1, 63) = .843$, $p = .362$, $\eta_p^2 = .014$), intimidation ($F(1, 63) = .021$, $p = .874$, $\eta_p^2 = .000$), personal control ($F(1, 63) = .110$, $p = .741$, $\eta_p^2 = .002$), and use of rewards ($F(1, 63) = .224$, $p = .638$, $\eta_p^2 = .004$).

Table 6

Athletes' Perceived Coaching Behaviors Means and Standard Deviations between Religious and Secular Schools

	Religious		Secular	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Controlling Coaching Mean	2.01	.96	2.23	.91
Negative Conditional Regard Mean	1.99	1.33	2.76	1.78
Intimidation Mean	1.57	.94	1.61	.88
Personal Control Mean	2.21	1.47	2.33	1.38
Use of Rewards Mean	2.41	1.40	2.26	1.03
Autonomy Supportive SUM	33.66	6.16	27.20	8.99

Note. Autonomy Supportive Score is mean of sum score while the others are the averages of mean scores

The significant findings of the MANOVA conclude that religious school coaches demonstrate a higher frequency of autonomy supportive coaching behavior ($M = 33.66$, $SD = 6.16$) over secular school coaches ($M = 27.70$, $SD = 8.99$) (See Table 6). Regarding total controlling coaching behaviors, both religious ($M = 2.01$, $SD = .96$) and secular ($M = 2.23$, $SD = .91$) were not significantly different nor were high in frequency, concluding that coaches, despite religious context, have minimal engagement in controlling coaching behaviors.

Athlete Qualitative Results

The analysis of the athlete portion of the qualitative responses yielded domains that derived from the open-ended questions: Domain 1, with core ideas perceived behaviors and coaching meaning of success, and Domain 2, with the core idea of perception of beliefs. Under each core idea, categories were established and coded. Participants were separated into four groups, Group A ($n=60$), athletes who attend a religious school and have religious beliefs, Group B ($n=24$) athletes who attend a secular school with religious beliefs, and Group C ($n= 27$) athletes who attend a secular school with no religious beliefs. For Group D (athletes who attend a religious school and do not have religious beliefs) was omitted from the frequency table due (see Table 7) to the small nature of the sample size ($n=3$) compared to the other three groups.

Table 7

Athletes Core Ideas, Category, and Code Frequencies

Core Idea	Category		Group A <i>f</i>	Group B <i>f</i>	Group C <i>f</i>
Perceived Identification of Coaches	Overall 'Positive' Behavior Responses	Patience/Grace	9		6
		Encouragement/Growth	9		
		Feedback/Help to Fix	8	6	8

Response to Mistakes		Loving/Care/Forgiveness	5		
		Learning Opportunities		3	
		Encouragement/Patience		3	
		Accountability			5
	Overall 'Negative' Behavior Responses	Reaction/Frustration	4	5	3
		Inconsistent		5	
		Ignores/Late Reaction		2	3
Perceived Coaches' meaning of success		Growing as a person/Growing in faith	27		
		Outcome/Winning	10	11	8
		Competing Well and Together	9		2
		Team Improvement	7		
		Having a good attitude/doing your best	4		
		General/Personal Sport Improvement		5	6
		Having Fun/Doing your best		5	8
		Growing as a person (not faith based)		3	2
Perception of Beliefs	Overall 'Positive' Perception of Beliefs' influence	Increases Care/Intentionality with Players	17	1	
		Increases Positivity/Encouragement	12	1	
		Increases Patience/Grace	5	1	1
		Increases integrity	4	2	
	Overall 'Neutral' Perception of Beliefs' influence	They Don't Influence	10	7	6
		They Don't Know	7	10	19
	Negative Perception of Beliefs' influence	Increases strictness/favoritism (with athletes of same beliefs)	3	2	

Note. Group A- Religious School/Religious Beliefs

Group B- Secular School/Religious Beliefs

Group C- Secular School/No Religious Beliefs

Athletes' Perception of Their Coaches Behavior: Responses to Mistakes

In analyzing athletes' perception of their coaches' behavior, responses were sorted into two main categories. These categories, based on the research of supportive and unsupportive coaching behaviors (Côté et al., 1999), were labeled to be either 'positive' or 'negative'. All groups had mentions of both identified positive and negative coaching behavior, with the closest ratio of negative to positive behavior found in Group B.

Overall Positive Behavior Response. Across all the groups, athletes perceived overall 'positive' coaching behavior to have a high frequency. For Group A, this positive response was associated with behaviors categorized as "Patience/Grace" and "Encouragement/Growth" where Group B and C had these behaviors characterized as feedback related; where their coach would give them specific guidance on how to fix the issue.

Athletes from Group A said "Coach is pretty patient. He shows us grace when we mess up even though he is a really competitive guy" and "She is very forgiving and always assumes the best from people, and she knows that there is always room for growth. She wants to take a step back and evaluate what can be done differently." For Group A, there appears to be a greater integration of feedback and encouragement whereas in Group B and C, these behaviors are utilized separately. An athlete from Group B stated that most their coach's behavior is engaging in corrections and stated "he will say the same thing a million times if you keep making the same mistake, but never get angry. When you get something right, he gives new corrections." Athletes from Group C expressed that in responding to mistakes their coach responds with "helpful advice", "constructive criticism" and "tells you what you did wrong and a way to fix it." In these responses, athletes appeared to view this feedback as a positive and desired.

Another interesting observation from this question was that athletes from Group A included rather specific language not as commonly seen in Group B and C, that included

verbiage related to ‘grace’, ‘forgiveness’ and ‘compassion.’ While these words were not completely absent from Group B and C’s group, they were more commonly expressed in Group A. It could be inferred that this difference in language is related to similarly related themes of grace, forgiveness, and compassion found within many religions (Krause et al. 2019). Overall, there were not dramatic differences in positive coaching behavior responses between the three groups outside of Group A having a notable emphasis on grace beyond just giving the athletes feedback to fix their mistake.

Overall Negative Behavior Response. For Group A and Group C, there was a rather large variance in frequency for positive and negative behavior responses, with many more positive behaviors than negative. Athletes from these groups identified negative behavior responses to be only a fraction of the positive responses. For Group A, there was about 3 positive responses for every one negative response and for Group C, about 2 positive responses for every one negative. On the contrary, Group B had typical frequencies for both positive and negative behavior responses, having the same amount for each.

For Group A and B, there were a few athletes who noted that much of their perception of a negative behavior response can come from inconsistency. An athlete from Group A stated that in how their coach responds to mistakes “depends on who we are playing that week. Also at what point we are at in the season. He tends to be much more critical and intense near the end of season around national tournament time” and an athlete from Group B expressed “My coach’s behavior across days at practice is pretty dependent on a lot of factors, including his mood, his opinion about certain players, and how each player has been competing lately. In my own experience, he often publicly criticizes me and brings it to the whole team’s attention when he feels I’ve made a mistake, but he does not do this for everyone.”

For Group B, there were also mentions of punishments due to mistakes either in “making [the team] run” or making public “belittling jokes.” Group A and C did not have mentions of physical punishments but did mention that making a mistake could cause their coach to either ignore them as an individual athlete or they ignore the mistake that was made.

Perceived Coaches’ Meaning of Success

Groups perception of Coaches meaning of success varied across groups for this core idea. For Group A, the highest frequency, with a typical category, was athletes perceiving that success to their coach mean growing as a person and/or growing in their faith. Many athletes emphasized their coach encouraging spiritual growth to be what is most important. One athlete stated “Coach loves winning tournaments and doing well on the golf course, but I think deep down he wants to see us become godly men” and another said that “[success means] nothing [to her coach], yes success is awesome and we want to win if we are able too but win or lose it is all in Jesus name that we play he always says.” Other athletes discussed their coach supporting overall character development and future life success, examples include: “I think he sees it as completing and doing well in things, even outside of golf. Such as in school, our relationship with God, and our relationship with others,” “It is important but is not the most important thing in the world. He knows our mental health is more important,” “I think athletic success is a nice thing to have, and our team definitely strives for it, but I believe my coach also strives for personal success for her athletes meaning she strives for her athletes to gain a relationship with God, and grow as a person in a good way.”

For Group B and C, winning or having an outcome perspective was what most athlete identified success meant to their coach. For Group A, there was still mention of winning and athletes achieving their goals, but character was largely set apart as first. Groups B and C

mentioned character development but was categorized as a rare frequency. All groups mentioned coaches identifying individual and team improvement as successful. For Group B, this was the second highest category but was lower on the list for Groups A and C. Groups A and C had other elements before such as 'having fun' and 'doing your best'

Athletes Perception of Their Coaches' Religious Beliefs

The athletes' perception of the influence of their coaches' religious beliefs on coaching behavior came in three different positions: positive, neutral, or negative. Group A had a largely positive athlete perception of their coaches' religious beliefs. Athletes expressed that they felt it made their coach more positive, increase their intentionality, enhance patience and grace, and overall influence their integral character. One athlete outlined some of these factors by stating how their coach's religious beliefs influences their coaching: "I think he lives strongly by his faith, which gives him a greater level of patience, a broader perspective, and overall helps build better relationships within the team." Another athlete from Group A stated "My coach is very understanding, and she always assumes the best out of people. She is extremely patient and doesn't let her frustration or anger influence the team negatively. She is quick to listen, slow to speak, and slow to become angry which is a great example of living out her Christianity."

For Group B and C, most athletes did not know much about their coach's religious beliefs and therefore did not know if it influences their behavior. This makes sense due to the secular nature of universities and the public sharing of religious affiliations. The majority of the responses for these groups were neutral stances on the matter yet were rarely negative. For Group B and C, most athlete express inferences about their coaches' religious beliefs based on the their coaches actions and behavior engagement. One athlete from Group B stated, "I believe that he would be [religious] because he genuinely cares for everyone." This was also reflected on the contrary

when an athlete expressed disappointment in assumed coaches' religious beliefs due to inconsistency in actions, stating "You would think it would make him a better coach, but it does not. He is very selfish. He only cares about winning and if you do not he puts you down and makes you feel bad."

Coach Qualitative Results

The analysis of the coach portion of the qualitative responses were organized by open-ended question into three domains for each group of coaches (see Table 8). The groups of coaches were separated as athletes above with Group A ($n=45$), Group B ($n=5$), Group C ($n=10$) and Group D ($n=1$). Each domain consists of core ideas and categories with the frequency of coach responses listed for each idea. The core ideas were a) leading to current position, b) coaching values, c) evaluation of success, d) coaching behavior after mistakes, e) coaching behavior after success, f) evaluation of beliefs, and g) perceived influence of beliefs.

Table 8

Coaches Core Ideas, Categories, and Code Frequencies

Core Idea	Category		Group A <i>f</i>	Group B <i>f</i>	Group C <i>f</i>
Leading to Current Position		Personal Mission/Desire to Make an Impact	12	1	1
		Played in College	10	1	
		Connections/Opportunity	8	1	4
		God's Calling	10		
		Competition Level	4	1	
		Love for Coaching	3	1	2
		Love for the Sport		1	2
Coaching Values		Honesty/Integrity	20	3	3
		Discipline/Dedicated	13	5	6
		Community/Relational	13		
		Respect	10	2	3

		Care/Kindness	9		
		Love/Empathy	9		
		Attitude/Joy	5		4
		Service	3		
		Instructional	3		
		Character Development	3		
Evaluation of Success		Personal/Holistic Growth	15	2	
		Reaching Potential/Performance Improvement	11	4	5
		Winning/Outcome	10	2	2
		Growing in Faith	5		
		Success Beyond	4		
		Positive Team Environment			2
		Positive Attitude			2
Coaching Behaviors	After Mistakes	Instruction/Talk through to adjust	21	2	2
		General Encouragement	14		
		'Appropriate' Discipline	4		
		Communication	3		
		Positive Reinforcement		2	2
		Make 'Redo' the right way		1	
		Acknowledge Mistake			2
	After Success	Encouragement/Affirmation	19	1	
		Personally Acknowledge	14	1	3
		Celebration/Praise	10	3	5
		Rewards	3		
		Ignore	2		
		Connect to Process			2
Evaluation of Beliefs		Heavily Involved	19	1	
		Attends Church Regularly	11	1	
		Just Identifies	7	2	
		Attends Church Sometimes	5	1	
		Spiritual	2		3
		No Religious Beliefs			5
		Past Religious Upbringing			2
Perception of Belief Influences		Influences every aspect of life	24	2	
		Influences Some Parts	11	1	
		Influences A little	6	1	
		No Influence	2	1	5
		Morality Influence			3
		Past Religious Upbringing Influence			2

Note. Group A- Religious School/Religious Beliefs

Group B- Secular School/Religious Beliefs

Group C- Secular School/No Religious Beliefs

Coaches' Evaluation of Their Coaching Position

From the domain of coaches' evaluation of their coaching position came three core ideas:

a) the leading to current coaching position, b) coaching values, and c) evaluation of success.

Leading to Current Coaching Position. Across Group A, B, and C, there was mention of a connection or open opportunity that led to the coaches' current coaching position. Many of these opportunities came from connections that were established through the athletic director, or in one case, seeing the job posting online and applying for it out of desiring something new. Another commonality between all three groups was a previous involvement within the sport. Many of the coaches in each group noted that their desire to coach came from playing that specific sport in college or being heavily involved in the sport growing up. This love of the sport, either through playing themselves or overall enjoyment was a common motivator for many.

Outside of the sport itself, few coaches reported that they desired to coach due to their love of coaching. Out of 77 coaches, only six reported that they coach because of their love for the coaching occupation. Along with this, only a few coaches expressed that they pursuit of collegiate coaching derived from a desire to coach at a higher more competitive level.

Group A had two items that were distinguishable from groups B and C. The highest frequency for Group A coaches for why their pursued coaching was for their personal mission to make an impact in college athletes. One coach stated that what lead him to his current position was the "[desire to develop] young people for life through the game of golf." Another coach expressed that it was through this ability to make an influence on athletes lives that she switched

careers entirely saying, “The happiest and most fulfilled I have ever been coaching and investing all of my time and energy mentoring kids and teens in both church and in athletics.” Along with this theme, another coach expressed that his heart for coaching came from “a desire to advocate for and walk alongside student athletes.” This ‘impact-focused’ posture towards the coaching occupation was not frequently present in Group B and C (only 1 response in each), while Group A had 12 responses.

The other distinguishable item from Group A was that 10 coaches contributed their coaching career to a ‘calling’ or the ‘Lord leading them.’ Other coaches from Group A expressed the integration of faith played a part in pursuing collegiate coaching. One coach said, “I have coached for years at the [high school] level and felt God leading me to more up to the college ranks and also work with a Christian College” and another coach stated “The Lord [led me to this current position]! I had a mental breakdown doing digital marketing and went back to the sport I loved. God showed me how much joy I had in coaching, so I decided to continue pursuing it.” Similarly, another coach expressed that if it wasn’t for the calling, he would not likely be in the field of coaching: “I feel as if coaching is a calling. Sport is just the tool to develop relationships to impact young people in their spiritual life journey. Without a solid foundation of Bible truths, I am not sure I could have kept coaching for over 40 years.”

Coaching Values. Group A, B and C all had mentions of honesty and integrity identified as a coaching value that many of these coaches uphold. For Group A, honest and integrity held to have the highest frequency with 20 while the other groups had this has the second or third on the list. Another common coach value was Dedication and Discipline. All three groups have this value on their list and was first for both Group B and C and second for Group A. Lastly, the third value that all groups had in common was the value of respect.

Group A had a distinguishable category for coaching values that many coaches described as relational. Values that fit into this category were items related to intentionality with players, seeking to know the athlete wholistically, and fostering a authentic team culture. Group A also stood alone in having coaching values for care/kindness, love/empathy, attitude/joy, and service. Two coaches from this group stated that their coaching value was “servant leadership.”

Lastly, Group C had one category different from Group A and B, and this was the coaching value of enjoyment/gratitude. This was second highest in frequency for Group C and items that fell into this category were coaching values that emphasized sport enjoyment, having fun with their players, laughter, and practicing thankfulness.

Coaches' Perception of Their Coaching Behavior

From the domain of coaches' perception of their coaching behavior two core ideas: a) behavior after mistakes, and b) behavior after success.

Coaching Behavior After Mistakes. Groups A, B and C all listed instruction and talking through the mistake as the highest frequency when engaging with mistakes. Outside of this core theme threaded throughout, the rest of the identified behaviors vary slightly from group to group. Group A coaches also had high frequencies of encouragement. Group B and C both mentioned positive reinforcement, but reinforcement was framed in such a way that is still corrective of the mistake, while the Group A coaches expressed the encouragement to be more general player affirmation, not always related to specific skill failure. Group A also listed “appropriate discipline” as one of the responses to mistakes. It could be inferred that this discipline was related to non-sport related mistakes, like an athlete breaking a team rule or policy, based on the narrative of these ‘discipline’ related responses. Overall, there were similarities across all groups for behaviors responding to mistakes.

Coaching Behavior After Success. All groups listed praise and encouragement as the highest frequency for this core idea. Group B and C had praise and encouragement highest, but Group A had this category, along with celebration as high in amount reported. Group A coaches also were intentional about personally acknowledging when players are successful. One coach specifically noted “I always try my best to acknowledge (by name) a player who is successful in practice in front of his/her teammates. Being “seen” is very important to my kids.” Group B and C had mentions of personal acknowledgement but were both lower in frequency.

Group A, apart from Group B and C, also had a few coaches mention their use of rewards with their athletes. Some of these rewards go beyond what was successful in sport or practice, but also into outside activities. One coach said “I award a team T-shirt to those who are killing it in the classroom and the water. I have a team meeting before each practice and recognize people who are doing a great job.” For a few coaches, there is a combining of rewards and public acknowledgement, almost inferring that public acknowledgement can be a reward itself.

Group C had a distinguishable categorized coach behavior a few coaches noted following success they try to connect it to the overall team process. One coach stated that in responding to mistakes they “Connect that small success to larger process of setting goals/progressing through season” and another coach said similarly that they “point out the work that led to success.”

Coaches’ Perception of Their Religious Beliefs

From the domain of coaches’ perception of their religious beliefs came two core ideas: a) evaluation of beliefs, and b) perception of beliefs influence.

Evaluation of Beliefs. As groups are organized by religious beliefs, evaluation of beliefs takes the perspective of religious belief involvement and religious commitment. For Group A, the majority of the coaches in this category claimed to be heavily involved in their church,

beyond the hourly commitment on Sunday morning. Many coaches expressed they are involved in church charities, leading bible studies, daily personal devotionals, and a few noted to be ordained pastors. Coaches who identified in this category evidently make their faith a big portion of their everyday lives. The second largest category for Group A were coaches who attend church, or a identified religious gathering, on a weekly basis. Some coaches attributed this to the busy schedule of being a collegiate coach. The next category for Group A were coaches who just identify with a religion but do not participate in organized religious activities, such as going to church, or bible studies, but rather it is just a lens through which they identify and view the world. The lowest frequency categories in Group A were those who attend church sometimes, on rare occasions, and those who identify as more 'spiritual.' The two coaches who expressed this transition to spirituality expressed previous religious involvement but have grown to develop their own sense of spirituality in the past years.

Group B had two coaches who claimed to just identify with religious beliefs, and only had one coach who indicated heavy church involvement. The other two coaches mentioned attending church every Sunday, whereas the other stated attending church occasionally. For Group B there was not many common threads as almost every coach in this group claimed a different evaluation of religious beliefs.

All of Group C claimed to not have religious beliefs (by choice in poll), but only 5 were specific in them having no religious influence in any way. Three of the coaches in this group noted that they are more spiritual in how they identify, one of them claiming to believe in a higher power, but nothing more than that. Additionally, apart from Group A and B, Group C had two coach who had past religious upbringing. Both claimed to have walked away from their religious experience but still respect and uphold to some traditions on occasion.

Perception of Beliefs' Influence. Due to the high frequency of Group A coaches stating regular involvement in church, it would make sense that most of the coaches in this group claimed that they believe their religious beliefs influence every aspect of their life. This influence is beyond just coaching. Coaches expressed that their faith influences their marriage, how they parent their kids, how they spend their time and resources, and how they treat people. One coach stated that “My faith informs every aspect of my life and I believe scripture guides my interactions with others. I spend time daily in Bible study and prayer, believing that my relationship with God will be reflected in my relationships with others.” The statement ‘all aspects of my life’ was found for a large quantity of coaches in group A. Beyond the all-encompassing influence, coaches in Group A also had a high frequency of their religious beliefs influencing some parts of their life. Coaches who categorized here would claim specific areas that their religious beliefs influence, but still held a posture that it did not influence every aspect. There were only a few coaches who expressed that their religious beliefs have a little influence or no influence at all.

Group B had coaches from each different category. Two coaches claimed that their religious beliefs influence every aspect of their life, while the remaining coaches fell into the remaining categories (influences some parts, influences a little, no influence).

Group C had some unique responses in light of Group A and B. Group C had the highest frequency for coaching perceiving their religious beliefs (or lack thereof) to have no influence on their daily living or choices. Two coaches expressed that their influences come from general morality principles such as “the golden rule” or “do unto others as you would have done to you” which are biblically based, yet these coaches contributed them to “spirituality”. As mentioned above, Group C had two coaches who mentioned previous religious involvement. Both coaches

who expressed this prior experience stated that it was from their past religious experiences that have given them virtues such as honesty and integrity. One coach stated “I suppose the values I learned as a kid have had influence. I love to help others and volunteer; I love to cultivate positive relationships with others.” This statement infers that the coach believes that past religious upbringing influences these charitable desires.

Discussion

The current mix-methods study sought to explore the differences in athletes’ perceptions of their coaches’ behavior in religious and secular institutions from both the athlete and coach perspective through the utilization of both quantitative survey data and open-ended responses to further expand and support data results. The results indicate that there is a difference in some of perceived coaching behaviors between these institutions and supports the proposed theory that religious beliefs can be an antecedent to coaching behavior.

Research question one was looking at the differences between athletes’ perception of their coaches’ frequency in controlling coaching behavior in religious and secular institutions in the practice setting. Contrary to the hypothesized difference, participants reported close to the same frequencies for controlling coaching behaviors for both religious and secular institutions, not demonstrating a significance difference. Previous research indicates that controlling coaching behavior is relatively present in the collegiate setting due to the evaluative context for coaching (Rocchi & Pelletier, 2017), but the results for this study reported low controlling coaching behavior. This could be due to the focus on Division III institutions on student athletes succeeding in more than just sports but also the classroom, as they do not give athletic scholarships (Stokowski et al., 2022), compared to DI, which has a great focus on winning that

increases the likelihood of engaging in controlling coaching due to a more intense coach evaluative context (Rocchi & Pelletier, 2017).

Along with overall controlling coaching behaviors, researchers also explored the controlling coaching subscales of intimidation and negative conditional regard, with a parallel hypothesis to overall controlling coaching behaviors. The results indicated that intimidation and negative conditional regard displayed no significant difference between groups, supporting Matosic and Cox (2013) in a similar study who concluded that college athletes tend to perceive similar levels of frequency across controlling coaching subscales. While the difference in negative conditional regard concluded not to be significantly different, the open-ended answers suggest that the participants at secular schools perceived negative conditional regard from their coaches, as multiple athletes reported that their coaches treat them differently based on their performance, and some coaches treat the starting players better than they do the players who do not play as much. Religious schools had mentions of this type of inconsistency in behavior but was only mentioned by three athletes and they were related to competition intensity rather than a specific players performance.

Researchers also explored athletes' perception of the frequency in autonomy supportive coaching behavior in the practice setting. In line with the hypothesis, the MANOVA results confirmed that coaches at religious institutions have a higher perceived frequency of autonomy supportive coaching behavior from their athletes. In the open-ended responses, athletes mentioned that this displayed itself in the coaches allowing them to have a voice in team meetings and decisions, encouraging them beyond their sport but in life, and shifting the focus away from outcomes but to becoming better people. This relation of religious beliefs and autonomy supportive behavior could additionally be related to the qualitative responses on

coaches' evaluation of their position. Existing research has affirmed that passion, or desire related to one's identity, is a powerful factor that influences coaching behavior (Vallerand, 2008). Vallerand (2008) proposed that coaches with a greater passion or desire for coaching are more inclined to engage in an autonomy-supportive style of coaching. This aligns with the qualitative coaching responses when coaches were asked to evaluate their coaching position. Very few of the secular coaches reported that their current coaching position evolved from a passion for coaching, but either was from connections or having previous playing experiences. On the contrary, a high number of religious coaches reported that their position resulted from a felt "calling" to coaching, and "a desire to make an impact." In support of Vallerand's theory, this analysis would confirm that religious coaches, due to their identified 'calling' in coaching, would engage in more autonomy-supportive coaching behaviors.

To better understand the complexity of an athletes' perceptions of how their coaches' religious beliefs influencing their coach's behavior, researchers asked open-ended question to athletes on how they viewed their coaches' religious beliefs and if they saw translation in beliefs and behavior engagement. In general, athletes at religious institutions reported positive perception of their coaches' religious beliefs, the majority of them assuming that it is due to their coaches' faith that has resulted in positive character traits (i.e., patience, kindness, forgiveness, service) that positively influence their coaching. For athletes at secular institutions, there was a lack of understanding of their coaches' motivations or belief system entirely.

Based on both secular and religious school athlete responses, it appears that this knowledge of coaches' religious beliefs for athletes at religious institutions created greater mutual trust and respect. This would conclude with Jowett (2007) 3 C's + 1 model supporting the importance of having overlapping values and views with their coach to increase the coach-athlete

relationship. Further affirming this point, athletes who had a religious faith but attended a secular school displayed greater discontentment in their coaches' behavior, alluding to a conflict of belief system can decrease mutual trust and respect in the coach-athlete relationship.

Beyond knowledge of coaches' religious beliefs, the athlete qualitative responses displayed evidence that they appreciate when their coaches demonstrate care about them outside the scope of sport. Closeness, another element of Jowett (2007) 3 C's +1 model, is the perception of coach care. For athletes at religious schools, most of them concluded that what they believed success meant to their coach was their own personal and character development, and much of this was tied to religious beliefs. This would conclude that athletes perceive their coaches' religious beliefs to be a motivator behind pursuing the coach-athlete relationship.

For the final research question, coaches' perception of their own religious beliefs influence on their coaching behavior was explored through open-ended questions. Regardless of religious affiliation, there was evidence in the qualitative responses to suggest that a coaches' belief system plays a role in their coaching decisions and behaviors. For secular coaches, despite most denying any religious affiliation, a few of them still stated that their past religious upbringing or cultural morals that are founded in biblical virtue (e.g., the golden rule) influence their behavior. For religious coaches, in alignment of Vinson and Parker (2020), there was expression that the underlying virtues of the Christian faith played a role in behavior choice, and for many of these coaches, these virtues expanded into their everyday lives and decisions. One virtue was the concept of servant leadership. It was hypothesized that due to the Christianity's emphasis on this leadership style, that encourages humility and service, that similarly related coaching behaviors (such as autonomy supportive coaching) would be present. While not present in all coaches, many religious coaches affirmed that their desire to pursue an 'athlete' focused

coaching approach derived from the virtue of servant leadership, alluding to an overlap of servant leadership and autonomy supportive behavior.

Finally, this study sought to specifically consider behaviors in the practice setting along with a smaller coach to athlete ratio present in individual sports. While coach behaviors have shown to fluctuate in the practice and competition setting (Nicolas et al., 2011; Partington & Cushion, 2012), Smith et al. (2020) affirms that practice behavior can hold greater importance due to the higher frequency athletes would interact with this behavior. This study would align with this statement as many of the autonomy supportive coaching behaviors can be utilized in the practice setting and the athletes took notice of this based on qualitative responses. Moreover, the purpose of utilizing individual sports with a smaller coach-to-athlete ratio was to consider the coach-athlete relationship, as more players can get lost with larger teams (Rhind et al., 2012). Results from this study provided no conclusive evidence towards this claim, especially with opening athlete participation to swimming and wrestling teams, that while still individual sports, typically are larger in team size.

Implications

The results found in this study led to offering several practical implications for coaches, administrators, and sport psychology professionals. For coaches, religious coaches specifically, this study raises further awareness of how one's beliefs often come through within their coaching style and how they go about coach-athlete relationships (Schools et al. 2020). Coaches at religious institutions must also be aware that while not intentional, athletes can feed off their beliefs for trust and security in their coach-athlete relationship or vice versa; feeling as though that due to their misalignment of beliefs, their coach does not care about them. For both religious and secular administrators, this study affirms the great responsibility that athletic organizations

have on selecting coaches for their athletes' development (Fisher et al., 2019). While hiring elite coaches for the future success of athletic programs is important, this study shows that athletes value more when their coaches care about their holistic development more than just the wins and the losses. Athletic departments should look to shift away from this mentality for the betterment of their athletes. Lastly, for those within the field of sport psychology, there needs to be a continued emphasis on the importance of autonomy coaching behavior. While there was low reported frequency in overall controlling coaching behaviors, controlling coaching was still found to be paired with autonomy supportive behaviors. For sports psych professionals and coach educators it is important to continue to educate on harmfulness of controlling coaching to hopefully eradicate it from the sports world entirely.

Limitations and Future Directions

For the limitations of this study, many were due to the unforeseen obstacles of data collection. One obstacle in particular was the low response rate (7.23%) from athlete participants, as desired power ($n=128$) was not achieved. Recent research has concluded that lower-response rates have been present in studies following the COVID-19 pandemic, but the specific data limitations are difficult to determine for certain (Stoto et al., 2022).

Furthermore, the generalizability of the results is limited by the small sample due to the incompleteness of the CCBS and HCQ questionnaires. Failure to place these at the beginning of the survey resulted in athletes leaving answers blank and led to the researcher having to delete surveys that were not completed in full. Because of the data collection shift in how surveys were distributed to the athlete participants (i.e., going straight to the athletes rather than through the coaches), there raises the issue of data clustering within the results. Due to there being a limited number of universities that have public directories, it could be inferred that many of those

athletes would have responded to the study would be from similar team or university. While athlete participants could interpret the same coach behavior differently, this potential risk of clustering could impact reliability of this data.

For the future direction in this line of research would be the exploration beyond just individual sports, but team sports (e.g., soccer, basketball, baseball). Additionally, this study was meant to focus on behaviors coach utilize in practice, and as research supports coaches can engage in different behaviors in practice and competition settings (e.g., Nicolas et al., 2011; Partington & Cushion, 2012; Smith & Cushion, 2006), it would be worth researching this topic from a competition perspective. Future research is still needed to establish the full extent of religious belief influence, potentially exploring these ideas from observation rather than coach and athlete perception.

Conclusion

Overall, this study provides new insight into the relationship between religious beliefs and coaching behavior. To date, there has been limited research on religious beliefs and coaching; one comparing coach values (Burns 1983), and one from the perspective of the athlete (Schools et al., 2020), but none incorporating both the coach and the athlete perspective. This study sought to combine these comparisons and perceptions to create a clearer understanding of religious belief influence on coaching behaviors. While Burns (1983) found no significant difference in coaching values and behaviors as a whole, these results demonstrate that in the particular area of autonomy supportive coaching behavior, athletes perceive that religious and secular coaches display different frequencies, and coaches themselves perceived their religious behaviors influencing their behavior choices. These results additionally build upon Schools et al. (2020) in integrating athletes' perception, that athletes perceive their coaches' religious beliefs in

a positive light when coaches intentionally care for them beyond their sport; affirming their dedication to their religious beliefs.

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CHAPTER V

Summary and Conclusions

The current mix-methods study sought to explore the differences in athletes' perceptions of their coaches' behavior in religious and secular institutions from both the athlete and coach perspective through the utilization of both quantitative survey data and open-ended responses to further expand and support data results. The results indicate that there is a difference in some of perceived coaching behavior between these institutions and supports the proposed theory that religious beliefs can be an antecedent to coaching behavior.

Research question one was looking at the differences between athletes' perception of their coaches' frequency in controlling coaching behavior in religious and secular institutions in the practice setting. Contrary to the hypothesized difference, participants reported close to the same frequencies for controlling coaching behaviors for both religious and secular institutions, not demonstrating a significance difference. Previous research indicates that controlling coaching behavior is relatively present in the collegiate setting due to the evaluative context for coaching (Rocchi & Pelletier, 2017), but the results for this study reported low controlling coaching behavior. This could be due to the focus on Division III institutions on student athletes

succeeding in more than just sports but also the classroom, as they do not give athletic scholarships (Stokowski et al., 2022), compared to DI, which has a great focus on winning that increases the likelihood of engaging in controlling coaching due to a more intense coach evaluative context (Rocchi & Pelletier, 2017).

Along with overall controlling coaching behaviors, researchers also explored the controlling coaching subscales of intimidation and negative conditional regard, with a parallel hypothesis to overall controlling coaching behaviors. The results indicated that intimidation and negative conditional regard displayed no significant difference between groups, supporting Matosic and Cox (2013) in a similar study who concluded that college athletes tend to perceive similar levels of frequency across controlling coaching subscales. While the difference in negative conditional regard concluded not to be significantly different, the open-ended answers suggest that the participants at secular schools perceived negative conditional regard from their coaches, as multiple athletes reported that their coaches treat them differently based on their performance, and some coaches treat the starting players better than they do the players who do not play as much. Religious schools had mentions of this type of inconsistency in behavior but was only mentioned by three athletes and they were related to competition intensity rather than a specific players performance.

Researchers also explored athletes' perception of the frequency in autonomy supportive coaching behavior in the practice setting. In line with the hypothesis, the MANOVA results confirmed that coaches at religious institutions have a higher perceived frequency of autonomy supportive coaching behavior from their athletes. In the open-ended responses, athletes mentioned that this displayed itself in the coaches allowing them to have a voice in team meetings and decisions, encouraging them beyond their sport but in life, and shifting the focus

away from outcomes but to becoming better people. This relation of religious beliefs and autonomy supportive behavior could additionally be related to the qualitative responses on coaches' evaluation of their position. Existing research has affirmed that passion, or desire related to one's identity, is a powerful factor that influences coaching behavior (Vallerand, 2008). Vallerand (2008) proposed that coaches with a greater passion or desire for coaching are more inclined to engage in an autonomy-supportive style of coaching. This aligns with the qualitative coaching responses when coaches were asked to evaluate their coaching position. Very few of the secular coaches reported that their current coaching position evolved from a passion for coaching, but either was from connections or having previous playing experiences. On the contrary, a high number of religious coaches reported that their position resulted from a felt "calling" to coaching, and "a desire to make an impact." In support of Vallerand's (2008) theory, this analysis would confirm that religious coaches, due to their identified 'calling' in coaching, would engage in more autonomy-supportive coaching behaviors.

To better understand the complexity of an athletes' perceptions of how their coaches' religious beliefs influencing their coach's behavior, researchers asked open-ended questions to athletes on how they viewed their coaches' religious beliefs and if they saw translation in beliefs and behavior engagement. In general, athletes at religious institutions reported positive perception of their coaches' religious beliefs, the majority of them assuming that it is due to their coaches' faith that has resulted in positive character traits (i.e., patience, kindness, forgiveness, service) that positively influence their coaching. For athletes at secular institutions, there was a lack of understanding of their coaches' motivations or belief system entirely.

Based on both secular and religious school athlete responses, it appears that this knowledge of coaches' religious beliefs for athletes at religious institutions created greater

mutual trust and respect. This would conclude with Jowett (2007) 3 C's + 1 model supporting the importance of having overlapping values and views with their coach to increase the coach-athlete relationship. Further affirming this point, athletes who had a religious faith but attended a secular school displayed greater discontentment in their coaches' behavior, alluding to a conflict of belief system can decrease mutual trust and respect in the coach-athlete relationship.

Beyond knowledge of coaches' religious beliefs, the athlete qualitative responses displayed evidence that they appreciate when their coaches demonstrate care about them outside the scope of sport. Closeness, another element of Jowett (2007) 3 C's +1 model, is the perception of coach care. For athletes at religious schools, most of them concluded that what they believed success meant to their coach was their own personal and character development, and much of this was tied to religious beliefs. This would conclude that athletes perceive their coaches' religious beliefs to be a motivator behind pursuing the coach-athlete relationship.

For the final research question, coaches' perception of their own religious beliefs influence on their coaching behavior was explored through open-ended questions. Regardless of religious affiliation, there was evidence in the qualitative responses to suggest that a coaches' belief system plays a role in their coaching decisions and behaviors. For secular coaches, despite most denying any religious affiliation, a few of them still stated that their past religious upbringing or cultural morals that are founded in biblical virtue (e.g., the golden rule) influence their behavior. For religious coaches, in alignment of Vinson and Parker (2020), there was expression that the underlying virtues of the Christian faith played a role in behavior choice, and for many of these coaches, these virtues expanded into their everyday lives and decisions. One virtue was the concept of servant leadership. It was hypothesized that due to the Christianity's emphasis on this leadership style, that encourages humility and service, that similarly related

coaching behaviors (such as autonomy supportive coaching) would be present. While not present in all coaches, many religious coaches affirmed that their desire to pursue an 'athlete' focused coaching approach derived from the virtue of servant leadership, alluding to an overlap of servant leadership and autonomy supportive behavior.

Finally, this study sought to specifically consider behaviors in the practice setting along with a smaller coach to athlete ratio present in individual sports. While coach behaviors have shown to fluctuate in the practice and competition setting (Nicolas et al., 2011; Partington & Cushion, 2012), Smith et al. (2020) affirms that practice behavior can hold greater importance due to the higher frequency athletes would interact with this behavior. This study would align with this statement as many of the autonomy supportive coaching behaviors can be utilized in the practice setting and the athletes took notice of this based on qualitative responses. Moreover, the purpose of utilizing individual sports with a smaller coach-to-athlete ratio was to consider the coach-athlete relationship, as more players can get lost with larger teams (Rhind et al., 2012). Results from this study provided no conclusive evidence towards this claim, especially with opening athlete participation to swimming and wrestling teams, that while still individual sports, typically are larger in team size.

Implications

The results found in this study led to offering several practical implications for coaches, administrators, and sport psychology professionals. For coaches, religious coaches specifically, this study raises further awareness of how one's beliefs often come through within their coaching style and how they go about coach-athlete relationships (Schools et al. 2020). Coaches at religious institutions must also be aware that while not intentional, athletes can feed off their beliefs for trust and security in their coach-athlete relationship or vice versa; feeling as though

that due to their misalignment of beliefs, their coach does not care about them. For both religious and secular administrators, this study affirms the great responsibility that athletic organizations have on selecting coaches for their athletes' development (Fisher et al., 2019). While hiring elite coaches for the future success of athletic programs is important, this study shows that athletes value more when their coaches care about their holistic development more than just the wins and the losses. Athletic departments should look to shift away from this mentality for the betterment of their athletes. Lastly, for those within the field of sport psychology, there needs to be a continued emphasis on the importance of autonomy coaching behavior. While there was low reported frequency in overall controlling coaching behaviors, controlling coaching was still found to be paired with autonomy supportive behaviors. For sports psych professionals and coach educators it is important to continue to educate on harmfulness of controlling coaching to hopefully eradicate it from the sports world entirely.

Limitations and Future Directions

For the limitations of this study, many were due to the unforeseen obstacles of data collection. One obstacle in particular was the low response rate (7.23%) from athlete participants, as desired power ($n=128$) was not achieved. Recent research has concluded that lower-response rates have been present in studies following the COVID-19 pandemic, but the specific data limitations are difficult to determine for certain (Stoto et al., 2022).

Furthermore, the generalizability of the results is limited by the small sample due to the incompleteness of the CCBS and HCQ questionnaires. Failure to place these at the beginning of the survey resulted in athletes leaving answers blank and lead to the researcher having to delete surveys that were not completed in full. Because of the data collection shift in how surveys were distributed to the athlete participants (i.e., going straight to the athletes rather than through the

coaches), there raises the issue of data clustering within the results. Due to there being a limited number of universities that have public directories, it could be inferred that many of those athletes would have responded to the study would be from similar team or university. While athlete participants could interpret the same coach behavior differently, this potential risk of clustering could impact reliability of this data.

For the future direction in this line of research would be the exploration beyond just individual sports, but team sports (e.g., soccer, basketball, baseball). Additionally, this study was meant to focus on behaviors coach utilize in practice, and as research supports coaches can engage in different behaviors in practice and competition settings (e.g., Nicolas et al., 2011; Partington & Cushion, 2012; Smith & Cushion, 2006), it would be worth researching this topic from a competition perspective. Future research is still needed to establish the full extent of religious belief influence, potentially exploring these ideas from observation rather than coach and athlete perception.

Conclusion

Overall, this study provides new insight into the relationship between religious beliefs and coaching behavior. To date, there has been limited research on religious beliefs and coaching; one comparing coach values (Burns 1983), and one from the perspective of the athlete (Schools et al., 2020), but none incorporating both the coach and the athlete perspective. This study sought to combine these comparisons and perceptions to create a clearer understanding of religious belief influence on coaching behaviors. While Burns (1983) found no significant difference in coaching values and behaviors as a whole, these results demonstrate that in the particular area of autonomy supportive coaching behavior, athletes perceive that religious and secular coaches display different frequencies, and coaches themselves perceived their religious

behaviors influencing their behavior choices. These results additionally build upon Schools et al. (2020) in integrating athletes' perception, that athletes perceive their coaches' religious beliefs in a positive light when coaches intentionally care for them beyond their sport; affirming their dedication to their religious beliefs.

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Appendix A**INSTITUTIONAL REVIEW BOARD APPROVAL LETTER**

Office of Research Integrity Institutional Review Board

DATE: February 8, 2022

TO: Hannah Severs, BS

FROM: Ball State University IRB

RE: IRB protocol # 1858112-1

TITLE: Athletes' Perception of Their Coaches' Behavior at Christian and Secular Institutions

SUBMISSION TYPE: New Project

DECISION: APPROVED PROJECT

STATUS: EXEMPT

DECISION DATE: February 8, 2022

REVIEW TYPE: Exempt Review

The designated reviewer for the Institutional Review Board (IRB) reviewed your protocol and determined the procedures you have proposed are appropriate for exemption under the federal regulations. As such, there will be no further review of your protocol, and you are cleared to proceed with the procedures outlined in your protocol. As an exempt study, there is no requirement for continuing review. Your protocol will remain on file with the IRB as a matter of record. All research under this protocol must be conducted in accordance with the approved submission and in accordance with the principles of the Belmont Report.

Exempt Categories: 2

While your project does not require continuing review, it is the responsibility of the P.I. (and, if applicable, faculty supervisor) to inform the IRB if the procedures presented in this protocol are to be modified or if problems related to human research participants arise in connection with this project. Any procedural modifications must be evaluated by the IRB before being implemented, as some modifications may change the review status of this project. Please contact the Office of Research Integrity at orihelp@bsu.edu or Sena Lim, HRPP manager at 765-285-5034 or slim2@bsu.edu if you are unsure whether your proposed modification requires review or have any questions. Proposed modifications should be addressed in writing and submitted electronically to the IRBNet as a "Modification/Amendment" for review. Please reference your IRB protocol number 1858112-1 in any communication to the IRB regarding this project. - 2 -
Generated on IRBNet121 In the case of an adverse event and/or unanticipated problem, you will

need to submit written documentation of the event to IRBNet under this protocol number and you will need to directly notify the Office of Research Integrity (<http://www.bsu.edu/irb>) within 5 business days. If you have questions, please contact the Office of Research Integrity at orihelp@bsu.edu or Sena Lim, HRPP manager at 765-285-5034 or slim2@bsu.edu.

Reminder: Even though your study is exempt from the relevant federal regulations of the Common Rule (45 CFR 46, subpart A), Ball State has elected to hold you accountable to these regulations to encourage best research practices. You and your research team are not exempt from ethical research practices and should therefore employ all protections for your participants and their data which are appropriate to your project.

Appendix B

INFORMED CONSENT FORM

Study Title

Athletes' Perceptions of Their Coaches' Behavior at Christian and Secular Institutions
IRBNet # 1858112-1

Study Purpose and Rationale

The purpose of this study is to explore the differences in individual sport college athletes' perceptions of the frequency of specific coaching behaviors in practice settings at secular and religious institutions, and to explore how coaches perceive their religious beliefs, or lack thereof, influencing their coaching behavior.

Inclusion/Exclusion Criteria*Athletes*

To participate in this study, athletes must meet inclusion criteria: a) be at least 18 years of age; and b) have played for their current coach for at least one season c). play on tennis or golf team at university.

Exclusion criteria: a) under the age of 18 years; and b) Is currently a red shirt (for medical or other reasons)

Coaches

To participate in this study, coaches must meet inclusion criteria: a) coached their current team for at least one season (does not include assistant coaching). For coaches at Christian institutions, they must additionally b) confirm alignment with Christian faith.

Exclusion criteria: a) coached their current team for less than one season as head coach (years as an assistant coach do not qualify). For coaches at Christian institutions, b) does not confirm alignment with Christian faith.

Participation Procedures and Duration

The duration of the study will consist of taking a one-time survey consisting of multiple choice, likert-scale, and short answer questions, taking a total estimated time of 10-15 minutes.

For athletes, the survey will consist of a general demographics portion, open-ended questions, and two likert-scale questionnaires.

For coaches, the survey will consist of a general demographics portion followed with open-ended questions.

Data Confidentiality or Anonymity

All data will be maintained as anonymous.

No identifying information will appear in any publication or presentation of the data.

Data Security, Storage, and Retention Period (How will the researchers protect my information?)

All survey response information will be kept in a password protected online folder (Onedrive) that only the researchers will have access to.

Data will be kept secured and password protected for three years, starting at the end of data collection (March of 2022).

Risks or Discomforts

Potential risk or discomforts involved in the study are psychological or emotional due to the potential of thinking about possible past unhealthy emotional experiences with a coach.

Another potential discomfort could come from discussing one's religious beliefs, especially if athlete or coach feels that they are not able to fully live their religious beliefs due to current situation.

Finally, there is a small possibility that some identifying demographic information could lead to a chance of identity reveal. Due to the nature of this possibility, all information will be kept confidential.

Benefits

There are no perceived benefits for participating in this study.

Voluntary Participation

Your participation in this study is completely voluntary and you are free to withdraw your permission at any time for any reason without penalty or prejudice from the investigator. Please feel free to ask any questions of the investigator before signing this form and at any time during the study.

Your decision to participate will not affect relationships with coach (if athlete) or university (if coach).

If you decide to withdraw from this study, the researchers will ask you if information already collected from you can be used.

IRB Contact Information

For questions about your rights as a research subject, please contact the Office of Research Integrity, Ball State University, Muncie, IN 47306, (765) 285-5052 or at orihelp@bsu.edu.

Consent Statement

Study Title: Athletes' Perceptions of Their Coaches' Behavior at Christian and Secular Institutions

Please select your choice below. You may print a copy of this consent form for your records. Clicking on the "Agree" button indicates that

- You have read the above information
- You voluntarily agree to participate
- You are 18 years of age or older
- Play/Coach tennis or golf (or specified individual sport) at current university
- Athletes: Played for current coach for at least one season
- Coaches: Coaches current team for at least one season (does not include assistant coaching)
- Coaches at Christian Institutions: Confirm alignment with Christian faith

Agree

Disagree

Researcher Contact Information

Principal Investigator:

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Appendix C

Demographics Questions

Filled out via Qualtrics

1. Are you an athlete or a coach?
 - a. Athlete
 - b. Coach

How they answer this question will determine which set of questions they will be given.

If they choose Athlete, they will be directed here

2. Religious Affiliation of University (if no religious affiliation, write none)
 - a. Christian (Wesleyan, Methodist, Baptist, Non-Denomination, etc...)
 - b. Catholic
 - c. Jewish
 - d. None
 - e. Other (please specify)
3. Sport Played at university
4. Age (in years)
5. Gender
 - a. Male
 - b. Female
 - c. Non-binary
 - d. Prefer not to answer
6. Year in School

- a. Freshman
 - b. Sophomore
 - c. Junior
 - d. Senior
 - e. Super-Senior
7. Years playing under current head coach
8. How many weeks (from the start of practice) into your spring season are you?
9. How would you define your personal religious affiliation?
- a. Christian (Wesleyan, Methodist, Baptist, Non-Denomination, etc...)
 - b. Catholic
 - c. Jewish
 - d. None
 - e. Other (please specify)
10. One a scale of 1-7 (1, not strong at all, 7 very strong) how strong is your personal religious affiliation?
11. Approximately how many hours do you spend in religious related activities (e.g., reading your bible, attending a bible study, going to mass, etc...) per week?
12. Do you know your coach's religious affiliation?
- a. Yes
 - i. what is it?
 - b. No
13. Does your team spend time in religious related activities (e.g., team bible studies, team church, worship before matches etc...)?

- a. Yes
 - i. If yes, how much time does your team spend in these activities (in hours per week)
 - ii. On a scale of 1-10 (1, never, 10, always) how frequently would you say your coach is involved in these religious related activities?
- b. No

If they choose Coach, they will be directed here

- 2. Religious Affiliation of School (if no religious affiliation, write none)
 - a. Christian (Wesleyan, Methodist, Baptist, Non-Denomination, etc...)
 - b. Catholic
 - c. Jewish
 - d. None
 - e. Other (please specify)
- 3. Sport Coached at University
- 4. Age (in years)
- 5. Gender
 - a. Male
 - b. Female
 - c. Non-binary
 - d. Prefer not to answer
- 6. Years at current sport program at current institution
- 7. Years coaching current sport at collegiate level

8. How many weeks into spring season are you (based on when you started practicing)?
9. How would you define your personal religious affiliation?
 - a. Christian (Wesleyan, Methodist, Baptist, Non-Denomination, etc...)
 - b. Catholic
 - c. Jewish
 - d. None
 - e. Other (please specify)
10. On a scale of 1-7 (1, not strong at all, 7 very strong) how strong is your personal religious affiliation?
11. How many hours per week do you spend in religious related activities (e.g., personal bible reading, prayer, attending church/mass, etc...)?
12. Does your team spend time in religious related activities (e.g., team bible studies, team church, worship before matches etc...)?
 - a. Yes
 - i. On a scale of 1-10 how frequent would you say you are involved in these religious related activities?
 - b. No

Appendix D

Coach Autonomy Supportive Behavior Scale

Stebbing et al. 2011

On a scale of 1-7 answer the following questions on how you perceive your coach does the following behaviors in a practice setting

1: Never

2: Vert Rarely

3: Rarely

4: Occasionally

5: Often

6: Usually

7: Always

1. I feel that my coach has provided me choices and options in how he conducts practice.
2. I feel my coach understands how I see things with respect to my development
3. My coach conveys confidence in my ability to make changes regarding my performance
4. My coach encourages me to ask questions in practice.
5. My coach listens to how I would like to do things regarding my sport and player development.
6. My coach tries to understand how I see my performance before suggesting any changes.

Appendix E

Controlling Coach Behavior Scale

Bartholomew et al., 2010

On a scale of 1-7 answer the following questions on how you perceive your coach does the following behaviors in a practice setting

1: Never

2: Very Rarely

3: Rarely

4: Occasionally

5: Often

6: Usually

7: Always

Controlling Use of Rewards (Items 1-4)

1. My coach tries to motivate me by promising to reward me if I do well
2. My coach only rewards/praises me to make me train harder
3. My coach only uses rewards/praise so that I stay focused on tasks during training
4. My coach only uses rewards/praise so that I complete all the tasks he/she sets in training

Negative Conditional Regard (Items 5-8)

5. My coach is less friendly with me if I don't make the effort to see things his/her way
6. My coach is less supportive of me when I am not training and competing well
7. My coach pays me less attention if I have displeased him/her
8. My coach is less accepting of me if I have disappointed him/her

Intimidation (Items 9-12)

9. My coach shouts at me in front of others to make me do certain things
10. My coach threatens to punish me to keep me in line during training
11. My coach intimidates me into doing the things that he/she wants me to do
12. My coach embarrasses me in front of others if I do not do the things he/she wants me to do

Excessive Personal Control (Items 13-15)

13. My coach expects my whole life to center on my sport participation
14. My coach tries to control what I do during my free time
15. My coach tries to interfere in aspects of my life outside of my sport

Appendix F

Open Ended Survey Questions For Athlete Participants

1. How does your coach respond to mistakes?
2. What do you think success means to your coach?
3. What are some common behaviors (e.g encouragement, general instruction, punishment after mistakes, etc...) you experience with your coach during practice? (give 3-4 examples)
4. Describe what do you know about your coach's religious (or lack of) beliefs?
5. How do you perceive your coach's religious beliefs influencing his/her behavior?

Appendix E

Open Ended Survey Questions For Coach Participants

1. Describe what led you to your current position as a college coach?
2. What are 4 or 5 values that underline your coaching style?
3. What specific type of behaviors (e.g. general instruction, encouragement after mistakes, correction after mistakes, punishments, ect...) do you try to implement during practice ?
4. Please describe your religious affiliation or beliefs (e.g. Christian, attends church sometimes, agnostic, 'spiritual', no religious affiliation, etc....).
5. How do you believe that your religious beliefs influence your coaching behaviors and values you listed above? Can you provide a couple of examples?
6. Do your beliefs HAVE to influence your coaching style because of the University values? Why or why not? Can you provide a couple of examples?
7. Describe if your religious beliefs influence other aspects of your life, outside of coaching? Can you provide a couple of examples?