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YOUTH SOCCER COACHING METHODOLOGIES' IMPACT ON ENJOYMENT OF THE GAME AND RETENTION

John Diffley
Saint John's University, Jamaica New York

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John A. Diffley

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John Diffley

Dr. James R. Campbell

ABSTRACT

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John A. Diffley

According to the Sports & Fitness Industry Association (SFIA, 2018), at least 4,420,000 children between the ages of 6–12 and 2,454,000 children between the ages of 13–17 participate in outdoor soccer in the United States. Arguably, their coaches have a significant impact on these children's development. The purpose of this study was to evaluate coaching methods in soccer and their relationship to youth players' enjoyment of the game and retention rates. The sample consisted of youth soccer players from the New York metropolitan area. This study adds to the growing literature on youth sports and demonstrates that coaches have a significant impact on outcomes such as enjoyment of the sport, increases in self-confidence, and motivation to remain in the sport. This study was used quantitative analysis and the Leadership Scale for Sports (LSS), designed by Chelladurai and Saleh (1978, 1980), with the goal of assessing athletes' perceptions of coaches' leadership styles and behaviors. This instrument assesses coaches' leadership style along five dimensions: training and instruction, autocratic behavior, democratic behavior, social support, and positive feedback (Chelladurai & Saleh, 1980, as cited in Wood, 2008). It is important for coaches to understand young athletes' motives for continued participation. Creating a positive environment within a team and at training sessions can have a lasting impact on overall enjoyment and, ultimately, on retention of team members. The findings of this research provide additional support for specific

coaching methodologies, such as including players in the decision-making process, providing specific positive feedback and encouragement, creating realistic expectations, providing social time for teammates to make friends, and creating an environment that reduces fear of trying new skills.

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CHAPTER 1
Introduction

The dropout rate of youth sport participants is alarming, with 70% of children leaving organized sports by age 13 (National Alliance for Sport, 2016, as cited in Beane, 2016). Youth soccer has followed this overall trend. Participation rates in the sports of soccer has declined. Over the past three years, the percentage of 6- to 12-year-olds playing soccer regularly has dropped to 2.3 million, a 14% decrease (Sports & Fitness Industry Association, 2017, as cited in Drape, 2018). The current structure of youth soccer is based on competition, results, and rankings (Beane, 2016). The goal of this study was to examine youth soccer coaching strategies, use quantitative methods to validate innovative and effective coaching strategies, and create a blueprint to improve players' enjoyment of the game and retention.

Since 2010, soccer has suffered the most dramatic participation rate decline in the 6-12 age group. This age group decreased 26.5 percent (Kennedy, 2020). Even tackle football (down 18.7 percent) has lost less players in the age group. By contrast, baseball participation numbers increased 7.8 percent in the last decade, and ice hockey and lacrosse were both up more than 50 percent. Overall, the largest participation decrease was in tackle football (down 11.8% last year), with soccer having the next biggest decrease of 9.5% (Drape, 2018).

Soccer was last in terms of any team sport for the average age a child quit regularly playing at 9.1 years (Kennedy, 2020). Only gymnastics of 21 sports surveyed was lower. Continually, over the past three years, for 6- to 12-year-olds, the percentage of kids playing soccer regularly dropped almost 14 percent, to 2.3 million players, according to a study by the Sports & Fitness Industry Association (Drape, 2018).

A decade ago, 45% of children ages 6 to 12 played a team sport regularly, but now only 37% of kids do so (Drape, 2018). The reasons for the decrease in sports participation in general may include concerns over injuries, concussions, poor coaching, the high cost to participate, travel, and competing interests such as video games.

Purpose of the Study

The purpose of this study was to research how soccer coaching behaviors affect players' enjoyment of the game and retention rates. Specifically, I examined the independent and combined effects of practice methods, along with the coach's ability to motivate and retain youth soccer players. Due to increasing dropout rates in youth sports, there is a greater need to research coaching strategies and their impact on retention. I studied the relationship of coaching ability, coaching methodology, and practice plans with overall player experience and enjoyment.

The coach plays a pivotal role in athletes' sport experiences. Various coaching behaviors can affect athletes positively or negatively. For example, certain coaching styles may reduce anxiety, increase self-confidence, increase the desire to continue participation, and enhance skill development (Hays et al., 2007; Smith & Smoll, 2007; Becker, 2009, as cited by Carlsson & Lundqvist, 2016). Conversely, other coaching methods may induce anger, distractions, team divisions and demotivation (Gearity & Murray, 2011, as cited by Carlsson & Lundqvist, 2016). Although scholars have studied coaching technique and tactics, the research on specific coaching efficacy is limited. Hood (2015) cited numerous authors' contention that there is an overall lack of research in coaching leadership (Kenow & Williams, 1999; Loughead , Hardy, & Eys, 2006; Todd & Kent, 2004, as cited by Hood, 2015).

Price and Weiss (2013) studied female sports teams and found that different types of leadership were related to individual and team performance. Their study included youth female soccer players (N = 412), and they assessed coach and teammate leadership behaviors, motivation, enjoyment, and team cohesion. The outcome of this study revealed that coach leadership was more influential than peer leadership. Price and Weiss (2013) emphasized the importance of coaches understanding how their behaviors can foster positive outcomes in individuals.

My aim was to address factors related to player enjoyment and retention. It is important for coaches and leaders to understand how to motivate players to give their best performances and contribute to a positive experience for all team members (Todd & Kent, 2004). The role of the coach has multiple components including technical, tactical, and interpersonal development (Fletcher & Roberts, 2013). Despite the importance placed on coaching leadership, Fletcher and Roberts (2013) indicate there is a limited number of studies on leadership for coaches. The Leadership Scale for Sport (LSS; Chelladurai & Saleh, 1980), within the Multidimensional Model of Leadership (MML), is one of the most utilized measures within the sporting literature (Fletcher & Roberts, 2013).

This study will contribute to leadership theory on youth athletes' perceptions of coaching behaviors. The results of this study may help coaching education and offer ideas to improve coaching methods and their understanding of how their respective behaviors affect players. I have contributed to the field by gathering the perspectives of youth soccer players at various levels, from recreational to elite. The results of my current study may aid in the research of coaching leadership. Having a better understanding of perceptions of leadership and perceptions of success in athletics, will benefit coaches and

administrators working in soccer. It would be beneficial for coaches to understand the factors that create a positive experience for players regardless of competitive outcomes.

Significance/Importance of the Study

In the United States, tens of millions of children, coached by millions of coaches, participate in youth sports each year. Aspen Institute (2019) estimated there are more than 6.5 million youth sports coaches in the United States, with over 24 million youth participants. Since 2010, soccer has suffered the most dramatic participation rate decline in the 6-12 age group. The purpose of this study is to evaluate coaching methods in soccer and how they relate to players' enjoyment of the game and retention. This research will add to current research on coaching strategies. Coaching education is still an under researched area from a learning theory perspective. The literature on coach knowledge about verbal feedback is still in its infancy (Mason, Farrow, & Hattie, 2020). This research may help coaches adjust their methods and behavioral patterns at practice. Coaches can use information from this study to better understand and implement effective leadership behaviors. Greater knowledge of the relationships between coaching behaviors, player enjoyment, development, and retention will help guide coaches to focus on areas other than results.

Most current coaching methodologies are limited because they rely on traditional strategies and coach-centered techniques. Traditional coaching methods are characterized by a controlling coach, who teaches technical content in a linear, organized, and repetitive fashion, as detailed by Bennett and Culpan (2014). Studies have revealed that coaches may be unaware of their own behavior or may overestimate the frequency of their positive behaviors (Partington & Cushion, 2011, as cited by Carlsson & Lundqvist,

2016). The coach's goal as an educator should be to enhance players' development on multiple levels. Current methodologies however, are limited to traditional technical methods and drills (Bennett & Culpan, 2014).

There is a growing body of research by scholars who have suggested a coach-centered approach can limit the learning environment. The typical coaching curriculum is restrictive and implies that the coach's role is merely to instruct and model a set of skills. Côté and Gilbert (2009) suggested that effective coaches must also acquire interpersonal and intrapersonal, aspects of knowledge. Interpersonal aspects of knowledge include individual and group interactions with different constituents including the athletes, officials, parents, and sport administrators (Bloom, Falcão & Caron, 2018). Strong interpersonal skills allow coaches to communicate appropriately. Côté and Gilbert (2009) also indicated that strong intrapersonal skills are an integral part of coaching knowledge. This skill includes the coach's ability to review, revisit, and reflect on their coaching practice (Bloom, Falcão & Caron, 2018).

The coaching process must be considered as more than just the instruction of physical and technical skills. Coaching is a complex, multifaceted, and socially significant process (Bennett & Culpan, 2014). Additional research and studies should be completed to validate innovative coaching methodologies. It is important for coaches to better understand how their behaviors affect players.

Research Questions

Research Question 1: How can practices be made more enjoyable for youth soccer players while also challenging them to improve?

Research Question 2: Can innovative coaching methodologies improve retention rates in youth soccer?

Definition of Terms

Motivational climate: This concept is based on achievement goal theory (Nicholls, 1984). The motivational climate is created by adults and can affect performance and behavior (Duda & Balaguer, 2007).

Task-involving (mastery-oriented) climate: Coaches who create this type of climate focus on the process and do not define success in terms of skill development (Duda & Balaguer, 2007). A task-involving coach shows value for all players, fosters shared learning, and views mistakes as learning opportunities.

Ego-involving (performance-oriented) climate: A climate that involves egos pits individual players in the team against each other. In addition, ego-involving coaches punish athletes for mistakes and give the best and most skilled players the most attention (Duda & Balaguer, 2007).

Intrinsic motivation: According to Deci and Ryan (1985), intrinsic motivation is engaging in an activity for the pleasure and satisfaction of the activity itself.

Psychosocial characteristics: Psychosocial characteristics are commonly described as an individual's psychological development in relation to his or her social and cultural environment. "Psychosocial" means "pertaining to the influence of social factors on an individual's mind or behavior, and to the interrelation of behavioral and social factors" (Oxford English Dictionary, 2012).

Leadership Scale for Sports (LSS): This is a tool developed and tested by Chelladurai & Saleh (1980), to assess five dimensions of a leader (coach). The five

dimensions include two ways in which coaches make decisions (autocratic or democratic leadership styles), two that measure the frequency of a coach's specific motivational behavior (positive feedback and social support), and one that measures the task behavior of the coach (training and instructional behavior) (Chelladurai & Saleh, 1980).

CHAPTER 2
Review of Related Literature

Athletic coaches are leaders, yet there appears to be relatively few studies about coaches influence on team members, especially as compared to leaders in other industries, such as business. Coaches of athletic teams typically spend far more time in activities such as practice and training than leaders in other types of organizations (Chelladurai & Saleh, 1980). Coaches can have a significant influence on athletes' development, on multiple levels, including physical, technical, and psychological (Lorimer, 2009). Therefore, research is needed to understand the effect of coaching behaviors on players' experiences, attitudes, and intent to persist on a team.

The purpose of this study was to examine the relationship between coaching behaviors in youth soccer and the factors of (a) players' enjoyment of the game and their perceptions of how challenging games are and (b) the retention of youth soccer players. This research project was designed to address the following issues. How can youth soccer coaches, who are essentially leaders, make practices more enjoyable and challenging for the players, while promoting player development and improving retention rates in the sport? Addressing these questions should benefit both athletes and coaches because a greater understanding of the relationship between these factors can lead to more effective training strategies and therefore stronger player development. This chapter presents a review of the literature that pertains to the research questions of this study.

Theoretical Framework

The theoretical framework for this study included Bandura's (1989) social learning theory, Nicholls' (1984) Achievement Goal Theory (AGT), Chelladurai's (1989) Multidimensional Model of Leadership (MML), and Light and Harvey's (2015) Theory

of Positive Pedagogy. Each of these concepts provided insight for this study into how specific aspects of coaching can affect not only players' enjoyment of the game and but also team cohesion and participation rates. For example, Nicholls (1984) contended that an individual's achievement goals, perceived ability, and achievement behavior determine his or her motivation. Importantly, the coach determines the motivational climate within a team and in most competitive sporting environments. AGT is a contemporary motivational framework that many studies have attempted to test within the sports setting (Biddle et al., 2003; Conroy et al., 2003; Edmunds et al., 2006, as cited in Moreno et al., 2010).

Albert Bandura's self-determination theory (SDT) is a motivational theory that focuses on the factors that motivate choice. SDT proposes that social factors within an environment, influences one's motivation and satisfaction levels (Deci & Ryan, 1985). SDT explores how a teacher or a coaches' interpersonal behavior influences the student or player motivation, well-being, and satisfaction (Gillet, Vallerand, Amourak & Baldes, 2010). SDT reinforces the hypothesis that the social environment can impact outcomes.. The theory has often been called a bridge between behaviorist and cognitive learning theories because it encompasses attention, memory, and motivation (Bandura, 1989).

Albert Bandura's theoretical framework, and the four sources of efficacy beliefs, is also relevant to this study (Bandura, 1989). Helping to develop social skills and confidence is essential to the learning process and self-efficacy plays an important role in an individual's chance for success. Bandura posited in his social learning theory that people learn from one another via observation, imitation, and modeling. The theory has often been called a bridge between behaviorist and cognitive learning theories because it

encompasses attention, memory, and motivation (Bandura, 1989). Bandura also proposed that individuals learn attitudes and behaviors by observational learning and social reinforcement (Bandura, 1989). Coaches can serve as role models and distribute rewards for desirable behaviors. In many cases, Bandura's social learning theory has been used for developing models for sport participation. Self-efficacy plays an important role in player development.

With this theory, Bandura argued that social factors in an environment influence one's motivation and satisfaction levels (Deci & Ryan, 2000). SDT explores how a teacher's or a coach's interpersonal behavior influences the student's or player's motivation, well-being, and satisfaction (Gillet et al., 2010). SDT reinforces the hypothesis that the social environment can impact outcomes. The theoretical framework associated with Bandura, four sources of efficacy beliefs, can be related to this study (Bandura, 1989). With SDT, Bandura contended that people learn from one another via observation, imitation, and modeling. The theory has often been called a bridge between behaviorist and cognitive learning theories because it encompasses attention, memory, and motivation (Bandura, 1989).

Positive Pedagogy

Traditional coaching methods emphasize drills to improve fundamental skills; most often the focus is on reducing error and negative aspects such as what the player cannot do (Light & Harvey, 2017). Players are required to practice skill development in front of peers, and negative feelings toward sports participation may arise or become exacerbated. The coach-centered approach focuses on technical mastery, which can deprive students the opportunity for self-discovery and increased self-confidence (Light & Harvey, 2017). In contrast, a game-based approach provides opportunities for players

to learn from their mistakes without the feeling that they are being criticized, or that they are under a microscope (Light & Harvey, 2017). This approach to learning is based on the construct of positive pedagogy.

Positive pedagogy is a type of teaching meant to foster the active acquisition of knowledge by creating a positive learning experience, turning the focus away from the learner's mistakes, and building self-confidence, autonomy, engagement, and motivation (George, 2006, Kirk 2005). Skills are built by emphasizing what a learner can do, which helps develop inquisitive and active learners instead of passive learners. As George (2006) has suggested, teaching based on positive pedagogy creates positive learning experiences that foster a love of learning, creativity, and problem-solving skills where an emphasis on error correction leads to reductions in focus, concentration, and motivation. Positive pedagogy can be used to by athletic coaches to create more positive and effective team practices (Light & Harvey, 2017). For this study, I have hypothesized that this approach is also relevant for athletic coaching and the promotion of mastering skills in youth sports.

When using positive pedagogy and a game-centered approach, coaching focuses on player development, and the learning process involved can create positive and enjoyable experiences (Light, 2003). Importantly, positive pedagogy contributes toward improved morale, social and personal development (Dyson, 2005; Shephard & Mandango, 2009, as cited in Light & Harvey, 2017). This type of learner-centered holistic approach contrasts with behaviorist theory, in which coaches focus on instruction and demonstrations with the belief that more direct feedback and greater levels of

intervention lead to more learning (Douge & Hastie, 1993; Williams & Hodges, 2005, as cited by Light & Harvey, 2017).

Athlete-centered learning

Athlete-centered learning and question-based approaches to coaching team sports improve player development and motivation and provide a positive learning environment (Light & Harvey, 2017). The process of athlete-centered learning includes questions, purposeful dialogue, and social interactions created by the coach. Game-based approaches such as *Teaching Games for Understanding*, *Game Sense*, *Play Practice*, and the *Tactical-Decision Learning Model* are all examples of athlete-centered approaches that encourage positive learning experiences (Light, 2013; Light & Harvey, 2017). Athlete-centered methods provide coaches with effective tools for improving technical abilities and increasing player motivation through reflection and dialogue to assist in the learning process and therefore are related to positive pedagogy (Cassidy & Kidman, 2010; Kidman, 2005; Kirk, 2005; Mitchell et al., 1995; Pope, 2005, as cited in Light & Harvey, 2017).

There are four core features of Game Sense pedagogy (Light, 2013) that can be utilized to promote positive learning experiences for players in practice: (a) highlighting the physical environment or experience, (b) asking questions to facilitate discussion and player thinking as opposed continually telling the players what to do, (c) providing opportunities to solve problems, (d) creating a safe and supportive environment in which mistakes are acceptable and deemed a natural part of the learning process. As players progress through the positive pedagogy learning process, they are encouraged to take ownership of practice, team activities, and team progress. Consequently, players tend to

rely less on the coach and take more responsibility for their own learning, which leads to empowered learners with a deep understanding of the sport (Light & Harvey, 2017).

An essential facet of the Game Sense approach, and positive pedagogy in general, is questioning, which fosters communications, debate, and reflection through open-ended questions that generate thinking about a range of possible solutions (Light & Harvey, 2017). An environment is continuously created where mistakes are an expected part of the learning process, and a coach's role is to be encouraging not critical. As opposed to being critical, the coach can ask a player to reflect upon and formulate a solution that may produce a better outcome (Light & Harvey, 2013). This player-centered approach fosters active learning through problem solving. The solution-based approach focuses the athlete on the goals of a practice session, and what the player can do to devise solutions to help the team accomplish a goal (Light & Harvey, 2017). Again, a collaborative, positive, and supportive environment is fostered to encourage players to speak up since the effective use of questioning can stimulate thinking and improve learning (Light & Harvey, 2017).

These game-based methods challenge the traditional approach and put the player at the center of the learning process. The traditional practice method is orderly, organized and typically follows a progressive pattern. The athlete-centered game-based practice is more free-flowing and creative. Overall, the Positive Pedagogy approach encourages learning through social interactions and joyful experiences (Harvey,2009; Renshaw et.al, 2012, as cited by Light & Harvey, 2017). Positive Pedagogy embraces purposeful dialogue, discussion, compromise, embracing democratic processes while making learning enjoyable (Light & Harvey, 2017).

Game-centered learning

One response to dissatisfaction with a skill first, game second approach was the development of Teaching Games for Understanding (TGfU) (Turner & Martinek, 1995). TGfU was created because of criticism that the emphasis of skills, without consideration of the game, resulted in a lack of technical mastery (Hastie, 2003). For example, a student who performed well at practice that emphasized technique and skills first, may achieve little in the game portion of practice. This is due to the players perceived lack of understanding of the rationale for practicing certain skills (Turner & Martinek, 1995). TGfU fosters understanding of the game's strategies and tactics, along with skill development (Turner, 2005). Game-centered teaching emphasizes decision making and game awareness. Skills are practiced and developed as needed; when they are critical to the success of the game (Turner & Martinek, 1995). Growing research demonstrates that children report games to be more fun than drills in organized sports (Benegoechea et al., 2004; Strean & Holt, 2000).

Game Sense Learning

The Game Sense pedagogical approach was developed in Australia during the 1990's in collaboration with the Australian Sports Commission, and Australian Coaches (Light & Evans, in press). The term Game Sense was utilized to describe the context of coaching, seperate from schools and teaching (Evans & Light, 2008). Differences between TGfU and Game Sense (GS) pedagogy are minimal, but Thorpe has suggested that GS is a more fluid method, and less structured than TGfU. GS is more closely related to the notion of building understanding in action; through GS pedagogy, coaches use a questioning approach while participants are engaged in action rather than a direct

instructional method (Evans & Light, 2008; Launder, 2001). In GS, the authoritarian approach is rejected. From the players' perspective, GS provided multiple benefits including: the skills obtained are more likely to be transferred to an actual game, the games are more enjoyable, and finally, and importantly, players can solve problems (den Duyn, 1997). There is support for these contentions due to empirical research conducted on players' perceptions of changes in practice afforded by an Australian rugby coach's use of Game Sense (Evans & Light, 2008).

Achievement Goal Theory

Nicholls' Achievement Goal Theory (AGT) asserted that three factors interact to determine an individual's motivation: achievement goals, perceived ability, and achievement behavior (Nicholls, 1984). Nicholls ascertained that the main achievement goal of every individual is maximizing ability for skills and minimizing the portrayal of low ability (Nicholls, 1984, as cited in Hood, 2009). The basis of this theory is that individuals assess their own ability by demonstrating task mastery or personal improvement (task orientation) as well as comparison to peers and those who assess their own ability through personal improvement are more likely to exhibit elevated levels of intrinsic motivation (Nicholls, 1984). This, in turn, will lead to higher participation rates (Nicholls, 1984). On the contrary, when individuals assess their own ability through social comparisons, Nicholls predicted, they may develop negative expectations, which may lead them to leave the sport (Nicholls, 1984).

There are two distinct climate dimensions that have different implications for motivation and achievement-related behaviors (Ames,1992; Nicholls, 1984). Nicholls has suggested that coaches create a more *task-oriented* environment when they focus on

cooperation and teamwork and when the players feel they have an important role in the team. Coaches create a more task-oriented environment when they emphasize effort and personal improvement. When individuals assess their own ability through a task orientation, they experience increased levels of intrinsic motivation (Nicholls, 1984). When coaches pay most attention to the best players, are critical when mistakes occur, and cultivate rivalry between teammates, an ego-centric climate is created (Newton et al., 2000).

Multidimensional Model of Leadership

Chelladurai and Saleh (1980) established foundational work in the field of sports leadership and proposed the Multidimensional Model of Leadership (MML). MML is based on the premise that athlete performance and satisfaction are functions of the congruency between the required behavior of the coach as dictated by the situation, and the actual behavior of the coach (Chelladurai, 1980). It one of the most widely accepted models of sport leadership. This model integrates different approaches to leadership and reinforces the importance of coaches' ability to balance and incorporate three diverse types of behaviors. These behaviors include those preferred by the athletes, those in context, and those effectively applied to everyday practice (Chelladurai & Saleh, 1980).

According to MML, there are three antecedents to leader behavior: situational characteristics, leader characteristics, and member characteristics. The interaction of these antecedents presents three types of leader behavior: required, actual, and preferred. Group performance and player satisfaction are based on the congruent nature of three types of leadership behavior characterized as required, actual, and preferred (Chelladurai

& Saleh, 1980; Fletcher & Roberts, 2013). Satisfaction and performance increase as the congruency between the three types of leader behavior increase (Burdette, 2008).

The MML is based on the proposition that, to a large extent, group performance and player satisfaction are dependent upon the congruency of these three leader behaviors. Group performance and player satisfaction are enhanced when there is a similarity in specific leader behaviors as required by the situation, as preferred by the followers, and as perceived by the followers. When these behaviors are dissimilar, group performance and player satisfaction are compromised. Research has also clearly established a link between leadership behavior congruency and athlete satisfaction (Chelladurai, 1978; 1984; Chelladurai et al., 1988; Dwyer & Fischer, 1988; Home & Carton, 1985; McMillin, 1990; Riemer & Chelladurai, 1995; Schliesman, 1987; Summers, 1983; Weiss & Friedrichs, 1986) as well as group performance (Gordon, 1986; Serpa, Pataco, & Santos, 1991; Weiss & Friedrichs, 1986). Collectively, these studies provided initial support for the leadership behavior, congruency hypothesis within the MML.

Strong support has been shown for the link between member characteristics and coaching behaviors (Chelladurai & Carron, 1983; Chelladurai et al., 1988; Chelladurai et al., 1987). The MML (Chelladurai, 1990) is one of the most significant sporting leadership models that has been developed and it has generated extensive empirical attention. Chelladurai (1980) originally proposed that the congruence between preferred, required, and perceived leadership behavior determines the level of the outcome variables of member satisfaction and group performance (Fletcher & Roberts, 2013). Successful outcomes include high performance and high athlete satisfaction, but these outcomes

occur only when there is congruence between these three aspects of leader behavior (Chelladurai & Saleh, 1980). Consequently, the quality of both team and individual performance, as well as athlete satisfaction, results from coaching behavior that is appropriate for the sport (Chelladurai & Saleh, 1980).

Chelladurai and Saleh (1980) focused on a combination of leadership elements and placed equal emphasis on being both a leader and member of a group. They ascertained that group performance and team member satisfaction are the functions of the interaction between the three different forms of leadership behavior. and there are three precursors of leadership behavior: the leader's characteristics, members' characteristics, and situational characteristics (Chelladurai & Saleh, 1980). When there is synergy between a coach's actual behavior and the players' preferred behavior, it is more likely that the athletes will have a positive experience and perform better.

As Chelladurai (1978) has noted, specific leader behaviors are more relevant to some situations as compared to others. Continually, a specific measurement was needed to assess leadership behavior relative to athletics. When a coach changes their behaviors based on athletes' preferences, there are positive effects on players' athletic performance (Chelladurai & Saleh, 1980). The Leadership Scale for Sport (LSS) was developed by studying the behaviors of coaches as they relate to player preference, the coach's perceptions, and the behavior of the coach. Iso-Ahola and Hatfield (1986) noted that player satisfaction in sport is often a direct result of coaching behavior, not successful team performance (Iso-Ahola & Hatfield, 1986). Coaching behavior that was positive, was a key component that correlates to athletic performance and success (Iso-Ahola & Hatfield, 1986). Chelladurai and Saleh (1980) also recognized that previous leadership

theories for sports did not contain adequate models to measure and test the MML theory, nor were there sufficient attempts to develop reliable and valid scales to assess and describe leadership in relation to coaching behaviors.

Numerous questionnaires or scales had been created to determine leadership behavior in industry or business (i.e., leadership models based in organizational settings). For example, the path-goal theory (House & Dessler, 1974) posits that leadership effectiveness is related to the extent that a leader can provide sufficient rewards, that are otherwise lacking in the environment, such that an effective and satisfying performance is elicited. In other words, effective leadership is based on the rewarding behavior of the leader (Chelladurai & Saleh, 1980). However, no existing theory of leadership had been successfully or appropriately adapted to a sports context and most failed to present evidence of validity and reliability (Chelladurai, 1978). As a result, Chelladurai & Saleh, (1980), developed the Leadership Scale for Sports (LLS). The LSS quantified MML so that the leadership behavior of coaches could be measured. The 40-item LSS was designed to assess leadership behavior by evaluating the hypothesized relationships within the MML (Chelladurai & Saleh, 1980). Through their research, five distinct coaching dimensions of leadership behavior in sport were identified: (a) training and instruction, (b) democratic behavior, (c) autocratic behavior, (d) social support, and (d) positive feedback.

According to Chelladurai and Saleh (1980), each of these five LSS subscales represents a unique dimension of leadership behavior. Training and instruction involve a coach who exhibits behavior that clarifies the player's role and provides an intensive training environment focused on skill instructions to improve performance. The training

and instruction (TI) subscale represents the direct tasks of the coach, such as assisting athletes in the development of skills and learning tactics of the sport and reflects one of the important functions of a coach: to improve the athlete's performance level (Chelladurai & Saleh, 1978). Through training and instruction, the coach helps athletes reach their maximum physical potential by providing instruction on how to acquire the necessary skills, techniques, and tactics of the sport. Coaches of team sports also coordinate the team members' activities. This construct is similar to the Instrumental Leadership dimension outlined by House and Dessler (1974) which essentially consists of role clarification, coaching, and coordination.

Democratic Behavior (DB) involves a coach who allows the players to take part in the decision-making process, which includes practice planning, game strategies, and drill selection. DB reflects the extent to which a coach permits participation by the athletes in decision making that pertains to group goal setting and how the goals are attained (Chelladurai & Saleh, 1980). Autocratic Behavior (AB) is about a coach's exertion of authority, and the degree to which they remain at a distance from the athletes. Consequently, DB and AB subscales reflect the decision style of the coach. DB assesses the extent to which a coach allows the athletes to participate in decision making and goal setting. AB refers to a top-down management style, with the coaches making the decisions and players expected to follow those decisions. AB reflects an authoritarian decision-making style. DB and AB are distinct apart from the other LSS subscales in that they are both related to a coach's decision-making style, rather than the content or substance of their leadership behavior (Chelladurai & Saleh, 1980).

Social support (SS) refers to coaching behavior that is personal and independent of player performance. SS behavior in sports involves coaches that provide individual athletes personal attention. SS coaching behavior emphasizes a positive relationship between coach and player (Chelladurai & Saleh, 1980). This type of social support varies from other leadership models (Bowers & Seashore, 1966; House & Dessler, 1974). However, this type of social support is a similar dimension to the socially oriented behavior outside an athletic situation (Danielson et al., 1975). This dimension also differs from TI, which is task oriented, and from DB and AB, which are based on the decision-making style of the coach. Social Support is the degree to which coaches involve themselves in meeting athletes' interpersonal needs either through direct behavior or by creating a supportive environment where team members can mutually satisfy interpersonal needs. The social support (SS) subscale measures a coach's ability to satisfy the interpersonal needs of the athletes, either directly or indirectly through creating a supportive atmosphere amongst the team members.

Finally, positive feedback involves coaching behaviors that recognize and award players' performance, effort, and attitude where positive reinforcement is given by the coach to the player during practice and games (Chelladurai & Saleh, 1980). Positive feedback is an important component in athletic competitions and practices. Athletic competitions are zero-sum games where only one side wins; maximum effort or performance can be exerted without necessarily winning and in team sports especially individual player contributions can go unnoticed and unrecognized. It is important for the coach to express appreciation and to compliment the athletes for their performance and contribution. Therefore, the positive feedback (PF) subscale assesses a coach's ability to

recognize and express appreciation of team members' efforts and to complement their performances. Positive feedbacl from the coach is crucial in maintaining the motivational level of the athletes. Renshaw, Oldham, and Bawden (2012) found that it was one of the motivational strategies that predicted leader effectiveness. Although SS and PF are both aspects of the traditional dimension of consideration, there is a distinction. SS behavior is given outside of the sports context and is not contingent upon individual performance. One the other hand, PF is only motivational when dependent on performance (Danielson et al., 1975).

Different versions of the LSS have been used in a wide variety of contexts to measure leadership variables in sports; however, Chelladurai (1990) identified three main purposes. The LSS has been used to study athletes' preference for specific leader behaviors (Chelladurai, 1984; Chelladurai et al., 1988; Chelladurai & Carron, 1981; 1983; Chelladurai & Saleh, 1980; Hastie, 1993; 1995; Horne & Carron, 1985; Sherman et al., 2000). Preferred leader behavior refers to actual behaviors favored by athletes. This instrument has also been used to measure athletes' perceptions of coaches' behavior (Chelladurai et al., 1988; Chelladurai & Saleh, 1980; Horne & Carron, 1985) and coaches' perceptions of their own behavior (Bennett & Maneval, 1998; Brooks et al., 2000; Dwyer & Fischer, 1988; Horne & Carron, 1985; Salminen & Luikkonen, 1994). Athletes' perceptions of leader behavior are similar to required leader behavior. Coaches' perception of themselves relates to their own leadership behavior.

The psychometric qualities of the LSS have been tested using reliability estimates, and internal consistency is in the range of moderate to high for TI, DB, SS, and PF. Cronbach's alpha statistics for the LSS subscales are (from lowest to highest): .64 (AB),

.75 (SS), .83 (DB), .84 (PF), and .90 (TI). The lowest reliability estimates are for AB, although this finding has been inconsistent across studies. Higher internal consistency reliability has been obtained for the perception version when compared to the preference version across multiple studies, although acceptable reliability has been found for both versions (Chelladurai & Riemer, 1998 as cited in Fletcher & Roberts, 2013).

In summary, the LSS is used to analyze the effectiveness of coaching behavior. It includes a single direct task factor (TI), two decision-style factors (DB and AB), and two motivational factors (SS and PF) and together these five factors serve as a useful tool that is consistent with the path-goal theory of leadership (House & Dessler, 1974), and that has distinct advantages over other proposed factor structures (e.g., Danielson et al., 1975). These dimensions represent five conceptually distinct, relatively reliable categories of coaching behavior.

Demographic Differences

Various types of research have been conducted using the LSS and demographic factors such as nationality and gender. For example, one study (Høigaard et al., 2008) found that Norwegian soccer players (n = 88) had the highest level of appreciation for training and instructing behavior, democratic style, and positive feedback from coaches. This was true regardless of whether the season was successful, but more social support was desired in unsuccessful seasons. It is also interesting to note that perceived social support may be related to satisfaction, so players who win may feel more social support than others that those who do not (Høigaard et al., 2008).

Research has also shown that male athletes prefer technical instruction and autocratic decision making while females desire coaches who exhibit democratic and

participatory leadership and provide high levels of positive feedback (Beam et al., 2004; Lam et al., 2007; Martin et al., 1999; Riemer & Toon, 2001; Sherman et al., 2000; Turman, 2003; Weinberg & Gould, 2007). This suggests that coaches should adapt leadership behaviors based on gender. Yet despite considerable amounts of research on the MML and gender, results have conflicted, and the factor of race has been largely ignored. As such, research on leadership in sports should examine the MML in today's athletic culture in relation to gender differences.

Review of Related Research

Following is a review of research relevant to this study. The topics discussed include coaching environments and methodologies, coaching pedagogy, player development and retention, game sense theory, and leadership in coaching.

Coaching Environments

According to Duda and Belaguer (2007), a coach can create two types of environments: task-involving or ego-involving. The coach that creates a task-involving environment places an emphasis on effort, personal improvement, and cooperation. In this environment, the players feel they have an important role in the team. In contrast, an ego-involving environment is when the coach focuses attention only on the best players, creates rivalry between players, and punishes poor performance (Newton et al., 2000). Scholars have found that a task-involving climate is positively correlated with intrinsic motivation (Duda & Beleaguer, 2007).

Duda and Belaguer (2007) have suggested that creating a task-involving climate has positive effects on athletes. In contrast, creating an ego-involving climate creates negative sports experiences. Duda and Belaguer (2007) concluded that coaches who

focused more on instruction and the well-being of the athletes had teams and players with higher levels of task motivation. A task motivational climate enhances the athletes' overall experience, including enjoyment, performance, and outcomes. It has been recognized that the social context created by the coach is a significant variable in athletes' motivation (Ryan & Deci, 1985). In the context of sports, the behavior of the coach is major factor that influences athletes' motivation (Duda & Balaguer, 2007; Vallerand & Losier, 1999). According to Mageau and Vallerand (2003), coaching behaviors that convey high but realistic expectations, display empathy, consider the player's needs, provide technical and tactical tips how to improve performance, and use a considerate tone of voice produce the most effective environments.

Coaching Methodologies

In 1998, after losing the World Cup, the Belgian Soccer Association sought to revamp youth coaching methodologies and research on youth soccer was commissioned from the University of Louvain (James, 2018). Based on the observation of 1,500 youth games of varying age groups, it was determined that players under the age of nine touched the ball only twice within 30 minutes (James, 2018). The researchers concluded that player development was underemphasized, and while too much emphasis was placed on winning. The evidence obtained from this study resulted in the recommendation that small-sided games are the best means of encouraging children to practice (James, 2018). This evidence was then used as support for the need to make substantial changes to youth coaching methodologies in Belgium.

In a similar effort to improve coaching methodologies, Bruyninckx (2009) analyzed training sessions and incorporated learning theory. Bruyninckx, a noted

researcher from Belgium, is at the forefront of researching neuroscience and learning methodologies in relation to coaching. Bruyninckx was one of the first to look at how the brain functions in relation to soccer coaching. His research combines soccer with general cognitive principles, and he calls for a greater focus on fun through small-sided games for kid's athletic development and brain training. His Brain Centered Learning in Soccer method also addresses the social impact of soccer in relation to humanism and constructivist learning theory. As Bruyninckx (2009) has asserted, a coach who learns effective teaching methodologies can better prepare lessons to improve player development and build players' self-esteem (Bruyninckx, 2009).

Bruyninckx (2009) also suggests that an effective coaching environment has creative variety, which leads to curiosity and learning. He also explains that emotions should be considered, along with the elements of curiosity, interest, fun, and motivation. These are the necessary conditions for learning; creating a positive environment full of variety helps teach and inspires students (Bruyninckx, 2009). Incorporating various learning theories into research on the sport of soccer makes Bruyninckx's research unique. He has produced unique soccer-specific drills to encourage creativity while improving awareness, technique, and tactical understanding of the game. For years, he has been looking for solutions to integrate the mind and body and better understand players' individual differences (Bruyninckx, 2009).

Other research in coaching has been conducted in relation to the Manchester United Football Club (MUFC). These coaches are responsible implementing "the Scheme," a pilot program that is implemented during daily practices with youth soccer players and uses player-centered values (Fenoglio, 2003). During competitive matches,

over coaching is discouraged, such as the raising of voices or disciplining of players. Rather, coaches are encouraged to provide players with consistent praise and encouragement, especially for extra effort and creative decision-making (taking chances). This approach differs from the traditional focus on the structured, process-oriented development of technique and skills (Fenoglio, 2003).

For the MUFC youth team members, skills homework is assigned (Fenoglio, 2003). During both practices and games, players are encouraged to make their own decisions, take initiative, and demonstrate their skills (Fenoglio, 2003). The MUFC belief is that players at a young age, require time and encouragement to build skills that will be useful in the future. Continually, MUFC coaches have been open in requesting evaluations, including written feedback from coaches, players, parents, and officials (Fenoglio, 2003). Research is also conducted through Manchester Metropolitan University where quantitative and qualitative data is collected (Fenoglio, 2003).

In concert with the work of Bruyninckx (2009), Light and Harvey (2015) have emphasized the importance of making the athlete the center of the learning process and of repositioning the coach's role to that of a facilitator by allowing the players to act as coaches at times to help motivate and encourage learning (Light & Harvey, 2015). This method challenges traditional practices. Light and Harvey (2015) highlighted four core pedagogical features of a games-based approach to coaching. These approaches include designing and managing a physical learning environment, emphasizing questioning to generate dialogue, providing opportunities for reflection, and developing a supportive social environment (Light & Harvey, 2015).

Coaching Pedagogy

Also, in alignment with Bruyninckx's methods, Kelly's (2017) research examined how coaching pedagogy facilitates player development. Utilizing data from 20 research workshops and 350 participants from teams in the UK and Ireland, Kelly (2016). The study found that player learning is enhanced when coaches understand the theoretical frameworks related to the players' learning processes (Kelly, 2016). Research in this area can be used to inspire coaches and promote update to current coaching and management practices. In the player-centric approach to player development, emphasis is placed on the important role that feedback plays in the learning process, and how the coach-player relationship influences players' motivation and continued participation (Martindale, 2013; as cited in Kelly, 2016). Positive interactions during coaching in the form of instruction and encouragement result in positive and improvements in players' enjoyment, self-esteem, and persistence (Kelly, 2016).

Player Retention

In a related study on reasons for sports participation, continuation, and withdrawal in youth soccer, Keathley et al. (2013) found that there were frequent complaints about coaching competence and more than half (55%) of participants described receiving pressure about performance from their coaches. The goal of this research was to investigate reasons for sport continuation and withdrawal in male and female athletes playing high-level competitive soccer. The qualitative study interviewed 22 youth (mean age=16) who had been playing soccer since approximately age 5. The players responded to questions about their reasons for leaving the sport and discussed perceived benefits and challenges of participation. Parents of participating athletes also were interviewed. The analyses indicated that athletes perceived the time demands of

competitive soccer to be a primary reason for discontinuation (Keathley, et al. 2013). Based on the findings of this study, three strategies for improving retention among soccer players were discussed: recruitment of coaches knowledgeable about adolescent needs, better attention to team interpersonal dynamics, and reevaluation of the intense time and pressure demands on high-level youth athletes (Keathley, et al. 2013). In contrast, three of the most often cited benefits included social opportunities, exercise, and fun. Clearly, a coach plays a vital role in creating an environment that shapes the experiences of youth soccer players and educating coaches about the importance of team relationships may result in less attrition in soccer players (Keathley, et al. 2013). For example, social time should not be perceived as a distraction away from training; rather, it can lead to opportunities for team-building activities and coaches should consider setting time aside away from practice for this purpose (Keathley et al., 2013).

This does not however appear to be the norm in youth soccer. Foster (2010) suggests that youth soccer games and practices are often actually a negative experience for the players. After all, traditional coaching methods tend to emphasize continual instruction (Wein 2004, 2007; as cited in Pill, 2012). Practice sessions are often rigid and structured, following a technical sequence from imparting simple to more complex tasks without variations that mimic actual games (Webb & Thompson, 2000 as cited by Pill, 2012). This illustrates the need for more research utilizing a measure such as the LSS, which explores coaching dimensions specifically related to democratic behavior and positive feedback.

Game Sense Theory

In addition, research is needed that includes the framework of game sense, and its emphasis on small-sided games, and coaching strategies that encourage inquiry as a means of fostering learning (Webb & Pearson, 2008). Game sense is similar to the Bruynincz method in so far as it is a non-traditional approach to coaching. It is based on a pedagogical approach and was developed in in the 1990's, in collaboration with Australian coaches and the Australian sports commission (Harvey, 2009). Game-centered pedagogy is related to constructivist learning theory, which asserts that individuals gain understanding through exploration and discovery and player learning is enhanced through social interaction and questioning (Harvey, 2009). Again, game sense strategies rely on small-sided games, typically three versus three, or less, because they provide increased opportunity for touching the ball and therefore more opportunities for successful player development. Coaches who use game sense are facilitators who pose open-ended questions to generate discussion (Harvey, 2009).

Player Development

Scholars have argued that coaches play a critical role in youth sport participants' psychological development and in shaping the character of their players. In sports, having a sense of relatedness means feeling connected to a teammate or coach (Deci & Ryan, 1985). Horn (2002) ascertained that coaches can positively impact athletic performance while having a positive impact on the psychological and emotional well-being of athletes. The relationship between the athlete and the coach is an important variable affecting sport outcomes (Serpa, 1999). Olympiou et al. (2008) asserted that the player's perception of his or her relationship with the coach has motivational significance. If the

relationship between the coach and athlete is congruent, successful outcomes can be accomplished. Kenow and Williams (1999) suggested that coaches should create positive interactions with the players, which will allow the coach to gain insight into the thoughts and emotions of their athletes.

Mann (2009) asserts that coach effectiveness should be measured based on personal development, not on performance results. Côté and Gilbert (2009) referenced specific coaching behaviors that led to positive youth development. These coaching behaviors included treating athletes respectfully, setting clear expectations, serving as a role model, providing individualized feedback, being flexible, and making practice fun (Côté & Gilbert, 2009). Mann (2009) also asserts that athlete burnout is related to perception of performance, and poor results lead to less enjoyment and feelings of reduced accomplishment.

Additionally, Mann (2009) found that gender may be a factor in how success and performance are perceived; women prefer leaders who exhibit a democratic and inclusive style (Mann, 2009). Female athletes also benefit by being coached by leaders who exhibit these behaviors (Beam et al., 2004; Mann, 2009). In Mann's (2009) study involving 1100 college students, the author concluded that women see good leadership as more collaborative, inclusive, and positive than men. Satisfaction levels and perceptions of performance have been related to levels of satisfaction. In Mann's (2009) research involving 44 female collegiate athletes, the author gathered data on athlete burnout, coaching behavior, leadership, and success. Mann (2009) concluded that perceptions of successful performance enhance motivation, continued participation, and enjoyment of sports.

Leadership in Coaching

As leaders, coaches also have a significant influence on athletes' motivational and performance outcomes (Chelladurai & Saleh, 1980). Researchers have noted the importance of leadership in coaches and that coaching behaviors are critical in developing numerous psychosocial characteristics in athletes (Chelladurai & Saleh, 1980). Mann (2009) also agreed, noting that some measures of coach effectiveness are not based upon athletes' physical performances, but rather, their psychosocial well-being and growth. Although the topic lacks focused research, many of the studies that do exist support the idea that coaches, as leaders, have a highly significant role in shaping how their teams perform and improve, as well as the experiences of team members.

Chelladurai and Saleh (1980) have argued that athletic leadership needs to be studied separately from other types of leadership, due to the unique number of tasks completed by coaches. Chelladurai (1990) also outlined the complicated and specific nature of athletic leadership as well as the need for further research on the complex relationships in sports. In comparison to other leaders, coaches spend a comparatively greater amount of time preparing for a very small amount of time in competition (Loughead et al., 2006; Todd & Kent, 2004).

Chelladurai and Saleh (1980) indicated that numerous different characteristics contribute to coaching leadership and how athletes perceive that leadership. These characteristics include leadership style, social support, gender, task dependence, task variability, and personality traits. The research that formed the basis of the LSS included the study of coaching behaviors as they related to players' preferences, the behavior of

the coach, and the coach's perceptions (Chelladurai & Saleh, 1980). This extensive research resulted in exploring preferred characteristics of coaches regarding leadership behavior.

Cranmer et al. (2017) explored different types of positive messaging that former high school athletes found influential and memorable. This study examined 216 athletes' reports of social support received from head coaches and satisfaction with their coaches and sport experiences (Cranmer & Sollitto, 2017). Results indicated that combinations of social support from head coaches predicted athletes' satisfaction sport experiences. In this research, athletes recalled specific types of messages, including those of support that contained information on how to play, the techniques needed to play effectively, and how to relate to others. In addition, the athletes reported that effective communication involved positive messaging that focused on abilities, recognized hard work, built self-esteem, and reinforced relationships. The athletes' important messaging after poor performance included emotional support from the coach (Cranmer et al., 2017). Similarly, Kassing and Pappas (2007) indicated players reported positive and memorable messages from coaches, including life lessons and those pertaining to work ethic, challenges, motivation, sacrifice, reflection, responsibility, and instruction.

Summary

Athletic coaches in general have a major role in fostering players' motivation, performance, and development, in addition, coaches have considerable influence on team cohesion (Chelladurai & Saleh, 1980; Gupta et al., 2010). A review of the literature on coaching in youth sports indicates that there is a correlation between educational practice and theories, coaching methodologies, and outcomes. Youth soccer coaches have the

ability to go beyond traditional technical practice methods and create a learning environment that cultivates an appreciation and deeper understanding of the intricacies of a game (Pill, 2012). This is likely a key factor in promoting positive experiences and reducing players withdrawal from the sport of youth soccer (Keathley et al., 2013). Understanding such factors was the goal of a qualitative research conducted on athletes in high-level competitive soccer leagues. Keathley et al. (2013) found that educating coaches about the importance of team relationships and understanding time demand and pressure, may result in less attrition among soccer players (Keathley et al., 2013).

Despite these studies, not enough research on coaching education have included a learning theory perspective. The result is that too many coaches are still relying on traditional methods characterized by repetitive drills, and the need for the coach to maintain control and teach technical content in a linear, organized, fashion (Bennett & Culpan, 2014). The typical coaching curriculum is restrictive and implies that the coach's role is merely one of instructing and modelling a set of skills. Rather, the coach's role should be to not only educate, but also to enhance players' development on multiple levels. The coaching process must be considered as more than just the instruction of physical and technical skills. Coaching is, in fact, a complex, multifaceted, socially significant, and engaging process (Bennett & Culpan, 2014). There is a need for sport coaching to draw on the body of research that informs educational practices. This research will allow the coach to realize that athletics involve more than just physical performance. The research will help guide the coach into looking beyond coach-centered typical training sessions and drills (Bennett & Culpan, 2014).

Despite the acknowledgement that learner perceptions about involvement and enjoyment in games are important, there is a dearth of research investigating this aspect of game-centered pedagogies, and where it has occurred, it has been limited to physical educational settings (Allison & Thorpe, 1997; Brooker et al., 2000; Harvey et al., 2009; MacPhail et al., 2008; Tjeerdsma et al., 1996). Coaching behaviors influence the overall practice environment, and more research is need on the impact coaches have on player enjoyment, retention, and skill development. This study was designed to provide knowledge that coaches can use to develop more effective practice plans and improve outcomes.

For this study, the LSS was utilized to assess the impact coaching behaviors on factors related to youth soccer. The LSS relies on the theoretical framework provided by the MML and evaluates hypothesized relationships to leadership behaviors Chelladurai & Saleh, 1980). Although the MML model was developed nearly 30 years ago, and research outside of sports contexts indicates that leadership preferences have changed over time, it remains one of the most widely accepted models for sport leadership.

CHAPTER 3
Methods and Procedures

The purpose of this study was to research and examine the relationship between perceived coaching behaviors and the enjoyment and retention of youth soccer players. This chapter presents a description of the research process and is divided into sections addressing the research design, sampling, data collection procedures, and data analysis.

Previous researchers have demonstrated that players may prefer certain coaching leadership styles and methods. Retention rates are a growing concern in youth sports. Coaching styles can have an impact on player experiences and outcomes. This research will help us gain a deeper understanding of what motivates youth soccer players and the factors connected with their enjoyment and retention.

To examine relationships between variables in each of the research questions, I used a quantitative approach. I measured perceptions of coach leadership using the survey described later in this section. Burns (2000) indicated the quantitative approach to research allows for definitions and comparison of variables. In this study, I used a multifaceted survey. Surveys are frequently used as an instrument for conducting research and obtaining information about opinions, perceptions, and attitudes (Glasow, 2005). Because the goal of this study was to compare specific types of leadership behaviors, it was important to provide comparable quantities to the variables.

I created the Youth Soccer Survey (YSS) for this research study and shared with a convenience sample of youth soccer players from the New York metropolitan area. The YSS included demographic questions and the shortened version of the LSS. The survey also asked questions specific to the dependent variables, including the players' enjoyment of the games, the challenging nature of practices, and projected retention rates. Using the

questionnaire as a research design method enabled broader outreach, assured confidentiality, and was effective in providing substantial information efficiently.

Research Questions and Hypotheses

The first research question was: How can practices be made more enjoyable for the players, while remaining challenging enough to improve player development? I hypothesized that athletes working with a coach using particular coaching behaviors would develop an enjoyment and be challenged by the game to a greater extent. I predicted that different coaching styles would lead to different experiences and outcomes. I used factor analysis to determine the relationship between dependent variables and the LSS coaching behavior constructs of training and instruction, autocratic behavior, democratic behavior, social support, and positive feedback. Factor analysis was also used to determine if there were significant differences in LSS responses based on variables and the LSS subscales. Construct validity was determined using Factor Analysis. Factor loadings for each item are equal or greater than .40.

For Research Question one, I screened the data for univariate outliers, identified unanswered questions, and coded them as missing data. The minimum amount of data for factor analysis was satisfied, with a final sample size of 212 after deletions, providing a ratio of over 20 cases per variable. Initially, I examined the factorability of the five LSS subscale items using several criteria for the factorability of a correlation. First, I observed that 16 of the five items correlated with at least one other item, which suggested factorability. Second, the Kaiser-Meyer-Olkin measure of sampling adequacy was above the commonly recommended value of .6. I tabulated Cronbach's alpha scores measuring internal consistency and reliability. Factor analysis was deemed to be suitable with all

five items. For the dependent variable (retention rates in youth soccer), I conducted a factor analysis comparing relationships between the LSS subscales (training and instruction, democratic behavior, autocratic behavior, social support, and positive feedback). The answers to the survey questionnaires were grouped based on the five constructs.

The second research question asked: Can innovative coaching methodologies improve retention rates in youth soccer? I hypothesized that athletes with a coach who uses certain coaching behaviors will be more likely keep playing. I predicted that athletes with different projections for how long they intended to play, would report different types of perceived leadership. The relationships between the retention variables and LSS subscales were determined using regression and factor analyses.

For Research Question two, I analyzed the data from the survey using the Software Statistical Package for the Social Science (SPSS) 16.0. Demographic variables, Cronbach's analysis, reliability analysis (internal consistency), and factor analysis were used to analyze the data. I used Cronbach's alpha to establish reliability with 0.60 considered acceptable for exploratory purposes, 0.70 considered adequate for confirmatory purposes, and 0.80 considered good for confirmatory purposes. Factor analysis was applied to research questions one and two. The dependent variables included enjoyment of the game, the challenging nature of practice, and retention. The independent variables included the five subscales of LSS along with gender, age, and whether the athlete's parent played the sport (see Table 1).

Table 1

Survey/Instrument Items Used to Address Hypotheses

Research Question	Survey/Instrument	Items
How can practices be made more enjoyable for the players while remaining challenging enough to improve player development?	Demographic questions in survey, LSS	Questions on enjoyment of the game and challenging practices, LSS subscales (training and instruction, democratic behaviors, autocratic behaviors, positive feedback, social support)
Can innovative coaching methodologies improve retention rates in youth soccer?	Demographic questions in survey, LSS	3 items on anticipated participation (next year, in 3–5 years, and in college), LSS subscales

Reliability and Validity

Studies have shown that the reliability and validity of LSS are acceptable for the five leadership dimensions of the LSS (Brooks et al., 2000; Chelladurai & Carron, 1981; Chelladurai et al., 1988; Chelladurai & Saleh, 1980; Dwyer & Fischer, 1988; Horne & Carron, 1985; Hastie, 1993; Hastie, 1995; Salminen & Luikkonen, 1994; Sherman et al., 2000). In addition, results of a study on the 25-item, five-factor model reported that internal consistency estimates for the factors were satisfactory (Chiu et al., 2016). It has also been determined that the LSS is valid as measured by replication and factor analysis (Chelladurai & Saleh, 1980). The coefficients for the internal consistency of all subscales exceeded .70, a value often accepted as an adequate reliability benchmark (Nunnally & Bernstein, 1994) For test-retest reliability of the LSS, 53 physical education majors responded to a revised questionnaire following a 4-week interval. Composite factor

scores (i.e., sums of selected items for each factor) were used to calculate reliability coefficients. The reliability estimates were adequate, ranging from .71 (Social Support) to .82 (Democratic Behavior) (Chelladurai & Saleh, 1980).

I chose to use the LSS (Chelladurai & Saleh, 1980) because the tool was designed to examine coaches' actual behavior, the coaching style preferred by athletes, and the coaching style required by specific sports (Chelladurai & Saleh, 1978, 1993, as cited by Wood, 2008). I used the shortened version of LSS to improve factorial reliability and reduce the potential impact of participant fatigue due to time constraints (Chiu et al., 2016). The shortened version of LSS consisted of 25 items, five factors with five items per factor. The phrase, "My Coach…." preceded each item. The study had five response categories: always, often, occasionally, seldom, and never. The factors include training and instruction, democratic behavior, autocratic behavior, and positive feedback

Researchers have showed that the reliability and validity of LSS were acceptable for the five leadership dimensions of the LSS (Brooks et al., 2000; Chelladurai & Carron, 1981; Chelladurai et al., 1988; Chelladurai & Saleh, 1980; Dwyer & Fischer, 1988; Sherman, Fuller, & Speed, 2000; Hastie, 1993, 1995; Horne & Carron, 1985; Salminen & Luikkonen, 1994). In addition, results of a study on the 25-item, five-factor model indicated that internal consistency estimates for the factors were satisfactory (Chiu et al., 2016).

To assess the validity and reliability of the LSS, Chelladurai and Saleh (1978) conducted two studies representing two stages of development (Wood, 2008). The first stage resulted in the development of the five dimensions reported as most meaningful, including training, autocratic, democratic, social support, and rewarding behaviors

(Chelladurai & Saleh,1978, as cited in Wood, 2008). During the first stage, none of the items in the original pool referred to the coaching behavior of teaching skills and strategies; thus, seven items reflecting this behavior were added in the second stage. In addition, six more social support items were included to capture the leader's interpersonal effectiveness (Chelladurai & Saleh, 1978, as cited in Wood, 2008). In this study, the internal consistency (Cronbach's alpha) for the five subscales ranged from .70 (autocratic behavior) to .92 (training and instruction).

The Sample and Population

Sample

This research project used a purposeful sampling methodology of local youth soccer players drawn mainly from the New York metropolitan area. The rationale for this sampling method was that these participants were accessible, local, and represented a diverse set of players with various skill levels. The players were on teams that represented a diverse competitive level from recreation to elite national level.

The target population was local youth soccer players. The process included send formal letters explaining the study via email to local sporting directors, directors of coaching, and coaches to recruit youth soccer participants. The sample population covered a cross section of youth soccer organizations representing diversity in level of competition, as well as technical and tactical skills. The survey was also sent to local high school and recreational players. The primary youth sports groups that participated in the survey included the Long Island Soccer Club (LISC), New York Hota Bavarians (NYHB), Floral Park Indians (FPI), New York City Football Club (NYCFC), Clarkstown

Soccer Club (CSC), World Class Football Club (WCFB), Floral Park Memorial High School (FPMHS), and Albertus Magnus High School (AMHS).

I created an appealing survey design to encourage participation from youth soccer players. The survey had a colorful visual graphic in the background; in addition, the survey was concise to limit the time needed to complete it. These strategies helped accomplish this goal, as 270 respondents participated in this study, including 165 male participants and 102 female participants (see Table 2). The sample represented a diverse range of skill levels, with 30% of respondents categorizing themselves as playing on a team classified as elite academy (top 10% of all teams in the country), and 28% categorizing themselves as recreational, high school, or travel team members.

Table 2

Demographic Characteristics

Category	N	%
Age Level		
9–12	63	23
13–15	128	47
16–19	51	19
20<	25	9
Gender		
Male	165	61
Female	102	38
Parents Played Soccer		
Yes	151	56
No	116	43
Team Level		
Recreational	5	2
High School	13	5
Travel	56	21
Premier	93	34
Elite (National)	82	30
Other	17	6
Years Playing Soccer		
3–5	30	11
6–7	35	13
8–9	52	19

Category	N	%
10–11	68	25
12–14	45	17
15<	25	9

Instruments

The instrument used to collect data was a survey created in Microsoft Forms. I used questions pertaining to the dependent variables, demographic questions, and the 25-item, shortened version of LSS to address the two research questions. The variables used for data analyses included retention, the challenging nature of practice, players' enjoyment, and the five subscales of LSS. My goal was to assess the athletes' perceptions of their coaches' leadership style and behaviors. I chose the LSS (Chelladurai & Saleh, 1980) because it was designed to examine various aspects of preferred leader behavior.

Participants completed a 38-question survey that included demographic questions and a shortened version of the LSS (Chelladurai & Saleh, 1980). This shortened version consisted of 25 questions. Included were two consent questions that required participants to respond with a "yes" to proceed. Demographic survey questions were also included to collect nominal information about the participants. The survey collected data regarding gender, age, number of years participating in soccer, estimated skill level/category of the team, and whether one of the athlete's parents played soccer. The category options included recreational, high school, travel, premier academy, elite academy (among the top 10% of the teams in the country), and other. In addition, there were questions addressing the dependent variables (enjoyment, retention, and the challenging nature of practice). One question gauged the player's enjoyment level of practice using a 5-point Likert scale with options ranging from 1 (*strongly agree*) to 5 (*strongly disagree*).

Another question gauged athletes' perceptions of the challenging nature of practice using a 5-point Likert scale, with options ranging from 1 (*strongly agree*) to 5 (*strongly disagree*). There were also three questions that captured retention. These three questions were tabulated on a 5-point Likert scale with response options ranging from 1 (*extremely likely*) to 5 (*extremely unlikely*). The three questions asked respondents if they planned on playing soccer next year, in the next three to five years, and in college. For this study, the 25-item shortened version of LSS was used. Responses were rated on a 5-point Likert scale ranging from 1 (*never*) to 5 (*always*). For this study, the internal consistency (Cronbach's alpha) for the five subscales ranged from .70 (autocratic behavior) to .92 (training and instruction).

Procedures for Collecting Data

For this research, the method of purposeful sampling was used. After obtaining approval from St. John University's Institutional Review Board (IRB), I sent invitations to participate in the study, describing the research project, by email to local sporting directors and coaches. The goal was to obtain a diverse subset of youth soccer players from teams at various skill and ability levels. In the email, which was presented as a formal letter, I asked the recipients to consider sharing the survey with their respective teams. In the letter, I also clearly explained the purpose of the research study and how I would maintain confidentiality of the participants. Each potential participant received a consent form along with the invitation for parents to sign. In the consent form, anonymity was ensured. No personally identification was gathered. Survey participants were recruited mainly through sporting directors and coaches at local youth soccer clubs. Team administrators and coaches distributed an online survey hosted by Microsoft Forms.

The data collection technique in this study involved creating the YSS using Microsoft Forms. I uploaded the YSS questions into a Forms document that could be shared in an email including a link and text. The Microsoft Form was efficient and professional in appearance. I designed the YSS to include a background graphic showing a professional soccer stadium on a picturesque mountain. On the field, two teams were shown warming up with visible grids and cones reflective of the equipment used in a practice session. The background picture was shaded with color so that the text from the survey was clearly legible. The picture was slightly faded so one could see the text; however, the background was colorful. I intended the YSS to be aesthetically appealing and look professional, and he received positive feedback on the design and format.

I created a cover letter to email to both the sporting directors and the coaches of various teams. The letter explained the research study and asked recipients to consider assisting with the research project. The cover letter was embedded in the Microsoft Forms document for ease of understanding and use. I emailed sporting directors and coaches and asked them to help recruit players on my behalf. I provided the directors and coaches with a letter explaining the research study. Follow up contact with coaches assisted in increasing participation in this voluntary study. I reminded coaches to ask their athletes to participate via follow up emails and text messages.

Participants were self-selected through purposeful sampling in order to diversify the participant pool with players from various team at various different skill levels. The respondents were all anonymous, and the survey answers were coded and automatically tabulated via the Microsoft Forms platform. Participants were asked to complete a 38-question survey that included demographic questions, which included the 25-item

shortened version of the LSS (Chelladurai & Saleh, 1980). Two of the questions were basic consent and proceed questions, consisting of "yes" or "no" answers. Five demographic questions gathered participants' age, gender, number of years playing soccer, whether a parent played soccer, the categorical level of their respective team, and the name of their club. The category levels ranged from recreational to elite academy, described as a team ranked in the top 10% of all teams in the country. Additional questions gauged the players' perception of practice, both in terms of their enjoyment and how much they were challenged. There were also three questions gauging retention, including if the participant planned on playing next year, in 3 to 5 years, and in college. The participants were asked to rate these items on a 5-point Likert scale. In addition, the survey recorded participants' demographic characteristics of age, gender, whether parents played soccer, the number of years played, and level of competition. Level of competition was coded at recreational, high school, travel, premier academy, elite academy, or other.

I contacted 34 coaches and directors. The twenty-five coaches were acquaintances made through years of playing and coaching soccer. Twenty-three coaches responded, suggesting they would send the email to their respective players. In addition, I sent text messages containing the link to the Microsoft Forms survey to 13 local coaches. In total,

After approximately two weeks, I emailed them again to remind them to consider participating in the survey. The Microsoft Forms platform was functional throughout the process and compiled all responses in real time. 269 participants completed part or all of the survey. LISC sent the email to the 422 players, and the survey received over 50 responses from this club for a 12% return rate. This return rate was most likely higher than in other groups, as the club sent a thoughtful cover letter emphasizing the

importance of the study and encouraging participation. The New York City Football Club forwarded the document to its 264 players. Eighteen participants identified themselves as playing for the NYCFC for a return rate of 8%.

Limitations

Although the Microsoft Forms link was effective, email correspondence is not always read. In future studies, a more aggressive approach to compiling data may lead to larger participant pool. One option would be to travel to clubs and speak directly to coaches and players, explaining the study and then sharing the questionnaire.

Pilot Test

I conducted a pilot test to determine whether there were flaws or limitations with the instructions and questions. The pilot test also was used to gauge the efficiency and functionality of the automated processing provided through Microsoft Forms. I sent the pilot test to five volunteers. The pilot test helped determine if participants could clearly understand the instrument. After the pilot test was completed, I refined the survey and updated the instructions. I considered comments from the five participants. As a result, I embedded the formal letter in the Microsoft Forms document for better access and revised the instructions for greater clarity. The pilot test also helped to verify that Microsoft Forms worked effectively, and that the appearance of the survey appeared professional on various platforms. Based on the pilot study, I concluded that the participants would be able to understand and navigate the survey.

Ethical Considerations

I adhered to ethical considerations and submitted all necessary applications to the IRB. I used multiple measures to ensure that participants fully understood the nature of

the study and the fact that the participation was voluntary. I sent the email with a letter of permission to the youth players' parents for consent. The letter of participation was included in the Microsoft Forms *YSS*. The letter indicated that the study complied with the requirements for protection of human subjects at St. John's University. IRB approved the survey and deemed it of minimal risk. I included statements ensuring confidentiality and stating that participants could withdraw from the study at any time.

Each participant included in the analysis first read and provided consent to participate in the study, with the understanding that the study was completely voluntary, and they could stop at any time form participating in the study. The consent form included information about potential drawbacks and benefits to participation. There were no concerns for the safety of participants. The data for this study were collected anonymously online. All responses were anonymous, and no information was collected that could identify any individual in this survey. I safely stored the data online in a password-protected format, where only I and my mentor had access to the data.

Summary

The main objective of this study was to determine relationships between athletes' perceptions of coaches' behavior, player enjoyment, and retention in youth soccer. Comparing coaching behaviors required evaluating the five subscales to note similarities and differences between coaching behaviors and outcomes. The five coaching methods evaluated included training and instructions, democratic, autocratic, social support, and positive feedback. I also evaluated athletes' overall enjoyment and retention. The relationships between coaching methods in the survey results aided in further

understanding how perceived coaching methods impact an athlete's enjoyment and retention.

CHAPTER 4
Results

This chapter provides an overview of the data, based on responses from participating soccer players to the Youth Soccer Survey (YSS) and the shortened Leadership Scale for Sport (LSS). The purpose of this study was to investigate the influence of coaches' behavioral styles on athletes' enjoyment of the game, and ultimately on the retention of athletes. Surveys are a frequently used methodology for gathering data for applied research, especially for sociodemographic research (Singh, 2017). Following the data collection for this study, a series of steps was taken to evaluate the results of the questionnaire regarding validity, reliability, and potential measurement error, which not only tested the quality of the data but also provided valuable information about the potential usefulness of and applicability of the results (Singh, 2017).

Descriptive Statistics

Included in this chapter is a summary of descriptive statistics for the demographic variables and for each questionnaire item (see Table 3), In addition, exploratory data analysis was conducted to assess normality of the measures. Finally, a reliability analysis and confirmatory factor analysis was conducted for each measure, and the results of the regression analysis related to each research question are presented.

Table 3

Descriptive Statistics of Variables

Variable	*N*	*M*	*SD*
Age	267	*	*
Gender	267	*	*
Did your parents play the sport of soccer?	267	*	*
Do you find practices fun and enjoyable	267	1.53	0.71
Do you find the practices challenging	190	2.31	0.81
Lets his/her athletes share in decision making	267	2.34	1.06

Variable	*N*	*M*	*SD*
Compliments athletes for good performance in front of others	255	1.79	0.81
Keeps to his/herself	267	3.49	1.08
Gives credit when it is due	267	1.67	0.81
Encourages close and informal relationships with the athlete	267	2.05	1.09
Expresses appreciation when an athlete performs well	267	1.62	0.82
Encourages athlete to confide in him/her	190	2.33	1.20
Speaks in a manner not to be questioned	267	2.65	1.23
Lets the group set their own goals	255	2.30	1.09
Sees to it that practice efforts are coordinated	248	1.58	0.73
Looks out for the personal welfare of the athletes	267	1.56	0.85
Lets the athletes try their own way even if they make mistakes	267	2.39	0.94
Encourages athletes to make suggestions on conducting practices	267	2.93	1.21
Pays special attention to correcting athletes' mistakes	190	1.80	0.86
Refuses to compromise on a point	267	3.54	1.14
Specifies in detail what is expected of each athlete	255	1.95	0.98
Sees to it that every athlete is working to his capacity	248	1.62	0.75
Asks for the opinions of athletes on strategies for specific competition	246	2.81	1.15
Works relatively independently of athletes	267	3.10	1.02
Helps athletes with their personal problems	267	3.00	1.27
Tells an athlete when he/she does a particularly good job.	190	1.72	0.82
Does not explain his/her action	267	3.69	1.09
Explains to each athlete technique and tactics of the sport	255	1.58	0.85
Helps members of the group settle their conflict	248	2.37	1.12
Sees that an athlete is rewarded for good performance	246	2.09	1.09
How many years have you been playing the sport of soccer?	265	10.15	5.16
Do you plan on playing next season?	267	1.40	1.02
Do you envision yourself playing in 3 years?	190	1.69	1.12
Do you envision playing in college, or you did play in college?	267	1.85	1.14
What best defines the category level of your team?	255	*	*
What club are you playing for, or did you play for relative to this study?	248	*	*

Most participants for this study (48%) were between the ages of 13 to 15 years old (see Table 4), followed by 9-12 years old (24%) and 16-19 years old (19%). Only approximately 9% were more than 20 years old.

Table 4

Age of Participants

		N	Percent	Valid Percent
Valid	9-12 years old	63	23.4	23.6
	13-15 years old	128	47.6	47.9
	16-19 years old	51	19.0	19.1
	20 years old or older	25	9.3	9.4
	Total	267	99.3	100.0
Missing	System	2	.7	
Total		269	100.0	

Most participants in this study were male (62%). Fewer than half (38%) were female (see Table 5).

Table 5

Gender of Participants

		N	Percent	Valid Percent
Valid	Male	165	61.3	61.8
	Female	102	37.9	38.2
	Total	267	99.3	100.0
Missing	System	2	.7	
Total		269	100.0	

Participants were asked if their parents had also played sports, and more than half (57%) replied in the affirmative (see Table 6).

Table 6

Did your parents play the sport of soccer?

		N	Percent	Valid Percent
	Yes	151	56.1	56.6
	No	116	43.1	43.4
Valid	Total	267	99.3	100.0
Missing	System	2	.7	
Total		269	100.0	

Most of the participants defined the category level of their team as either premier academy (35%) or travel (21%). The least frequent were elite academy or recreation with approximately 1% to 2% respectively (see Table 7).

Table 7

What best defines the category level of your team?

	N	Percent	Valid Percent
Elite Academy	84	1.2	1.2
High School	13	4.8	4.8
Other	15	5.6	5.6
Premier-Academy	93	34.6	34.6
Recreation	5	1.9	1.9
Travel	56	20.8	20.8
Missing	3	1.1	1.1
Total	269	100.0	100.0

Leadership Scale for Sport

The LSS includes five dimensions (e.g., training and instruction, democratic behavior, autocratic behavior, social support behavior, and positive feedback). Chiu et al. (2016) used exploratory structural equation modeling and confirmatory factor analysis to examine the factor structure of the shortened LSS, the same version used for this study, by surveying 201 collegiate swimmers and reported that the five-factor solution was supported.

Descriptive statistics for each scale are presented in Table 8. For autocratic behavior (AB), the means ranged from 2.65 to 3.69. For democratic behavior (DB) the means ranged from 2.30 to 2.93. For positive feedback (PF), the means ranged from 1.62 to 2.09. For social support behavior (SSB), the means ranged from 1.56 to 3.00. Finally, for training and instruction (TI), the means ranged from 1.58 to 1.95.

Table 8

LSS Scale Statistics

	M	*SD*	Min	Max	*N*
Autocratic behavior (AB)	16.63	3.51	5	24	225
Speaks in a manner not to be questioned	2.65	1.23	1	5	260
Works relatively independently of athletes	3.10	1.02	1	5	243
Keeps to his/herself	3.49	1.08	1	5	248
Refuses to compromise on a point	3.54	1.14	1	5	253
Does not explain his/her action	3.69	1.09	1	5	254
Democratic Behavior (DB)	12.77	4.08	5	25	255
Lets group set their own goals	2.30	1.09	1	5	265
Lets athletes share in decision making	2.34	1.06	1	5	265
Lets athletes try own way even if they make mistakes	2.39	.95	1	5	
Asks for opinions on strategies for specific competition	2.81	1.15	1	5	258
Encourages suggestions on conducting practices	2.93	1.21	1	5	258
Positive feedback (PF)	8.92	3.54	5	21	236
Expresses appreciation when athlete performs well	1.62	0.82	1	5	262
Gives credit when it is due	1.67	0.81	1	4	246
Tells athlete when does a particularly good job.	1.72	0.82	1	4	259
Compliments for good performance in front of others	1.79	0.81	1	4	255
Sees athlete is rewarded for good performance	2.09	1.09	1	5	259
Social support (SS)	9.81	3.63	4	20	251
Looks out for the personal welfare of the athletes	1.56	0.85	1	5	260
Encourages close/informal relationships with the athlete	2.05	1.09	1	5	265
Encourages athlete to confide in him/her	2.33	1.20	1	5	261
Helps members of the group settle their conflict	2.37	1.12	1	5	253
Helps athletes with their personal problems	3.00	1.27	1	5	262
Training and instruction (TI)	8.52	3.23	5	19	250
Sees to it that practice efforts are coordinated	1.58	0.73	1	4	260
Explains technique and tactics of the sport	1.58	0.85	1	5	266
Sees to it that every athlete is working to capacity	1.62	0.75	1	4	266
Pays special attention to correcting mistakes	1.80	0.86	1	4	258
Specifies in detail what is expected of each athlete	1.95	0.98	1	5	252

An exploratory analysis was also conducted in SPSS to evaluate normality of the data obtained for each LSS scale (see Table 9). The Shapiro-Wilk test provides a means of determining if a random sample is derived from a normal distribution where *p*-values

less than 0.05 indicate than a distribution is most likely normal (Glen, 2021b). Although all *p*-values for the Shapiro-Wilk test for the data from this study were significant ($p < .05$), statistics for skewness and kurtosis for the distribution of responses for each scale were within the acceptable limit of ±2.00 (Tabachnick & Fridell, 2007).

Table 9

LSS Skewness, Kurtosis and Normality

	Skewness	SE of Skewness	Kurtosis	SE of Kurtosis	Shapiro-Wilk
Autocratic behavior AB	-0.603	0.162	0.697	0.323	.000
Democratic Behavior (DB)	0.342	0.153	-0.276	0.304	.010
Positive feedback PF	0.891	0.158	0.267	0.316	.000
Social support SS	0.353	0.154	-0.382	0.306	.000
Training and instruction (TI)	1.077	0.154	0.788	0.307	.000

Reliability Analysis

A reliability analysis was conducted to assess the reliability and internal consistency of the research instrument based on the obtained responses from this sample. This is an essential step in data analysis that should not be overlooked since these criteria can affect the usefulness and applicability of a study (Singh, 2017; Singh & Masuku, 2012). The results obtained for this study from the LSS were similar to those obtained by Chiu et al. (2016) and the findings provide additional evidence of the validity of the five-factor solution for the shortened LSS. Internal consistency was examined with Cronbach's alpha, a commonly used statistic to evaluate the reliability of a questionnaire with a response set based on a Likert scale (Laerd Statistics, 2015a). Cronbach's alpha coefficients range from 0 to 1 and, in general, a coefficient of 0.60 is considered acceptable for exploratory purposes, while values of 0.70 to 0.80 are considered adequate to good for confirmatory purposes. Higher α coefficients signify a high degree of

common covariance between the items, an indication that the same concept (i.e., leadership) is being measured. When scale items are not correlated (i.e., are independent), $\alpha = 0$. For this study, the Cronbach's alpha (α) coefficient was used to examine internal consistency for the 25 items in the LSS and it was determined that the scale was reliable and demonstrated internal consistency (see Table 10).

Table 10

Reliability Statistics

Cronbach's Alpha	N of Items
.869	25

Individual scale statistics are presented in Table 11.

Table 11

Mean, Standard Deviation, and Cronbach's Alpha for LSS Analyses

Subscale	*n*	*M*	*SD*	*α*
Training and instruction	179	27.37	7.68	.89
Democratic	186	24.81	5.93	.85
Social support	179	22.77	5.38	.79
Positive feedback	185	11.29	3.69	.87
Autocratic	177	16.99	3.29	.72

Preliminary Analysis: Sampling Adequacy

According to Field (2018), samples greater than 300 tend to produce a stable factor solution, but one method of measuring sampling adequacy is the Kaiser-Meyer–Olkin (KMO). This statistic, originated by Kaiser (1970), can be computed for either individual or multiple variables, and results in a value of 0 to 1 where 0-0.50 indicates that factor analysis of the data may not be appropriate. In general, the KMO can overestimate how many factors should be retained but is usually accurate with fewer than

30 variables with post-extraction communalities greater than 0.7 and/or with sample sizes greater than 250 and average communalities greater than or equal to 0.6 (Stevens, 2002).

A KMO value ranging between .60 and .90 is desired, and significant sphericity ($p < .05$) indicates that the correlation matrix for the data set is factorable (Nyaradzo & Sink, 2013). Obtaining a value of 1 (or close to 1) is ideal and suggests that a relatively compact pattern of correlations was found; it is an indication of the likelihood of obtaining a reliable result from a factor analysis (Kaiser, 1974; as cited in Field, 2018). When KMO values are near 0, large partial correlations exist, as compared to the sum of the correlations and this reduces the viability of a factor analysis (Glen, 2021a). Computing KMO is an important aspect of conducting a factor analysis; it helps assess whether variables should be removed from the analysis due to correlations between the variables that are either extremely low or high (Field, 2018). Bartlett's test compares the correlations between variables and helps determine if there is redundancy such that the variables can be summarized into fewer factors. When *p*-values less than a 0.05 are obtained, this indicates that the data set is not suitable for data reduction (Field, 2018).

In verifying assumptions prior to rotation, Bartlett's Test of Sphericity and KMO were conducted on the LSS scales, as recommended by Field (2018). The overall sample size for this study was $n = 269$, and the frequency of responses for each scale ranged from 236 to 255. The KMO value was obtained for each item, for each of the five LSS scales, and the correlation coefficients for each item with itself verified that the data was suitable for factor analysis (see Table 12). The smallest KMO value was .691 (*Refuses to compromise on a point* from the AB scale) and the largest was .890 (*Compliments athletes for good performance in front of others* from the PF scale). Therefore, following

the recommendation of Nyaradzo & Sink (2013), and the finding that all KMO values ranged from .60 to .90 is, with significant sphericity (p = .05), it was determined that the data set was factorable. The results of the KMO test statistic for all items combined is presented in the next section on the confirmatory factor analysis.

Table 12

KMO and Bartlett's Test

KMO Measure of Sampling Adequacy		.895
Bartlett's Test of Sphericity	Approx. Chi-Square	2321.247
	df	300
	Sig.	.000

Confirmatory Factor Analysis

After conducting the preliminary analysis to ensure that the factor extraction process was viable, the magnitude of the associated eigenvalues was inspected using Kaiser's criterion, to evaluate whether each factor should be retained or discarded based on eigenvalues greater than 1 (Field, 2018). All 25 items (all five dimensions) of the shortened LSS were included in a factor analysis. Pearson correlation coefficients were inspected between all pairs of items to examine patterns of relationships between variables. Values greater than .9 indicate possible multicollinearity within the data; if no excessively large correlations are found, there is no need to immediately eliminate items (Field, 2018). For this data, Pearson's correlation coefficients revealed that none was greater than .9 and multicollinearity was not an issue. In addition, the KMO statistic was .895, well above the minimum recommended value of 0.5. In general, although the KMO can overestimate how many factors should be retained, it is usually accurate when analyzing fewer than 30 variables with post-extraction communalities greater than 0.7

and/or with sample sizes greater than 250 and average communalities greater than or equal to 0.6 Stevens, 2002, for more detail).

Bartlett's test of sphericity should be significant ($p < .05$), and for this data it was $p < .001$ (see Table 13); this is another indication of the feasibility of continuing with the factor analysis (Field, 2018). The anti-image correlation matrix was also examined for any values below minimum .5 which would indicate that they should possibly be excluded from the factor analysis (Field, 2018); none were found, and no variables were excluded before continuing with the analysis. The communalities column shows the proportion of common variance within each variable and there were appropriate factor loadings for all five dimensions of the LSS (see Table 15).

Table 13

Communalities

Survey Item	Initial	Extraction
Sees to it that practice efforts are coordinated	0.453	0.448
Pays special attention to correcting athletes' mistakes	0.512	0.520
Specifies in detail what is expected of each athlete	0.465	0.465
Sees to it that every athlete is working to his capacity	0.512	0.552
Let's his/her athletes share in decision making	0.558	0.598
Compliments athletes for good performance in front of others	0.596	0.621
Keeps to his/herself	0.298	0.295
Gives credit when it is due	0.687	0.733
Encourages close and informal relationships with the athlete	0.465	0.483
Expresses appreciation when an athlete performs well	0.649	0.643
Encourages athlete to confide in him/her	0.457	0.527
Speaks in a manner not to be questioned	0.200	0.187
Lets the group set their own goals	0.497	0.421
Looks out for the personal welfare of the athletes	0.497	0.479
Let's the athletes try their own way even if they make mistakes	0.352	0.334
Encourages athletes to make suggestions on conducting practices	0.498	0.499
Refuses to compromise on a point	0.404	0.534
Asks for the opinions of athletes on strategies for specific competition	0.487	0.537
Works relatively independently of athletes	0.231	0.229

Survey Item	Initial	Extraction
Helps athletes with their personal problems	0.510	0.550
Tells an athlete when he/she does a particularly good job.	0.648	0.671
Does not explain his/her action	0.337	0.377
Explains to each athlete technique and tactics of the sport	0.597	0.599
Helps members of the group settle their conflict	0.479	0.484
Sees that an athlete is rewarded for good performance	0.526	0.455

Extraction Method: Principal Axis Factoring

Included in the SPSS output, before extraction, are eigenvalues for each factor in the data, which help to explain the percentage of variance that is being explained by each specific factor; the list of values was examined until a relatively small amount of variance was encountered (i.e., less than 1), which resulted in an extraction of five factors (see Table 14). Rotation of the factors was selected for the factor analysis procedure, which optimizes the factor structure such that the relative importance of the factors is equalized (Field, 2018).

Eigenvalues indicate the amount of variance that is accounted for in the dependent measure based on the number of items in each factor, where the total variance explained shows the division of variance among the factors. A common criterion for useful factors is eigenvalues >1, and that was the criterion used for this study. Another important consideration in factor analysis is the result of the Rotated Component Matrix, which reveals if a variable is related to more than one factor. This matrix also assists in the decision of which variables to retain (Field, 2018).

Another important consideration is the results of the Rotated Component Matrix, which reveals if a variable is related to more than one factor and assists in the decision of which variables to retain. For this study principal factor analysis with varimax rotation was conducted to assess the structure of the five coaching constructs (e.g., training and instruction, democratic behavior, autocratic behavior, positive feedback, and social

support) and significantly high factor loadings were obtained for each of the five coaching constructs. This aligned directly with the five scales of the LSS.

Table 14

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Factor	Total	% of Var.	Cum. %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.21	32.85	32.85	7.76	31.03	31.03	4.25	16.98	16.98
2	2.39	9.58	42.43	1.85	7.39	38.42	3.09	12.35	29.34
3	1.81	7.25	49.67	1.26	5.06	43.48	2.11	8.43	37.77
4	1.28	5.14	54.81	0.80	3.20	46.68	1.54	6.14	43.91
5	1.08	4.32	59.13	0.57	2.28	48.96	1.26	5.05	48.96
6	0.94	3.76	62.88						
7	0.92	3.67	66.55						
8	0.79	3.15	69.69						
9	0.75	2.99	72.68						
10	0.74	2.96	75.64						
11	0.68	2.72	78.37						
12	0.59	2.35	80.71						
13	0.54	2.14	82.85						
14	0.52	2.10	84.95						
15	0.48	1.91	86.86						
16	0.45	1.82	88.68						
17	0.45	1.79	90.47						
18	0.39	1.58	92.05						
19	0.35	1.41	93.46						
20	0.33	1.34	94.80						
21	0.30	1.18	95.98						
22	0.28	1.10	97.08						
23	0.27	1.08	98.16						
24	0.26	1.03	99.20						
25	0.20	0.80	100.00						

Extraction Method: Principal Axis Factoring.

The results indicated appropriate factor loadings for all five coaching dimensions of the LSS (see Table 15).

Table 15

Component Matrix

Scale	Item	Factor 1	2	3	4	5
PF	Gives credit when due	-.324		.310	-.137	-.137
PF	Tells athlete when s/he does particularly good job	-.205		.304	.122	.122
PF	Expresses appreciation when athlete performs well	-.230		.313	-.137	-.137
TI	Explains to athlete techniques/tactics of sport	-.157	.271	-.181		
DB	Let's his/her athletes share in decision making	.199	-.302	.188	.186	.186
SS	Looks out for the personal welfare of the athletes				-.206	-.206
SS	Helps members of the group settle their conflicts	.194		-.321	-.120	-.120
TI	Pays special attention to correcting athlete' mistakes	-.164	.370	-.207	.260	.260
TI	Sees to it that efforts are coordinated	-.191	.216		.161	.161
TI	Sees to it that every athlete is working to capacity	-.191	.323	-.279		
PF	Compliments for good performance in front of others	-.296		.432		
SS	Encourages close/informal relationships with athlete	.293		-.126	-.383	-.383
PF	Sees that athlete is rewarded for good performance		.132		.186	.186
DB	Lets group set own goals	.312	-.264		.217	.217
TI	Specifies in detail what is expected of each athlete		.348	-.250		
SS	Encourages athlete to confide in him/her	.246		.105	-.525	-.525
SS	Helps athlete with personal problems	.386	-.226	-.267	-.310	-.310
DB	Asks for opinions on strategies for competitions	.355	-.264	-.166	.303	.303
DB	Encourages suggestions on conducting practices	.481	-.207		.231	.231
DB	Lets athletes try own way, even if make mistakes	.186	-.285	.234	.161	.161
AB	Keeps to his/herself	.594	.220	.285	.169	.169
AB	Does not explain his/her actions	.535	.273	.211		
AB	Works relatively independent of athletes	.459	.423	.262		
AB	Refuses to compromise on a point	.450	.639			

Extraction Method: Principal Component Analysis.

a. 5 components extracted.

The results indicated appropriate factor loadings for all five coaching dimensions of the LSS (see Table 15).

Table 16

Rotated Component Matrix

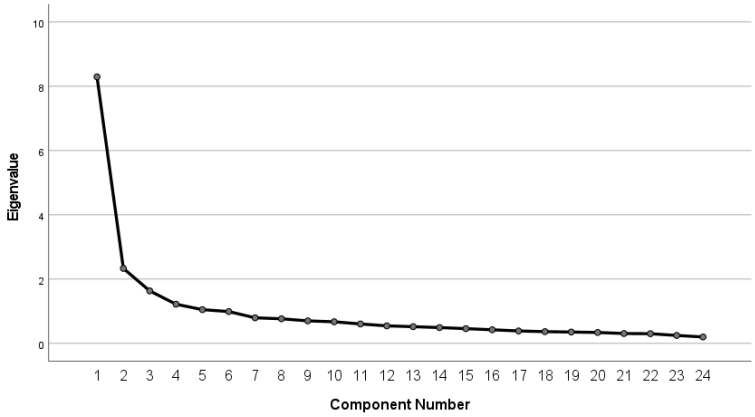
Scale	Item	Factor 1	2	3	4	5
TI	Pays special attention to correcting athlete' mistakes.	.790	.200	.176		
TI	Sees to it that every athlete is working to capacity	.742	.177		.196	
TI	Explains to techniques and tactics of the sport	.687	.278	.127	.243	
TI	Specifies in detail what is expected of each athlete.	.670	.132		.279	
DB	Sees to it that efforts are coordinated.	.624	.314	.187		
PF	Sees that athlete is rewarded for a good performance.	.486	.360	.279		
PF	Compliments for good performance.	.238	.775	.118		
PF	Gives credit when it is due.	.326	.753	.123	.228	-.187
PF	Expresses appreciation when athlete performs well.	.347	.714	.113	.241	
PF	Tells athlete when s/he does a particularly good job.	.408	.670	.275		
DB	Asks for the opinions on strategies.	.241		.735	.182	
DB	Encourages athletes to make suggestions.	.149		.724	.231	.153
DB	Lets group set their own goals.	.217	.124	.693	.233	
DB	Lets athletes share in decision making.	.126	.395	.665	.179	
DB	Lets athletes try own way, even if make mistakes.		.357	.561	.116	
SS	Encourages athlete to confide in him/her.		.358	.132	.715	.113
SS	Helps the athlete with their personal problems	.142		.410	.704	
SS	Encourages close/informal relationships with athlete.	.245	.170	.240	.695	
SS	Helps members of the group settle their conflicts.	.407		.373	.518	
SS	Looks out for the personal welfare of the athletes.	.316	.374	.209	.434	
AB	Refuses to compromise on a point.	.132	-.257	-.198		.736
AB	Works relatively independent of the athletes.					.670
AB	Keeps to his/herself.			.273		.654
AB	Does not Explain his/her action.	-.265	-.176			.640

The scree plot is another analytic tool for confirmatory analysis; it a graphical representation of the eigenvalues against the associated factors demonstrating the relative importance of each factor. The inflexion point in the graph (i.e., the descent in the curve) indicates a cut-off point for determining which factors to retain (Cattell, 1966, as cited in Field, 2018). With a sample of more than 200 participants, the scree plot provides a

reliable criterion for factor selection (Stevens, 2002). For this study, the scree plot confirms the results and extraction of five factors.

Figure 1

Scree Plot



Research Question One

The first part of research question one was, how can practices be made more enjoyable for the players? A hierarchical linear regression analysis was run in three model steps to predict perceptions of fun and enjoyment. The first block included the demographic variables of gender and age, and the model was statistically significant $F(2, 198) = 6.28$, $p = 0.002$. This model accounted for 5% of the variation in enjoyment based on adjusted R^2. There was a significant effect of age such that for every age group increase, there was a decrease in self-reported enjoyment, by 0.16 units ($B = -0.16$, $SE = 0.06$, $t = -2.83$, $p = .005$) but gender was not a significant predictor ($p = .120$). The second model was also significant, $F(3, 197) = 4.17$, $p = 0.007$; however, the addition of whether the parents had played soccer or not was not a significant predictor and, based on adjusted R^2, the amount of variance explained decreased to 4.5%. The third model included the five coaching behavior constructs from the LSS and was significant $F(8, 192) = 8.14$, $p < 0.001$. Adding these five coaching constructs produced a substantial

increase in the amount of variation that was explained for enjoyment. Collectively, this set of predicators explained approximately 22% of the variation in enjoyment (see Table 16).

Table 17

Model Summary for Predicting Enjoyment

					Change Statistics				
Model	R	R^2	Adj R^2	SE of the Est	R^2 Δ	F Δ	df1	df2	Sig. F Δ
1	.244[a]	0.060	0.050	0.687	0.060	6.283	2	198	0.002
2	.244[b]	0.060	0.045	0.688	0.000	0.000	1	197	0.984
3	.503[c]	0.253	0.222	0.616	0.194	9.950	5	192	0.000

a. Predictors: (Constant), Gender, Age

b. Predictors: (Constant), Gender, Age, P_Play

c. Predictors: (Constant), Gender, Age, P_Play, DB, AB, SB, PF, TI

Factors scores were computed and there were four significant factors on the final model. Factor scores are the latent variables for a given factor and are useful for conversion of large sets of measured variables into a smaller set of composite constructs for further inquiry (Odum, 2011). When looking at the individual coaching constructs, PF, DB, and SS were significant predictors of enjoyment ($p < .01$). For every 1-unit increase in PF, there was an increase in enjoyment by 0.20 units ($B = 0.20$, $SE = 0.04$, $t = 4.52$, $p < .001$). For every 1-unit increase in DB, there was an increase in enjoyment by 0.16 units ($B = 0.16$, $SE = 0.45$, $t = 3.60$, $p < .001$). For every 1-unit increase in SS, there was an increase in enjoyment by 0.15 units ($B = 0.04$, $SE = 0.44$, $t = 3.42$, $p < .001$). There was no significant effect for any other coaching constructs on enjoyment (see Table 17).

Table 18

Significant Coefficients for Predicting Enjoyment

Model		B	SE	β	Sig.
1	(Constant)	5.041	.171		.000
	Age	-.157	.055	-.199	.005
	Gender	-.158	.101	-.110	.120
2	(Constant)	5.038	.216		.000
	Age	-.157	.056	-.199	.005
	Gender	-.158	.101	-.110	.121
	P_Play	.002	.097	.001	.984
3	(Constant)	4.844	.199		.000
	Age	-.118	.052	-.150	.025
	Gender	-.088	.094	-.061	.349
	P_Play	.014	.089	.010	.878
	TI	.075	.045	.107	.100
	PF	.200	.044	.290	.000
	DB	.161	.045	.225	.000
	SS	.151	.044	.217	.001
	AB	-.026	.044	-.037	.553

The second part of research question one was, how can practices be made more challenging so that player skills are developed? Regression results are presented below for predicting perceptions of the challenging nature of practice. A hierarchical linear regression was conducted with three model steps. The first model step included the demographic variables of gender and age. This model was statistically significant $F(2, 143) = 3.54$, $p = .032$). These variables accounted for 3.4% of the variance in challenging nature of practice based on adjusted R^2. There is a significant effect of age such that for every age group increase, there was a decrease in the challenging nature of practice by 0.16 units ($B = -0.16$, $SE = 0.08$, $t = -2.09$, $p = .038$). The second model was not significant, $F(3, 142) = 2.45$, $p = 0.066$, the addition of whether the parents had played soccer or not was not a significant predictor and, based on adjusted R^2, the amount of variance explained decreased to 2.9%. The third model added in the five coaching

behavior constructs from the LSS, and the model was statistically significant $F(8, 137) = 2.90$, $p = .005$). Adding these five coaching constructs produced an increase in the amount of variation that was explained for enjoyment. Collectively, this set of predicators explained approximately 9.5% of the variation in the challenging nature of practice. There was no change in the covariates in the third model (see Table 18).

Table 19

Model Summary for Predicting Challenging Nature of Practice

					Change Statistics				
Model	R	R^2	Adj R^2	SE of the Est	R^2 Δ	F Δ	df1	df2	Sig. F Δ
1	.217[a]	0.047	0.034	0.794	0.047	3.539	2	143	0.032
2	.222[b]	0.049	0.029	0.796	0.002	0.312	1	142	0.577
3	.381	0.145	0.095	0.768	0.096	3.062	5	137	0.012

a. Predictors: (Constant), Gender, Age

b. Predictors: (Constant), Gender, Age, P_Play

c. Predictors: (Constant), Gender, Age, P_Play, DB, AB, SB, PF, TI

TI was a significant predictor of the challenging nature of practice; for every 1-unit increase in TI, there was an increase in challenge in practice by 0.20 units ($B = 0.20$, $SE = 0.07$, $t = 2.48$, $p = .003$). There was no significant effect for any of the other coaching constructs on enjoyment (see Table 19).

Table 20

Significant Coefficients for Predicting Challenge

Model		B	SE	β	Sig.
1	(Constant)	4.290	.234		.000
	Age	-.159	.076	-.174	.038
	Gender	-.169	.138	-.102	.223
2	(Constant)	4.390	.295		.000
	Age	-.155	.076	-.170	.043
	Gender	-.169	.139	-.101	.226
	P_Play	-.074	.133	-.046	.577

Model		B	SE	β	Sig.
3	(Constant)	4.223	.291		.000
	Age	-.110	.077	-.121	.152
	Gender	-.076	.137	-.046	.581
	P_Play	-.111	.131	-.069	.396
	TI	.200	.066	.248	.003
	PF	.118	.065	.147	.072
	DB	.099	.066	.119	.134
	AB	.004	.064	.005	.951
	SS	.051	.065	.063	.432

Factor scores are the composite (latent) scores for each subject on each factor (Thompson, 2004; Wells, 1999). Factors are specific to a group of measured variables and are commonly used for further statistical analysis (Odom, 2011). Factor scores were computed for this analysis and four significant results were found: younger age (p =.025), DB ($p < .001$), PF ($p < .001$), and SS ($p = .001$) strongly influence the dependent variable *enjoyment*. AB ($p = .553$) and TI ($p = .100$) were the only two dimensions which did not show any significant association with enjoyment. In line with the hypotheses, negative personal rapport showed a negative correlation to all external variables assessed.

Research Question Two

The second research questions was, can innovative coaching methodologies improve retention rates in youth soccer? A hierarchical linear regression was conducted with three model steps to predict retention. The first model included the demographic variables of gender and age, and was statistically significant $F(2, 197) = 25.048$, $p < 0.001$. This model accounted for 19.5% of the variance in retention based on adjusted R^2. There is a significant effect of age such that for every age group increase, there is a decrease in self-reported retention by 0.35 units ($B = -0.51$, $SE = 0.08$, $t = -.419$, $p < 0.001$). The second model was also significant, $F(3, 196) = 15.975$, $p < 0.001$, although

the addition of whether the parents had played soccer or not was not a significant predictor and, based on adjusted R^2, the amount of variance explained decreased to 19.2%. The third model added in the five coaching behavior constructs from the LSS, and was statistically significant F (8, 191) = 7.218, $p < .001$. Adding these five coaching constructs produced an increase in the amount of variance in retention that was explained by the model ($p < .001$). Collectively, all the predicators explained approximately 21% of the variation in overall retention rates. There was no change in the covariates in the third model step. There was no significant effect for any of the coaching constructs on retention (see Table 20).

Table 21

Model Summary for Predicting Retention

					Change Statistics				
Model	R	R^2	Adj R^2	SE of the Est	R^2 Δ	F Δ	df1	df2	Sig. F Δ
1	.450	0.203	0.195	0.975	0.203	25.048	2	197	0.000
2	.452[b]	0.204	0.192	0.977	0.001	0.292	1	196	0.589
3	.496	0.246	0.214	0.963	0.042	2.115	5	191	0.065

a. Predictors: (Constant), Gender, Age

b. Predictors: (Constant), Gender, Age, P_Play

c. Predictors: (Constant), Gender, Age, P_Play, DB, AB, SB, PF, TI

In addition to linear regressions, crosstabs were calculated to determine the relationship, if any, between player enjoyment or challenge and retention factors (e.g., intention to play next season, next three years and in college). All response sets based on five-point Likert scales from 1 (*strongly agree/extremely likely*) to 5 (*strongly disagree/extremely unlikely*) were recomputed as dichotomous variables (1 = *agree/likely* or 2 = *disagree/unlikely*) and chi-square tests of independence were conducted in SPSS.

The results are further confirmation of the research hypotheses: statistically significant relationships were found for the following sets of variables (see Table 21):

Table 22

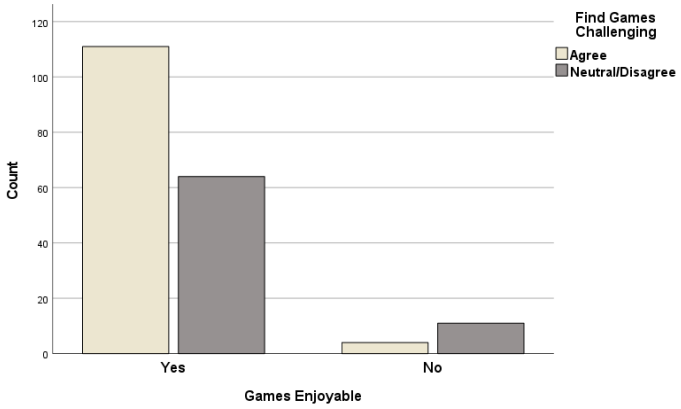
Relationships Between Enjoyment, Challenge, and Retention Factors

Crosstab	X^2 Value	df	Sig.	Valid Cases
Find Practice Enjoyable * Find Practice Challenging	7.82	1	.005	190
Find Practice Enjoyable * Envision Playing Next Season	12.99	1	.000	266
Find Practice Enjoyable * Envision Playing Next 3 Years	16.78	1	.000	260
Find Practice Enjoyable * Envision Playing in College	9.55	1	.002	259
Find Practice Challenging * Envision Playing Next Season	.863	1	.353	189
Find Practice Challenging * Envision Playing Next 3 Years	10.31	1	.001	188
Find Practice Challenging * Envision Playing in College	3.96	1	.047	188

This study found that there is a strong relationship between enjoyment of the practice and finding practice challenging (p = .005). Youth soccer players who find practice challenging were also significantly more likely to find it enjoyable (see Figure 2).

Figure 2

Relationship between Find Practice Enjoyable and Challenging



Also, as predicted, players who enjoy youth soccer are more likely to envision themselves remaining in the sport in the near and long-term. Enjoyment of practice was related to the intention to play youth soccer next season ($p < .001$), within the next three years ($p < .001$), and in college ($p < .002$).

Figure 3

Relationship between Enjoy Practice and Intention to Play Next Season

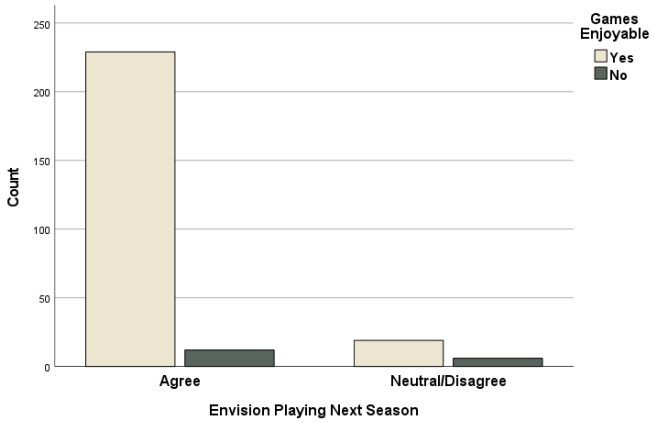


Figure 4

Relationship between Enjoy Practice and Intention to Play Next Three Years

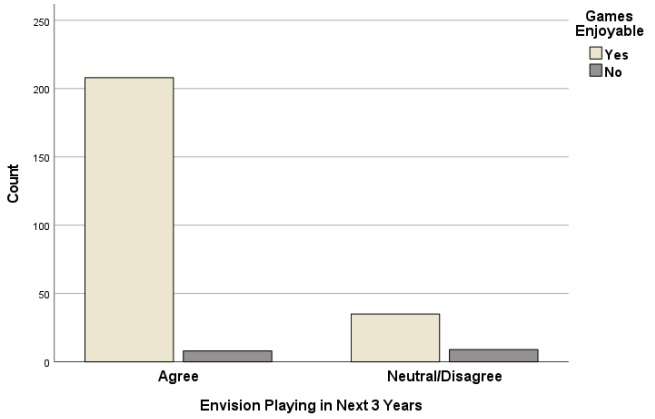
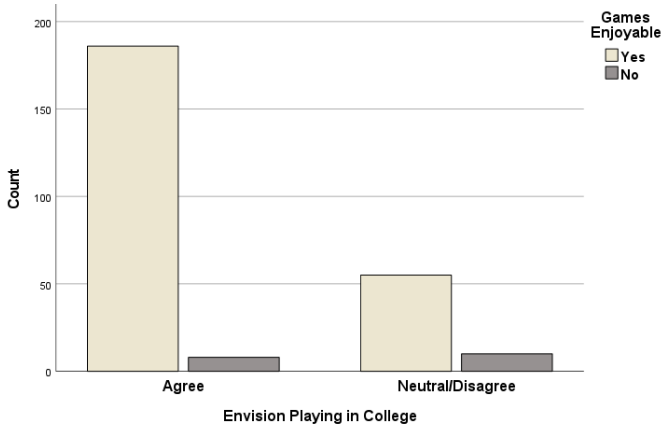


Figure 5

Relationship between Enjoy Practice and Intention to Play in College



For the relationship between finding practice challenging and intention to remain in the sport, the results were mixed. Interestingly, participants who agreed (strongly or somewhat) that their youth soccer practice is challenging were significantly more likely to envision themselves playing youth soccer in the next three years (p = .001) or in college (p = .047); however, this was not true for intentions to play in the next season (see Table 26, Figures 5, 6, and 7).

Figure 6

Relationship between Practice Challenging and Intention to Play Next Season

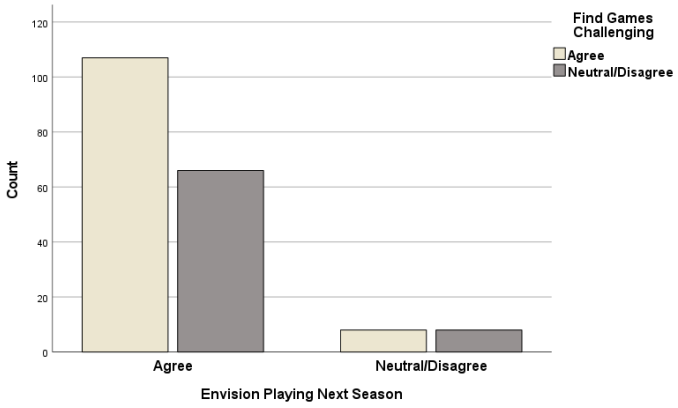


Figure 7

Relationship between Practice Challenging and Intention to Play Next 3 Years

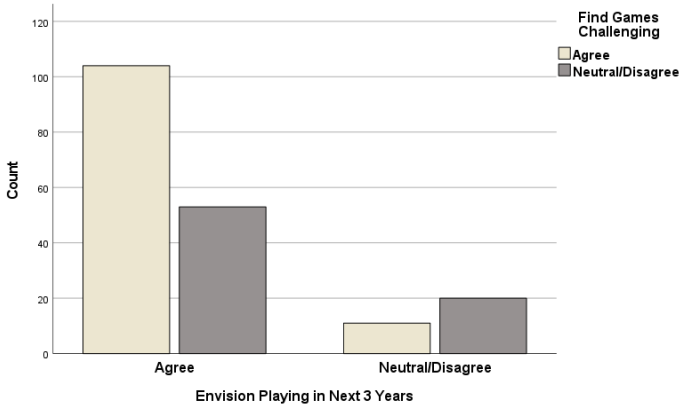
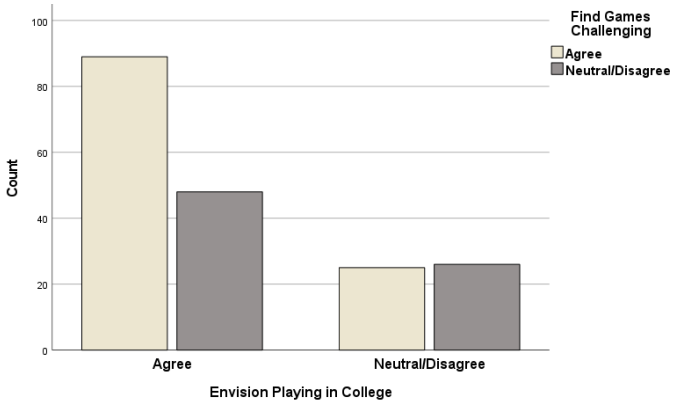


Figure 8

Relationship between Practice Challenging and Intention to Play in College



The results for the relationship between retention and the demographic factors of gender and age were mixed. For example, intention to play next season was not related to gender $X^2(1) = 1.18$, $p = .278$; however, it was related to age $X^2(3) = 46.49$, $p < .001$. Overall, younger participants were less likely to envision themselves in the sport in the upcoming season. The younger participants were, the greater the disparity between those who find it likely (strongly or somewhat) that they will be playing youth soccer next season, as compared to those who are not sure (neutral) or who do not find it unlikely (strongly or somewhat) they will be playing.

For intentions to play in college, the opposite was found. There was a significant relationship between gender and intention to play in college $X^2(1) = 7.73$, $p = .005$, but not for age $X^2(1) = 1.31$, $p = .726$. More male participants find it likely (strongly or somewhat) that will be playing soccer in college as compared to females. (see Table 22).

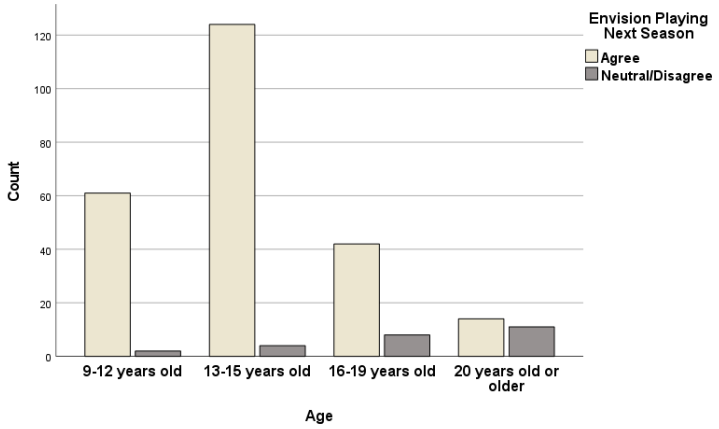
Table 23

Relationships Between Study Variables, Gender and Age

		Envision Playing Next Season					
		Likely		Neutral/Unlikely		Total	
		N	%	N	%	N	%
Gender	Male	152	63.1%	13	52.0%	165	62.0%
	Female	89	36.9%	12	48.0%	101	38.0%
Total		241	100.0%	25	100.0%	266	100.0%
Age	9-12	61	25.3%	2	8.0%	63	23.7%
	13-15	124	51.5%	4	16.0%	128	48.1%
	16-19	42	17.4%	8	32.0%	50	18.8%
	20+	14	5.8%	11	44.0%	25	9.4%
Total		241	100.0%	25	100.0%	266	100.0%
		Envision Playing in College					
		Agree		Neutral/Disagree		Total	
		N	%	N	%	N	%
Gender	Male	130	67.0	31	47.7	161	62.2
	Female	64	33.0	34	52.3	98	37.8
Total		194	100.0	65	100.0	259	100.0
Age	9-12	46	23.7	13	20.0	59	22.8
	13-15	97	50.0	31	47.7	128	49.4
	16-19	33	17.0	15	23.1	48	18.5
	20+	18	9.3	6	9.2	24	9.3
Total		194	100.0	65	100.0	259	100.0

Figure 9

Relationship between Age and Intention to Play in College



CHAPTER 5
Discussion

The purpose of this study was to contribute research on leadership theory and how perceptions of coaches' behaviors and attitudes correlate with enjoyment of the game, challenging nature of practice, and the retention of youth soccer players. This study was designed to contribute knowledge on the effects of various aspects leadership in coaching, and to provide coaches with practical information that can be used to create a more positive and effective coaching environment. The research questions for this study focused on how practices can be made more enjoyable and challenging for players of varying ages and gender with the objective of improving player development and determining if innovative coaching methodologies can improve retention rates (for next season, next three years, and in college). The quantitative analyses used to address the research questions showed significant results and the findings answer the research questions.

This chapter includes a discussion of the theoretical implications of each of the major findings from this study, as related to the theoretical framework that was used, and a comparative analysis of the findings from this study with prior research on this topic. Additionally, the following topics are discussed: a description of the sample from this study, results of the reliability and exploratory factor analyses on the LSS, and detailed results on how coaching factors influence youth soccer players' enjoyment, perceptions of challenge, and intentions to remain in the sport. Also included is a presentation of the strengths and limitations of this study and the theoretical implications. Finally, I present the practical implications of the findings for coaches and administrators of youth soccer so they may have a better understanding of how leadership strategies in coaching can

help achieve goals of player development and retention along with suggestions for future research on this topic.

Dropout rates of youth sport participants have been increasing Seventy percent of children leave organized sports by age 13 (National Alliance for Sport, 2016, as cited by Beane, 2016). Participation rates in youth soccer have declined in recent years. In the past 3 years, the number of 6- to 12-year-olds playing soccer regularly has dropped nearly 14%, to 2.3 million players (Sports & Fitness Industry Association, 2017, as cited by Drape, 2018). The current structure of youth soccer is based on competition, results and rankings.

Results

From this study, it can be concluded that a coach's influence on the overall practice environment has a significant impact on player enjoyment, retention, and skill development. These findings provide additional support for specific coaching methodologies as effective instructional methods for youth soccer teams. Specifically, this supports prior research on the use of positive pedagogy as a teaching strategy, and three coaching dimensions in the LSS, democratic behavior, positive feedback, and social support. Coaches can learn from this study, apply the results to their practices, and subsequently develop plans that not only enhance the overall experience for young athletes, but also help them improve their performance. Specifically, coaches should consider the beneficial effects of offering positive feedback, forming realistic expectations of each athlete's performance, maintaining active practice sessions, including social time for teammates to make friends, and creating an overall positive environment that reduces the fear of trying new skills and making mistakes.

Ethical considerations for this study included conducting the following steps. I received approval for the study from St. John University's IRB and the study was deemed to be of minimal risk to the participants. Multiple measures were used to help ensure that participants fully understood the nature of the study and the fact that the participation was voluntary. Parental consent was obtained before collecting data from youth soccer players, which fully disclosed how the study complied with the requirements for protection of human subjects at St. John's University, the potential drawbacks, and benefits to participation, and how participants could withdraw from the study at any time. Confidentiality was ensured. All responses to the survey were anonymous.

A pilot test was conducted with five volunteers to determine any potential flaws or limitations with the survey and to gauge the efficiency and functionality of the automated processing provided through Microsoft Forms. Based on the results, some survey items and the instructions were clarified. Also, the consent letter was embedded into the survey for better access. The pilot test also helped to verify that Microsoft Forms worked effectively, and that the appearance of the survey looked professional on various platforms. Based on the pilot study, I concluded that the participants would be able to understand and navigate the survey.

The sample for this study consisted of youth soccer players between the ages of 13 to 20 years old; almost half (48%) were between 13 to 15 years old. Few were aged 20 or older (9%). Almost two thirds (62%) self-identified as male, and one-third (38%) as female. Slightly more than half (56%) reporting playing for a premier academy or travel league, and the same proportion (56%) had parents who also played soccer.

To determine whether the LSS and its items represented an internally consistent measures, I computed an overall Cronbach alpha (α) coefficient and found a high degree of reliability (α = .86). Statistics for the LSS subscales were (from lowest to highest): .64 (AB), .75 (SS), .83 (DB), .84 (PF), and .90 (TI). The finding of the lowest reliability estimate for AB confirms the results from prior research (Chelladurai & Riemer, 1998 as cited in Fletcher & Roberts, 2013). This study confirmed prior research on samples of college-aged participants, which has demonstrated that reliability and validity of the LSS are acceptable (i.e., above .7) for the five leadership dimensions of the LSS (Chelladurai & Saleh, 1980; Mann, 2009; Pappas, 2004). For this sample of youth soccer players,

A confirmatory factor analysis (CFA) analysis of the LSS data based on this sample was conducted using SPSS with component extraction and varimax rotation. Conducting a factor analysis helps ensure that the variables in a study are measuring the concept they are intended to measure. The Kaiser-Meyer-Olkin (KMO) measure was 0.908, which verified that the sampling was adequate for the factor analysis and indicated a strong relationship between the variables (Field, 2018). Bartlett's Test was used to compare the correlations and determine if redundancy was present between the variables, indicating that they can be summarized into fewer factors. Data with p-values < 0.05 were considered suitable for data reduction. The CFA helped confirm the Multidimensional Model of Sport Leadership (MML) theory and the foundational structure of the LSS. The five-factor solution for the Leadership Scale for Sports (LSS) (Chelladurai & Saleh, 1978, 1980) and the use of the individual constructs of Autocratic Behavior (AB), Democratic Behavior (DB), Positive Feedback (PF), Social Support (SS), and Training and Instruction (TI) was supported. Factor discrimination was achieved by

plotting the variables on rotated axes. Together the five factors accounted for 65% of the total variance.

The scree plot indicated where the values of the eigenvalues leveled off (below 1). The rotated component matrix, often referred to as the loadings, is the key output of principal components analysis and contains correlation estimates between each of the variables. In this study, there are moderate-to-strong correlations between the five factors. Typically, when analyzing a component matrix, correlations of less than 0.3 to 0.4 are regarded as being trivial. For this study, items with a correlation of ≤ 0.40 were discarded. There were moderate to strong correlations between the five coaching constructs. After rotation, the first component accounted 35% of the variance, the second component 10%, and the third component 7%. The factor loading cutoff score was 0.40. Item PL24DF loaded to a medium to low amount across all components. All other loadings were 0.40 or greater. The communalities were all greater than 0.4 (see Table 13) further confirming that each item shared some common variance with other items. Given these overall indicators, factor analysis was deemed to be suitable with all five items.

Following the extraction process, using the regression method, factor scores (i.e., composite variables) were computed where higher loadings were associated with more important factors (DiStefano, Zhu & Mindrila, 2009). Techniques for calculating factor score coefficients vary. For this study, the regression method was used where the factor score coefficients were used as weights rather than the factor loadings. This adjusted the factor loadings to account for the initial correlations between variables and stabilized any differences in variable variances based on the units of measurement. The matrix of factor scores (see Table 15) presents the adjusted relationship between each variable and factor.

This regression technique produces factor scores with $M = 0$ and variance equivalent to squared multiple correlations between estimated factor scores and true factor values (UCLA, 2021). According to Field (2018), factor scores have several uses including for factor analysis where the data is reduced into a subsets of measurement variables that indicate individual scores and further analyses can then be carried out on the factor scores as opposed to the original data. A benefit of factor scores for this study was to overcome potential issues related to multicollinearity (Field, 2018).

A regression analysis was run in efforts to operationalize coaching factors and to separate the underlying constructs of coaching in relation to enjoyment and the challenging nature of practice. For model one for the first part of the research question was, how can practices be made more enjoyable for the players? There was a significant effect of age such that for every age group increase, there was a decrease in self-reported enjoyment by 0.16 units. However, gender was not a significant predictor ($p = .120$). For the second model, adding the predictor of whether the parents had played soccer or not, based on adjusted R^2, the amount of variance explained decreased to 4.5%. The third model included the five coaching behavior constructs from the LSS and was significant ($p < 0.001$). Adding these five coaching constructs produced a substantial increase in the amount of variation that was explained for enjoyment. Collectively, this set of predicators explained approximately 22% of the variation in enjoyment (see Table 16).

The second part of research question one was, how can practices be made more challenging so that player skills are developed? The first model, which included gender and age, was ($p = .032$). These variables accounted for 3.4% of the variance in challenging nature of practice based on adjusted R^2. For every age group increase, there

was a decrease in the challenging nature of practice by 0.16 units. The second model, adding whether the parents had played soccer or not was not significant predictor and, based on adjusted R^2, the amount of variance explained decreased to 2.9%. The third model, adding the five coaching behavior constructs from the LSS, was ($p = .005$). Adding these five coaching constructs produced an increase in the amount of variation that was explained for enjoyment. Collectively, this set of predicators explained approximately 9.5% of the variation in the challenging nature of practice.
There was no change in the covariates in the third model (see Table 18).

For research questions two, if innovative coaching methodologies improve retention rates in youth soccer, the first model including gender and age was ($p < 0.001$) and accounted for 19.5% of the variance in retention based on adjusted R^2. For every age group increase, there is a decrease in self-reported retention by 0.35 units. The second model was also significant ($p < 0.001$), although adding if the parents had played soccer or not was not a significant predictor and, based on adjusted R^2, the amount of variance explained decreased to 19.2%. The third model, with the five coaching behavior constructs, was statistically significant ($p < .001$). Collectively, all the predicators explained approximately 21% of the variation in overall retention rates. There was no change in the covariates in the third model step. There was no significant effect for any of the coaching constructs on retention (see Table 20).

This study confirmed that there is a strong relationship between enjoyment of the game and finding games challenging, where youth soccer players who find practices challenging were also significantly more likely to find them enjoyable. Enjoyment of the game was also related to the intention to play youth soccer next season, in the next three

years, and in college where players who agreed (strongly or somewhat) that they enjoy the game are more likely to envision themselves remaining in the sport. These results not only support the research hypothesis related to the positive effects of certain coaching outcomes; they also add to the literature on the effectiveness of positive pedagogy as a coaching method.

Although the results for the relationship between finding games challenging and intention to remain in the sport were mixed, this is likely due to the function of player age. For example, two questions were presented in the questionnaire for this study, one about intentions to play in the next three years and one about intentions to play in college. For participants aged 16 and above, it is probable that the time frames of "the next three years" and "in college" overlapped. However, this does not detract from the interesting discrepancy found for intentions to play next season. Participants who agreed (strongly or somewhat) that their youth soccer practices are challenging were *not* significantly more likely to envision themselves playing youth soccer next season as compared to participants who do not find practices challenging. This contrast is also interesting when considering the finding that enjoyment was related to all three time periods.

Theoretical Implications of the Findings

Leadership has been defined as a behavioral process with the objective of positively influencing individuals to work toward achieving goals, which in terms of athletic teams means working toward achieving the goals of the group (Chelladurai, 1999). The coach plays a pivotal role in the experience of athletes, yet research on athletic leadership is lacking (Kenow & Williams, 1999; Loughead et al., 2006; Todd & Kent, 2004). Coaching behaviors can affect athletes positively or negatively, and it is

important for coaches to understand what motivates young athletes to enjoy the game and keep playing. Specifically, it is beneficial for coaches to understand the impact that their behaviors have on athletes' experiences.

The results of this study relate to the theoretical underpinnings of the MML model of sports leadership and to the Leadership Scale for Sports (LSS) originally developed by Cheladurai and Saleh (1980) for the measurement of coaching behavior. MML, which proposes that group performance and member satisfaction are a function of the congruence of actual and preferred leadership behavior, is one of the most significant models of sporting leadership. Chelladurai and Saleh (1978) originally suggested that when a leader's behaviors are congruent with player preferences and situational characteristics, this has a positive influence on group performance and player satisfaction. For this reason, the LSS was created to help determine and measure effective coaching leadership behaviors.

The LSS was the appropriate instrument for this study because it is one of the most widely used instruments to evaluate coaching leadership. Specifically, the LSS measures five behavioral coaching constructs (i.e., subscales), that were validated through the factor analysis for this study. The constructs of TI and DB were shown to have the largest influence on the enjoyment of the game. Consequently, coaches who focus on these constructs will achieve better outcomes. The results of this study confirm that these five constructs are distinct yet related which further validates LSS as an appropriate and practical instrument for coaching of youth sports.

It was also important to consider learning theories for this study, given that athletic coaches in youth soccer have the role of teaching skills and techniques to team

members. My findings can be linked to benefits of positive pedagogy, which relies on an athlete-centered learning approach. Athlete-centered approaches to coaching are not only effective for the improvement of technical ability, but they also increase player motivation and provide a positive learning experience (Cassidy & Kidman, 2010; Kidman, 2005; Kirk, 2005; Mitchell, Oslin & Griffin,1995; Pope, 2005, as cited by Light & Harvey, 2017). This correlates with the democratic behavior dimension of the LSS. This study confirms previous research that athlete-centered, question-based approaches to coaching are likely to provide a more positive learning environment, increase player development, and improve motivation (Light & Harvey, 2017). As the results of this study demonstrate, democratic behavior was associated with player enjoyment, a construct that is arguably linked to the factors stated above. As predicted, players who agree (either strongly or somewhat) that they enjoy participating in youth soccer are more likely to envision themselves remaining in the sport not only for next season ($p < .001$), but also for the next three years ($p < .001$), and in college ($p < .002$).

Chelladurai and Saleh (1980) placed equal emphasis on the importance of sports coaches being both a leader and member of the group and ascertained that group performance and team member satisfaction are functions of the interaction between different forms of leadership behavior. This relates to the underpinning of the MML, which proposes that group performance and player satisfaction are based on the congruent nature of required, actual, and preferred leadership behavior (Chelladurai,1980; Fletcher & Roberts, 2013). This research study found additional evidence linking Chelladurai and Saleh's (1980) leadership theory to enjoyment of the

game for the three dimensions of democratic behavior, positive feedback, and social support.

The dimension of training and instruction was significantly correlated with the challenging nature of practice. The training and instruction dimension involves a coach that provides an intense training environment focused on technical skill instructions to improve performance (Chelladurai & Saleh, 1980). This study also found a strong relationship between enjoyment of the game and finding practices challenging ($p = .005$). Youth soccer players who find practice challenging were significantly more likely to find them enjoyable. This supports literature on game-based methods, which differ from traditional coaching methods by centering learning around the players as opposed to using an ordered, progressive pattern. Foster (2010) has suggested that most youth soccer players' games and practices are a negative experience. Traditional coaching methods often emphasize continual instruction (Wein 2007, as cited by Pill, 2012). Practice is rigid, structured, and conducted in a technical sequence from simple to more complex with no consideration of the variations of the actual game (Webb & Thompson, 2000 as cited by Pill, 2012).

This study confirms the benefits of game-sense coaching strategies. Game-sense is based on a pedagogical approach that emphasizes small-sided games. It was developed in Australia in the 1990's in collaboration with the Australian sports commission and Australian Coaches (Harvey, 2009). This type of coaching strategy utilizes small-sided games (typically teams of three versus three or less) and instill questioning into the process to foster learning (Webb & Pearson, 2008). Game sense strategies provide more opportunities for touches of the ball, and therefore more opportunities for success. This

study demonstrates that players are likely to respond positively a coach who functions more as a facilitator, asking open-ended questions and creating discussion (Harvey, 2009).

Overall, positive pedagogy approaches encourage learning through social interactions and joyful experiences (Harvey,2009; Renshaw et.al, 2012, as cited by Light & Harvey, 2017). Positive effects on players' athletic performance have also been noted when coaches alter their behaviors based on athletes' preferences (Chelladurai & Saleh, 1980). Together, practices based on athlete-centered and game-based practice methods are more free-flowing and offer players more opportunities for creativity. This study demonstrates that using these coaching approaches will most likely lead to a more enjoyable and challenging environment for youth soccer players.

Practical Implications of the Findings

Results from this study hold practical implications for coaches, administrators, sporting directors and parents. Athletic coaches have considerable influence on players' motivation and performance, and on team cohesion (Chelladurai & Saleh, 1980; Gupta et al., 2010). It has been established throughout the literature that teaching/coaching methods play a significant role in the experience of learners/trainees, and this study demonstrates that to retain participants in youth soccer, the coaching environment should not only be challenging, but it should also be fun for the participants. Much of the prior research on positive pedagogy suggests that the most effective means of encouraging participation in youth sports, and retaining those who chose to participate, results from coaching methods that create a fun and challenging environment.

An essential aspect of sports coaching is to promote the improvement of fundamental skills. Under traditional coaching methods, this typically means focusing on negative players attributes (Light & Harvey, 2017). Yet the results from this study indicate that merely focusing on drills to reduce error may not be the most effective approach, especially when considering the impact on players' enjoyment, perception of challenge and intention to remain in the sport. This study supports turning the focus of coaching youth soccer to an emphasis on what the players *can* do through coaching behavior that uses reflection and dialogue to assist in the learning process (Light & Harvey, 2017).

Based on this study, coaches can improve levels of enjoyment if they embrace the coaching constructs of democratic behavior, positive feedback, and social support. To accomplish this, a coach may allow athletes to participate in important coaching decisions regarding team goals, game strategies and practice methods (Chelladurai, 1990). Thus, a coach that creates an inclusive environment, where the players feel involved in the decision-making process, would achieve higher levels of enjoyment, and consequently more positive outcomes. In contrast the autocratic behavior was not significant in relation to enjoyment. Autocratic coaches tend to stay a distant from the players and make decisions for them (Chelladurai & Saleh, 1978). An autocratic coach keeps to him/herself and does not include the players in the decision-making process.

Specific recommendations for practice to promote positive learning experiences in youth soccer (Light, 2013) include the following four core features of game sense pedagogy. The coach should (a) emphasize the physical environment or experience, (a) ask questions to facilitate discussion and player thinking as opposed continually telling

the players what to do (c) provide players with opportunities to solve problems, and (c) creates a safe and supportive environment in which mistakes are acceptable and deemed a part of the learning process. Without question, player enjoyment and retention are influenced by many factors, such parental involvement, time demands, travel and socioeconomic status. However, the results of this study show that the certain coaching behaviors can have a significant positive relationship with athlete's experience. Coaches are likely to be more effective when they use this knowledge to provide democratic coaching and positive feedback style because they will have a more positive influence on player competence, enjoyment, and retention.

A positive, athlete-centered environment is conducive to greater levels of enjoyment and retention. Therefore, the results from this study hold practical implications for coaches, administrators, sporting directors and parents. For example, administrators and coaching directors can use this study to encourage coaches to take on a more democratic approach to coaching. They can encourage coaches to create an athlete-centered environment that includes the players in the decision-making process. Coaches who offer athletes the opportunity to provide input on team strategies create a more collaborative and inclusive environment. When players have a vested interest in the process, they experience greater ownership of the outcomes.

Coaches should embrace the positive feedback (reward behavior). This dimension refers to coaching behaviors of reinforcing, recognizing, and rewarding good behavior (Chelladurai, 1990). The coach that utilizes the Positive Feedback dimension compliments athlete on their performance, in front of others, to increase and maintain motivations. The other dimension with significant results is social support. Coaches that

use the social support dimensions shows genuine concern for the welfare of his/her athletes. This coach would create a more positive environment and interpersonal relationships with athletes (Chelladurai, 1990).

Coaches should also increase the challenging nature of practice as perceived by the youth players in this study. The training and instruction dimension refers to the behavior of the coach that is directed towards improving the athlete's performance. Training and instruction focus on the training process to improve athletes' performance. These behaviors include instructing athletes on skills, techniques, and tactics of the sport, along with organizing and facilitating activities (Chelladurai, 1990). It is telling that the results of this research show a strong correlation with the training and instruction dimension and the perceived challenging nature of practice.

Limitations of the Study

As with every research study, there are limitations and opportunities for further analysis. While this study provided several interesting and important conclusions about the effects of perceived coaching behaviors on young athletes' enjoyment of the game, there were also several limitations to consider. External validity is the extent to which a study can be generalized to the population. The data collected from this study was based on purposeful sampling. The study's findings may lack some degree of generalizability to the general population of children who participate in outdoor soccer. Furthermore, the majority of the 267 participants were from the New York metropolitan area. Although the sample size for this study was large, it is important to note that external validity is enhanced with larger sample sizes. Larger sample sizes produce results that would be more generalizable to the overall population of youth soccer players.

Another limitation was that many factors that can impact both enjoyment of the game and the retention of players, such as coaching behaviors, which itself is varied. Depending on the situation, other significant factors could include either lack of parental involvement or parental interference, restrictions due to time demands or travel, the effects of the players' socioeconomic status or peer pressure. Each of these factors could affect the degree to which a young athlete enjoys, or amount of time spent in, the sport. One more limitation of this research to consider was non-response bias, which occurs when there is some characteristic that differentiates those who participated in the study from those who did not and potentially affects the results. For example, participation in this study was limited to players whose parents granted permission for them to participate and coaches who chose to cooperate by disseminating the invitation based on their own discretion. These factors limited the study in terms of both the potential pool of participants and the actual sample that was achieved. It is likely that some coaches were more responsive to the request to recruit their players and share the survey with their respective teams.

Recommendations for Future Research

The results of this study can serve as a basis for future research. Future research could seek a larger participant pool from a more expansive geographical area. In addition, qualitative data collection could have been utilized to gain more insight on enjoyment and retention. A study that included open ended questions and a qualitative component would enrich the overall analysis. Adding more levels to the study would enhance the results and provide a greater understanding on the factors related to youth soccer players' experiences, their enjoyment of the fame and their retention. One example would be to

interview former athletes to gain their perspective on the reasons why they stopped playing the game. Another interesting approach would be to create a comparison with other youth sports beyond soccer.

LSS is an instrument that is widely accepted worldwide and has been utilized in numerous countries to understand the effects of leadership in sports. Obtaining a dataset from differing nations could add to the research on leadership in sports. Also, comparisons between elite soccer clubs and amateur teams could provide insight into contributing factors that are relative to enjoyment, challenging nature of practice, and retention. Other recommendations for further research include measuring additional factors that may impact enjoyment and retention. Variables of interest for future studies could include time demands, parental influence, scheduling conflicts other activities, competition, and peer pressure.

Recommendations for Future Practice

It is important for coaches to understand that young athletes have various motives for participating in sports like soccer, and to recognize that this knowledge can be utilized to promote a more democratic coaching environment that is challenging, fun, and effective. The research findings provide additional support for specific coaching methodologies. Coaches could implement effective instructional methods by providing specific positive feedback, forming realistic expectations for each athlete, keeping practices active, providing social time for teammates to make friends, and creating an environment that reduces fear of trying new skills.

Conclusion

The purpose of this study was to examine the relationships among perceived coaching behaviors, enjoyment of the game, and ultimately to understand factors related to the retention of youth soccer players. The results of this study were significant and correlate directly with positive pedagogy methodology along with coaching dimensions of the Leadership Scale for Sports (LSS). This study further validated the shortened version of the Leadership Scale for Sports (LSS). Confirmatory factor analysis showed an acceptable model fit for the five coaching dimensions of the LSS. The factor loadings for the five dimensions were clear and sufficient. In addition, Cronbach's alpha (> .86) for all dimensions provided support for the reliability of LSS. This research further supported Chelladurai and Saleh's (1980) LSS dimensions of coaching behavior.

This study also serves as further evidence of the validity of the LSS as it was utilized in this research to examine variables associated with youth soccer. An exploratory analysis of the underlying LSS constructs demonstrated its usefulness for this population. This study achieved significantly high factor loadings for five coaching constructs. The factor scores were significant and aligned directly with the five scales of LSS. The results of this study further validate the work of Chelladurai and Saleh. Chelladurai (1990) identified main purposes that the LSS was used, one being athletes' preference for specific leader behaviors.

Further understanding of the relationships among coaching behaviors and overall enjoyment of youth sports by children can aid in the development of effective coaching methodologies and have positive effects on strategies for both training and competition. This study revealed that coaching democratic behavior, social support, and positive

feedback significantly increased youth players' enjoyment of the game; therefore, it may also help increase retention of players on youth soccer teams. This study revealed that democratic behavior and positive feedback in coaching significantly increased youth players' enjoyment of the game; therefore, it may also help increase retention of players on youth soccer teams. This study also serves as further evidence of the validity of the LSS as it was utilized in this research to examine variables associated with youth soccer and an exploratory analysis of the underlying constructs demonstrated its usefulness for this population.

This research met the goal of using use a quantitative study to validate the use of innovative and effective coaching methodologies for youth soccer. This study is relevant on multiple levels. Since 2010, soccer has suffered the most dramatic participation rate decline in the 6-12 age group, down 26.5 percent (Kennedy, 2020). Due to increasing dropout rates in youth sports, there is a greater need to research coaching strategies and their impact on retention. Also, soccer is the largest participation sports in the world. According to the World Atlas (2020), soccer has 4 billion fans worldwide and 3.571 Billion people watched the 2018 World Cup. In the United States alone, at least 24,471,538 people play soccer at some level second only to China (Source: FIFA World Football Big Count).

This study also adds to the growing body of research surrounding youth sports by showing how coaches have a significant impact on outcomes, motivation, and enjoyment and that a coach-centered approach limits the learning environment. Coaching is a complex, multifaceted, and socially significant process (Bennett & Culpan, 2014). Yet the typical coaching curriculum is restrictive and limits the coach's role.

Coaches often underestimate their impact in shaping lives. It is important for coaches and leaders to understand how to motivate players (Todd & Kent, 2004). It is beneficial for coaches to understand what creates a positive experience for players regardless of competitive outcomes.

The goal of the coach as an educator should be to enhance players' development on multiple levels. However, the current methodologies being used are limited to traditional, technical methods and drills (Bennett & Culpan, 2014). The typical coaching curriculum is restrictive and implies that a coach's role is merely one of instructing and modelling a set of skills. The coaching process must be considered as more than simply the instruction of physical and technical skills. Coaching is in fact a complex, multifaceted, socially significant, and engaging process (Bennett & Culpan, 2014). This research has contributed to this field of study by gathering the perspectives of youth soccer players at various levels, from recreational to elite. The results of the current study will aid in coaching education and offer guidance to improve coaches' understanding of how their behaviors affect players.

Results from this study hold practical implications for coaches, administrators, sporting directors and parents. One implication for coaches is the understanding and knowledge that a democratic coaching, positive feedback and social supporting style may be more effective and have a greater influence on player competence, enjoyment, and retention. Coaches will benefit from understanding how a coach facilitated, player-centered training session affects player development, overall enjoyment and ultimately retention. It is imperative for coaches to provide an environment that is constructive, challenging and at the same time fun. The coach who takes his/role professionally, and

seriously, can provide and foster lifelong experiences for players. Being able to coach is a privilege. Every practice session is an opportunity to have a positive influence on someone's life. Coaches can utilize this study, and the related literature to improve their methods and strategies.

As a person who played the game of soccer at the professional level and coached numerous teams at the national collegiate and youth levels, I have learned a tremendous amount from this research. I have learned to embrace a more democratic, player-centered approach instead of relying on structured drill techniques. After reading the literature and conducting this research, I now have a greater appreciation and understanding of the importance creating a democratic environment. For example, I will now enable players to have input into practice plans and game strategies, and to value time spent creating a social environment where the children have time to interact socially. This includes extended breaks and encouragement for players to communicate.

In addition, I plan to spend more time creating dialogue and asking questions. Consistent with positive pedagogy, time for discussion and reflection helps players gain a deeper understanding of the game. Based on this research I have embraced a more democratic approach to coaching. I will ask for volunteers on my ten-year old girls' youth soccer team to run portions of practice. This study demonstrates that, as a coach, I have the power to implement strategies that lead to motivated players who are engaged and enjoy practice more.

APPENDIX A

IRB Approval Letter

ST. JOHN'S UNIVERSITY

Federal Wide Assurance: FWA00009066

Dec 17, 2020 10:33:20 AM EST

PI: John Diffley
CO-PI: James Campbell
Dept: Ed Admin & Instruc Leadership

Re: Initial - IRB-FY2021-228 *YOUTH SOCCER COACHING METHODOLOGIES IMPACT ON ENJOYMENT OF THE GAME AND RETENTION*

Dear John Diffley:

The St John's University Institutional Review Board has rendered the decision below for *YOUTH SOCCER COACHING METHODOLOGIES IMPACT ON ENJOYMENT OF THE GAME AND RETENTION*.

Decision: Exempt

PLEASE NOTE: If you have collected any data prior to this approval date, the data must be discarded.

Selected Category: Category 2.(i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording).
The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects.

Sincerely,

Raymond DiGiuseppe, PhD, ABPP
Chair, Institutional Review Board
Professor of Psychology

Marie Nitopi, Ed.D.
IRB Coordinator

APPENDIX B

Youth Soccer Survey

This survey is for doctoral candidate's research study on coaching methodologies affect on enjoyment and retention. The research study is being conducted by John Diffley at St. John's University. John is a former professional soccer player and also played for the United States National Team.
You are invited to participate in this study because you are a current, or former youth soccer player. The research has been reviewed according to University IRB procedures.

John A. Diffley
Doctoral Candidate
Division of Administrative & Instructional Leadership

St. John's University
The School of Education
8000 Utopia Parkway
Queens, New York 11439

Dear Parent,
As a Doctoral candidate, a part of my research at St. John's University is to administer a survey called the Youth Soccer Survey. This survey is completely confidential. This research will help gain a deeper understanding of what motivates youth soccer players. As a current college athletic administrator, former collegiate, professional, and a United States National team player, I have a lifelong passion for the sport. This study will utilize the survey, Leadership Scale for Sports (LSS), designed by Chelladurai and Saleh (1978, 1980). We ask for permission that your child be allowed to participate in a research study.

Once students complete the survey, their answer page will be assigned a coded number to protect their anonymity. The coach nor the club will see the results. There are no known risks associated with your child's participation in this research project. Although your child will receive no direct benefits, this research will help us gain a deeper understanding of what motivates youth soccer players and how factors connect with their enjoyment and retention. Your child's responses will be kept confidential, and he or she may withdraw from this study at any time without penalty. Furthermore, your child does not have to answer every question in the survey. If there is anything about the study that is unclear you may contact me at ([redacted]), diffleyj@stjohns.edu.

For questions about your rights as a research participant, you may contact Raymond DiGiuseppe, PhD, ABP, Chair, Institutional Review Board, Professor of Psychology; or Marie Nitopi, Ed.D. IRB Coordinator Dr. Marie (718-990-1440).
Here is a link to the "Youth Soccer Survey":
https://forms.office.com/Pages/ResponsePage.aspx?id=P4nfNtQNJ0GXpbxTe83GKr42TQTzOwFAhEaJP0RyzqBUNk5CVzBNU0RJQVJHMjdCTjlDWVlHTUVQSy4u

CONSENT I have read this parental consent form and have been given the opportunity to ask questions. I give my permission for my child to participate in this study. I understand that, in order to for my child to participate, they will need to be able to give their consent also. I understand that participation is voluntary and I can withdraw my child at any time without penalty or loss of benefits.
If you agree to consent, click YES and proceed, and/or sign and return.

Parent/Guardian signature_____ Date: _____

Respectfully,
John A. Diffley

Participant Letter
John A. Diffley
Doctoral Candidate
Division of Administrative & Instructional Leadership

St. John's University
The School of Education
8000 Utopia Parkway
Queens, New York 11439

Dear Youth Soccer Player,
I am John Diffley from St. John's University. I am doing a research on youth soccer coaching methods relative the enjoyment of the game and continued participation. I am asking you to take part in this research study because you play youth soccer.
For this research, you will be asked about how your coaches leadership style. We will keep all your answers private and will not show them to your coach. Only people from St. John's University working on the study will see them.
You should know that:
• You do not have to be in this study if you do not want to. Please note, there is no penalty if you say no.
• You may stop being in the study at any time. (If there is a question you don't want to answer, just leave it blank.)
• Your parent(s)/guardian(s) were asked if it is OK for you to be in this study. Even if they say it's OK, it is still your choice whether or not to take part.
• You can ask any questions you have, now or later. If you think of a question later, you or your parents can contact me at diffleyj@stjohns.edu or my phone number [redacted]

2.Answer yes and proceed to the survey only if you have understood what you will be doing for this study, have any questions answered, have talked to your parent(s)/legal guardian about this project. If you agree answer Yes and proceed to the next section. You can also email me at diffleyj@stjohns.edu., or send hard copy to John Diffley, [redacted]

[redacted] and proceed to section 2. If you do not wish to continue, please answer No and stop here. Thank you.

Yes

No

Base your answers on one year of your playing career, one coach and base your answer's according to that year.

3.Age

9-12 years old

13-15 years old

16-19 years old

20 - older

4.Gender

Male

Female

5.Did your parents play the sport of soccer?

- Yes
- No

6.Practices

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

Do you find practices fun and enjoyable

Do you find the practices challenging

7.LSS survey "My Coach....."

Always

Often

Occasionally

Seldom

Never

Let's his/her athletes share in decision making

Compliments athletes for good performance in front of others

Keeps to his/her self

Gives credit when it is due

8."My Coach....."

Always

Often

Occasionally

Seldom

Never

Encourages close and informal relationships with the athlete

Expresses appreciation when an athlete performs well

Encourages athlete to confide in him/her

Speaks in a manner not to be questioned

9."My coach....."

Always

Often

Occasionally

Seldom

Never

Lets the group set their own goals

Sees to it that practice efforts are coordinated

Looks out for the personal welfare of the athletes

Let's the athletes try their own way even if they make mistakes

10."My coach....."

Always

Often

Occasionally

Seldom

Never

Encourages athletes to make suggestions on conducting practices

Pays special attention to correcting athletes mistakes

Refuses to compromise on a point

Specifies in detail what is expected of each athlete

11."My coach....."

Always

Often

Occasionally

Seldom

Never

Sees to it that every athlete is working to his capacity

Asks for the opinions of athletes on strategies for specific competition

Works relatively independently of athletes

12."My Coach...."

Always

Often

Occasionally

Seldom

Never

Helps athletes with their personal problems

Tells an athlete when he/she does a particularly good job.

Does not explain his/her action

13."My coach....."

Always

Often

Occasionally

Seldom

Never

Explains to each athlete technique and tactics of the sport

Helps members of the group settle their conflict

Sees that an athlete is rewarded for good performance

14.How many years have you been playing the sport of soccer?

Enter your answer

15.Continuing to play

Extremely Likely

Likely

Neutral

Unlikely

Extremely Unlikely

Do you plan on playing next season?

Do you envision yourself playing in 3 years?

Do you envision playing in college, or you did play in college?

16.What best defines the category level of your team.

Recreation

High School

Travel

Premier - Academy

Elite Academy (amongst top teams in region and country)

Other

17.What club are you playing for, or did you play for relative to this study?

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Vita

Name	*John A. Diffley*
Current Professional Occupation	*Deputy Athletics Director, St. John's University*
Date Graduated	*June, 1985*
Baccalaureate Degree	*Bachelor of Science/Arts*, The American University, Washington, D.C. *Major: Real Estate and Urban Development*
Date Graduated	*May, 1988*
Other Degrees and Certificates*	*Master of Business Administration*, *St. John's University, Jamaica, New York, Major: Finance*
Date Graduated	*May, 2001*