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An Exploration of How Peer Servant Leadership and Basic Psychological Needs Relate to the Intrinsic Motivation and Athletic Coping Skills of Intercollegiate Athletes

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By
Claire Henninger

Accepted in Partial Completion
of the Requirements for the Degree
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Master's Thesis

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A Thesis
Presented to
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In Partial Fulfillment
of the Requirements for the Degree
Master of Science

By
Claire Grace Marie Henninger
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Abstract

In servant leadership (SL), a leader's primary objective is to fulfill their followers' needs. Sport-specific research has shown that coach SL is positively related to athletes' motivation and athletic coping skills (e.g., Hammermeister et al., 2008), but it is unknown if athlete SL has similar relationships to these variables. The aim of this study was to examine how peer SL and basic psychological needs (BPN) related to intrinsic motivation and athletic coping skills and to determine if perceived SL varied between co-acting and interacting sports. Participants were 75 collegiate athletes. Multiple linear regressions indicated that SL and BPN accounted for variance in intrinsic motivation (31%) and athletic coping skills (19%). BPN satisfaction and the SL subscales of trust/inclusion and humility were significant predictors of intrinsic motivation; only BPN satisfaction predicted athletic coping skills. There were no differences in perceived SL reported by athletes from co-acting versus interacting sports.

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Literature Review

Introduction

Servant leadership departs from conventional leadership paradigms by inverting the traditional, top-down leadership pyramid to instead position the leader on the bottom, placing their followers' needs above their own (Rieke et al., 2008). In the servant leadership style, one desires to serve first and lead second, which, though counterintuitive, can be effective (Greenleaf, 1977). While even the term, "servant-leader" may seem like an oxymoron, servant leadership has ancient roots and is currently utilized in the present as a leadership style in businesses, churches, and sporting organization settings (Eva et al., 2019; Gandolfi et al., 2017). More specific to the realm of sport, servant leadership styles have been embodied by successful coaches, such as the basketball coaching legend John Wooden, and research supports the efficacy of servant leadership in athletic departments and on coaching staffs (Burton et al., 2017; Dodd et al., 2018; Rieke et al., 2008; Vinson & Parker, 2020).

More recent literature indicates that, in addition to coaches, athlete leaders within a team are crucial to the success and functioning of their team (Fransen et al., 2020). Therefore, given the weight of both coach and athlete leadership, and how they affect the team through different mechanisms (García-Calvo et al., 2014; Loughead & Hardy, 2005; Price & Weiss, 2013), it seems important that athlete peer servant leadership is examined. While other models have been used to study athlete leadership (i.e., peer leadership) in sport (e.g., transformational leadership; Price & Weiss, 2013), only two known studies (Wang et al., 2021; Worley et al., 2020) have investigated the relationship between athlete servant leadership and team variables. Given that relatively little is known about athlete servant leadership in sport, the current literature review aims to address the gap by examining roles in sport, different leadership models, and coach and

athlete leadership behaviors, in order to provide a basis for the proposed research. The purpose of this study was to develop a deeper understanding of athlete servant leadership in sport though a survey-based analysis to determine how peer servant leadership and basic psychological needs relate to the intrinsic motivation and athletic coping skills of intercollegiate athletes.

Leadership Roles in Sport

Several leadership roles exist within sport, each with particular expectations and various levels of interaction with athletes. It is important to distinguish between these roles to understand how and why different leaders may impact and interact with athletes. This section contains a discussion of the current research on servant leadership and athletic directors, coaches, and athlete leaders.

Athletic Directors

Athletic directors supervise all aspects of athletic programs at educational institutions, and thus are closely involved with coaches, and by trickle-down effect, the team. Intercollegiate athletic directors' leadership style may affect how they handle difficult situations within their department and can also affect the climate and job satisfaction of their employees (Achen et al., 2019). Further, athletic directors can play a significant role in setting organizational goals that help to develop athletes and maintain ethical responsibility, but this is dependent on their leadership quality (Lee, 2019).

Burton and Peachey (2013) advocated for an increase of strong moral leadership in athletic departments due to the number of scandals, inappropriate activities, and academic dishonesty that have been covered up by university athletic directors and other senior administrators. Instead of the "win-at-all-costs" mentality, Achen et al. (2019) postulated that athletic directors have a chance to prioritize people over results. Unfortunately, the success-

driven mentality appears to have led to cover ups of academic misconduct, positive drug tests, and sexual assaults in intercollegiate athletics – athletic directors can feel intense pressure to succeed, which may drive them to look the other way (Achen et al., 2019). One prominent example of this misconduct is the cover-up by the Penn State University athletic department of Jerry Sandusky's egregious actions, among many more examples (Burton & Peachey, 2013). Therefore, given that the leadership of athletic directors can significantly influence the way their departments handle difficult situations, the planning of organization goals, and the preservation of solid ethical climates, their impact on the systems that affect athletes is clear. However, athletic directors have less direct interaction with athletes than coaches, indicating that coach leadership style may be more closely linked with team outcomes.

Coaches

Leadership is a crucial element in teams' success (Weinberg & McDermott, 2002). In team sports, coaches occupy the primary leadership role. Charged with decision making surrounding a plethora of items, including personnel, tactics, training sessions, games, and media, the way in which coaches lead is closely related with many aspects of team functioning and outcomes. To this end, a multitude of theories and models have been developed to best explain what methods of leadership produce optimal outcomes (e.g., athlete satisfaction, motivation, and performance). Among these theories are transactional leadership, transformational leadership, and servant leadership; these models will be defined in detail later on (Kovach, 2018). While each coach's leadership style is unique, some may prioritize outcomes (e.g., winning), given the competitive nature of sport. Coaches may or may not choose to adhere to a certain model, and may borrow from several as they see fit, or may even perform coaching behaviors without being aware of leadership models; nevertheless, coaches have the

responsibility and power to create what they believe are ideal conditions for athletes to develop to their fullest potential (Kim & Cruz, 2016). One example of the effect that a great coach can have is John Wooden, who led his team to ten national championships and is considered one of the best collegiate basketball coaches ever. The influential role and power of coaches explains why the majority of sport leadership research has revolved around the leadership behaviors of coaches (Vincer & Loughead, 2010).

Many studies have investigated the relationship between coach leadership and team or performance-related variables. For example, the motivational climate (which describes whether an environment is task- or mastery-focused, and can affect the motivation of those within it) created by coaches, and the quality of coach-athlete relationships (CARs) are related with athletes' cohesion (García-Calvo et al., 2014), motivation (Mageau & Vallerand, 2003; Olympiou et al., 2008;), likelihood of burnout (Isoard-Gautheur et al., 2016), satisfaction (García-Calvo et al., 2014), and well-being (Jowett & Poczwardowski, 2007). For example, Hampson and Jowett (2012) found that coach leadership behaviors were positively correlated with the perceived collective efficacy of 150 football players from teams at a variety of competitive levels. This data suggests coaches may be able to influence their teams' collective efficacy. Additionally, in their study of 296 Olympic athletes (138 females, 154 males) who participated in the 1996 Atlanta Olympics and 83 athletes (44 females, 39 males) who participated in the 1998 Nagano Olympics, Gould et al. (2002) found that the quality of CARs was perceived by athletes to positively impact their performance. Taken together, it is evident that coach variables are connected with athletic performance variables and the team environment.

It has been suggested that coaches can serve an integral role in mentoring, influencing, and challenging their athletes to grow in virtue, both in and out of sport (Vinson & Parker, 2021; Yeager et al., 2001). Team sport has an inherent possibility to induce virtue cultivation, making it a fertile ground for character growth (Devine, 2021). Moreover, as Vinson and Parker (2021) argued, coaching involves much more than simply performance enhancement and athletic development. Given the many learning opportunities, emotions, and experiences that sport offers, coaches are involved in many situations that enable them to exert influence over their athletes' character development. Additionally, coaches may participate in any number of roles that are extraneous to the nature of their job, for instance, as a mentor, counselor, friend, or paternalistic or maternalistic figure. Some coaches have even indicated that they believe one of their primary responsibilities as a coach is to help their athletes grow in character (Vinson & Parker, 2021). In summary, coaches have the ability to significantly impact their athletes' lives, and therefore, leadership styles that emphasize ethical and moral coaching ought to be integrated with the enhancement of athletic performance.

Although both coach and athlete leadership can influence team factors (e.g., motivational climate) simultaneously, they do so in different ways (García-Calvo et al., 2014). Given the inherent differences between the nature of coach and athlete, it makes sense that (a) coaches and athletes exhibit different leadership behaviors and (b) leadership behaviors that are practiced by both coaches and athletes are demonstrated to varying extents (Loughead & Hardy, 2005). In a study of 238 Canadian athletes (94 females, 144 males; *M* age = 20.39) from 15 teams, several differences were found between coach and athlete leader behaviors (Loughead & Hardy, 2005). Specifically, athletes perceived that their coaches demonstrated more autocratic and instruction behaviors than peer leaders; conversely athletes perceived that peer leaders displayed more social

support, positive feedback, and democratic decision-making behaviors than coaches (Loughead & Hardy, 2005). Arguably, when coaches and athletes have both led effectively, athletes' needs were more likely to be satisfied than if only the coaches were leading, as athletes may be able to address issues that coaches cannot, and vice versa (Loughead & Hardy, 2005). Given some of the differences in coach and athlete leadership behaviors, it is important to examine them separately.

Peer Athlete Leaders

One of the least explored, and yet most potentially impactful areas of study in sport is intra-team athlete leadership (Price & Weiss, 2013). Therefore, to gain a well-rounded perspective of sport leadership, it is important to study athlete peer leadership (Fransen et al., 2015). As peer leaders, athletes have a unique role in the leadership complex of their teams. These leaders do not have the same hierarchical status or authority as coaches, but they may tend to have closer relationships with their teammates as well as spend more time together (e.g., at social events, rooming together, sharing meals). Athlete leaders have been shown to exhibit a multitude of behaviors that affect athlete satisfaction, motivational climate, team identification, team confidence, team cohesion, and team performance (Cotterill & Fransen, 2016; Crozier et al., 2013; Fransen, Haslam et al., 2017; Fransen, Vanbeselaere et al., 2014; Vazou et al., 2006).

Athlete leaders may perform any number of four different defined leadership roles: task, social, motivational, or external (Fransen et al., 2014). *Task leaders* serve as on-field coaches, giving direction and tactical advice to teammates, *social leaders* promote positive interpersonal relationships on the team between both players and coaches, and are generally considered trustworthy and good listeners by their teammates, *motivational leaders* direct the emotions of the team, and provide encouragement, morale-boosting, and push their teammates to work hard,

and *external leaders* connect the team with external bodies, such as club management and the media, and publicly represent the team (Fransen et al., 2014).

According to Loughead and Hardy (2005), athlete leaders may occupy roles that are formal (i.e., team captain) or informal (i.e., non-captains who utilize their sport competence and/or social skill to lead). While most studies have focused on team captains (e.g., Dupuis et al., 2006; Voelker et al., 2011), researchers have advocated for leadership studies to include both types of athlete leaders, as focusing only on formal leaders does not sufficiently encapsulate the leadership structure on any team (Burkett et al., 2014; Fransen et al., 2014; Loughead & Hardy, 2005). Relatedly, Fransen et al. (2014) found in their study of 3,193 athletes from nine different team sports in Belgium that nearly half (44%) of participants did not view their team captain as the principal leader among teammates. Moreover, Crozier et al. (2017) found significant differences in the behaviors of formal leaders, informal leaders, and followers, as evidenced by differences in self-reported leadership behaviors, while Loughead and Hardy (2005) found that 65.1% of the 218 athletes in their study perceived that both team captains and other teammates provided leadership on their teams. One-third of athletes judged team captains to be the only source of athlete leadership, and 2.5% of participants viewed non-team captains as the only source of athlete leadership (Loughead & Hardy, 2005). Taken together, these findings support the inclusion of non-formal leaders in studies of athlete leadership.

Regarding the appropriate number of leaders on a team, as few as one or two leaders may be ideal (Glenn & Horn, 1993), or perhaps up to 85% of the team ought to perform leadership roles (Crozier et al., 2013). Fransen et al. (2014) found that there was a positive relationship between the number of leadership roles on a team with team identification and collective efficacy. These findings, combined with Morgan et al.'s (2013) discovery that shared leadership

roles were characteristic of more resilient teams, suggest that the more leadership roles and shared leadership exists, the better. However, it is not evident if there is a point at which these positive relationships would become neutral or negative. It has been demonstrated that leadership roles can be distributed throughout a team, but no consensus on a specific percentage of leaders exists, likely due to the variation between sports and the specific needs and environment of each team (Crozier et al., 2017; Fransen et al., 2014).

Regardless of the number of leaders, both formal and informal leadership roles are considered crucial to team functioning (Loughead & Hardy, 2005), and athlete leaders have been shown to perform differing (and sometimes contradictory) roles (Crozier et al., 2017; Fransen et al., 2014). Elaborating on this, research has indicated that both self-identified formal and informal leaders engage in social support behaviors more than self-rated followers, but formal athlete leaders exhibit more training and instruction behaviors (e.g., coaching) than informal athlete leaders (Crozier et al., 2017). This finding suggests that formal leaders may view themselves as more similar to coaches than informal leaders. Interestingly, in their study of both athletes (n = 3,193) and coaches (n = 1,258) from nine different sport teams in Belgium, Fransen et al. (2014) discovered that task leaders were rated as the most important type of leader, while motivational leaders were considered second-most important, followed by social and then external leaders. These researchers suggested that on-field, task and motivational leadership may be valued more than off-field, social and external leadership (Fransen et al., 2014).

Considerable research has been conducted that examines the attributes and behaviors of high-quality athlete leaders. Findings have consistently indicated that those who are perceived as athlete leaders tend to be older and have more years of experience on the team (Cotterill & Fransen, 2016). Additionally, it has been postulated that athlete leaders are confident, well-liked,

behave appropriately, and are intrinsically motivated (Price & Weiss, 2011). This assertion seems logical considering that athlete leadership behaviors have been positively associated with perceived interpersonal attraction (Price & Weiss, 2011; Yukelson et al., 1983), sport competence and peer acceptance (Glenn & Horn, 1993), as well as self-esteem, positive affect, and openness to experience (Rylander et al., 2013). Additionally, athlete leaders may embody the values of a team. However, much of the research on the topic has used cross-sectional designs, making it hard to determine whether athletes possessing certain qualities become leaders, or if acting in a leadership role leads to the development of these qualities. More experimental research in this area is needed.

Researchers have focused on similar characteristics in athlete leaders. In one study of 33 student athletes (17 females, 16 males; *M* age = 19.6; representing 11 different team sports) that utilized semi-structured, qualitative interviews, the researchers identified three main themes that encompassed desirable attributes of athlete leaders: communication, personal characteristics, and behavior (Holmes et al., 2010). Participants expressed that athlete leaders ought to be vocal, provide positive feedback, and communicate effectively with coaches and other players. Behaviors congruent with desired athlete leadership in the study included responsibility, leading by example, and demonstrating a hard work ethic and a positive attitude. Finally, personal characteristics that were considered desirable by athletes included authenticity, confidence, respect, and good interpersonal skills. Of note, several gender differences were evident, including that women tended to value interpersonal communication skills more than men; however, both men and women mentioned that different situations called for different types of leadership, noting that in some situations task leadership was more relevant, while in others, interpersonal communication and support mattered most. These findings concur with Fransen et

al.'s (2014) previously mentioned conceptualization of four different types of leadership roles (Holmes et al., 2010).

Quality athlete leadership on a team was perceived to positively influence team structure, cohesion, processes, outcomes, and behaviors in a study of 104 athletes (both leaders and non-leaders; 36 females, 68 males; *M* age = 20.31; average team tenure = 1.8 years) from three interactive team sports (Crozier et al., 2013). Similarly, Vincer and Loughead (2010) determined from their study of 312 varsity and club athletes (*M* age = 19.21; 130 females, 182 males) from 25 different sport teams in Canada that athlete leader behaviors can potentially have a positive relationship with the team environment. More specifically, the authors found that athlete leader behaviors related to the social support and training and instruction subscales of the Leadership Scale for Sports (LSS; Chelladurai & Saleh, 1980) were positively related to all four dimensions of team cohesion, as measured via the Group Environment Questionnaire (GEQ; Carron et al., 1985); this suggests that athlete leaders' behaviors are connected with team cohesion (Vincer & Loughead, 2010).

Relatedly, Fransen et al. (2017) found that among three professional Australian football teams (N = 135), the team with the highest quality athlete leadership was also the most effective team, as evidenced by a greater sense of shared purpose, more commitment to team objectives, and higher confidence in their team's ability, in addition to having a higher task-involved climate and performing better throughout the course of the season than the other two teams in the study. Congruently, in two separate studies, athlete leadership behaviors were positively related to player satisfaction (Eys et al., 2007; Price & Weiss, 2013), while other researchers have found a statistically significant relationship between athlete leadership behaviors and confidence and performance (Callow et al., 2009; Fransen et al., 2014). Similarly, Fransen and colleagues (2018)

found in their study of 144 Flemish adolescent male soccer players (*M* age = 14.2; average years of experience = 7.9) that competence-supportive athlete leaders increased the intrinsic motivation and performance of their teammates. Given this research evidence, the importance of athlete leadership should not be understated.

Leadership Theories in Sport

There are many models that conceptualize effective leadership that can be applied to sport settings; a full analysis of all available leadership models is outside the scope of this review. Given that the current study is centered on peer (i.e., athlete) leadership, this review is focused on several models that are socially or relationally based, including transformational leadership theory (Bass & Riggio, 2006), self-determination theory (SDT; Deci & Ryan, 1985) and servant leadership (Van Dierendonck & Patterson, 2015).

Transformational Leadership Theory

According to Bass (1985), transformational leadership theory describes an approach to leadership that involves application of four key hallmarks: *idealized influence*, in which leaders act as role models for their followers, *inspirational motivation*, wherein leaders encourage and rouse their followers, *intellectual stimulation*, in which leaders induce learning by providing opportunities to problem-solve and be innovative, and *individualized consideration*, wherein leaders act as mentors and recognize the individual needs of their followers. This theory is related to transactional leadership, which describes leadership that is centered around the business-like exchange between leader and follower; however, transformational leadership includes additional components of motivation and inspiration, and has a significant body of research supporting its effectiveness (Bass & Riggio, 2006).

Transformational leadership by peers may be associated with particular peer-leader personality characteristics and also with team variables. Teammates of transformational peer leaders perceive that their leaders possess high intrinsic motivation and sport competence, and are confident, socially skilled, and well-liked (Price & Weiss, 2011). In relation to team variables, high quality peer leadership has been associated with a team's task and social cohesion in a social network analysis conducted by Loughead et al. (2016), making it a desirable trait. Overall, transformational leadership is an effective model of athlete leadership in which the leader's objective is to use the four key hallmarks to achieve team goals (Stone et al., 2004).

Self-Determination Theory

Autonomy-supportive coaching is a concept that was derived from self-determination theory of motivation (SDT; Ryan & Deci, 1985). One of the sub theories within SDT, basic psychological need theory (BPNT), posits that all humans have three basic psychological needs: autonomy, competence, and relatedness (Deci & Ryan, 1985). According to Deci and Ryan (1985), *autonomy* refers to one's perception that they have control over their actions, *competence* is the perceived match between one's ability or growth potential and the demands of a certain task, and *relatedness* refers to the perception that one has a sense of belonging. Importantly, Deci and Ryan (2000) suggested that autonomy is the most relevant basic psychological need when it comes to developing self-determined, or intrinsic motivation. Intrinsic motivation is the highest quality form of motivation because it is linked with long term persistence; intrinsic motivation is present when people participate in activities that are inherently interesting or enjoyable (Deci & Ryan, 2000). Being autonomy-supportive means that the leader considers the perspective of their follower and provides them with an opportunity for choice, while reducing controlling or

pressuring behaviors; the latter behaviors are exhibited in the controlling coaching style, the opposite of autonomy-supportive coaching (Mageau & Vallerand, 2003).

Autonomy-supportive head coaching has been associated with several desirable outcomes in sport. Almagro et al. (2010) found a positive relationship between autonomy-supportive leadership and sport adherence, intrinsic motivation, and intent to be physically active in a sample of 608 Spanish youth athletes (109 females, 499 males; *M* age = 14.43) representing nine different sports. These findings suggest that autonomy-supportive coaching may influence athletes' perceptions of their autonomy and influence their motivation and adherence. However, this study was limited by its correlational nature. In a similar study, Coatsworth and Conroy (2009) examined the relationship between autonomy-supportive head coaching and the satisfaction of the basic psychological needs and self-perceptions of 119 recreational youth swimmers (77 girls, 40 boys, 2 did not report sex; *M* age = 12.07). The researchers found a positive relationship between autonomy-supportive coaching behaviors and the satisfaction of athletes' basic psychological needs; further, need satisfaction predicted athlete self-perceptions, which ultimately predicted developmental outcomes of the youth athletes, suggesting that autonomy-supportive coaching can positively influence youth development. Limitations of this study included the limited age range and focus on a singular sport.

Studies on leadership related to basic psychological need satisfaction have focused on both coaches and athletes. In an experimental study designed to compare competence support (in the form of verbal encouragement) provided by coaches versus athlete leaders on team members' performance, intrinsic motivation, and competence satisfaction, Mertens et al. (2018) found that both coach and athlete leader competence-support increased the performance of male Flemish basketball players (n = 126; *M* age = 16). Interestingly, Mertens et al. (2018) also found that the

athlete leader competence-support condition had a larger increase in players' competence satisfaction than both the coach condition and a control condition. Further, when athlete leaders (but not coaches) provided competence support, it increased the competence satisfaction and intrinsic motivation of their teammates compared to a control group (Mertens et al., 2018). These findings suggest that competence-supportive athlete leaders can increase the intrinsic motivation, competence satisfaction, and performance of their teammates, and may do so more effectively than coaches. Limitations include that only one aspect of competence support was examined (providing positive feedback), that the study was a short-term intervention in a singular sport, and that the quality of coach/athlete leader feedback was not tracked, only quantity (Mertens et al., 2018). In summary, athlete leadership that seeks to address at least one of the basic psychological needs may have beneficial outcomes over and above those of coaches. Taken together, autonomy-supportive leadership is associated with increased intrinsic motivation, sport adherence, and influences the developmental benefits of participation in sport, and has been shown to be an effective leadership model (Almagro et al., 2010; Coatsworth & Conroy, 2009).

Servant Leadership

Servant leadership is a proposed leadership model that has ancient roots (Gandolfi, 2017). The following section will include a historical overview, the definition and distinguishing characteristics of servant leadership, and a summary of its purported antecedents. Then, servant leadership research in organizational and cross-cultural contexts, servant leadership mechanisms, and servant leadership in sport will be discussed, leading to the purpose of the present study.

Historical Roots of Servant Leadership

Although its official nomenclature has only been around for 50 years, the concept of servant leadership has deep historic roots (Gandolfi, 2017). While traces of servant leadership

are evident in ancient tribal leadership and the teachings of Confucius, the first person considered to have taught and embody servant leadership was the founder of Christianity, Jesus Christ (Gandolfi, 2017; Hirschy et al., 2012). As Sendjaya and Sarros (2002) point out, the gospels are full of accounts of Jesus teaching his disciples about servant leadership, as well as modeling it for them. In Matthew 20:28, it is written, "The Son of Man did not come to be served but to serve." Similarly, Mark 10:43 includes the quote, "Whoever wishes to be great among you will be your servant" [New American Bible, Revised Edition, [NAB-RE], 2022). According to Sendjaya and Sarros (2002), Jesus regularly exemplified servant leadership, such as when he humbly washed the feet of his disciples, which was then regarded as a demeaning task only done by servants (John 3:16; NAB-RE, 2022). Finally, given that Jesus Christ is credited as the first teacher and model of servant leadership in recorded history, it makes sense that there would be considerable overlap between servant leadership and moral, spiritual, and religious values.

Servant leadership has frequently been linked with virtue and morality (Parris & Peachey, 2013). Van Dierendonck and Patterson (2015) proposed that virtuous attitudes translate into servant leader behaviors. Virtue stems from the Greek word arête, meaning excellence, and is associated with moral character and doing the right things in each situation (Kennedy, 1995). The extent to which one views morality as central to their self-schema, known as moral identity, has been found to be an antecedent of ethical leadership, meaning that ethical leaders have strong moral commitment and live accordingly (Mayer et al., 2015). Servant leaders tend to pursue their vision from a basis of virtue and righteousness, and base decision making on justice, fairness, and the best interest of their followers (Page & Wong, 2002). It is arguable that without a strong sense of morality, servant leaders could not function as such. Relatedly, Sendjaya and Pekerti (2010) postulated that servant leadership includes both moral agency and moral accountability,

supporting the morally laden, follower-focused model that is servant leadership. However, it is worth noting that Greenleaf (1977) meant for servant leadership to be practiced regardless of religious orientation or moral philosophy, making it accessible to all (Sullivan, 2019).

Defining Servant Leadership

Officially defined by AT&T CEO turned philosopher Robert Greenleaf in a seminal essay on the topic, servant leadership is a manner of leadership that originates from a strong desire within an individual to serve others; one then consciously chooses to lead in such a way that their primary objective is to place the needs, aspirations, and interests of their followers above their own (Greenleaf, 1977; Sendjaya & Sarros, 2002). Importantly, the servant leader is a servant *first*; their primary motivation is serving others. Greenleaf provides an example of a story in which a group of men on a long journey are accompanied by a servant who, in addition to doing various chores, maintains the morale of the group with his song and extraordinary presence, yet when the servant disappears, the entire group suffers and the journey becomes impossible, leading the journeymen to realize that their servant was actually leading them all along (Greenleaf, 1977). Greenleaf (1977) goes on to state that:

> "The best leaders are clear. They continually light the way, and in the process, let each person know that what they do makes a difference. The best test as a leader is: Do those served grow as persons; do they become healthier, wiser, freer, more autonomous, more likely themselves to become leaders?" (pg. 7)

In addition to service, servant leaders invest in and appreciate the dignity of their followers (Greenleaf, 1977). Servant leadership is largely relationally based; the servant leader must maintain a trustful connection with those whom they serve (Sendjaya & Pekerti, 2010). In a review and synthesis of servant leadership, Van Dierendonck (2011) noted that 44 different

characteristics of servant leaders have been identified by various studies; among these were characteristics like integrity, humility, authenticity, selflessness, love, altruism, listening, awareness, stewardship, commitment, foresight, empowerment, and more. While noting that there was considerable overlap between the 44 characteristics, Van Dierendonck (2011) stated that there are still a large number of servant leader attributes, indicating that servant leadership is quite multifaceted, which makes servant leadership a challenge to measure, and important to define and operationalize for researchers.

Servant leadership has not always been well understood, likely due to its paradoxical nature (Sendjaya & Sarros, 2002). It can be difficult to conceptualize a servant who leads and a leader who serves as one and the same person (Sendjaya & Sarros, 2002). Additionally, it has been difficult to acquire a consensus about an empirically validated definition and theoretical framework for servant leadership. To address this issue, several studies have been published to reconcile the seemingly ambiguous term with a concrete definition and theoretical framework (e.g., Barbuto & Wheeler, 2006; Langhof & Güldenberg, 2020; Russell & Stone, 2002; Van Dierendonck, 2011), while others have argued for the importance of a clear conceptualization and form of measurement (Page & Wong, 2000). Even so, there are multiple frameworks in the research and several different validated measures of servant leadership which Van Dierendonck (2011) sought to clarify and consolidate, resulting in a framework of six characteristics of servant leaders: empowering and developing people, humility, authenticity, interpersonal acceptance, providing direction, and stewardship.

Van Dierendonck and Patterson (2015) developed the servant leadership model, which identifies empowerment, authenticity, stewardship, and providing direction as the four core servant leader behaviors. Antecedents of the model included humility and interpersonal

acceptance. Interpersonal acceptance was divided into two parts: compassionate love and forgiveness, which were then factored into latest version of the servant leadership model according to Van Dierendonck and Patterson (2015). In their conceptual model, compassionate love is the fundamental underlying motive for servant leadership; it is thought to engender four virtuous attitudes (humility, forgiveness, gratitude and altruism), which purportedly influence the four core servant leader behaviors. These behaviors are thought to increase follower wellbeing, which includes optimal human functioning, meaningfulness, and a sense of community (Van Dierendonck & Patterson, 2015).

The servant leadership model is the only known model that postulates compassionate love as the cornerstone (Van Dierendonck & Patterson, 2015). Hallmarks of compassionate love include valuing the fundamental dignity of others, being receptive, emotionally engaged, and understanding others' feelings and needs (Underwood, 2008). While the model may not seem fitting in workplace organizations, compassionate love has been argued to create a better work climate, which, focused on potential and trust, rather than productivity and control, could enhance employee well-being and organizational health (Van Dierendonck & Patterson, 2015). Further, the authors advocate for a conceptualization of love that is not purely emotional or based on feeling, but one that is virtuous, focused on the good of the other, and based on an act of the will. In other words, the person demonstrating love does so even if it may be difficult or does not benefit them; this conceptualization of love is firmly rooted in virtue theory (Van Dierendonck & Patterson, 2015). In conclusion, Van Dierendonck and Patterson's (2015) empirically grounded model of servant leadership provides a basis from which to conduct research on the topic.

Recent research conducted on servant leadership has shown that it may be an effective model for leadership in sport by coaches (Rieke et al., 2008) and athletes (Worley et al., 2020).

Servant leadership differs from transformational and autonomy-supportive leadership in that the primary focus of a servant leader is on the needs of their followers, which has been suggested to proceed from the compassionate love of the leader (Van Dierendonck et al., 2013; Van Dierendonck & Patterson, 2015). Furthermore, both transformational and autonomy-supportive leadership seem to be performed in the traditional, top-down method (which is normally associated with coaching), whereas servant leadership functions from the bottom-up as the leader strive to serve their followers (Rieke et al., 2008), perhaps making it especially apt for athlete leaders. Additionally, while both transformational and autonomy-supportive leaders are *mindful* of their followers' needs, servant leadership places follower needs at the *top* of the leader's priorities; it is at the forefront of the leader's mind. Moreover, it has been suggested that the embodiment of servant leadership is more intrinsically orientated than other leadership styles (Vidic & Burton, 2011). Given these differences, and the fact that there are relatively few studies in sport settings on servant leadership, the servant leadership model merits further exploration.

Antecedents of Servant Leadership

Several research teams have examined potential antecedents of servant leadership. Understanding the underlying motivators of servant leaders and thus, the antecedents of servant leadership, has the potential to increase understanding of servant leader behaviors, as well as general knowledge about the subject. Most research has indicated that various virtues and personality traits form the primary antecedents of servant leadership. Van Dierendonck and Patterson (2015) advocated for compassionate love, signified by the attitudes of humility, gratitude, forgiveness, and altruism, as an antecedent to servant leadership; they claimed that compassionate love forms the cornerstone of the servant leader/follower relationship. Likewise, Burton et al. (2017) postulated that certain virtues, including humility, gratitude, and forgiveness

are crucial antecedents of servant leadership. Further, compassionate love requires that leaders view their followers as complete persons with inherent dignity, rather than simply another cog in the machine (Van Dierendonck & Patterson, 2015).

Others who have examined antecedents of servant leadership have found that emotional intelligence, integrity, competence, and the Big Five personality dimensions of extraversion, agreeableness, conscientiousness, and openness to experience can positively predict servant leadership (De Rubio & Kiser, 2015; Liden et al. 2014; Politis & Politis, 2012). In a recent literature review, Sawan et al. (2020) concluded that emotional intelligence, mindfulness, self-efficacy, and motivation to serve are required for servant leadership. According to Greenleaf (1977), the primary antecedent is the desire to serve, which is a form of intrinsic motivation; it is thought that this desire originates from the presence of the aforementioned virtuous attitudes (Van Dierendonck, 2011). For example, having love for one's fellow humans may motivate one to be a servant leader for them. In conclusion, it is apparent that personality traits, virtues, and intrinsic motivation contribute towards servant leadership behaviors.

Distinguishing Characteristics of Servant Leadership

Servant leadership, while sharing commonalities with several different leadership types, appears to be a distinct construct. For example, Sullivan (2019), compared servant leadership with authentic leadership, charismatic leadership, spiritual leadership, and transformational leadership and found differences. For the sake of brevity, the present focus is on the leadership style that is most often compared with servant leadership, transformational leadership (Sullivan, 2019). Several factors distinguish the two. First, in transformational leadership, the primary objective of leaders is for organizational effectiveness, whereas in servant leadership the primary objective is serving the needs of the followers (Van Dierendonck et al., 2013). Supporting this,

Stone et al. (2004) argued that the primary difference between the two models is the focus of the leader. In other words, the main distinction is if the leader's priority is to fulfil the needs of their followers or to achieve organizational goals.

Another difference between transformational and servant leadership is that they function differently. Researchers examining the mediating mechanisms of the two styles found that, while they were both positively related to organizational commitment and work engagement, transformational leadership was more strongly associated with leader effectiveness, while servant leadership was more closely related to need satisfaction (Van Dierendonck et al., 2013). From this, it can be reasoned that while transformational and servant leadership may be able to induce similar effects, they have different mechanisms. Moreover, transformational leaders may motivate their individual followers to perform better in order to achieve organizational goals, whereas servant leaders' organizational goal is to serve their individual followers, regardless of their output or productivity. Finally, in several studies, servant leadership predicted team performance, employee satisfaction, organizational commitment, and intention to stay more accurately than transformational leadership (Sendjaya, 2015).

Servant Leadership in Organizations

In recent decades, there has been a proliferation of interest and research regarding servant leadership in organizations, predominantly due to the search for effective, ethical, and relational leadership and as part of the evolution of traditional leadership models (Van Dierendonck, 2011). Further, servant leadership is a paradoxical deportation from traditional, autocratic, and hierarchical leadership models, making it a refreshing alternative to some (Rieke et al., 2008). A significant number of researchers have examined the relationship between servant leadership and

workplace performance, self-efficacy, intrinsic motivation, work engagement, and more (Sullivan, 2019).

In an effort to better understand the potential role of servant leadership in organizations, many studies have been conducted. Varela et al. (2019) found that servant leadership was positively related with the performance of 181 salespeople and their direct supervisors from a variety of industries in Spain. In another study of Spanish salespeople (N = 145), positive relationships were found between servant leadership and workers' adaptive behaviors, intrinsic motivation, and self-efficacy (Bande et al., 2016). Relatedly, Yang et al. (2017) found a positive relationship between servant leadership and employee self-efficacy in 466 employees and 83 team leaders from 11 Chinese banks. In two separate studies, Carter and Baghurst (2014) and De Clercq et al. (2014) found a positive relationship between levels of servant leadership and work engagement; interestingly, in De Clercq's study, this relationship became stronger as social interaction increased. Additionally, servant leadership positively predicted leader-member exchange in a study of 200 subordinate-leader dyads from several Nigerian companies (Amah, 2015), further supporting its relevance in the organizational context. Relatedly, in a study of servant leadership, organizational citizenship behaviors (OCBs), and team effectiveness, Mahembe and Engelbrecht (2014) found that servant leadership was positively related with both OCBs and team effectiveness in 288 teachers (205 female, 83 male) from 38 schools in the Western Cape of South Africa. Of note, these studies are all limited by their focus on servant leadership in specific sectors (e.g., banking, sales), which may make results difficult to apply to other populations.

Departing from the for-profit sector, servant leadership was associated with increased organizational citizenship in a case study on three Catholic parishes in Iowa by Ebener and

O'Connell (2002). The authors described that the servant leadership in the parishes created cultures that were inviting, inspirational, affectionate and had a servant culture and servant structure, meaning they promoted organizational citizenship (Ebener & O'Connell, 2002). In a study of 1,232 members of 28 Catholic churches in South Korea, Joo et al. (2018) found that participants who perceived higher amounts of servant leadership in their priest were more committed to both the priest and their church, exemplified by more frequent attendance and participation in church activities (in addition to services). Of consequence, servant leadership embodied by pastors was positively related with the degree of follower servant-leadership in a study of 329 United Methodist pastors and congregants (Dearth & West, 2014), providing support for Greenleaf's notion that servant leaders may increase the likelihood that their followers imitate them (Greenleaf, 1977). Using an online survey of 76 followers and 14 qualitative interviews of both leaders and followers, others have found that servant leadership was perceived to be related to need satisfaction in the sport for development and peace field; this field uses sport to advance social and political change in many diverse countries (Welty-Peachey et al., 2018). Taken together, servant leadership is a style that is related with a host of beneficial outcomes in organizations. However, there is a notable lack of experimental studies focused on organizational servant leadership, and most organizational studies are specific to the business world, therefore making it difficult to completely generalize findings to other settings, like sport.

Servant Leadership Across Cultures

Leadership styles may vary across cultures; therefore, important additions to servant leadership literature have included several studies on its cross-cultural relevance (Hale & Fields, 2016). Servant leadership research has been conducted across business, religious, and other contexts within North America, but has also found to be present and efficacious in other cultures

as well (e.g., Amah, 2015; Hale & Fields, 2007; Pekerti & Sendjaya, 2010). In one study of cross-cultural leadership behaviors in Indonesian faculty and administrative staff from two educational institutions (n = 279; 68% female, 32% male) and Australian employees from several different organizations (n = 190; 34% female, 57% male), servant leadership was perceived as universal across the two cultures and without a differential effect due to age, gender, or education. However, there were differences between cultures in the weight of individual servant leader dimensions as measured via the Servant Leadership Behaviour Scale (SLBS; Pekerti & Sendjaya, 2010). For example, Indonesian participants demonstrated more behavior related to the responsible morality subdimension of the SLBS, while Australians had more behavior related to the dimension of authentic self. A notable limitation of this study was that the participants had different occupations, and, therefore, the comparison is not perfect. In summary, these findings indicate that servant leadership extends across cultures, but there is variance in which aspects of servant leadership are the most valued per culture.

Similarly, Hale and Fields (2007) explored servant leadership presence between samples of working adults from the USA and Ghana, finding that while servant leadership was present in both cultures, the extent that different aspects of it were valued varied. Ghanese participants (n = 60; 7% female, 93% male) and USA participants (n = 97; 45% female, 55% male) were asked about their experience of servant leadership in a work situation; both reported experiencing servant leadership from their leaders (Hale & Fields, 2007). Of note, participants from the USA reported a higher frequency of servant leader behaviors, as measured using the Servant Leadership Assessment Instrument, which measures three dimensions: service, humility, and vision (Hale & Fields, 2007). The authors posited that these differences were due to the increased power distance (which refers to the relationship between authority and subordinates)

present in Ghanese culture (Hale & Fields, 2007). The variance in the weight given to different subscales of servant leadership may indicate that while it is present in both cultures, certain cultures differentially value certain dimensions of servant leadership. It is possible that cultural factors such as whether a culture is mainly collectivist or individualistic may influence the extent to which servant leadership is practiced (Pekerti & Sendjaya, 2010). This differential effect in value across cultures may affect outcomes of servant leadership (Amah, 2015).

Mechanisms of Servant Leadership

Given extant research that indicates an association of servant leadership with positive outcomes, a natural next step would be to determine *how* servant leadership works. One of the most predominant theories used to examine the mechanisms of servant leadership is Ryan and Deci's (1985) self-determination theory, or SDT (Sullivan, 2019). As explained earlier, SDT posits that motivation and well-being are influenced by the satisfaction or frustration of three basic psychological needs: autonomy, competence, and relatedness (Deci & Ryan, 1985). Since a foundational principle of servant leadership is serving followers and fulfilling their needs, SDT provides a relevant framework for understanding the mechanisms of servant leadership (Sullivan, 2019).

It has been suggested that need satisfaction is the mediating mechanism through which servant leadership enhances performance (Sullivan, 2019). To investigate this, Chiniara and Bentein (2016) recruited 247 employee-supervisor dyads from a technology company in Canada and had the employees assess the servant leadership of their supervisor as well as their own need satisfaction at work. Employee performance was measured using a task performance measure, and participants also completed several surveys. The results showed positive relationships between servant leadership and the satisfaction of all three basic psychological needs, and that

supervisors' servant leadership was positively associated with employee performance through the mediating mechanism of need satisfaction. Similarly, another study examining the relationship between servant leadership and follower need and job satisfaction found that there was a positive relationship between servant leadership (as experienced in participants' current or most recent job) and follower need satisfaction in 187 undergraduate students (*M* age = 24; 46% female, 54% male) who were employees at a university in the United States (Mayer et al., 2008). In summary, need satisfaction has a strong basis as the mediating mechanism of servant leadership, though it has only been assessed in non-sport settings via cross-sectional research.

Servant Leadership in Sport

Taking a broader approach, it is arguable that if leaders within sport adopt a servant leadership style, it could positively impact athletes for several reasons (Sullivan, 2019). First, the win-at-all-costs mentality that can be manifested in coaches may lead them to be outcome-oriented even at the expense of the best interests of their athletes (Robinson et al., 2021). Certain virtues (e.g., selflessness, humility, generosity) may become lost in the rush to succeed. While the focus on winning in collegiate sport makes sense, given the potential revenue streams and media attention it can garner, it is possible that by coaching with the servant leadership style and putting the needs of athletes first, athletes will be more satisfied, motivated, and performance will increase as a byproduct (Cho & Kim, 2014; Kim et al., 2017). In other words, by providing athletes with what they need to be their best, they may perform their best. Leaders who exhibit servant leadership do not believe that winning does not matter; rather, the roots of servant leadership are in the field of positive psychology, the focus of which is human flourishing and enabling people to become the best versions of themselves (Seligman & Csikszentmihalyi, 2000; Sullivan, 2019). Additionally, it has been argued that an environment that fosters trust and

inclusion, humility, and service may promote mental toughness, an important aspect of performance, more than an autocratic environment (Hammermeister, 2014). Servant leader coaches tend to view winning as a result of athlete development, which leads coaches to emphasize the process more than the product (Westre, 2008).

Coach Servant Leadership

The rise and relevance of servant leadership research in other fields has led to its study in the arena of sport, as the team environment in many ways is similar to the business or organizational environment. In a study of Christian coaches' leadership philosophies and coaching practices, Vinson and Parker (2021) found that servant leadership provided a tenable operational framework for coaches. In a series of online qualitative questionnaires, 110 Christian coaches (24 females, 86 males) from a range of sports and competitive levels responded to six open-ended questions regarding their coaching journey, philosophy, values, and how they evaluated success. Three main categories were derived from the data: (i) building the environment, (ii) holistic athlete development, and (iii) service and calling. These coaches indicated that winning was not their primary goal; rather, they sought to serve their athletes, while creating an environment that would fulfill their athletes' needs and develop their character. Examples of coach responses included that they believed it was important to care more about other people than themselves, they felt a responsibility to help their players become good people, they believed every athlete had a vital role on the team, and they thought servant leadership led to not only more success, but also more enjoyment and fulfillment.

Based on these findings about coaches' perspectives on leadership, it can be reasoned that servant leadership provides an appropriate framework for Christian coaches, possibly because it is aligned with their moral and ethical worldview (Vinson & Parker, 2021). Limitations of

Vinson and Parker's (2021) study include that it was an exploratory study limited to coaches from institutions that were outwardly Christian, which may have excluded Christian coaches at secular institutions. However, this does not mean that servant leadership is not applicable for non-Christian coaches. Overall, this study provided insight into how servant leadership is lived out in the lives of Christian coaches and provides a possible explanation for how coaches can achieve success and their players can become people of character through servant leadership. Concerning ethical development, Kim et al. (2018) found that when coaches exhibited more servant leadership (as judged by their athletes), their players (n = 347; 100% male; 261 = football players, 86 = basketball players, all NCAA Division I athletes) had significantly more ethical development compared to athletes whose coaches had less servant leadership behaviors, further substantiating the moral underpinnings of servant leadership and indicating that servant leader coaches may create environments conducive to character development. Though, it is also possible that athletes who have more ethical development gravitate towards coaches who exhibit servant leadership. This study was limited in that it was focused on male NCAA Division I athletes from only two sports.

Anecdotally, servant leader coaches can be effective by building on their athletes' strengths, removing obstacles that are preventing success, and redefining success as helping athletes be the best they can be, training them to reject mediocrity (Davenport, 2012). Further, effective coaching behaviors can result in the athlete outcomes of enhanced sense of competence and connection, as well as stronger moral character (Côté & Gilbert, 2009). As Kim et al. (2017) surmised, the nature of the servant leadership coaching style may lead to the improvement of several aspects of athlete performance. Given the associations between servant leadership and intrinsic motivation, others have concurred that coach servant leadership could result in better

performance (Cho & Kim, 2014), as it fosters a more long-term form of motivation. This is juxtaposed by externally regulated forms of motivation that often weigh on athletes and coaches, such as financial benefits and bonuses, job security, and media attention (Jordalen et al., 2020). The type of motivation an athlete has matters because motivational quality is related to health and performance (Gustafsson et al., 2018). Finally, Baric and Bucik (2009) found that athletes who were trained by athlete-focused coaches with low ego-orientations had preferable motivation patterns, meaning that they displayed higher intrinsic motivation and task orientation than athletes with coaches who were less athlete-focused and exhibited higher ego-orientations. Given that high athlete-focus is present in coach servant leadership, these results are interesting.

Researchers have studied the relationship between coach servant leadership and other variables in sport such as athletic performance, coaching success, and cohesion. Regarding cohesion, Gilham and Gilham (2014) found a positive relationship between coach servant leadership and athletes' task cohesion in a study of 33 coaches who were assessed by 290 athletes (130 males, 183 females, 9 did not report gender) representing both team and individual youth sports. The researchers also discovered that at higher levels of coaching success, as measured by athletes using the Coaching Success Questionnaire (CSQ-2; Gilham et al., 2013), coaches tended to be rated as servant leaders more so than coaches who were less successful. This study was limited by being centered on youth athletes, leaving applications to other age groups difficult. Although the win-loss ratio is not the only outcome that indicates success (Kim et al., 2017), Gilham et al. (2015) examined the relationship between coach servant leadership and coaching success in a study of 322 athletes (130 males, 183 females, 9 did not report gender; *M* age = 19.7) representing eight different sports in Canada. After administering the Revised Servant Leadership Profile for Sport (RSLP-S; Hammermeister et al., 2008), the Coaching

Success Questionnaire (CSQ-2; Gilham et al., 2013) and several other assessments related to social behaviors, resilience and cohesion, the researchers found positive correlations between coach servant leadership and coaching success, providing more evidence of the existence of a relationship between servant leadership and success. Limitations of this study were that the participants were recruited from a single conference, reducing the ability to generalize results to broader populations.

Rieke et al. (2008) argued that coach servant leadership could lead athletes to not only perform well but also have healthier psychological profiles. They designed a study to explore the relationship between servant leadership within male high school basketball coaches on the athletes' (n = 195; ages 15-19) motivation, satisfaction, mental skills use, and performance. The results indicated that athletes who had coaches they perceived as servant leaders (measured by the RSLP-S) had higher amounts of all of the aforementioned variables than players who did not perceive their coach to be a servant leader (Rieke et al., 2008). Moreover, these athletes preferred servant leader coaches to non-servant leader coaches, indicating that servant leadership may be a preferred leadership method (Rieke et al., 2008). Of note, Cho and Kim (2014) found in a sample of 224 student-athletes (no further demographics provided) at a South Korean university that there was a positive relationship between coach servant leadership (measured by the Servant Leadership Survey [SLS]; Barbuto & Wheeler, 2006) and athletes' subjective sport performance and exercise flow. This may support Hammermeister et al.'s (2008) argument that coach servant leadership may be able to increase athletic performance, although this hypothesis cannot be confirmed by Cho and Kim's (2014) correlational data. Relatedly, Hammermeister et al. (2008) found that among NCAA intercollegiate athletes (N = 251; *M* age = 19.76) from eight different sports, athletes with coaches they perceived to be servant leaders (determined by scores on the

RSLP-S) demonstrated significantly more confidence, coachability, task orientation, sport competence, freedom from worry, and respect for their coaches (measured by the Athletic Skills Coping Inventory-28 [ASCI-28]; Smith et al. 1995), along with less pressure and tension than their counterparts coached by non-servant leaders. These results indicate that athletes who are coached by servant leaders are more equipped to cope with adversity, which can be common in high-level sport. Noteworthy limitations of both studies include that they only included high school and collegiate student-athletes and lacked demographic information on participants' race/ethnicity; also, Hammermeister et al. (2008) did not report the gender of their participants.

Overall, past research on coach servant leadership has indicated many positive relationships between SL and desirable variables in sport, suggesting that SL may be an effective leadership style. This knowledge carries with it the question of whether these same relationships are present regarding servant leadership by athletes.

Athlete Servant Leadership in Sport

As mentioned previously, little research has focused on athlete servant leadership in sport. The majority of servant leadership research in sport has focused on coaches. To date, only two studies are available in the literature on athlete servant leadership in sport. In one study, peer servant leadership was positively associated with team cohesion and negatively related to burnout in a survey study of 245 female collegiate soccer players, which utilized the RSLP-S (modified to apply to peer leaders); notably, this study lacked additional demographic information on the participants (Wang et al., 2021). In the other published study on athlete servant leadership, Worley et al. (2020) examined the relationship between athlete servant leadership and team cohesion and sought to determine whether this relationship was mediated by social identity (i.e., one's sense of self as a member of a group that shares common values). The

researchers recruited NCAA Division I and III athletes (165 females, 123 males; *M* age = 19.41) from seven different sports (soccer, volleyball, rowing, field hockey, swimming and diving, rugby, and gymnastics) who completed the Revised Servant Leadership Profile for Sport (RSLP-S), the Social Identity Questionnaire for Sport (SIQS; Bruner & Benson, 2018) and an adapted version of the Group Environment Questionnaire (GEQ; Carron et al., 1985). Results indicated that athlete servant leadership positively predicted team cohesion, and this was mediated by social identity. This finding means that facilitating teammates' perceptions of belongingness was the pathway through which peer servant leadership was positively related with cohesion (Worley et al., 2020). The authors postulated that athlete servant leaders may create a cohesive team environment, meaning that they enhance perceptions of unity, closeness, and similarity within their team; further, athlete servant leaders, who are perceived as competent, trustworthy, and humble, may help increase cohesion by increasing the social identity of their teammates with the team. However, it is also possible that a cohesive team environment may lead to athlete servant leadership behaviors, as no cause-and-effect relationship can be established. The limitations of this study include that it was cross-sectional and that the teams from which participants came were at different points of their seasons, meaning that each team was at a different stage and may have had more or less developed leadership structures. Also, only athletes from NCAA Division I and III schools participated, so information on Division II athletes is still lacking.

Summary and Conclusion

While there is a plethora of extant research on coach and athlete leadership in sport, and similarly, a number of studies on servant leadership in business and religious contexts, very little research has examined peer-to-peer servant leadership in sport, leaving a lack of information on athlete servant leadership. The current study is aimed towards bridging the knowledge gap

between athlete leadership and servant leadership. Although experimental research is needed, exploratory survey research is most useful at this point, given the infantile state of research on athlete servant leadership. Given that coach servant leadership has been connected with desirable outcomes (e.g., athlete well-being, motivation, athletic coping skills), it is relevant to examine whether athlete servant leadership has a similar relationship with key athlete variables.

The present study focused on varsity intercollegiate athletes because there is a lack of current research on athlete servant leadership and its relationship with intrinsic motivation and athletic coping skills within that population, and because peer leadership is the most common and yet least studied type of leadership. Moreover, athlete leaders have more contact time with their teammates than coaches and thus more potential for impacting them. Taking Worley et al.'s (2020) method of surveying Division I and II athletes one step further, the primary researcher recruited participants from all three NCAA Divisions. Further, past studies on servant leadership in collegiate sport settings have been limited by lack of diversity in gender, sport, or geographical region of participants (e.g., Hammermeister et al., 2008; Rieke et al., 2008; Worley et al., 2020). To address these limitations, the current study included participants who were recruited from across the United States, did not use gender as an inclusion parameter, and included a variety of sports.

The purpose of this study was to develop a deeper understanding of athlete servant leadership in intercollegiate sport. Specifically, through anonymous online surveys, the aim was to examine how athlete servant leadership and basic psychological needs relate to athletes' intrinsic motivation and athletic coping skills. Intrinsic motivation and athletic coping skills are of particular interest because they have been positively associated with other desirable sport-specific variables such as athlete satisfaction, task orientation, and performance (Rieke et al.,

2008; Smith et al., 1995). Positive relationships between coach servant leadership and intrinsic motivation and athletic coping skills have been found (Hammermeister et al., 2008; Rieke et al., 2008), but these variables have yet to be studied in the context of athlete servant leadership. Given that most athletes perceive that teammates other than their captains perform leadership roles (Loughead & Hardy, 2005) and that athletes may not view their team captain as the principal leader (Fransen et al., 2014), the current study asked participants to rate the servant leadership of the person they view as the most influential leader on their team, to account for both formal and informal leaders. Responses between two broad sport types (interacting vs. co-acting sports) were also compared to investigate potential differences in perceptions of levels of athlete servant leadership. Results may be applied to inform athlete leadership training, increase coaches' knowledge about the relationship between athlete leadership and salient athlete variables, and contribute to the literature on servant leadership in sport.

The specific hypotheses of this study are 1) higher intrinsic motivation scores will be predicted by higher levels of perceived peer servant leadership, higher levels of BPN satisfaction, and lower levels of BPN frustration 2) athletic coping skills scores will be predicted by higher levels of perceived peer servant leadership, higher levels of BPN satisfaction, and lower levels of BPN frustration 3) perceived levels of servant leadership will be higher on interacting teams than on co-acting teams.

Introduction

Leadership is a crucial element in a team's success (Weinberg & McDermott, 2002). Teams may rise or fall to the level of their leaders, which makes the examination of effective leadership displayed by both coaches and athletes of interest. A coach's leadership can influence a variety of factors, such as athletes' motivation (Mageau & Vallerand, 2003), satisfaction (García-Calvo et al., 2014), and well-being (Jowett & Poczwardowski, 2007). Additionally, peer athlete leadership has a similar relationship to key team variables, like team cohesion, motivation, and performance (Cotterill & Fransen, 2016; Crozier et al., 2013). Yet, it has been suggested that coaches and athletes may exhibit different leadership behaviors and perform them to varying extents (Loughead & Hardy, 2005), which indicates that coach leaders and athlete leaders ought to be examined separately.

As peer leaders, athletes have a unique role in the leadership complex of their teams. These leaders do not have the same hierarchical status or authority as coaches, but they may have closer relationships with their teammates as well as spend more time than coaches spend with team members (e.g., at social events, rooming together, sharing meals). According to Loughead and Hardy (2005), athlete leaders may occupy roles that are formal (i.e., team captain) or informal (i.e., non-captains who lead by sport competence and/or social skill). While most studies have focused on team captains (e.g., Dupuis et al., 2006; Voelker et al., 2011), researchers have advocated for leadership studies that include both types of athlete leaders, as focusing only on formal leaders does not sufficiently encapsulate the leadership structure on any team (Fransen et al., 2014).

Quality athlete leadership has been connected to a greater sense of shared purpose, more commitment to team objectives, higher confidence in the team's ability, and better performance

throughout the course of a season in professional Australian football teams (Fransen et al., 2017). Similarly, among 144 Flemish adolescent male soccer players (*M* age = 14.2; average years of experience = 7.9), competence-supportive athlete leaders increased the intrinsic motivation and performance of their teammates in an experimental study (Fransen et al., 2018). Given this research evidence, the importance of athlete leadership should not be understated.

One framework with which to conceptualize athlete leadership is servant leadership, which is a leadership style in which one's primary objective is to place the needs, aspirations, and interests of their followers above their own (Greenleaf, 1977; Sendjaya & Sarros, 2002). Importantly, a servant leader is a servant *first*; their primary motivation is serving others. SL is largely relationally based in that the servant leader maintains a trustful connection with those whom they serve (Sendjaya & Pekerti, 2010). While multiple frameworks of SL exist, Van Dierendonck and Patterson (2015) consolidated existing conceptualizations into a framework in which they distinguished four core servant leader behaviors: empowerment, authenticity, stewardship, and providing direction. These behaviors are thought to increase follower well-being, which includes optimal human functioning, meaningfulness, and a sense of community; further, it is the only known model that postulates compassionate love as a leadership cornerstone, proposing that this love is the underlying motive for SL, and results in attitudes of things like humility and altruism (Van Dierendonck & Patterson, 2015). Hallmarks of compassionate love include valuing the fundamental dignity of others, being receptive, emotionally engaged, and understanding others' feelings and needs (Underwood, 2008).

Relatedly, SL has been closely associated with basic psychological need (BPN) satisfaction in both research and certain aspects of theoretical grounding, as both include needs fulfillment as a core tenet (Van Dierendonck et al., 2013). According to basic psychological need

theory (BPNT), a sub-theory of self-determination theory (SDT; Deci & Ryan, 1985), motivation and well-being are influenced by the satisfaction or frustration of three psychological needs: *autonomy,* which is one's perception that they have control over their actions, *competence,* the perceived match between one's ability and the demands of a certain task, and *relatedness,* the perception that one has a sense of belonging (Deci & Ryan, 1985). Research indicates that when these needs are satisfied, it leads to intrinsic motivation, and that when they are frustrated, intrinsic motivation decreases (Ryan & Deci, 2000).

Studies that have focused on BPN satisfaction in sport have shown that coach and athlete leader competence-support resulted in increased intrinsic motivation, performance and competence satisfaction in 126 male basketball players (*M* age = 16); interestingly, athlete leader competence support showed a larger increase in players' competence satisfaction than both the coach-competence-support condition and a control (Mertens et al., 2018). Others have found positive relationships between autonomy-supportive coaching and sport adherence, intrinsic motivation, and intent to be physically active in a sample of 608 Spanish youth athletes (109 females, 499 males; *M* age = 14.43) representing nine different sports (Almagro et al., 2010). Sullivan (2019) suggested that BPN satisfaction is the mediating mechanism through which SL enhances performance. This claim has been supported in organizational contexts, where researchers have found that reported levels of SL were positively associated with employee performance and job satisfaction through the mediating mechanism of need satisfaction (Chiniara & Bentein, 2016). Taken together, it is evident that there is a relationship between SL, BPN satisfaction, and important team variables (e.g., motivation, satisfaction, and performance).

Literature on SL in sport has mostly focused on coaches, revealing that athletes who are coached by servant leaders had higher motivation, satisfaction, mental coping skills, and

performance than those coached by non-servant leaders in a sample of 185 male high school basketball players (Rieke et al., 2008). Relatedly, Hammermeister et al. (2008) found that among NCAA collegiate athletes (N = 251; *M* age = 19.76) from eight different sports, those with coaches who were perceived as servant leaders (determined by scores on the Revised Servant Leadership Profile for Sport; Rieke, et al., 2008) reported significantly more confidence, coachability, task orientation, sport competence, freedom from worry, and respect for their coaches (measured by the Athletic Skills Coping Inventory-28; Smith et al. 1995), along with less pressure and tension than their counterparts coached by non-servant leaders. These results indicate that athletes who are coached by servant leaders may be more equipped to cope with adversity, which can be common in competitive sport.

Given differences in leadership behavior between coaches and athletes, it is logical to study them separately (Loughead & Hardy, 2005). To date, only two known studies are available in the literature on athlete SL (i.e., peer SL) in sport. In one study, peer SL was positively associated with team cohesion and negatively related to burnout in a survey study of 245 female intercollegiate soccer players. Researchers measured SL with a validated instrument (RSLP-S, modified to apply to peer leaders), however, the study was limited by a homogenous sample (e.g., female Thai soccer players) and did not report additional demographic information on the participants (i.e., age, years of experience in sport, year in school; Wang et al., 2021). In the other published study on athlete SL, Worley et al. (2020) examined the relationship between athlete SL and team cohesion to determine whether this relationship was mediated by social identity (i.e., one's sense of self as a member of a group that shares common values). The researchers recruited NCAA Division I and III athletes (165 females, 123 males; *M* age = 19.41) from seven different sports (soccer, volleyball, rowing, field hockey, swimming and diving,

rugby, and gymnastics) who completed the RSLP-S, and surveys about social identity and group environment. Results indicated that athlete SL positively predicted team cohesion, and this relationship was mediated by social identity. This finding means that facilitating teammates' perceptions of belongingness was the pathway through which peer SL was positively related with cohesion (Worley et al., 2020). The authors postulated that athlete servant leaders may create a cohesive team environment, meaning that they enhance perceptions of unity, closeness, and similarity within their team; further, athlete servant leaders, who are perceived as competent, trustworthy, and humble, may help increase cohesion by increasing the social identity of their teammates with the team. However, it is also possible that a cohesive team environment may lead to athlete SL behaviors, as no cause-and-effect relationship can be established because of the cross-sectional nature of the study. Another limitation was that each team was at a different stage of their competitive season, so they may have had more or less developed leadership structures. Also, only athletes from NCAA Division I and III schools participated, which limits the generalization of results to Division II athletes.

While there is considerable extant research on coach and athlete leadership in sport, and a number of studies on SL in business and religious contexts, very little research has examined peer-to-peer SL in sport. Given that coach SL has been connected with desirable outcomes (e.g., athlete well-being, motivation, athletic coping skills), it is relevant to examine whether athlete SL has a similar relationship with key athlete variables, and whether BPN satisfaction and frustration show similar relationships with SL as in past studies. As such, the current study explores whether athlete SL is a worthwhile method of leadership, as it cannot be assumed that studies conducted on SL in business or coaching apply to athlete leaders. Additionally, peer leadership is the most common, and yet least studied, type of leadership; athlete leaders have

more contact time with their teammates than coaches and thus more potential for impacting them. Although experimental research is needed, exploratory survey research is most useful at this point, given the infantile state of research on athlete SL. To improve upon Worley et al.'s (2020) method of surveying Division I and III college athletes, the primary researcher recruited participants from all three NCAA Divisions. Further, past studies on SL in collegiate sport settings have been limited by lack of diversity in gender, sport, or geographical region of participants (e.g., Hammermeister et al., 2008; Rieke et al., 2008; Worley et al., 2020). Therefore, the current study included participants who were recruited from across the United States, did not use gender as an inclusion parameter, and included a variety of sports. The purpose of this study was to determine how peer servant leadership and basic psychological needs relate to the intrinsic motivation and athletic coping skills of intercollegiate athletes. Based off findings in SL in organizational contexts and coaching (e.g., Bande et al., 2016; Rieke et al., 2008), it was hypothesized that higher intrinsic motivation scores would be predicted by higher levels of perceived peer SL, higher levels of BPN satisfaction, and lower levels of BPN frustration. It was also expected that athletic coping skills scores would be predicted by higher levels of perceived peer SL, higher levels of BPN satisfaction, and lower levels of BPN frustration, and that perceived levels of SL would be higher on interacting teams than on co-acting teams given increased time spent interacting with teammates.

Methods

Participants

Participants were 75 varsity collegiate athletes (M_{age} = 19.7, SD = 1.3) who attended universities in the United States and competed in various NCAA sports. The participants had an

average of 8.74 years of sport experience (*SD* = 5.35). See Table 1 for details on the sample's demographics. Table 2 includes participants' sport and leadership demographics.

Table 1. *Personal Demographic Information*

Demographic Variable	*n*	Percentage
Gender		
Men	14	18.7
Women	60	80.0
Non-binary	1	1.3
Race/Ethnicity		
American Indian/Alaskan Native	1	1.3
Asian or Asian American (including Indian subcontinent and Philippines)	4	5.3
Black or African American (including Africa and Caribbean)	5	6.7
Hispanic or Latino/Latina/Latinx (including Spain)	8	10.7
White or European American (including Middle Eastern)	61	81.3
NCAA Division Level		
Division I	5	6.7
Division II	21	28.0
Division III	49	65.3
Class year		
Freshmen	18	24.0
Sophomore	19	25.3
Junior	22	29.3
Senior	16	21.3

Note. The percentages for race/ethnicity equal more than 100% because participants could select more than one option.

Table 2. *Sport Type and Leadership Demographic Information*

Variable	*n*	Percentage
Sport type		
Basketball	4	5.3
Cross Country Running	13	17.3
Field Hockey	3	4.0
Golf	5	6.7
Gymnastics	2	2.7
Lacrosse	2	2.7
Rifle	1	1.3
Swimming and Diving	5	6.7
Soccer	9	12.0
Softball	8	10.7
Track and Field	21	28.0
Triathlon	4	5.3
Tennis	8	10.7
Volleyball	3	4.0
Leadership status		
Formal leader (e.g., team captain)	17	22.7
Not a formal leader	56	74.7
Other (leadership group, informal leader)	2	2.7
Interaction level of sport		
Co-active	55	73.3
Interactive	20	26.7

Data Collection Measures

Demographics

Participants completed a demographic survey to provide personal and sport experience information (see Appendix E).

Basic Psychological Need Satisfaction and Frustration Scale (BPNSFS)

The BPNSFS (Appendix F; Chen et al., 2015) was created to assess levels of need satisfaction and frustration using six subscales: autonomy satisfaction (Cronbach's alpha [α] =.81) and frustration (α = .71), competence satisfaction (α = .88) and frustration (α = .86), and relatedness satisfaction (α = .83) and frustration (α = .81). The 24 items (four items for each of the six subscales) are answered using a 5-point Likert scale, ranging from 1 (*not true at all*) to 5 (*completely true*). Higher scores on the BPNSFS indicate higher levels of need satisfaction or need frustration. For the present study, scores for each subscale were totaled and then averaged to create an average subscale score, showing acceptable to good levels of internal consistency for the autonomy satisfaction (α = .80), competence satisfaction (α = .85) and frustration (α = .86), and relatedness satisfaction (α = .84) and frustration (α = .77) subscales. Notably, internal consistency for the autonomy frustration subscale bordered on acceptable (α = .69) but was lower than the other subscales. The three satisfaction subscales and the three frustration subscales were then added and averaged to create an average total BPN satisfaction score and average total BPN frustration score. The Cronbach's alphas were strong for both BPN satisfaction (α = .90) and BPN frustration (α = .88) in the current study.

Revised Servant Leadership Profile for Sport (RSLP-S)

The RSLP-S (See Appendix G) was developed by Rieke et al. (2008) as a modification of the Servant Leadership Profile (Page & Wong, 2000), to create a sport-specific measure of

servant leadership. The measure includes three subscales that mirror purported dimensions of servant leadership: trust/inclusion, humility, and service. The RSLP-S contains both a perceived and preferred leader profile; only the perceived leader profile was necessary for the purpose of the present study. The RSLP-S contains 22 questions which are answered using a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Higher scores on the individual subscales of the RSLP-S indicate that the person the participant rated exhibits higher levels of that aspect of servant leadership behavior. Previous research has shown that the RSLP-S subscales have good internal consistency (Cronbach's alpha coefficients ranging from 0.79-0.92, Rieke et al., 2008). For the purposes of the current study, the stem of the RSLP-S was modified to apply to the most influential athlete leader on the team, excluding oneself. For example, instead of, "The head coach has a heart to serve others," the item was changed to, "The most influential athlete leader on my team has a heart to serve others." In this study, the RSLP-S displayed strong internal consistency, with Cronbach's alpha coefficients of .95 (SL trust/inclusion) and .91 (both SL humility and SL service); notably, these alpha coefficients are higher than the suggested maximum of .90, suggesting that there may be redundancy in survey items (Tavakol & Dennick, 2011).

Intrinsic Motivation Inventory (IMI)

The IMI (McAuley et al., 1989; Ryan, 1982; see Appendix H) evaluates intrinsic motivation using four subscales: interest/enjoyment, perceived competence, perceived choice, and pressure/tension. Each of the 22 questions is answered using a 7-point Likert scale, from 1 (*not at all true*) to 7 (*very true*). The scores for each item are added and averaged to produce individual subscale scores (after necessary reverse-scoring). It is theorized that the interest/enjoyment subscale is the purest measure of intrinsic motivation, and so although

participants completed the entire IMI, only the scores from the interest/enjoyment subscale were used in analysis (Intrinsic Motivation Inventory, n.d.). Higher scores on the interest/enjoyment subscale indicate that an individual has higher levels of intrinsic motivation. Previous research has shown that the IMI has strong internal consistency (Cronbach's alpha coefficients between 0.78-0.85, Rieke et al., 2008). The IMI has been modified for a variety of activities, including education, reading, puzzle activities, and sports (Monteiro et al., 2015). For the present study, the IMI was adapted for sport; for example, "I would describe the task as very enjoyable" was changed to. "I would describe my sport as very enjoyable." McAuley et al. (1989) presented strong evidence that the IMI is valid and reliable in sport settings ($\alpha = 0.85$). In the current study the IMI interest/enjoyment subscale had strong internal consistency ($\alpha = .93$).

Athletic Coping Skills Inventory-28 (ACSI-28)

The ACSI-28 (Smith et al., 1995; see Appendix I) measures athletes' psychological coping skills using seven sport-specific subscales: Coping with Adversity, Coachability, Concentration, Confidence and Achievement Motivation, Goal Setting and Mental Preparation, Peaking under Pressure, and Freedom from Worry (Smith et al., 1995). Each of the seven subscales has four related questions that are answered using a 4-point Likert scale ranging from 0 (*almost never*) to 3 (*almost always*). An example of an item is, "I handle unexpected situations in my sport very well." Scores for each subscale are totaled (after certain items are reversed) and used to indicate an athlete's psychological coping skills in specific areas on a scale from 0-12. Scores from all seven subscales may also be totaled, resulting in a total coping score that can range between 0-84; this is the method that was used in the present study. Higher total scores indicate a greater ability to cope with sport-related challenges. After undergoing confirmatory factor analysis (CFA), the ACSI-28 was found to be a psychometrically reliable and valid

method (subscale alpha coefficients = 0.84-0.88) of measuring sport-related coping skills (Smith et al., 1995). Similar to past studies, Cronbach's alpha in the current study was .84.

Procedure

The study was approved by the university internal review board. To acquire a diverse sample from across the United States, stratified random sampling was used. A random number generator was used to select 20 NCAA schools from each of the three NCAA divisions (I, II, and III). Next, the primary researcher emailed the head coaches of all varsity team sports from each selected school to ask if they would pass the survey link along to their athletes. The inclusion criteria (see Appendix D) were that participants must have been: 1) 18 years of age or older; 2) a current member of a varsity team at an NCAA Division I, II, or III institution in the United States. No personal contacts of the primary researcher were utilized for recruitment.

Upon clicking the link to the anonymous online survey, which was hosted by Qualtrics software, athletes were presented with the inclusion criteria. If they met all criteria, they then electronically agreed to an informed consent form, and began the surveys. As an incentive, participants were presented with the option to enter a raffle for one of six $50 gift cards. Some participants (n = 6) only completed a portion of the surveys, and could therefore only be included in some analyses, which explains the varying sample sizes across analyses (see Table 3).

Data Analysis

Results were statistically analyzed using SPSS version 28. Four multiple linear regressions were used to determine which predictor variables could uniquely explain variance in intrinsic motivation as well as variance in athletic coping skills. Prior to running the regressions, predictor variables were standardized into z-scores. In two of the multiple linear regressions, IMI was the criterion (i.e., dependent variable), and in the other two the ACSI was the criterion (i.e.,

dependent variable). The first pair of multiple linear regressions included the three subscales of SL, average BPN satisfaction, and average BPN frustration to predict IMI and ACSI scores. The second pair of multiple linear regressions assessed whether the six subscales of BPN satisfaction and frustration could explain variance in the IMI and ACSI. In each regression, adjusted R^2 was used because of the small sample size. Finally, an independent samples t-test using SL as a dependent variable was used to determine if perceived SL varied between co-acting and interacting sports. Effect sizes for the independent samples t-test were evaluated using Cohen's *d*, where 0.2 is considered a small effect, 0.5 is a medium effect, and 0.8 is a large effect (Cohen, 1988).

Results

Means, standard deviations, and a correlational matrix for all measures in the study are located in Table 2. Of note, sample sizes vary slightly for each scale because some participants did not complete all the measures.

Table 3. *Means, Standard Deviations, and Pearson Correlation Matrix for Continuous Variables (N = 75)*

Measure	n	M (SD)	1	2	3	4	5	6	7	8	9	10	11	12	13
1 SL Trust/Inclusion	75	5.30 (1.40)	-												
2 SL Humility	75	5.00 (1.37)	0.89**	-											
3 SL Service	75	5.25 (1.47)	0.93**	0.84**	-										
4 Total BPN Sat	75	3.95 (0.62)	0.33**	0.22	0.33**	-									
5 Total BPN Frus	75	2.33 (0.72)	-0.37**	-0.25**	-0.42**	-0.65**	-								
6 Autonomy Sat	75	3.77 (0.76)	0.22	0.16	0.22	0.85**	-0.48**	-							
7 Autonomy Frus	75	2.59 (0.76)	-0.22	-0.24**	-0.31**	-0.57**	0.81**	-0.54**	-						
8 Relatedness Sat	75	4.00 (0.72)	0.41**	0.32**	0.41**	0.76**	-0.63**	0.39**	-0.44**	-					
9 Relatedness Frus	75	2.55 (0.99)	-0.40**	-0.25*	-0.42**	-0.47**	0.83**	-0.19	0.51**	-0.72**	-				
10 Competence Sat	75	4.08 (0.76)	0.20	0.07	0.19	0.89**	-0.51**	0.74**	-0.44**	0.51**	-0.28*	-			
11 Competence Frus	75	1.87 (0.81)	-0.31**	-0.17	-0.32**	-0.59**	0.88**	-0.48**	0.58**	-0.46**	0.59**	-0.55**	-		
12 IMI Interest/Enjoyment	72	5.68 (1.19)	0.13	0.17	0.17	0.54**	-0.31**	0.55**	-0.47**	0.28*	-0.12	0.51**	-0.22	-	
13 ACSI Total	69	46.80 (8.90)	0.26*	0.25*	0.31**	0.43**	-0.24*	0.39**	-0.26*	0.25*	-0.06	0.42**	-0.28*	0.50**	-

Note. SL = Servant Leadership; BPN = Basic Psychological Need; IMI = Intrinsic Motivation Inventory; ACSI = Athletic Coping Skills Inventory; Sat = satisfaction; Frus = frustration. $^{*}p < .05$. $^{**}p < .01$

Intrinsic Motivation, Peer Servant Leadership, and BPN Satisfaction and Frustration

A multiple regression with five predictors including average BPN satisfaction, average BPN frustration, and the three subscales of the RSLP-S (trust/inclusion, humility, and service) indicated that the linear combination of variables predicted intrinsic motivation; the overall model was statistically significant, adjusted R^2 = .306, $F(5, 71) = 7.258$, p = <.001. Of these five predictors, the statistically unique significant predictors of intrinsic motivation were average BPN satisfaction (β =.623, p = <.001; 21% of variance), SL trust/inclusion (β = -.747, p = .026; 5% of variance), and SL humility (β = .489, p = .033: 5% of variance), suggesting that higher levels of BPN satisfaction and playing on a team with a more humble, trustworthy peer leader predicts higher levels of athlete intrinsic motivation.

Intrinsic Motivation and BPNSFS Subscales

A multiple regression with six predictors (one for each subscale of the BPN satisfaction and frustration scales) revealed an overall statistically significant model, adjusted R^2 = .356, $F(6, 71) = 7.538$, p = <.001. Of the six factors, average autonomy frustration made a unique contribution (β =.-.370, p = .007: 7% of variance), indicating that lower levels of autonomy frustration predict higher intrinsic motivation.

Athletic Coping Skills, Peer Servant Leadership, and BPN Satisfaction and Frustration

A multiple regression with five predictors including average BPN satisfaction, average BPN frustration, and the three subscales of the RSLP-S (trust/inclusion, humility, and service) produced an overall model that was statistically significant, adjusted R^2 = .190, $F(5, 68) = 4.188$, p = .002. The only statistically significant unique contributor to athletic coping skills was

average BPN satisfaction (β = .476, p = .002: 21% of variance), suggesting that higher total BPN satisfaction predicts adaptive athletic coping skills.

Athletic Coping Skills and BPNSFS Subscales

A multiple linear regression with six predictors (one for each subscale of the BPN satisfaction and frustration scales) revealed a statistically significant model, adjusted R^2 = .150, $F(6, 68) = 3.005$, p = .012.Average relatedness frustration had the largest Beta value (β=.314, p = .123), however, none of the six individual factors explained a statistically significant percentage of variance in athletic coping.

Servant Leadership and Sport Interaction Type

Three independent samples t-tests revealed no statistically significant differences between the SL subscales of trust/inclusion ($t(73) = 1.581$, p = .118, Cohen's d = .45), humility ($t(73) = 1.251$, p = .215, d = .34) and service ($t(73) = 1.6668$, p = .100, d = .45) and perceived levels of servant leadership between the two sport types (co-acting versus interacting). However, there were two effect sizes that were very close to the medium size (cutoff of d= 0.5), indicating that there may have been at least some magnitude of difference between groups.

Table 4. *Descriptive Statistics of RSLPS for Sport Type Sub-Groups*

Sport interaction type	Interacting (n = 20)		Co-acting (n = 55)	
	M	*SD*	*M*	*SD*
RSLP-S subscale				
SL trust/inclusion	5.72	1.03	5.15	1.49
SL humility	5.38	1.44	4.87	1.60
SL service	5.82	1.25	5.19	1.51

Discussion

This study contributes to the literature on leadership and motivation in sport by providing information about how peer servant leadership and basic psychological need satisfaction and frustration relate to the intrinsic motivation and athletic coping skills of intercollegiate athletes.

Basic Need Satisfaction, Peer Servant Leadership, and Intrinsic Motivation

The first hypothesis of the current study was that intrinsic motivation would be predicted by higher peer SL and BPN satisfaction, as well as lower BPN frustration. This hypothesis was supported by the results of the first model, in that SL subscales and BPN satisfaction positively predicted 31% of variance in intrinsic motivation, while variance in BPN frustration was associated with lower intrinsic motivation. This finding aligns with core tenets of self-determination theory (SDT; Ryan & Deci, 2000).

Overall, the data from the current study aligns with past studies' predications that coach SL may produce more intrinsically motivated athletes (Hammermeister et al., 2008; Rieke et al., 2008). These results are similar to positive relationships between SL and BPN satisfaction found in organizational contexts (Mayer et al., 2008), and seem to concur with Chiniara and Bentein's (2016) finding that BPN satisfaction mediates the relationship between SL and task performance in business settings. The current findings may lend support to Sullivan's (2019) argument that need satisfaction is the mediating mechanism through which SL enhances performance. Others have found that athlete leader competence-support increased basketball performance, suggesting that if athlete servant leaders are satisfying BPN, there may be a positive effect on team performance (Mertens et al., 2018).

Interestingly, the SL subscales of trust/inclusion and humility were significant predictors of intrinsic motivation, while the SL subscale of service was not. From these results, it appears that intrinsic motivation is higher when one feels that their leader is trustworthy, inclusive, and humble; yet the services provided by the leader may not be as important. Notably, some items in the trust/inclusion subscale of the RSLP-S include that the athlete leader actively seeks to build team spirit by communicating encouragement and confidence. It is logical that an athlete who feels that their leader supports them and believes in them would have higher intrinsic motivation, because these leader behaviors contribute to the athlete's competence BPN. Further, although a full structural equation model was not used in the present study, it may be that when athletes act as servant leaders, their teammates may be more likely to have their basic psychological needs met; this claim is corroborated by the significant contribution of average BPN satisfaction in this model.

Initially, the lack of unique contribution from SL service to intrinsic motivation may seem surprising, given that service is a hallmark of SL. However, the lack of statistical significance of SL service may be due to the service items on the RSLP-S being difficult to quantify by the survey respondent because they reflect the personal, internal experience of the leader (e.g., "Finds enjoyment in serving others in whatever role or capacity, "Has a heart to serve others."). For these items to be discernable, the participants' servant leaders would need to outwardly express their enjoyment of serving, which contradicts the humility aspect of SL. Another potential explanation of this unexpected result is that merely serving physical needs can be done functionally and without much personal investment, whereas serving psychological needs and being trustworthy, inclusive, and humble may take more effort and investment. Finally, it is possible that different leadership styles may be more or less relevant in different

sports; given that track and field athletes were the most frequently represented in the current sample, it is possible that SL service was not predictive of intrinsic motivation because it was simply not the most effective leadership style for that sport. For example, track and field teams often consist of over a hundred athletes who compete in varied events, making interpersonal connections and serving athletes across the entire team may be less likely in such a setting, or even nearly impossible.

In comparing the mean scores on the BPNSFS from other studies to those in the present study (through visual inspection), it appears that current participants had similar means to past athlete (Komenda et al., 2022) and non-athlete samples (Chen et al., 2015); although statistical comparisons of the means are needed to verify this statement. Interestingly, there was one individual BPN in the current study, autonomy frustration, that was a significant negative predictor (p = .007, β = -.370), which uniquely explained 7% of variance in intrinsic motivation. This finding is logical in that Ryan and Deci (2000) asserted that autonomy is the most relevant basic psychological need when it comes to developing intrinsic motivation. It seems likely that athlete servant leaders are not able to provide as much autonomy support as a coach, and so their teammates may already have lower levels of autonomy satisfaction from their peer leaders to begin with. However, it is worth considering that past studies have found that athlete leaders influence team variables such as competence satisfaction and intrinsic motivation, to a greater extent than coaches (Mertens et al., 2018), which supports other research showing that quality athlete leadership is related with better team performance, confidence, and task orientation (Fransen et al., 2017). Notably, Cronbach's alpha for autonomy frustration in this study was only 0.69, which is slightly below the typical threshold of acceptability, and just slightly lower than the 0.71 value obtained in the original confirmatory factor analysis (Chen et al., 2015). As such,

it is possible that the autonomy frustration scale of the BPNSFS may need adjustment for this population, as alphas for this subscale were much lower than the alphas for other subscales in both the present study and the original pilot study of the scale (Chen et al., 2015).

Thinking more broadly about the current findings, it is relevant to note that 65% of the sample in the present study were athletes from NCAA Division III schools, where athletic scholarships are not dispensed. Given the research that indicates that athletic scholarships are related to lower levels of intrinsic motivation (Moller & Sheldon, 2020), it is worth considering that this relationship may have affected the present results; in other words, it is possible that the sample could have had higher intrinsic motivation than athletes from NCAA Division I and II schools. Moreover, 80% of the sample consisted of women, and nearly half of the sample was composed of athletes from running sports (e.g., track and field or cross country), which indicates that the current results may be most reflective of these specific sub-populations of athletes. The uneven gender breakdown in the current study may have also influenced results, as there are known differences in preferred leadership behavior between male and female athletes (Witte, 2011).

Basic Need Satisfaction, Peer Servant Leadership and Athletic Coping

The second hypothesis supposed that athletic coping skills would be predicted by higher peer SL and BPN satisfaction, and lower BPN frustration. This hypothesis was supported by the findings that SL subscales and BPN satisfaction were predictive of 19% of variance in athletic coping skills, while BPN frustration was negatively associated with athletic coping skills. Interestingly, only total BPN satisfaction was a statistically significant unique predictor. The BPNSFS subscales were positively correlated with athletic coping skills, but none were significant unique predictors. These results indicate that total BPN satisfaction is predictive of

athletic coping, rather than the satisfaction or frustration of any individual BPN. The relationship between SL and athletic coping skills was demonstrated by modest positive correlations between the SL subscales of trust/inclusion *(r* =.257), humility *(r* =.249), and service *(r* =.312) with athletic coping skills; however, regression analysis indicated that none of the subscales were statistically significant predictors of athletic coping skills. Conversely, Hammermeister (2008) found that coach SL was related to more effective coping on four ACSI subscales; however, the present study utilized a total score for the ACSI and Hammermeister used each subscale on the ACSI for analyses, making a direct comparison in findings difficult. Given that the ACSI-28 measures a variety of athletic coping skills it may be that, in the current study, athlete SL would predict some of the skills individually but cannot predict the combination of all seven skills in the survey.

Researchers have found that athletes who play for servant leader coaches are more likely to cope well with adversity, worry less about performance, and are more coachable than athletes who are not coached by servant leaders, which supports past findings of a relationship between SL and athletic coping skills (Hammermeister et al., 2008). From the current study, it appears that athlete (i.e., peer to peer) SL is predictive of higher intrinsic motivation but is less closely connected with overall coping skills. Instead, these types of skills may be better learned from mental performance experts, for example. An athlete leader is rarely competent or qualified to teach mental skills but may be more equipped to enhance their teammates' motivation by their inclusivity, trustworthiness, and humility.

Peer Servant Leadership and Sport Interaction Level

Finally, the third hypothesis was that perceived levels of SL would be higher on interacting teams than on co-acting teams. This hypothesis was not supported by the results;

there were no statistically significant differences in perceived SL between different interaction levels. However, small effect sizes (two of which were close to the medium effect cutoff; Cohen, 1988) were present, which indicates that there may have been differences in the groups that were not detected by p-values. Given that there were 55 co-acting sport athletes and only 20 interacting sport athletes, it could be that with a larger sample, larger effect sizes would exist alongside a significant p-value. Given that the effect sizes in the present study, there may be practical significance to these results, as it appears that athletes from interacting sports report higher perceptions of athlete SL in their athlete leaders. Given that athlete SL predicts intrinsic motivation, if athlete SL is less present in co-acting sports than in interacting sports, then methods of incorporating athlete SL into co-acting sports should be considered to enhance intrinsic motivation.

Summary

Overall, the findings indicate that the BPN satisfaction/frustration and SL model explains some of the variance in the intrinsic motivation (31%) and athletic coping skills (19%) of intercollegiate athletes. These results indicate that athlete servant leaders likely play a role in influencing key athlete variables on their team, which is concurrent with literature that suggests that effective athlete leaders can significantly impact team variables (Fransen et al., 2014). These findings also align with what Wang et al. (2021) and Worley et al. (2020) found about athlete servant leaders' ability to influence team cohesion. More specifically, results of the present study mirror the positive relationship that Hammermeister et al. (2008) found between coach SL and athlete satisfaction, which provides additional support for the theoretical interpretation that SL is related to serving and fulfilling followers' needs. Moreover, these findings replicate what researchers have discovered about the positive relationship between coach SL and their athletes'

intrinsic motivation and athletic coping skills (Hammermeister et al., 2008; Rieke et al., 2008), which suggests that both coach and athlete servant leaders can impact the mental skills profiles of their teams. Conversely, it is possible that it is easier to be a servant leader on a team where athletes have higher intrinsic motivation. Since intrinsic motivation is linked with long term persistence (Deci & Ryan, 2000), and athletic coping skills indicate greater coachability, confidence and achievement motivation, and concentration (Smith et al., 1995), these findings have inherent value to those who desire to improve sport leadership and performance.

The negative correlation between BPN frustration and both intrinsic motivation (r = -.311) and athletic coping skills (r = -.240) in the current study further supports that BPN satisfaction is a predictor of important athletic variables. However, it is interesting that average BPN frustration was not a significant unique predictor of lower intrinsic motivation and athletic coping in the current sample. According to a recent study, the BPNSFS probably does not validly measure need frustration, which may explain the lack of significant findings in the present study (Murphy et al., 2023). Also due to the voluntary nature of the survey and the recruitment method (asking coaches to forward the recruitment message), it is likely that the coaches who chose to send the survey to their athletes valued letting their athletes express themselves in a study, and therefore may have been coaches who are more BPN supportive. Over 1200 emails were sent to head coaches, but the sample size suggests that many chose not to forward it to their athletes. Therefore, it is possible that the survey only reached athletes who already had higher levels of BPN satisfaction and lower levels of BPN frustration.

Limitations

Given the cross-sectional nature of the study, no cause-and-effect relationships can be established between any of the study variables. Notable limitations include the relatively small

sample size and lack of diversity within the participant pool (e.g., 80% female, 81% White) and sports represented (e.g., mostly track and field or cross country). These limitations mean that the results may not be generalizable to wider, more diverse populations, but the statistically significant results of the current study merit the consideration of performing a similar study with more athletes from a greater variety of sports. It is important to note that several subscales in the present study showed Cronbach's alpha coefficients that were over the suggested maximum of .90, suggesting that there may have been redundancy in certain test items (Tavakol & Dennick, 2011).

Another limitation was the length of the surveys. Dozens of participants were excluded from analysis because they only completed the first one or two surveys, resulting in a smaller sample size than desired. The imbalance between co-acting and interacting sports also likely resulted in an underpowered t-test. Also, since only NCAA institutions were surveyed, it is unknown whether the results would apply to athletic populations at either different collegiate levels (e.g., NAIA, NJCAA) or elite levels (e.g., national teams, professional leagues). Finally, given that leadership structure on athletic teams often have several leaders who fulfill a variety of roles at different times (Fransen et al., 2014), it may have been difficult for participants to identify which athlete leader they should reference for the survey. Relatedly, asking athletes to choose the most influential athlete leader enabled subjectivity; it would be of interest to distinguish between formal and informal leaders in future studies.

Conclusions and Future Directions

In conclusion, the current study adds to the body of literature on SL, supporting its integration into the context of sport. This was the first study to incorporate basic psychological needs satisfaction into the study of sport servant leadership, intrinsic motivation, and athletic

coping skills. Generally, these results indicate that athlete SL in sport predicts the desirable outcomes of both intrinsic motivation and athletic coping skills. This information may be used to inform coach and athlete leadership training, perhaps encouraging professionals to tailor training towards methods to fulfill BPN on a team. Further, it confirms findings from the literature that athlete leaders have influence over the mental skills profiles of their teammates (e.g., Crozier et al., 2013; Fransen et al., 2017; Vincer & Loughead, 2010), which provides an impetus for coaches to encourage in-depth leadership training for their athletes. Currently, there is a lack of systematic leadership training in college sport, as coaches do not tend to allocate resources to formally training peer leaders (Machida-Kosuga & Kohno, 2022), even though it has been shown that athlete leadership training can be effective (Duguay et al., 2016). To this point, Fransen et al. (2018) suggested that training athlete leaders in competence-support may result in a more motivating and performance-enhancing environment. In one past study, an intervention consisting of education and reflection on SL led to the internalization of SL behaviors in a group of undergraduate students (non-athletes), which provides support for the use of SL interventions (Fields et al., 2015). Relatedly, Parris and Peachey (2013) found that a cause-related sporting event (e.g., the U.S. Transplant Games, an Olympic style competition put on by the National Kidney Foundation) inspired SL behaviors in participants, illustrating a particularly engaging manner of developing SL behaviors.

Importantly, leadership development starts with awareness and conviction within oneself before expanding outward (Meuser & Smallfield, 2023), which makes individual effort a key component of adopting SL. To this end, future research could determine what factors make one more likely to adapt a SL style, what SL interventions are most effective, and how servant leaders, who may be quite invested in their followers, can best protect themselves from burnout.

Additionally, it would be useful to determine how results might change in a sample of either only co-acting or only interacting sport athletes. Future studies may also use experimental methods to measure athletes' intrinsic motivation and athletic coping skills before and after time spent playing with a servant leader.

Training athlete leaders on SL and BPN satisfaction could be an effective method of increasing intrinsic motivation on teams, given the positive relationship found in the current study between two dimensions of athlete SL (trust and humility subscales) and variance in intrinsic motivation. Considering the consistent finding from past studies that intrinsic motivation is negatively correlated to sport burnout (e.g., Bicalho & Da Costa, 2018; Hodge et al., 2008), the current findings may also indicate that athletes who play on teams with peer servant leaders may be at lower risk for burnout. Overall, the current results suggest that those in the sport, performance, and leadership fields may benefit from increased awareness of the importance of BPN satisfaction. In a world that often places a premium on quality athletic performance, these findings may be relevant to athletic departments, researchers, coaches, athletes, leadership experts, and anyone interested in helping athletes develop and sustain intrinsic motivation as well as handle adversity or pressure in sport.

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Appendices
Appendix A

Journal Requirements

When preparing manuscripts for submission in The Sport Psychologist, authors should follow the guidelines in the Publication Manual of the American Psychological Association (7th edition; www.apa.org). Manuscripts must be submitted in English. All manuscripts must be preceded by an abstract of no more than 150 words. If footnotes are used, they should be as few as possible and should not exceed six lines each. Figures should be saved as TIFF or JPEG files. Format tables using the Table Layout function in Word rather than aligning columns in text with tabs and spaces or using text boxes. Reference citations in the text must be accurate concerning dates of publication and spelling of author names, and they must cross-check with those in the reference list. Manuscripts will be summarily rejected if they do not follow the APA guidelines. Please activate continuous line numbering throughout the manuscript.

Manuscripts submitted will be judged primarily on their substantive content, but writing style, structure, and length are very important considerations. Poor presentation is sufficient reason for the rejection of a manuscript. When first received, manuscripts will be evaluated by the editor in terms of their contribution-to-length ratio. Thus, manuscripts should be written as simply and concisely as possible. However, we recognize that in rare circumstances, papers intended to make very extensive contributions may require additional space. Prior to submitting a manuscript, authors should consider the contribution-to-length ratio and ask themselves, "Is the paper long enough to cover the subject while concise enough to maintain the reader's interest?" (This paragraph is based on the Information for Contributors of the Academy of Management Review.)

Manuscripts must not be submitted to another journal while they are under review by The Sport Psychologist, nor should they have been previously published. Manuscripts are read by two reviewers, with the review process taking 8–12 weeks. Manuscripts will be evaluated in terms of topical relevance, theoretical and methodological adequacy, and clarity of explanation and analysis. Authors should be prepared to provide the data and/or research instrument(s) on which the manuscript is based for examination if requested by the editor. Comments from reviewers concerning manuscripts along with the editorial decision are made available to authors. When you submit, please make it clear in your cover letter if you wish to have your manuscript reviewed under Applied Research or Professional Practice. Please note that a blind review process is used to evaluate manuscripts. As such, any clues to the author's identity should be eliminated from the manuscript. The first page of the manuscript must not include author names or affiliations, but it should include the title of the paper and the date of submission.

Authors are advised to check carefully the typing of the final copy and to retain a copy of the manuscript to guard against loss. There are no page charges to contributors.
Brief reports are limited to 7 pages. Importantly, both Applied Research and Professional Practice manuscripts should not exceed 25 pages, but for multistudy or in-depth qualitative material of extended scale and scope, pages may run to a maximum of 35 on the initial

submission. The additional page allowance for longer manuscripts is at the editor's discretion. Manuscripts will be judged according to their applied focus, contributions to knowledge, presentation of information, appropriateness of the discussion, interpretation of ideas, and clarity of writing. In addition, Applied Research articles will be judged on their methodology/design and data analysis. Authors are expected to have their raw data and descriptive statistics available throughout the editorial review process and are responsible for providing elaboration upon request.

Appendix B

Western Washington University Internal Review Board Notification

To: Claire Henninger and Jessyca Arthur-Cameselle
From: Stephanie Richey
Subject: Human Subjects Application
Date: 7/25/2022
Action Taken: Exemption Granted
Principal Investigator: Claire Henninger
Faculty Advisor: Jessyca Arthur-Cameselle
Project Title: The Relationship Between Peer Servant Leadership and Intercollegiate Athletes' Intrinsic Motivation and Athletic Coping Skills
Protocol Number: 4825EX22
Funding: None

The Western Washington University (WWU) Institutional Review Board (IRB) designee determined that your project meets the requirements outlined in §45 CFR 46 and WWU institutional procedures to receive the following exemption determination:

Exempt Category 2

This determination means that your research is valid indefinitely, as long as the nature of the research activity remains the same. You may begin recruitment and data collection. After 6 years, according to the University's retention schedule, this exemption file will be deleted. After this point, you will no longer be able to make modifications to this protocol.

Thank you for your attention to these details. If you have questions at any point, please review our website (www.wwu.edu/compliance) or contact a Research Compliance Officer.

Research Compliance Officer: Stephanie Richey
Exemption timestamp: 7/25/2022

Appendix C

Informed Consent Form

Study on Collegiate Athletes' Experiences
Conducted through Western Washington University
Lead Researcher: Claire Henninger

We are asking you to be in a research study. Your participation is voluntary. The purpose of this form is to give you the information you will need to help you decide whether to participate. Please read the form carefully. You can decide if you want to be in the study or not. This process is called "informed consent."

Purpose and Benefit: The purpose of this research study is to better understand intercollegiate athletes' motivation and other experiences on their teams. There are no direct personal benefits from completing this study; however, your participation can further the knowledge of intercollegiate athlete motivation and skills related to performance, which is useful to sport psychologists.

Summary of your Participation: To participate in this study, you must be a current NCAA athlete over the age of 18. If you choose to participate in this study, you will complete several numeric surveys and fill out a demographic questionnaire. Two example questions from the numeric surveys are: "I feel confident that I will play well" and "Playing my sport is fun." The demographics questionnaire will ask for information such as your age and what sport you participate in. Your participation will take approximately 20 minutes of your time.

Data and Privacy Protection: Your participation is anonymous. Your name and contact information will not be collected (unless you opt-in as explained below in the **Incentive** section). Your data cannot be linked back to you. In addition, your school's name is not collected, and the researcher will not inform your coach or athletic department that you participated.

Risks: There are no expected risks to participating, but it is possible that some questions may cause some discomfort.

Withdrawal: Your participation is voluntary, and you may choose to withdraw from participating at any time, by closing your web browser.

Incentive: If you complete the entire study, you will have the option of entering your email address in a separate survey to be included in a raffle for one of six $50 Amazon e-gift cards. Your email address will only be used to notify you if you won the raffle and your email address will not be linked with your data entered on the other surveys. Your contact information will be deleted once winners of the raffle have been sent their e-gift cards.

Researcher Information and Contact Information: This research study is being conducted by Claire Henninger, a sport and exercise psychology master's student at Western Washington

University, under the supervision of Dr. Jessyca Arthur-Cameselle. The Institutional Review Board (IRB) at Western Washington University has approved this study. If you have any questions about your rights as a research participant, you can contact the Western Washington University Office of Research and Sponsored Programs (RSP) at compliance@wwu.edu or (360) 650- 2146. Any questions that you have about this study may be directed to Claire Henninger at henninc4@wwu.edu

Consent to Participate:
By clicking "next" to continue the survey, you are saying that you have read this form, that you understand the tasks involved, you are 18 years of age or older, and that you agree to participate in this study. If you want a copy of this consent form, you can print this page or contact the researcher.

Appendix D

Inclusion Criteria

Check the box next to each of the following to indicate whether or not it applies to you.

1. Are you 18 years old or older?

    a. Yes

    b. No (automatically sent to thank you page)

2. Do you currently participate in a NCAA varsity intercollegiate sport?

    a. Yes

    b. No (automatically sent to thank you page)

Appendix E

Demographic Questionnaire

1. What is your current age in years (e.g., 19)?
2. What is your current year in school? Freshman__ Sophomore__ Junior__ Senior__ Graduate student__
3. What is your gender identity? (Check all that apply)

   Man Women Transgender man Transgender woman Agender Non-binary Two-Spirit Gender Fluid/Queer Prefer not to answer Other (Please Explain):
4. What ethnicity(s) do you identify with? Check all that apply. American Indian or Alaska Native __ Asian (including Indian subcontinent and Philippines) __ Black or African American (including Africa and Caribbean) __ Hispanic or Latino (including Spain) __ Native Hawaiian and Other Pacific Islander __ White (including Middle Eastern) __ Other (please specify) _____ Prefer not to respond __
5. What sport level do you compete in? NCAA Division I __ NCAA Division II __ NCAA Division III __
6. Which sport(s) do you play at the intercollegiate varsity level? _____Check all that apply.

   Basketball __ Baseball __ Beach Volleyball __ Bowling __ Competitive Cheer or Dance __ Cross Country __ Equestrian __ Fencing __ Field Hockey __ Football __ Golf __ Gymnastics __ Half Marathon __ Ice Hockey __ Indoor Track and Field __ Lacrosse __ Outdoor Track and Field __ Rifle __ Rowing __ Rugby __ Swimming and Diving __ Skiing __ Soccer __ Softball __ Tennis __ Indoor Volleyball ___ Water Polo___ Wrestling___ Other (please explain) __

7. On which of the following do you compete for your university?
    a. Men's sport
    b. Women's sport
    c. Coed sport
8. How many years in total have you participated in your primary sport?
9. Are you currently a formal leader on your team (e.g., team captain)? Yes___ No___ Other (please explain) ___

Appendix F

Basic Psychological Need Satisfaction and Frustration Scale (BPNSFS; Chen et al., 2015)

Below, we are going to ask you about your experiences in your sport. Please read each of the following items carefully. You can choose from 1 to 5 to indicate the degree to which the statement is true for you on your current collegiate sport team.

1	2	3	4	5
Not true at all				Completely true

1. I feel a sense of choice and freedom in the things I undertake
2. Most of the things I do feel like "I have to"
3. I feel that the people I care about also care about me
4. I feel excluded from the group I want to belong to
5. I feel confident that I can do things well
6. I have serious doubts about whether I can do things well
7. I feel that my decisions reflect what I really want
8. I feel forced to do many things I wouldn't chose to do
9. I feel connected with people who care for me and for whom I care
10. I feel that people who are important to me are cold and distant towards me
11. I feel capable at what I do
12. I feel disappointed with many of my performances
13. I feel my choices express who I really am
14. I feel pressured to do too many things
15. I feel close and connected with other people who are important to me
16. I have the impression that people I spend time with dislike me
17. I feel competent to achieve my goals
18. I feel insecure about my abilities
19. I feel I have been doing what really interests me
20. My daily activities feel like a chain of obligations
21. I experience a warm feeling with the people I spend time with
22. I feel the relationships I have are just superficial
23. I feel I can successfully complete difficult tasks
24. I feel like a failure because of the mistakes I make

Appendix G

Revised Servant Leadership Profile for Sport (RSLP-S; Rieke et al., 2008)

For the following items, please think about the person you consider the most influential athlete leader on your team. If you consider yourself the most influential leader, please answer the questions about the next most influential leader. In other words, do not complete the questions about yourself.

Please indicate how much you agree or disagree with each of the following items using the following scale:

1 2 3 4 5 6 7

Strongly Disagree Strongly Agree

The most influential athlete leader on my team:

1. Inspires team spirit by communicating enthusiasm and confidence.
2. Believes the leader should not be front and center.
3. Listens actively and receptively to others.
4. Serves others and does not expect anything in return.
5. Practices plain talking (means what they say and say what they mean).
6. Is not primarily concerned with always having full authority.
7. Always keeps their promises and commitments to others.
8. Is willing to make personal sacrifices in serving others.
9. Grants all athletes a fair amount of responsibility.
10. Doesn't have to have their name attached to every initiative.
11. Is willing to accept others' ideas whenever they are better than theirs.
12. Finds enjoyment in serving others in whatever role or capacity.
13. Promotes tolerance, kindness, and honesty.
14. Doesn't look at their position as one of power.
15. Creates a climate of trust and openness to facilitate participation in decision-making.
16. Has a heart to serve others.
17. Wants to build trust through honesty and empathy.
18. Allows their subordinates to have some control.
19. Devotes a lot of energy to promoting trust, mutual understanding, and team spirit.
20. Takes great satisfaction in bringing out the best in others.
21. Has the courage to assume responsibility for their mistakes.
22. Doesn't have to be seen as superior to subordinates in everything.

Scales: Trust/Inclusion: 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21 Humility: 2, 6, 10, 14, 18, 22 Service: 4, 8, 12, 16, 20

Appendix H

Intrinsic Motivation Inventory (IMI; Ryan, 1982; McAuley et al., 1989)

For each of the following statements, please indicate how true it is for you, using the following scale:

1	2	3	4	5	6	7
Not at all true			Somewhat true			Very true

1. While I am not playing my sport, I think about how much I enjoy it.
2. I do not feel at all nervous about playing my sport.
3. I feel that it is my choice to play my sport.
4. I think I am pretty good at my sport.
5. I find my sport very interesting.
6. I feel tense while playing my sport.
7. I think I do pretty well at my sport, compared to other athletes.
8. Playing my sport is fun.
9. I feel relaxed while playing my sport.
10. I enjoy playing my sport very much.
11. I don't really have a choice about playing my sport.
12. I am satisfied with my performance in my sport.
13. I am anxious while playing my sport.
14. I think my sport is very boring.
15. I feel like I am doing what I want to do while I play my sport.
16. I feel pretty skilled at my sport.
17. I think my sport is very interesting.
18. I feel pressured while playing my sport.
19. I feel like I have to play my sport.
20. I would describe my sport as very enjoyable.
21. I play my sport because I have no choice.
22. After working at my sport for awhile, I feel pretty competent.

Scoring information. Begin by reverse scoring items # 2, 9, 11, 14, 19, 21. In other words, subtract the item response from 8, and use the result as the item score for that item. This way, a higher score will indicate more of the concept described in the subscale name. Thus, a higher score on pressure/tension means the person felt more pressured and tense; a higher score on perceived competence means the person felt more competent; and so on. Then calculate subscale scores by averaging the items scores for the items on each subscale. They are as follows. The (R) after an item number is just a reminder that the item score is the reverse of the participant's response on that item.
Interest/enjoyment: 1, 5, 8, 10, 14(R), 17, 20
Perceived competence: 4, 7, 12, 16, 22
Perceived choice: 3, 11(R), 15, 19(R), 21(R)
Pressure/tension: 2(R), 6, 9(R), 13, 18

Appendix I

Athletic Coping Skills Inventory-28 (ACSI-28; Smith et al., 1995)

Instructions: The following are statements that athletes have used to describe their experiences. Please read each statement carefully, and then recall as accurately as possible how often you experience the same thing. There are no right or wrong answers. Do not spend too much time on any one statement.

Please circle how often you have these experiences when playing sports.

		0	1	2	3
1	On a daily or weekly basis, I set very specific goals for myself that guide what I do.	Almost never	Sometimes	Often	Almost always
2	I get the most out of my talent and skill.	Almost never	Sometimes	Often	Almost always
3	When a coach or manager tells me how to correct a mistake I've made, I tend to take it personally and feel upset.	Almost never	Sometimes	Often	Almost always
4	When I'm playing sports, I can focus my attention and block out distractions.	Almost never	Sometimes	Often	Almost always
5	I remain positive and enthusiastic during competition, no matter how badly things are going.	Almost never	Sometimes	Often	Almost always
6	I tend to play better under pressure because I think more clearly.	Almost never	Sometimes	Often	Almost always
7	I worry quite a bit about what others think of my performance.	Almost never	Sometimes	Often	Almost always
8	I tend to do lots of planning about how to reach my goals.	Almost never	Sometimes	Often	Almost always
9	I feel confident that I will play well.	Almost never	Sometimes	Often	Almost always
10	When a coach or manager criticizes me, I become upset rather than feel helped.	Almost never	Sometimes	Often	Almost always
11	It is easy for me to keep distracting thoughts from interfering with something I am watching or listening to.	Almost never	Sometimes	Often	Almost always
12	I put a lot of pressure on myself by worrying about how I will perform.	Almost never	Sometimes	Often	Almost always
13	I set my own performance goals for each	Almost	Sometimes	Often	Almost

	practice.	never			always
14	I don't have to be pushed to practice or play hard; I give 100%.	Almost never	Sometimes	Often	Almost always
15	If a coach criticizes or yells at me, I correct the mistake without getting upset about it.	Almost never	Sometimes	Often	Almost always
16	I handle unexpected situations in my sport very well.	Almost never	Sometimes	Often	Almost always
17	When things are going badly, I tell myself to keep calm, and this works for me.	Almost never	Sometimes	Often	Almost always
18	The more pressure there is during a game, the more I enjoy it.	Almost never	Sometimes	Often	Almost always
19	While competing, I worry about making mistakes or failing to come through.	Almost never	Sometimes	Often	Almost always
20	I have my own game plan worked out in my head long before the game begins.	Almost never	Sometimes	Often	Almost always
21	When I feel myself getting too tense, I can quickly relax my body and calm myself.	Almost never	Sometimes	Often	Almost always
22	To me, pressure situations are challenges that I welcome.	Almost never	Sometimes	Often	Almost always
23	I think about and imagine what will happen if I fail or screw up.	Almost never	Sometimes	Often	Almost always
24	I maintain emotional control regardless of how things are going for me.	Almost never	Sometimes	Often	Almost always
25	It is easy for me to direct my attention and focus on a single object or person.	Almost never	Sometimes	Often	Almost always
26	When I fail to reach my goals, it makes me try even harder.	Almost never	Sometimes	Often	Almost always
27	I improve my skills by listening carefully to advice and instruction from coaches and managers.	Almost never	Sometimes	Often	Almost always
28	I make fewer mistakes when the pressure is on because I concentrate better.	Almost never	Sometimes	Often	Almost always

Appendix J

Recruitment Email

Hello Coach ____,

My name is Claire Henninger, and I am a current graduate student in the Sport and Exercise Psychology Master's program at Western Washington University. I am also a current student athlete, and I am conducting a study for my master's thesis to better understand athletes' motivation and their experiences on their intercollegiate varsity sport teams.

I am recruiting current NCAA varsity athletes to complete an **anonymous online survey.** **I would be very grateful if you would forward this email with the survey link to your current student athletes.** (Survey Link:)

Participation is completely voluntary. It will take approximately 20 minutes to complete the surveys, which include questions about motivation, mental states, and team experiences. Participants will have a chance to win one of six $50 Amazon gift cards after completing the study.

Lastly, would you please forward this email to other NCAA varsity coaches to send to their current athletes? If you are interested in the results of my study, you may contact me. If you have any questions or concerns, please feel free to reach out to me. I appreciate your time!

Again, here is a link to the survey:

Sincerely,

Claire Henninger