AN EXAMINATION OF AUTHENTIC LEADERSHIP IN COACHES AND ITS CONSEQUENCES FOR ATHLETES

By

COMILLE TAPIWA BANDURA

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ABSTRACT

The aim of this thesis was to examine Authentic Leadership (AL) in sport. In Study 1 AL was investigated through professional football coaches' perceptions. This thesis also sought to investigate the links between AL, satisfaction, commitment, enjoyment and task cohesion, and potential mediators of the relationships between AL and the abovementioned variables. Trust (Studies 2 & 3) and autonomy (perceived choice) (Studies 2 & 3) were examined as mediators of the links between AL and satisfaction (Study 2), commitment (Studies 2 & 3) and enjoyment (Study 3). In Study 4, team sacrifice, and trust were investigated as mediators of the relationship between AL and task cohesion. AL was positively related to commitment, enjoyment and satisfaction. Mediation findings showed that trust and autonomy (perceived choice) may help explain the links between AL and the abovementioned variables. AL was positively associated with task cohesion. Mediation findings revealed that trust and team sacrifice may help to understand the link between AL and task cohesion. These findings suggest that coaches may benefit from being authentic as this may be beneficial for athlete and team outcomes.

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CONTENTS LISTING

LIST OF PAPERS

This thesis is comprised of four papers. Study design, data collection, statistical analysis, and writing were conducted by Comille Tapiwa Bandura. Dr Maria Kavussanu provided assistance with study design, data analysis, and paper editing. Dr Juliette Stebbings advised on data analysis and editing of Study 2. Dr Chin Wei Ong advised on the data analysis of Study 4.

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While studying within the School of Sport, Exercise and Health Sciences at the University of Birmingham, the following conference presentations were delivered.

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CONTENTS

APPENDICES

LIST OF FIGURES

LIST OF TABLES

CHAPTER 1

General Introduction

"I have been asked [to respond] and I maintain what I said, 100%. Nothing has changed. I try to serve this game with honesty and integrity and when I have something to say, I say it." (Arsene Wenger, 2017)

In general, many definitions ascribed to leadership focus on an individual's role and responsibilities. Over the past 30 decades, there has emerged several ways to define the term leadership with varying degrees of interpretations-perceived either as either an ability, process, relationship or art of expression. In this thesis, leadership is defined as a process whereby an individual influences a group of individuals to achieve a common goal. Indeed, leadership involves influencing people and focusing that influence towards a tangible outcome, such as the completion of a task or a change in behaviour (Gilmore, 2007). Furthermore, leadership implies the ability of an individual to influence a group or organisation by directing, structuring, and facilitating activities and relationships (Yukl, 2010).

This thesis adopts a functional approach to leadership which postulates that individuals in leadership roles must provide for the needs of the team. Within this perspective, the 'leader's main job is to do, or get done, whatever is not being adequately handled for the group's needs' (McGrath, 1965, p.75). Sporting environments can be viewed as a social context comprised of multiple novel, complex and ambiguous components (Northouse, 2010). For this reason, it is reasonable to adopt a functional approach to leadership in sport. Indeed, it is important to understand the social context in which coaches work. Furthermore, due to complexity and ambiguity faced by sports coaches, research should re-evaluate the coaching process and what it means for athletes (Morton, 2016). Adopting a functional approach supports the notion that leadership is a process of influence to achieve a common goal. In other words, a functional approach to leadership addresses specific coach behaviours expected to contribute to individual or team effectiveness.

Many researchers have examined leadership in sport throughout the years. The interest in examining leadership stems from the belief that coaches are crucial in determining whether a team succeeds or fails (Vella, Oades, & Crowe, 2010). Notably, the relationship between a coach and his/her athletes influences athletes' motivation to perform (Morton, 2016). This will subsequently have consequences on their experiences as an athlete. A variety of leadership conceptualisations have been proposed. All of which outline the important role leadership plays in sport. The leadership approach proposed herein shares some common aspects with other forms of leadership. An overview of highly related and competing leadership theories is presented and interrogated below.

Overview of Leadership Theories and Models in Sport

Theories of leadership vary greatly. Understanding the various leadership models that influence follower outcomes stems from organisational research. This research has helped to understand the importance of leadership in determining the effectiveness of an organisation. Research in this context has also identified that leadership styles influence organisational outcomes differently. This research suggests that certain types of leadership contribute differently to organisational attributes such as commitment, satisfaction and cohesion which drive performance. Earlier theories (e.g., autocratic leadership, laissez-faire and participatory) underpin some of the most examined forms of leadership in organisational research over the last 30 decades. For example, transactional and servant leadership (Greenleaf, 1977), charismatic (Conger & Kanungo, 1987) and ethical leadership (Brown, Trevino, & Harrison, 2005). These theoretical perspectives are discussed below.

Within transactional leadership, followers are extrinsically motivated because leaders operate using a system of rewards and punishment (Bass, 1985). Transactional leaders offer something of value in return for organisational success. Such leaders focus on results, conforming to structure whilst ignoring followers' individual needs and development.

Subsequently, followers of transactional leaders are not self-motivated because they are not rewarded for self-initiative- their creativity is limited since goals and objectives are already set. Although Bass (1985) argues that transactional leadership helps followers to perform due to the recognition associated with goal achievements, there is some debate over whether transactional leadership offers any benefit to followers (Morton, 2016).

Servant leadership involves a leader who puts their followers before her/himself (Greenleaf, 1977). Such leaders consider follower needs, by prioritising their personal and professional development. Servant leadership focuses on followers' interests and aspirations over and above organisational outcomes (Greenleaf, 1977). Thus, servant leaders have a broad-level focus whereby they are committed to making a positive contribution to society via their followers. Whilst servant leadership typically develops positive environments, encourages and motivates high performance from followers, it is important for leaders to recognise and share their *own* visions when identifying and meeting the needs of their followers and organisational outcomes.

Charismatic leaders inspire and motivate their followers by relying on their charm and persuasiveness (Conger & Kanungo, 1987). Charismatic leadership involves creating a self-image so powerful that followers are naturally drawn to a leader due to her/his enthusiasm and articulate visionary. As such, followers identify with charismatic leaders' vision and accept the leaders' values as their own (Shamir & Eilam, 2005). Because charismatic leadership relies heavily on the leaders' personality and actions, such leaders are prone to exaggeration, excessive risk taking, 'tunnel vision', and manipulation of followers (Brown et al., 2015). In other words, charismatic leadership centres around the energy levels of a leader towards their *own* ambition and vision, potentially changing value systems of followers - thwarting learning opportunities.

Ethical leadership is directed by high ethical standards, rewarding ethical conduct and punishing unethical behaviour (Brown et al., 2005). Ethical leaders are fair, respect their followers and ensure that decisions are made in accordance with overall organisational values. By regularly communicating and discussing organisation values, ethical leaders ensure that there is consistent understanding among followers. Subsequently, followers of ethical leaders have a clear vision of organisational values and expectations. Because of these articulated high values, ethical leaders do not tolerate or overlook unethical behavior. Since ethical behavior sole requirement of ethical leadership, this disregards the fact that there are other desirable leadership behaviors practiced by individuals that separate these leaders from those that are simply ethical.

In this section, three leadership perspectives that have given significant insights into leadership in sport are discussed. The Multidimensional Model of Leadership (MML) has been examined extensively by sport leadership researchers (Chelladurai, 1978). Coach behaviour consists of five distinct constructs. First, training and instruction refers to a coach's use of tactics to improve performance and skill in athletes. Second, social support is how the coach satisfies the relational needs of athletes. Third, positive feedback is coach behaviour aimed at encouraging and rewarding athletes when they perform well. Fourth, democratic behaviours allow athlete's input in the decision-making process. Finally, autocratic behaviours emphasise the authority of the coach, and thus do not allow room for athletes to make decisions (Loughead, Munroe-Chandler, Hoffmann, & Duguay, 2014; Vincer & Loughead, 2010).

According to Chelladurai and Saleh (1980) the abovementioned dimensions are measured via three perceptions: how athletes perceive coach behaviours, how athletes prefer these behaviours to play out, and through the perceptions of a coach's actual behaviours. Measuring these three perceptions is proposed to allow researchers to examine whether they

are similar. The model proposes that an athlete will feel more satisfied if coach leadership behaviours are consistent with how they prefer them (Morton, 2016). This has been shown to be the case for, autocratic, democratic and training and instruction behaviours (Loughead & Hardy, 2005). These three dimensions are proposed to be the most central to coach leadership (Loughead et al.,2014).

The Mediational Model of Leadership (Smoll & Smith, 1989) proposes that situational, cognitive, behavioural, individual difference, and personality variables interact. In this model, there are interaction effects between athletes' perceptions of coaching behaviours and how athletes assess these behaviours (Smoll & Smith, 1989). Athlete perceptions are said to be influenced by three factors; player individual differences, coach individual differences and situational factors. Player individual differences (e.g., age, sex, achievement motivation, perceptions of coaching norms) and coach individual differences (e.g., sex, coaching norms, self-evaluation) influence athletes' perceptions and attitudes and how athletes evaluate coach behaviour. Situational factors (e.g., the nature of the sport, level of competition, practice versus game situations) influence all factors specified within the model. For the model to be complete, how athletes evaluate coach behaviour is linked with athletes' perceptions and actual coach behaviours via a coaches' perception of athlete attitudes.

Although the Multidimensional Model of Leadership (MML; Chelladurai, 1978) and the Mediational Model of Leadership developed by (Smith & Smoll (1989) have given significant insights into leadership in sport, they are dated. As such, the behaviours investigated may not be comprehensive and are perhaps inconsistent. For, example the MML has become synonymous with autocratic versus democratic behaviours (Yulk, 2010). This had led to the majority of research focusing on the advantages and disadvantages of autocratic and democratic behaviours. Thus, less attention has been given to alternative and more contemporary leadership approaches (Zhu et al., 2015). As such, over the past decade,

researchers have increasingly turned to transformational leadership to better understand leadership in sport.

Transformational leadership involves behaviours that are designed to empower, inspire, and challenge followers to enable them to reach their full potential (Bass & Riggio, 2006). Callow, Smith, Hardy, Arthur, and Hardy (2009) outlined five transformational behaviours in sport. First, individual consideration pertains to a coach who understands his/ her athletes at an individual level. Second, inspirational motivation is a coach who motivates and inspires athletes by encouraging creativity and innovation. Third, high-performance expectations involve the coach being consistent with regards to the high standards he/she expects from athletes. Fourth, appropriate role model is a coach who gains the respect of his/her athletes because they are viewed as a role model. Fifth, fostering acceptance of group goals and promoting teamwork relates to a coach who promotes teamwork to achieve team goals.

Transformational leadership research in sport has been linked with several positive outcomes including performance, athlete satisfaction, effort and task cohesion (e.g., Arthur, Woodman, Ong, Hardy, & Ntoumanis, 2011; Callow et al., 2009; Charbonneau, Barling, & Kelloway, 2001; Rowold 2006; Smith, Arthur, Hardy, Callow, & Williams, 2013). However, it is important to acknowledge other examples of strength-based approaches to leadership, given the fundamental problems regarding the conceptualisation transformational leadership (Arthur, Bastardoz, Eklund, 2017). These concerns are discussed below.

The pervasive use of repetitive definitions, describing transformational leaders in terms of what they do rather than what they are confounds transformational leadership with its outcomes (Antonakis, Bastardoz, Jaquart, 2016; Van Knippenberg & Sitkin, 2013) and prevents the construct from being used as an independent variable (Arthur et al., 2017). For example, the assertion that transformational leaders behave in ways “to achieve superior

results", "that motivate and inspire those around them" or that "stimulate their followers" efforts to be innovative and creative" (Bass & Raggio, 2006 p. 5–7) describes transformational leaders by their outstanding outcomes on followers and makes a test of the construct true by definition. But how do leaders come to achieve these effects? For example, are all effective leaders charismatic or inspirational? Indeed, charisma is not necessarily leader behaviour but rather how leaders feel the need to impress (Yukl, 2006). The theory remains vague and elusive about such issues. As such, theoretical clarifications and proper definitions are needed to advance our understanding of the phenomenon (Arthur et al., 2017).

Transformational leadership focuses enabling followers to achieved desired goals and helping to transform followers into future leaders (Bass, 1985). However, the theory does not emphasise follower development, ignoring the fact that not all followers have the desire to become future leaders (Arthur et al., 2017). As such, researchers have questioned the moral and ethical aspect of transformational leadership (e.g. Emuwa, 2013). Based on this, Bass and Steidlmeier (1999) proposed two types transformational leadership; pseudo transformational leadership and authentic transformational leadership. However, Bass and Steidlmeier argued that even "authentic transformational leaders may have to be manipulative at times for what they judge to be the common good" (p. 186). Thus, transformational leaders can create an impression to others of being something different than who they are (Avolio & Walumbwa, 2014).

In summary, there are several leadership theories proposed to address issues on effective coaching. Bass's (1985) concept of transformational leadership has been applied to the sport domain (e.g. Callow et al., 2009; Charbonneau, Barling, & Kelloway, 2001; Rowold, 2006). Transformational leadership in sport is characterised by a coach's ability inspire and motivate his/her athletes to reach their full potential (Callow at al., 2009). Authenticity in leadership originated from the observation and critique of the unethical way

transformational leaders manipulate their followers (Emuwa, 2013). Researchers argue that authentic behaviour is inherently concerned with a leader's ethics and morality (Cianci, Hannah, Roberts & Tsakumis, 2014). Thus, authentic behaviour addresses the demand for coaches to act with integrity and transparency, as this may influence athletes' behaviours and attitudes (Vella et al., 2010).

Authenticity and the Need for Authentic Coach Behaviour

Despite researchers' efforts to distinguish authentic transformational leadership in sport from pseudo (e.g. Mills & Boardley, 2017), this has failed to inform leadership research that emphases the importance of authentic behaviour. The notion of authenticity originated from Greek philosophy and is conceptualised in terms of 'living a meaningful life' (Harter, 2002). Authenticity is about a person being true to themselves as opposed to being fake (Gardner, Avolio, Luthans, May & Walumbwa, 2005; George, 2003; Shamir & Eilam, 2005). Thus, authenticity revolves around the ability to be being self-aware and being true with one self by expressing genuine thoughts and feelings and acting in accordance to them (Penger & Cerne, 2014).

An emerging trend within sport is a growing interest in authentic coach behaviour (Vella et al., 2010). This is a reaction to persistent controversial practices of coaches which have been highlighted by the media. Some have become full-blown corporate scandals which have questioned the integrity and transparency of sport governing bodies. For example, the collapse of UEFA and Sepp Blatter, through to the alleged cover-up of coaches' inappropriate conduct by the English Football Association. There are several other examples, such as a report which uncovered the alleged cover-up of bullying and 'culture of fear' created by British cycling coaches and their governing body. The report, which was never made public was said to have improperly reflected "actual facts" and had "a complete "lack of transparency" (UK Sport, 2016).

Other examples include coercive coaching to facilitate financial gains, which may result in promotion to a higher league. Such actions could have some degree of benefit for governing bodies or stakeholders of clubs, but they do not take into account how some decisions may impact athletes (Nesti & Littlewood, 2011). These leadership behaviours are consistently masqueraded as the 'norm in sport', however, it appears they undermine, manipulate and weaken the true meaning of sport to the point where the viability of sport comes into question (Ronkainen, Tikkannen, Littlewood, & Nesti, 2015). Such practices demonstrate how poor governance could be taken advantage of by coaches whose conduct is solely to satisfy their personal gains

In sport, coaches must ensure that certain expectations are met, however, they need to do this in an authentic manner (Vella et al., 2010). According to Ciulla (1999), morally good leadership is more effective than simply "good leadership" in order to achieve long-term success. A major concern has been that despite growing recognition of the significance of authentic behaviour in coaches, this awareness has not only failed to inform morally driven leadership practices, but it also appears to have been actively disregarded (Ronkeinen et al., 2015; Vella et al., 2010). Indeed, the notion of authenticity is lacking in existing leadership models in sport.

Past research has shown the benefits of AL in several contexts including nursing and education (see Avolio & Walumbwa 2014). With the interest in ethical issues within sporting environments, authenticity may evolve into an essential element leadership (Vella et al., 2010). Indeed, there has been a growing interest in sport to develop value-based approaches to leadership. This because earlier models focus on performance as an outcome of effective leadership. However, contemporary leadership models tend to emphasis additional positive outcomes for athletes (e.g., satisfaction and trust). In this thesis, I aim to address the need for specific research into understanding perceptions of promoting authentic behaviour and

positive sportsmanship in coaches who may benefit from engaging in the deep reflection required to be authentic (Ykhymenko-Lescroat et al., 2015).

Authentic Leadership (AL)

According to Gardner, Cogliser, Davis and Dickens (2011) the resurgence of AL in organisational literature was borne out American scandals of the late 20th century. In their review Gardner et al. (2011) postulate that AL could inform other leadership approaches because it is a "root construct in leadership theory" (Avolio & Gardner 2005, p. 315). Although the notion of authenticity has been around for decades Luthans and Avolio (2003) were the first to develop a framework of AL. Their research forms the current understandings of AL.

Several researchers (e.g., Avolio & Gardner, 2005; Gardner et al., 2005; Ilies, Morgeson, & Nahrgang, 2005) attempted to build upon this work, however the core components of the construct were consistent with those proposed by Luthans and Avolio (2003). Walumbwa and colleagues (2008) noted that existing conceptualisations of AL and their implications were insufficient and failed to capture the '*how*' in authentic leader development. Walumbwa et al (2008) found that in addition to four key components AL draws upon positive psychological capacities and a positive ethical climate. Below I will describe Walumbwa and colleagues' (2008) four component model of AL which is generally the most accepted within the literature.

Authentic Leadership (AL) (Walumbwa et al., 2008) is defined as:

> a pattern of leader behaviour that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development (Walumbwa et al., 2008, p. 94).

The first dimension of AL is self-awareness which pertains to the degree to which leaders are able to recognise their own strengths, weaknesses, and attributes (Gardner et al, 2005; Walumbwa et al., 2008). Therefore, such leaders have the ability reflect effectively to improve strengths and alleviate weaknesses. Thus, leaders who are self-aware are cognisant of their own beliefs, values, and emotions and can accurately assess these personal attributes (Gardner et al., 2011). Consequently, authentic leaders are aware about how they may influence others' behaviours both within or outside the working environment (Kernis, 2003).

The second component of AL is internalised moral perspective. Internalised moral perspective refers to the self- regulation of the leader's internal moral values and standards (Gardner et al., 2005). Thus, authentic leaders' behaviour reflects their personal values and morals. This allows them to resolve ethical dilemmas and influence others to act authentically (Avolio, Gardner, Walumbwa, Luthans, & May, 2004; Avolio & Gardner, 2005). In other words, authentic leaders' values reflect their character which includes showing integrity and fairness regardless of external pressures (Hannah & Avolio, 2011)

Balanced processing is the third component of AL this reflects how a leader objectively analyses all information relevant to a problem before ultimately making decisions (Walumbwa et al., 2008). Leaders who display balanced processing welcome the views of followers during the decision-making process, even views may challenge their position (Gardner et al., 2005). Thus, balanced processing rest on the notion that authentic leaders can evaluate and critically reflect on tasks in an unbiased manner.

The final component of AL is relational transparency, which refers to possessing a high level of openness, sharing information and being honest with others (Walumbwa et al., 2008). As such, authentic leaders express genuine thoughts and feelings, as opposed to being insincere, manipulative and fake (Diddams & Chang, 2012). This helps leaders to develop

trust authentic leaders to not demonstrate inappropriate thoughts or emotions that could negatively influence others' trust in their abilities (Kernis, 2003).

In summary, the notion that coach behaviours need to be authentic, based on good ethical intentions and not being manipulative or fake has received little attention in sport (Houchin, 2011; Vella et al., 2010). The resurgence of AL in organisational research prompted scholars to develop a multicomponent model of AL (Avolio & Walumbwa, 2014; Gardner et al., 2011; Leroy, Anseel, Gardner & Sels, 2015; Penger & Cerner, 2014; Peus, Wesche, Stricher, Braun, & Frey, 2012; Walumbwa et al., 2008; Wang, Sui, Luthans, Wang & Wu, 2014). This research acknowledges that Walumbwa and colleagues (2008) accurately define AL. This model forms the basis of this thesis.

Outcomes of Authentic Leadership in Sport

In this section, the potential consequences of AL for athletes will be discussed. First, trust is discussed as both an outcome and mediating mechanism. Second, athlete satisfaction, commitment, enjoyment and autonomy (perceived choice) will be discussed as outcomes of AL. Third, autonomy (perceived choice) is explored as a mediating variable. Lastly, team outcomes of AL will be discussed, specifically task cohesion and team sacrifice.

In sport, only one study has examined consequences of AL. Houchin (2011) examined whether (a) AL predicted higher levels of trust and (b) whether trust mediated the relationship between AL and group cohesion and performance in a sample of 109 mainly female (n = 99) student athletes from team sports. In this study, there were significant correlations between AL and trust in leadership, AL and group performance, and with both AL and trust with group performance. AL did not have a significant effect on group performance when controlling for trust in leadership, resulting in a mediating effect. AL also resulted in higher group cohesion when mediated by trust in leadership. AL had a significant effect when controlling for trust in leadership, thus there was a partial mediating effect.

Trust

Trust is defined as athletes' perceptions of the integrity, credibility, and benevolence of a coach (Dirks, 2000). Drawing support from social exchange theory (Blau, 1964), authentic create high-quality relationships because of trust (Dirks & Ferrin, 2002). Authentic leaders promote trust in their followers because they show concern for their well-being (Vincer & Loughead & Loughhead, 2010). In addition, authentic leaders have the ability to ensure that everyone is aware of what is required to be successful, which builds confidence (Diddams & Chang, 2012). Authentic leaders communicate their views, openly discussing critical issues, and behave in accordance with their convictions which promotes trust (Walumbwa et al., 2008). Athletes are more likely to trust their coach if they feel empowered to reach desired goals. Thus, trust enables athletes to be dedicated to accomplishing goals set out by the coach (Dirks, 2000). If athletes trust their coach, athletes may feel confident in communicating openly which could lead to positive outcomes (Dirks & Ferrin, 2002; Podsakoff, Whiting, Podsakoff, & Blume, 2009).

Previous research has shown that trust between a leader and his/her followers can lead to positive outcomes including sportsmanship and performance (e.g., Dirks & Ferrin, Podsakoff et al., 2009). AL is associated with attributes such as benevolence and integrity. These attributes have been identified as antecedents of AL (see Peus et al., 2012). Given that AL is underpinned by these characteristics, this elicits trust, and because of this trust, increased commitment, satisfaction, organisational citizenship behaviours and work engagement (see Avolio & Walumbwa, 2014).

Authentic leaders are portrayed as being "genuine, reliable, trustworthy, real, and veritable" (Luthans & Avolio, 2003). As such, trustworthiness is theorised as an essential characteristic of AL. Empirical research suggests that being consistency, behaving with integrity, sharing of power, open communication, and benevolence – all characteristics that

reflect the theoretical construct of AL – are associated with followers' perceptions of their supervisors' trustworthiness (Peus et al., 2012). Furthermore, as noted by Zhu, May and Avolio (2004), "most perspectives on trust acknowledge that a leader's words must accurately predict his/her future actions in order to create a necessary, though perhaps not sufficient, condition for the development of trust" (p. 19). The alignment between the values and behaviours of authentic leaders and the transparency of their decision-making process appears to be consistent with the importance of reliability and dependability judgments (Peus et al., 2012). The present study aims to build on previous work by examining trust as a key outcome of AL behaviour in coaches.

There is scant research exploring how trust relates to leadership styles (Peus et al, 2012). Trust has been found to be important for athletes in coaches viewed to be authentic (Houchin, 2011). Placing trust in their coach allows athletes to work towards their teams' common goals. Thus, athletes are motivated, committed and put extra effort into achieving these goals (Dirks, 2000). There is a scarcity of research on the relationship between AL and trust in sport. Trust in coaches viewed to be authentic may not only allow athletes to strive towards common goals but it can potentially act as a mediator for other factors such as commitment, satisfaction and enjoyment.

Athlete Satisfaction

Athlete satisfaction is "a positive affective state resulting from a complex evaluation of the structures, processes, and outcomes associated with the athletic experience" (Chelladurai & Riemer, 1997 p.113). The difference between what an athlete desires and their perception of what is received determines whether an athlete is satisfied within three domains: psychological, physical and environment. Many studies investigated the relationship between AL and job satisfaction, however, none have specifically examined athlete satisfaction. According to Chelladurai and Riemer (1997) "It is imperative that

evaluation of an athletic program and its coaches should be based on athlete satisfaction in addition to measures of performance such as win-loss records" (Chelladurai & Riemer, 1997 p.13). They argue that win-loss records (i.e. performance as an outcome) do not reflect athletes' pursuit of excellence nor their experiences of being an athlete.

In this study, I focused on a three-dimensional concept of satisfaction. The three dimensions are: individual performance, which refers to satisfaction with athletes' performance; personal treatment, which is satisfaction with the coaching behaviours that affect the individual directly and the team development indirectly; and training and instruction, which refer to satisfaction with the training and instruction provided by the coach (Chelladurai & Reimer, 1997). Kim and Cruz (2016) conducted a meta-analysis on coaching behaviour and athletes' satisfaction, following the multidimensional model of sports leadership (MML). They found that all leadership traits specified in the model positively correlated with athletic satisfaction.

Authentic leaders provide working environments that support follower development through the creation of meaningful relationships (Giallonardo, Wong & Iwasiw, 2010). These relationships allow followers to share a deeper understanding with a leader and therefore aid the promotion of positive emotional states, such as satisfaction (Avolio & Gardner, 2005, Gardner et al., 2011). In sport, coach AL may be associated with satisfaction because coaches who are viewed to be authentic are expected to treat athletes in an unbiased and considerate manner and involve them in problem-solving. Furthermore, if coaches model highly ethical conduct, this could promote self-regulation of athletes' *own* actions, which may contribute to greater levels of satisfaction.

Studies in several contexts (e.g., organisational and nursing) have found a positive relationship between AL and satisfaction (Penger & Cerne, 2014; Walumbwa et al., 2008; Wong & Laschinger, 2013). In a study by Penger and Cerne (2014) employees working under

authentic supervisors were reported to enjoy their work and were more satisfied with the working atmosphere. Studies in nursing have revealed that positive relationships fostered by authentic leaders support high levels of follower satisfaction (Giallonardo et al., 2010; Wong & Laschinger, 2013). Given these results, this thesis examines the relationship between AL and athlete satisfaction.

Commitment and enjoyment

Sport commitment is defined as a "psychological state representing the desire to resolve or continue sport participation" (Scanlan, Carpenter, Schmidt, Simons, & Keeler, 1993, p.6). Sport enjoyment is defined as a "positive affective response to the sport experience that reflects generalised feelings, such as pleasure, liking, and fun" (Scanlan et al., 1993 p.6). The theoretical model of sport commitment has proposed enjoyment and commitment as key components of the model (Scanlan at al., 1993).

According to Avolio and Gardner (2005), leaders who show concern for their followers' well-being and create caring environments built on mutual trust will facilitate commitment. Authentic leaders are open and honest about their values and beliefs this in turn creates high-quality relationships (Walumbwa et al., 2008). These trusting relationships broaden the interests of followers and motivate them to go beyond individual self-interest for the good of the team (Illes et al., 2005). As a result, followers develop an emotional attachment to leaders viewed to be authentic which elicits commitment (Avolio & Gardner, 2005; Avolio & Walumbwa, 2014).

Much of what we know about the relationship between AL and commitment stems from organisational research (e.g. Gardner et al., 2011, Walumbwa et al., 2008). Organisational commitment refers to the extent to which workers are committed to an organisational goals and values. (Avolio & Walumbwa, 2014). Organisational commitment also includes emotional attachment to goals and how proactive and connected individuals are

towards these goals (Walumbwa et al., 2008). Walumbwa et al's. (2008) study was the first to reveal that AL positively predicted' organisational commitment. Peus et al (2012) found that antecedents of AL- being consistent with one's values and beliefs and acting in accordance with them- had a positive and significant influence on commitment.

The relationship between AL and athletes' commitment and enjoyment could also be explained by research on AL and employee engagement. Engagement includes a person's attachment towards his/her organisation and is a positive affective-cognitive state (Emuwa, 2013; Penger & Cerne, 2014) similar to commitment and enjoyment. A common agreement among organisational researchers is that engaged employees are immersed and involved in their work (Macey, Schneider, Barbera, & Young, 2009), take pride in their job (Mathews, 2010), and exert a great deal of effort toward their work (Penger & Cerne, 2014).

Authentic leaders' ability to elicit a sense of challenge and meaning, while boosting their followers' belief that they can complete their work, means that authentic leaders are in an ideal position to promote commitment and enjoyment. By challenging their followers to think creatively and proactively, authentic leaders work to re-frame seemingly routine, everyday tasks into exciting work that instils in the employee a greater sense of meaning (Avolio & Walumbwa, 2014). It, therefore, seems plausible to suggest that coaches' AL may promote athlete commitment and enjoyment.

Research has also shown that followers of supervisors perceived to be authentic reported greater effort, were more energetic and determined even when faced with difficult challenges (Lam, Kraus & Ahearne, 2010). Furthermore, this research revealed that followers who were committed also reported other positive emotions such as pride and inspiration. Penger and Cerne (2014) found that followers of authentic leaders fully concentrated, were happily engrossed in their work, and had difficulty with detaching themselves from work.

These studies pave the way for researchers to examine athlete commitment and enjoyment as consequences of coach AL.

Research has also shown that the way in which coach AL may elicit commitment and enjoyment through the creation of a trustful environment may lie with Social Exchange Theory (Blau, 1964). A basic tenant of social exchange theory, when applied to the realm of leadership, is that followers will "repay" supportive leaders by displaying organisationally beneficial behaviour and attitudes (Gerstner & Day, 1997). Saks (2006) included commitment and enjoyment in this list of outcomes resulting from positive exchange relationships, stating that "Bringing oneself more fully into one's work roles and devoting greater amounts of cognitive, emotional, and physical resources is a very profound way for individuals to respond to an organisation's actions" (p. 603). It appears coach AL could elicit athletes' commitment and enjoyment in much the same way, due to their tendency to create an environment of trust (Peus et al., 2012; Penger & Cerne, 2014).

Authentic leaders have been shown to enhance followers' commitment (Gardner et al., 2011; Peus et al., 2012; Walumbwa et al., 2008). Furthermore, through the creation of meaningful relationships, authentic leaders allow followers to share a deeper understanding of a leader and therefore aid the promotion of positive emotional states, such as enjoyment. Although the AL-commitment and AL-enjoyment has been examined in several context, little is known about these relationships within the context of sport.

Autonomy (perceived choice)

Autonomy refers to "being the perceived origin or source of one's own behaviour" and is one of the three basic psychological needs specified in self-determination theory (SDT) (Deci & Ryan, 2008). Autonomy encompasses three aspects. First, internal perceived locus of causality (IPLOC) indicates whether a person believes that his or her actions are initiated and regulated by a personal force. Second, volition refers to an unpressured willingness to engage

in an activity. Finally, perceived choice pertains to the perception of having decision-making flexibility to choose whether to engage in an activity (Reeve, Nix, & Hamm, 2003).

According to SDT, one of the main intrinsic needs that motivate athletes to initiate behaviour and contribute to psychological health and wellbeing is autonomy. Intrinsically motivated athletes are more self-determined this leads to committed athletes who exert more effort during practices and games and experience greater enjoyment (Pelletier, Fortier, Vallerand, & Briere, 2001). In order for athletes to report increased levels of intrinsic motivations their need for autonomy should be fulfilled (Deci & Ryan, 2000; Ryan & Deci, 2002).

Coaches who satisfy athletes' need for autonomy been shown to positively influence their psychological needs (Amorose & Horn, 2000, 2001). This is known as autonomy-supportive coaching which is characterised by behaviour which includes providing athletes with opportunities to make decisions, showing concern and providing constructive feedback (Mageau & Vallerand, 2003). These resemble the core characteristics of AL and have been shown to establish the benefits of coach autonomy-supportive environments (Adie, Duda, & Ntoumanis, 2008; Alvarez, Balaguer, Castillo & Duda, 2009). Previous research has found that authentic leaders had followers who reported heightened levels of positive psychological capacities (Gardner et al., 2011).

AL is associated with behaviour that engenders autonomy. Thus, involving athletes in decision-making, consulting with athletes on important team matters and sharing critical information are likely to make athletes feel that their opinions and contributions are respected and valued by the coach. As a result, athletes should experience a greater sense of autonomy. Research suggests that when authentic supervisors engage in participative behaviour (e.g. encourage subordinate initiative and provide feedback in an autonomy-supportive rather than in a controlling way), followers experience greater intrinsic motivation, and are more self-

determined (Deci & Ryan, 2008). Followers are more likely to be committed if they have leaders who encourage them to participate in decision making (Penger & Cerne, 2014; Rego, Sousa, Marques & Cunha, 2014). Moreover, Ahearne, Mathieu and Rapp (2005) found that empowering leader behaviour (providing autonomy, allowing followers to take part in decision making and having high expectations) predicted followers' sense of satisfaction.

Research in organisational and nursing contexts has examined the relationship between AL and autonomy from the perspective of follower empowerment (e.g. Wong & Laschinger, 2013). The psychological state of empowerment is characterised by four cognitions including self-determination/choice (Thomas & Velthouse, 1990). Research has not examined relations between AL and athletes' autonomy. Given that empowerment of followers by leaders has been shown as a key mechanism by which AL fosters superior long-term organisational results (George, 2003; Wong & Laschinger, 2013), it seems plausible to examine AL and its relationship with athletes' perceived autonomy.

Athletes' perceptions of AL could influence their autonomy. Research exploring AL has shown that leaders viewed to be authentic leaders enhances followers' self-determination (Gardner et al., 2005; Ilies et al., 2005). Indeed, Athletes who perceived their coaches' behaviour to support their need for autonomy experienced greater self-determination hence exerted more effort and enjoyed their sport (Amorose & Horn, 2000, 2001; Gagné, Ryan, & Bargman, 2003). It is important to understand how coaches' AL may enhance autonomy in athletes, given that theory underpinning autonomy-supportive leader behaviour has lagged (Morton, 2016).

Task cohesion

Task cohesion is the degree to which team members strive to work together towards achieving performance-related goals, both in competition and practice (Eys, Loughead, Bray, & Carron, 2009a, 2009b). It has been suggested that authentic leaders are aware individual

differences and can bring out the best in individuals, to create high-task cohesive teams (Gardner et al., 2011). Peus and colleagues (2012) showed that certain behaviours for example positive interactions and providing constructive feedback was a major factor in developing task cohesion in followers. This idea is supported by the conceptual model of team building (Prapavessis, Carron, & Spink, 1997) which identified communication, team goals and task interaction as key aspects of group processes towards high-cohesive teams.

AL is also characterised with an alignment between leader-follower goals and self-development (Walumbwa et al., 2008); therefore, if teammates are encouraged to work together towards achieving common goals, it is likely that task cohesion will increase. Furthermore, by encouraging different behaviours related to bonding and support of the team (e.g. commitment and high moral ethical conduct) I expect that task cohesion will increase as athletes will look to emulate these behaviours (Rego et al., 2014).

Greater levels of task cohesion have been linked with increased levels in team performance (Carron, Bray & Eys, 2002). It is therefore important to identify factors that result in high-task cohesive teams both in training and competition (Carrón, Colman, Wheeler, & Stevens, 2002; Westre & Weiss, 1991). Research had identified that leadership factors including behaviour and/or style to influence cohesion (Carrón, 1982). Leadership may be the most important factor for the development of task cohesion because group effectiveness is important for performance (Carrón, Hausenblas, & Eys, 2005). There is only one study which has examined the relationship between AL and group cohesion in sport. Given that AL is characterised by behaviours related to creating high-quality relationships that bond groups, it is not surprising that this research identified trust to be associated with cohesion in teams with coaches perceived to be authentic (Houchin, 2011).

Team sacrifice

Sacrifice is defined as "group members voluntarily initiating an action or giving up prerogative or privilege for the sake of another person or persons" (Prapavessis & Carron, 1997, p. 231). Team sacrifice has been conceptualised to include three behaviours. First, social sacrifice relates to sacrifices athletes make in their social lives. Second, outside sacrifice involves sacrifices athletes make in their personal lives. Third, inside sacrifice pertains to sacrifices athletes make in practice and competition (Prapavessis & Carron, 1997). Prapavessiss and Carron (1997) propose that inside sacrifice comprises both personal (e.g. sacrifices athletes make for themselves) and team (e.g. sacrifices athletes make for their team).

Authentic leaders communicate effectively by being honest and transparent, thus followers are aware of the expectations required to be a successful team (Rego et al., 2014). By being open and honest followers of authentic leaders report increased levels of trust, because teams are striving towards a common goal (Walumbwa et al., 2008). Thus, a relationship between a coach and his/her athletes which is based on openness, trust, and honesty, could lead higher levels of sacrifice because they appreciate that mutual support within the team is important.

Furthermore, by leading by example and being consistent, followers of authentic leaders feel a greater sense connection with the leaders and collective organisation (Giallonardo et al., 2010). Thus, if a coach supports each individual athletes' development, athletes a likely to make sacrifices of their team. Where a coach is transparent, consistent and involves athletes in decision making, it is reasonable to expect athletes to make sacrifices for their team if they have a shared identity with team goals and values. Collective-oriented behaviours, such as recognising team goals because of AL, could motivate athletes to make sacrifices for the

team. Through leading by example, coach AL could also model team sacrifices expected of athletes.

Although there is no study examining the relationship between AL and sacrifice in sport, some research in organisational psychology provides evidence for the link between the two variables. Furthermore, there is evidence in sport to suggest that coach behaviour is related to sacrifice (Cronin, Arthur, Hardy, & Callow, 2015). Organisational citizenship behaviours (OCB) have been likened to team sacrifice, as they both include behaviours that promote the functioning of the group but are not necessarily rewarded (Cronin et al., 2015). Research has shown that AL is significantly related to OCB (Avolio & Walumbwa, 2014; Walumbwa et al., 2008). The relationship between AL and OCB has had positive consequences for various outcomes including productivity, better financial performance and reduced employee turnover (Gardner et al., 2011). In sport, team sacrifice could be a significant factor in sports environments where athletes are motivated to contribute to the success of the team.

In summary, AL in coaches has been linked with trust and group cohesion (Houchin, 2011). One of the aims of this thesis is to substantiate these findings. AL could be associated with satisfaction, commitment, enjoyment and autonomy (perceived choice) which are positive individual states. Trust and autonomy (perceived choice) could also mediate these relationships. AL could also influence team sacrifice. Research in a variety of contexts supports these links (see Gardner et al., 2011 for a review). However, there is scant research in sport. The notion authenticity is non-existent in current leadership models in sport. Thus, AL paves the way for research on its influence on athlete and team outcomes.

Research Paradigms and Philosophical Orientations

It is imperative to understand the philosophical approach underpinning all research (Scott & Usher, 2011). Research philosophies are critical to how we describe and explain the world (Lincoln, Lynham& Guba, 2011). Research paradigms offer a theoretical framework to

define a researcher's philosophical orientation. Overall, a research paradigm refers to 'a basic set of beliefs that guides action' (Guba, 1990 p.17). Research paradigms determine research expectations and how it is conceptualised (ontology), how to conduct the research (epistemology) and how the information of the research is obtained (methodology) (Thomas, 2013; Zikmund et al., 2013). The researcher's role is to decide on an appropriate research paradigm to address their research questions (Smith & Sparkes, 2016). In this section, a detailed overview of the chosen research paradigms for this thesis is discussed and justified.

Kuhn (1962) first used the word paradigm to mean a philosophical way of thinking. Since then academics have debated on appropriate philosophical assumptions to direct research (e.g. Cresswell, 2014; Lincoln et al., 2011; Smith & Sparkes, 2016; Sparkes, 2015). This has resulted in several interpretations. For example, Crotty (1998) adopts a theoretical perspective and defines a paradigm as a 'philosophical stance informing the methodology'. For Lather (1986), a research paradigm inherently reflects the researcher's beliefs about the world that she/he lives in and wants to live in. Patton (2015) and Cresswell (2014), describe paradigms as a researcher's 'worldview'. This worldview is the perspective that informs the interpretation of research. That is, 'a way of thinking about and making sense of the complexities of the real world (Patton, 2015, p.89). Thomas (2013) adopts a flexible approach, suggesting that researchers experience a 'eureka' moment whereby several approaches can be utilised to lead to a satisfactory outcome.

Consequently, a research paradigm is a conceptual lens through which to examine and interpret social science research. Multiple paradigms can be adopted to guide and develop research (Thomas, 2013). Thus, a combination of lenses can shape how a researcher observes and interprets the world. Subsequently, a research paradigm has significant implications for every decision made during the research process. It is therefore very important to understand

the strength and weaknesses of existing research paradigms. This allows the researcher to evaluate which research paradigm is most valid and appropriate (Denzin & Lincoln, 2011).

The importance of researchers recognising and understanding their philosophical orientations within the paradigm adopted, provides a clear rationale and maintains consistency (Denzin & Lincoln, 2011). Ontological and epistemological assumptions of a researcher's worldview have a significant influence on the methodology to be used (Lincoln et al., 2011). The choice of a paradigm for research implies that the research will be nested in epistemology, ontology to enable the researcher to be aware of and distinguish between other approaches (Grix, 2010). The acknowledgement of other positions allows the researcher to be transparent, respecting the 'theoretical debates and approaches to social phenomena' (Grix, 2010).

There are hierarchy of considerations that form the foundations of a researcher's philosophical assumptions (Hammond & Wellington, 2013). Epistemology and ontology offer a choice of view in the research and is often linked with the preferences of the researcher. Thus, a researcher must consider both approaches in combination with the research questions to be answered. This subsequently informs the methodology, which presents the framework within which the research is conducted. Consequently, the research methods will guide the researcher toward meeting the main objectives of the research. Because ontology and epistemology are directly linked, they often overlap. However, a clear distinction between the two can be offered.

Epistemological assumptions

Epistemology quite simply, refers to what we know to be true or reality or as Cooksey and McDonald (2011) put it, what counts as knowledge within the world. Epistemology is concerned with uncovering knowledge in the social context by asking questions like: is knowledge something that can be acquired or is it something personally experienced? What is

the nature of the research and the relationship between existing research and what can be gained from extending the research? What is the relationship between the researcher and the existing research? These questions are important because they guide the researcher to a clear, logical and coherent position to discover what else is new given what is already known (Hammond & Wellington, 2013). This will inform the researcher to embrace the most appropriate methods to uncover/investigate the 'truth' (Bryman, 2012). Although researchers have debated whether there is such thing as the 'truth' (e.g., Grix 2010; Weed, 2008). Epistemology guides the researcher to ask factual questions, such as how we know the truth in order to produce 'reliable social scientific knowledge' (Blaikie, 2007, p.309). This is particularly important because one of the criteria by which higher degree research is judged is its contribution to knowledge.

There are three strands of epistemological philosophy within social science research to be considered. First, pragmatism takes a practical approach-in order to solve a problem, reality is constantly renegotiated, debated, interpreted-aiming intervention and change (Bryman, 2016). Second, interpretivism, guides the researcher to understand the meaning that cultural and institutional practices have for those taking part. Third, positivism offers an 'objective interpretation' of reality because in can be measured and therefore focuses on reliable and valid methodologies and methods to obtain that. In general, within leadership research in sport, interpretivist paradigm (there is no single reality or truth) and positivist paradigm (there is a single reality or truth-realist) are the major philosophical orientations.

Interpretivism paradigm aims to understand the subjective world by assuming that there is no objective reality (Bryman, 2016). This approach tries to enter participants' minds so to speak and aims to understand and interpret their thoughts and standpoints (Thomas, 2013). Within the interpretive paradigm the researcher's objective is to decode the perspectives of participants via their comments, expressions, behaviours, attitude and

manners including verbal and nonverbal cues (Robson & McCartan, 2016). Emphasis is placed the interactions between the researcher and the participant. Specifically, the role of the researcher in understanding the participant and their interpretation of the world around them.

Researchers who investigate and operate within an interpretive context contend that through subjective interpretations of the 'natural environment' in which participants operate in, reality can be understood. Interpretivists acknowledge that the researcher can draw upon their own positions and assumptions, meaning that there may be many interpretations of reality (Robson & McCartan, 2016; Sparkes, 2015). Notwithstanding this, interpretivists argue that these interpretations of participants' perceptions' (words and actions) are in themselves a part of gaining scientific knowledge of their social world.

Positivists, on the other hand believe that reality is stable and can be observed and described from an objective viewpoint (Hammond & Wellington, 2013). Positivism signals a broad interest in developing cause and effect generalisations to uncover a singular truth (Thomas, 2013). Research located in this paradigm relies on (a) deductive logic utilising tools and regular techniques such as questionnaires, (b) formulation of hypotheses and testing those hypotheses to examine relationships from a contextual point of view utilising quantitative measures , (c) conclusions that are based on statistical numbers/equations to interpret and understand the relationship between variables under the study, (d) dualism- whereby there should be no link between the researcher and the participants to prevent bias (Bryman 2012; Cresswell, 2014; Lincoln et al., 2011). Simply, positivism aims to provide explanations and to make predictions based on measurable outcomes

Leadership research can be understood from both interpretivist and positivist philosophical approaches. There is scant extant leadership research in sport influenced by interpretivist methods. In contrast, the majority of the leadership research is based on a positivist approach. Having reviewed these research paradigms, both interpretivism and

positivism are situated within this thesis. Adopting interpretivism in study 1, leadership in sport, and analysis of factors and nuances of AL as conceptualised by Walumbwa et al., (2008) can be studied in a great level of depth (Denzin & Lincoln, 2011). On the other hand, the positivist paradigm is well suited for studies 2, 3 and 4, given that aim of these studies is to statistically examine the relationships between two or more variables to predict outcomes expected in the future. This type of research design herein (studies 2, 3, & 4), develops complex causal frameworks in which to empirically test several hypotheses (Cresswell, 2014; Lincoln et al., 2011).

Ontological assumptions

Ontology is concerned with how things actually exist- what is the nature of the world? Ontology examines a researcher's underlying belief system about 'what they are looking at'- the nature of being and existence in the social world (Thomas, 2013). Importantly, ontology is concerned with the philosophical assumptions a researcher makes in order to make sure that their programme of research is logical or is real, or the very nature or essence of the of the social world under investigation makes sense. Ontology helps the researcher to conceptualise the form and nature of reality and what they believe can be known about that reality within which humans live and act, alone or towards others (Hammond & Wellington, 2013). Philosophical assumptions about the nature of reality are crucial to understanding the main objectives of the line inquiry and how a researcher interprets the data gathered.

In their 'purest' form the epistemological assumptions of interpretivist paradigms assume a relativist ontology while positivist paradigms assume a naïve realist ontology. The assumption of a *relativism ontology* means that you believe that the situation studied has multiple realities, and that those realities can be explored and meaning made of them or reconstructed through human interactions between the researcher and the subjects of the research, and among the research participants (Bryman, 2016). Thus, the purpose of science

from a relativist ontology is to understand the subjective experience of reality and multiple truths. On the other hand, assumptions of *naiive realism* quite simply, are the objective reality that the social world is viewed "as it is" rather than as a subjective construction and interpretation of reality (Sparkes & Smith, 2014). In other words, the world is perceived exactly as it is and our knowledge of the world is justified. As such, positivism has held a dominant position in much research, and informs studies 2, 3 and 4.

Researchers have argued that positivism does not take into account peoples lived experiences (Byman, 2012). As a result, constructivism was born out of the challenges faced when interpreting and defining human and social reality or truth (Crotty, 1988). A key distinction between positivism adopted in studies 2, 3 and 4 and study 1 is that study 1 takes the standpoint that 'meaningful reality is socially constructed' (Illing, 2007, p.11). Although study 1 adheres to the beliefs of constructivism i.e. interpreting and creating meaning out of the coaches' experiences in their respective environments. The ontological orientations of study 1 go beyond a constructivist research approach. Indeed, the constructivist approach is the interpretation and continuous regeneration of multiple realities as the research participant conceive them (Guba & Linclon, 1998). Thus, the outcomes of a constructivist approach are a joint development of reality to represent the researcher and participants interpretations (Sparkes, 2015). In light of this, it can be argued that there can exist several 'truths' given the wide acceptance of 'realities' within a constructivist approach.

The constructivist focuses on observation and behaviour (Sparkes, 2015). The two most recognised perspectives within the constructivist paradigm are constructivism and constructionism (social constructionism). Constructivists tend to focus on collecting knowledge and constructing theory (McGannon & Smith, 2015) which does not appear favourable for generalisations (Smith & McGannon 2017). Constructionism encourages us to

approach research with openness instead of the conservative meanings we have been taught (by our environment) to associate with an entity (Smith & Sparkes, 2016b).

Constructivism and constructionism are terms that are strongly associated and at times used interchangeably (Gergen, 2009; Smith & Sparkes, 2016b). Researchers have attempted to separate the two terms. For example, Crotty (1998) suggests that unlike constructivism, for constructionism, the "social dimension of meaning is at centre stage" (p.57). This is supported by Gergen (2009), who states that constructivists focus on the meaning-making processes 'within the mind of (the) individual person' (p.1772), whereas constructionists focus on the social construction of meaning.

Originally termed as naturalistic inquiry (Lincoln & Guba, 1985), constructionism is now known as social constructivism (Smith & Sparkes, 2014). Social mirrors, social foundation and generation of meaning underpins this research (Crotty, 1998). From a constructivist approach, the researcher and the research participants are powerfully interconnected within the procedures of inquiring into constructions (Smith & Sparkes, 2016a). According to Lincoln and Guba (1985) this as a process whereby the "knower and the known are inseparable" (p.37); thus, the outcomes are "literally created as the investigation proceeds" (Guba & Lincoln, 2005, p.207). In other words, the aim is to explore how fragments of individuals' lives, conversations, experiences and emotions become re-constructed and negotiated into meaning over time (Sparkes & Smith, 2014).

A major concern of social constructivists has been that the term 'reality' implies that there is one ultimately correct description of that reality (Bryman, 2012). In study 1 it is expected that multiple and mind-dependent realities exist when depicting coaches' experiences, thus the assumptions of a social constructivist paradigm can be achieved through theory-free knowledge. However, it can be argued that, there cannot be "objective" theory-free knowledge, because a person's understanding of reality is only known through their

experiences. Because this knowledge is socially constructed, it is partial, incomplete and fallible (Smith & Mcgannon, 2017).

Given that this thesis is designed using existing theoretical foundations of AL (Walumbwa et al., 2008) study 1 joins Hammersley (1992) thinking in arguing for subtle realism as a philosophical position to approach this research. Under a subtle realist framework this research retains the idea of multiple socially constructed realities of the beliefs and perspectives of professional football coaches whilst recognising that this knowledge is theory-laden. In other words, the study purpose is not to re-invent the coach leadership wheel per se through theory generation, but rather but explore AL as a construct in its 'true' form in the context of sport from the perspectives of professional football coaches.

Subtle realism has gained considerable traction in current philosophical discussions in sport psychology research. (Smith & McGannon, 2017). In general, subtle realism is a middle ground between the naive realism of positivist and the relativism of social constructivist approaches (Hammersley, 1992). Subtle realism is not to be confused with pragmatic research orientations which combine interpretive and interventionary research (Bryman, 2016). Subtle realists are continually aware of the somewhat objective nature of research and provide an alternative to the broad application of social constructivism views which are now dominant in qualitative research (Bryman, 2012).

According to Hammersley (1992), subtle realism can help resolve some of the issues that are not well handled within the social constructivist framework within sport psychology research. Social constructivism does not reject the existence of an objective- it focuses on subjective perceptions, experiences and process of individuals which does not allow the researcher to engage with the possibility of gathering evidence about the real world (Weed,2008). Thus, the subjective nature of social constructivist is susceptible to error, dogmatism and cultism (Gergen, 2009; Weed, 2008).

Whilst some researchers have accused subtle realists of ‘sitting on the fence' (e.g., Smith & McGannon, 2017), subtle realism can eliminate the potential effects of error, dogmatism and cultism in three main ways. First, acknowledging that a real world exists and that knowledge about it can be evidenced offers subtle realists with a logical structure to recognise *meaning*-being cognisant of the interpretive and exploratory nature of understanding different physical and behavioural perspectives of AL as a “reality”. Second, subtle realism emphasises the importance of *context* rather than seeking a general understanding independent of a specific condition (Brynam, 2012). In the current case-examining the construct of AL (Walumbwa et al., 2008) in the specific context of sport. Finally, from the objective standpoint, the *process* by which AL occurs can be understood, perceived and theorised by what is subjectively accepted as “truth”.

In sum, study 1 adopts a subtle realist perspective as a philosophical framework to carry out the intended research objectives. This stance is able to bridge the positions of naïve realism (a unique social reality exists) with relativism (unique individual perspectives exist each is as valid as any other). Within this position it is believed that common realities exist for people and that these realities can relate to previously understood theory (in this case how AL is understood by previous constructs; Walumbwa et al., 2008). Whilst there is confidence in the findings of this research and belief that this work can be related to by others, we don’t claim it to represent the only or sole way to understand the phenomen, in the words of Weed (2008) we consider findings as a ‘truth of truths’, rather than a single truth.

For studies 2, 3 and 4 a positivist approach is considered the most appropriate paradigm. Positivism is a philosophical position which emphasises the empirical analysis of a singular independent truth (Johnson & Christensen, 2012; Phillips & Burbules, 2000). Within this position the aim is to examine the relationship between variables to establish cause and effect. Thus, this research is objectively analysed by observing the correlations between two

or more variables. This rational and logical approach adopted in these three studies is designed to uncover a single and objective reality by testing specific hypothesis utilising statistical techniques. Subsequently, results from studies 2, 3 & 4 can then be generalised and predict future outcomes when examining similar relationships. Therefore, studies 2, 3 & 4 follow an empirical investigation to test hypotheses to garner quantifiable results to support AL as an underlying theory (Johnson & Christensen, 2012).

Overview of research methodology and design

Research consists of carefully selected procedures and techniques linked to a research paradigm in order to design, collect, analyse and disseminate findings (Lincoln, Lynham & Guba, 2011). Research methods are strategies used to implement these procedures and techniques in order to address the research question. Therefore, applying appropriate research methods is fundamental in producing logical and rigorous knowledge. The steps taken to conduct study 1 are illustrated in detail in Chapter 2. Studies 2, 3, and 4 follow previous positivist research designs which are discussed in greater depth within their respective chapters.

This thesis adopts two long standing approaches in sport psychology research- qualitative and quantitative methods. First qualitative research captures verbal and narrative data (Bryman, 2012; Smith & Sparkes, 2014). In general, qualitative research is aimed at providing meaning and interpretation based on the contact between the researcher and participants (Bryman, 2012; Litchtman, 2013). According to Lichtman (2013), the emphasis of qualitative research is on the 'interactions, processes, lived experiences, and belief systems that are a part of individuals' (p.130). In contrast, quantitative research is quite simply concerned with numerical data. Given the explanatory nature of the research in study 1, a qualitative methodology is deemed appropriate. For studies 2 & 3 and 4 quantitative methods

are most suitable given that these studies aim to draw some causal inferences about the relationships between two or more variables.

There is no research in sport examining AL using qualitative methodologies. Qualitative research can be designed to include (but not limited to), narrative research, phenomenological research, grounded theory, ethnography and case studies (Sparkes & Smith, 2014; Sparkes, 2015). Qualitative research employs a range of methods for example, observation, field notes, focus groups, interviews, visual texts (Smith & Sparkes, 2016). Researchers have used interviews and found that effective coaches possess a range of personal attributes (e.g., desire for personal growth) and exceptional organisational skills (Bloom & Salmela, 2000), aspire to facilitate their players' individual growth both in and out (e.g., nurturing life skills) of the sporting context (Vallée & Bloom, 2005), and serve as role models for their followers by demonstrating exemplary behaviour (Dupuis, Bloom, & Loughead, 2006). Thus, the application of qualitative methodologies would allow for richer and more elaborate representation of the theoretical construct of AL from coaches' perspectives.

One of the first studies to empirically examine authenticity in leaders within organisational psychology literature came in the form of a qualitative study (Endrissat et al. 2007). These authors suggest "not to equate authentic leader behaviour with ethical, transformational, or any other existing leadership form, because equating it would make it a redundant construct" (Endrissat et al., 2007, p.7). Previous research has applied qualitative methods (interviews) to explore authentic leader behaviour however greater attention in assessing how credible and applicable these findings are is required because this research is not grounded in theory. Study 1 therefore, addresses Gardner and colleagues' (2011) concerns in calling for more extensive use of qualitative methods utilising Walumbwa and colleagues' (2008) conceptualisation of AL. This will provide a deep insight into nature and

manifestations of authentic behaviour, authentic followership, and positive ethical climates that are not readily revealed through quantitative methods. Thus study 1, is a qualitative assessment of AL in sport as perceived by professional football coaches.

Studies 2, 3, and 4 are quantitative and designed to examine influencing relationships between an independent variable (IV), dependant variables (DV), mediating and moderating variables. An independent variable is characterised as the influencing factor, which is not affected by any other variable and therefore considered as a predictor for change in an outcome of a dependent variable (Kelley & Preacher, 2012). A dependent variable is thus the factor that will be measured and expected to change in response to the independent variable being measured (Cresswell, 2014). The aim of studies 2, 3 and 4 is to examine the influence of AL on athlete outcomes. Therefore, AL is identified as the main independent variable. The hypotheses constructed within these studies describe the causal effects of perceived AL on trust in coach, perceived autonomy (choice), commitment, satisfaction, enjoyment, team sacrifice and task cohesion. Subsequently, these variables are identified as dependant variables.

In addition to examining the direct relationships between AL and the dependant variables, mediating and moderating effects are assessed. Mediating and moderating effects account for more complex causal relationships between independent and dependent variables (Baron & Kenny, 1986; MacKinnon, Fairchild & Fritz., 2007). Mediation represents the consideration of how a third variable affects the relationship between independent (X) and dependent (Y) variables. Mediation in its simplest form represents the addition of a third variable to this X → Y relation, whereby X causes the mediator, M, and M causes Y, so X→ M →Y (MacKinnon et al., 2007).

A mediator thus, explains the reason why effects between independent (X) and dependent (Y) variables occur. For the purpose of studies 2, 3 and 4 trust in coach is

identified as a mediator variable to explain why AL may influence commitment, satisfaction, enjoyment and task cohesion. Autonomy (perceived choice) is identified as a mediator variable to explain why AL may influence commitment, satisfaction, enjoyment in studies 2 & 3. In study 4, team sacrifice is identified as a mediator variable to explain why AL may influence task cohesion. The argument here is that trust in coach, autonomy (perceived choice) and team sacrifice transmit the effectiveness of AL onto athlete outcomes-allowing us to draw some causal inferences about these relationships. In study 4, gender is assessed as a moderating variable. A moderator variable alters the strength of the causal relationships (Baron & Kenny, 1986). Thus, gender is used to determine whether the relationship between AL, trust and task cohesion and AL team sacrifice and task cohesion is different for male and female athletes.

Studies 2, 3 and 4 are characterised as cross-sectional by design. This type of research provides a snapshot of the prevailing characteristics of a specific group of people at a given point in time (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). Cross- sectional studies allow researchers to collect a large amount of data from a large pool of participants quickly, often using self-report measures. Employing a cross sectional design enables the researcher to observe two or more variables, drawing some causal inferences about the relationships under study. Cross sectional research designs have been widely used in previous studies on coach leadership in sport and its effects of athletes' attitudes and behaviours.

A major short coming of cross-sectional designs and their findings is the occurrence of common method variance and how to control for it (Podsakoff, Mackenzie & Podsakoff, 2012). Common method variance represents measurement error which is randomly or systematically generated, resulting from bias in the measurement method (Podsakoff et al. 2012). This brings into question whether or the relationships between independent and dependant variables are accurately measured, which in turn significantly affects the research

findings. In order to eradicate the effects of common method variance to generate reliable and satisfactory data which contributes to the body of knowledge- unbiased, rigorous, logical methods were employed in studies 2, 3 and 4. This included (but not limited to) the use of widely published and established measurement scales with appropriate reliability Cronbach's alpha scores and counterbalancing them.

In order to enable athletes to give instant responses and obtain acceptable numerical data, all measurement scales utilised closed responses (Zickmund et al., 2013). A demographic section allowed athletes to complete information regarding their gender, age, sport, number of years participating, league or university team, length of time with team and coach and coach gender. Each scale was preceded by a stem (e.g., My coach) and each item response was based on a Likert scale to give athletes the choice to select a particular value for a given option. In studies 2, 3 & 4 a total of eight measurement scales were utilised. Each is discussed in detail within their respective chapters and Appendices 2a to 4e show the structure and sections relating to each scale and its items.

Summary and Study Purposes

AL originated from researchers' observation and critique of the unethical way transformational leaders manipulate their followers (Walumbwa et al., 2008). AL adds to existing leadership models in several ways. Firstly, AL focuses on the significance of a leader's innate character traits and how this may influence followers through how they behave and the relationships they form (Avolio & Walumbwa, 2014). Being consistent with one's deep self ultimately prevents authentic leaders from acting in a manipulative manner, and subsequently avoids the creation of false impressions to followers (Walumbwa et al., 2011). Secondly, many leadership models do not highlight the importance of the ethical and moral components of leadership. These are central in AL (Penger & Cerne, 2014). AL addresses the need for specific research into understanding perceptions of promoting authentic behaviour

and positive sportsmanship in coaches who may benefit from engaging in the deep reflection required to be authentic (Vella et al., 2010).

This thesis has four purposes: First, to conduct a qualitative examination of AL as perceived by professional football coaches. Second, to examine whether AL is related to commitment, satisfaction and enjoyment. Third, to examine trust and autonomy (perceived choice) as mediators to explain the link between AL and the abovementioned variables. Fourth, to examine the relationship between AL and task cohesion and the mediating role of trust and team sacrifice. These purposes are investigated in four studies. The thesis purpose 1 is investigated in Study 1 and thesis purpose 2 and 3 are examined in Studies 2 and 3. Thesis purpose 4 is examined in Study 4.

Study 1 comprised of two main research questions (a) what are professional football coaches' views around the key concepts of AL? (b)What elements (if any) of AL can be applied to sport as perceived by professional football coaches. Study 2 hypotheses state that AL exhibited by coaches positively influences athletes' commitment and satisfaction directly and (b) trust and perceived choice mediate these relationships. In study 3 it is hypothesised that coach AL – as determined via athlete perceptions - would be positively associated with athlete enjoyment and commitment indirectly through trust and autonomy. Study 4 hypothesised that coach AL would positively predict task cohesion and that this relationship would be mediated independently by trust and team sacrifice. It is also hypothesised that the relationship between AL and task cohesion via trust and team sacrifice would be different in male and female athletes.

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CHAPTER 2

Study 1: Authentic leadership: A Thematic Analyses of English professional football coaches

Abstract

The purpose of this study was to undertake an in-depth exploration of coaches' perceptions of Authentic Leadership (AL) in the pressurised and subcultural milieu of English football. One-to-one semi-structured interviews were conducted with 11 professional football coaches. Questions encompassed the four-component model of AL: self awareness, relational transparency, internalised moral perspective and balanced processing. A combination of deductive and inductive thematic analysis was employed to analyse the data. The four dimensions of AL emerged salient and were explained further by context specific sub-themes. From these findings, the study helps us to understand the meaning of AL in sport.

Keywords: integrity, coaching, leadership,

Introduction

Despite the broad scope of sports coaching literature, there remains a scarcity of research examining the behaviour of professional football coaches (Smith & Cushion, 2006). The role of professional football coaches has become increasingly complex; with the perceived integrity of coaches increasingly under scrutiny (Cook, Littlewood, Nesti, Crust & Allen-Collinson, 2014). Their ability to relate to athletes with openness, transparency, humility, courage and ethical consistency in the midst of pressure is therefore salient. Authentic Leadership (AL) (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008) provides a novel approach to analysing coaches' perceptions of the concept in a distinctive subcultural milieu of English football.

AL has been defined as "a pattern of leader behaviour that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development" (Walumbwa et al., 2008, p. 94). AL, therefore, encompasses 4 related dimensions: self-awareness, internalised moral perspective, balanced processing and relational transparency.

Self-awareness is the extent to which leaders understand their strengths and weaknesses, recognizing how their decisions impact others, and are cognizant of how others perceive their leadership (Gardner, Cogliser, Davies, & Dickens, 2011). Internalized moral perspective relates to leader behaviours that are directed by and are congruent with their personal values and moral standards (Gardner et al., 2011). Thus, authentic leaders are guided by internal values and moral standards and not influenced by external pressures (Gardner, Avolio, Luthans, May, & Walulmbwa, 2005). Balanced processing refers to the extent to which leaders seek, analyse, and objectively consider all available information prior to

making decisions, even if such viewpoints challenge their own (Gardner et al., 2005). Relational transparency involves the extent to which followers perceive that leaders express their true thoughts and feelings (Walumbwa et al., 2008). As such authentic leaders establish relational transparency to build trust and credibility among their subordinates by virtue of being honest and open in sharing information (Avolio & Walumbwa, 2014).

The notion of authenticity has been around for centuries with the majority of sport literature existing in sport philosophy (e.g., Breivick, 2010; Ronkainen, Tikkannen, Littlewood & Nesti, 2015). Many theories of positive leadership have lacked sufficient emphasis on the ethical and moral components of leadership, however, AL makes these issues central (Leroy, Anseel, Gardner & Sels, 2015). Scandals of the late 20th century where leaders and managers had been found to be dishonest with their subordinates and stakeholders prompted scholars to develop AL to inform other value-based and holistic theories of leadership such as transformational, charismatic and servant leadership (Gardner et al., 2011). AL was explicitly borne to address unethical practices (e.g., corruption and manipulation of followers) to restore confidence in leaders and maintain integrity, particularly in high pressured organisations (Avolio & Walumbwa, 2014).

Of the various forms of leadership associated with the development of moral values, AL has been found to be particularly important (Gardner et al., 2011). AL provides not only the means to build effective follower–leader relationships but also to rebuild follower trust and influence follower behaviour (Rego, Junior, & Cunha, 2014). Significant ground has been covered on AL in several contexts (see Gardner et al., 2011). For example, AL has been linked to a variety of positive outcomes such as citizenship behaviours, creativity, employee well-being, job satisfaction, moral actions, psychological capital, organizational commitment, sales achievement, voice, work engagement, performance, safety climate, and perceptions of

risk (see Avolio & Walumbwa, 2014 for a review). However, there is limited research in sport.

Professional football coaches are faced with varying degrees of measuring success. For example, in an academy setting, coaches are under pressure to produce players good enough to sell to premiership football clubs to meet stakeholders' expectations (Nesti & Littlewood, 2011; Ronkainen et al., 2015). Another example is the "win at all cost" mentality, characterised by professional football coaching (Cook at al., 2014) which is often argued to be a catalyst of unethical conduct (Vella, Oades, & Crowe, 2010). High pressured environments such as professional football often prioritise performance over other values and tend to have higher rates of unethical behaviour (Vella et al., 2010; Ykhymenko-Lescroat, Brown & Peskus, 2014). AL addresses the need for specific research into understanding coaches' perceptions of promoting authentic behaviour and positive sportsmanship (Yukhymenko-Lescroat et al., 2015).

There is a paucity of literature examining AL in sport. Given that AL behaviours have been seen to have a positive impact on follower outcomes in several contexts, and no qualitative research has explicitly explored AL in the sporting domain, the aim of the present study was to use AL as a lens through which to examine leadership behaviours as perceived by professional football coaches. Specifically, the aims of this study were to extend our knowledge of AL by examining how the four components of AL identified above 'play out' in a specific sporting context. Implications of this research could inform coaches how they might display effective AL behaviours and inform practitioners who provide support to coaches.

Key research questions

(1) What are professional football coaches' views around the key concepts of AL?

(2) What elements (if any) of AL can be applied to sport as perceived by professional football coaches.

Method

The research approach of this paper comprises three components: first, the philosophical assumptions adopted by the researcher; second, the method of inquiry that will be employed; and third, the research methods or tactics used to collect data, perform analysis and interpret results (Cresswell, 2014). The present study adopts an interpretive, subtle realist and qualitative approach to research. That is, the purpose is to derive the various interpretations of meaning behind the AL experiences of professional football coaches. Interpretive research allows the lived experiences of participants to emerge naturally to ascertain the 'essence' or common theme of everyone who has encountered the same phenomenon (Bryman, 2016; Creswell 2014). Within this perspective the role of the researcher is to actively investigate participants' personal experiences, views, and meanings (Spaekes, 2015).

A subtle realist perspective underpins the philosophical orientations of this study. This stance is able to bridge the positions of naïve realism (a unique social reality exists) with relativism (unique individual perspectives exist each is as valid as any other). Within this position we believe that common realities exist for people and that these realities can relate to previously understood theory (in this case how AL is understood by previous constructs; Walumbwa et al., 2008). Whilst we are confident in our findings and believe that this work can be related to by others, we don't claim it to represent the only or sole way to understand

the phenomen, in the words of Weed (2008) we consider findings as a 'truth of truths', rather than a single truth.

The research method adopted for this study was a qualitative approach. Qualitative inquiry often aims to explore meanings of experience in attempts to understand both what people do (behaviour) and why they do it (values; Sparkes & Smith, 2013). To better understand AL, Sparrowe (2005) suggests that research should examine autobiographical accounts of one's life experiences, in addition to the discovery of one's self-awareness, values, and a sense of purpose. Sparrowe's (2005) approach is inline Schwandt's (2000) views for qualitative and interpretative research as a means to 'share the goal of understanding the complex world of lived experience from the point of view of those who live it '(p.118).

This paper explores the AL in a sporting context through the lived experiences of professional football coaches. Exploring these experiences can help the researcher understand their interpretation of events and experiences views and meaning of AL. These accounts can provide opportunities for the researcher to make connections between events, feelings, thoughts, beliefs, behaviours and reactions or responses to particular kinds of situations. Thus, a qualitative approach was deemed fitting. Indeed, qualitative research involves the sustained interaction of the researcher with the participants, who are social actors, in order to understand and make meaning out of their experiences (Denzin & Lincoln, 2005).

Given that the aim of this research was to understand the meaning professional football coaches involved in coaching make of their experience and their nature of AL engagement, the use of face to face semi structured interviews was considered to be appropriate. Interviews are more flexible than other qualitative methods (Bryman, 2016) and can allow the researcher-interviewer 'to unravel the complexity of other people's worlds' (Rubin & Rubin, 2012, p.134). Semi-structured interviews offer some significant benefits for

this research; particularly the flexibility and freedom offered to coaches to express their views related to coaching and AL. With face-to-face interviews, the researcher has the benefit of visual contact with coaches, whereby non-verbal cues could assist in interpreting views (Smith & Sparkes, 2014). Indeed, face to face interviews allow for interaction between the researcher and the interviewee, allowing the researcher to examine motives and feelings by also gathering information from participants' tone of voice, facial expression and hesitation (Robson & McCartan, 2016).

Consequently, an in-depth insight into subjectivity and lived experience is achieved via having a deeper access to participants' thoughts, perceptions, values, feelings, and perspectives (Bryman, 2016; Robson & McCartan, 2016; Smith & Sparkes, 2014). This is particularly significant in the growing body of literature focusing on value-based leadership approaches in sport where coaches' views and experiences of AL have received relatively little attention (Vella et al., 2010). Similarly, the study contributes to the extant literature focusing on understanding leadership behaviours of professional football coaches (Smith & Cushion, 2006).

Participants

A sample if eleven English-born professional football coaches (male = 8) between 25 and 53 years (average age=35 years) were recruited via email. The criteria that guided inclusion for the interview process were that participants had to be professional football coaches who held a minimum Level 4 (UEFA A) Football Association qualification in football coaching. In order to gain this qualification, individuals are required to be full time coaches currently working within the senior male and female professional game, youth development (centre of excellence) and academy environments, with at least five years' experience. A Level 4 qualification is the final hurdle towards the highest coaching course which is a mandatory qualification for first team managers in the English Premier League

(Level 5-Pro License). Most coaches complete the Level 4 qualification within 2 years. Subsequently, for coaches to be included in this study they should had (a) held their Level 4 qualification for a minimum of 12 months, (b) had been coaching football for a total of 5 years or more, and (c) gained their living solely through coaching (see Table 1.1). Coaches were based in various regions across England.

A number of sampling techniques were used in order for the participants to be recruited for this study. Firstly, stringent purposive sampling strategy (Patton, 2015) resulted in a sample of participants that were intentionally selected for the study. In this study, the data collection consisted of individual interviews with professional football coaches Purposive sampling assured the researcher that coaches had experienced the phenomenon to be studied (AL) and could describe the most relevant and critical aspects of their experience (Creswell, 2014). Secondly, convenience sampling was adopted by recruiting coaches that were available and willing to participate (Patton, 2002). Thirdly, snowball sampling was used by asking coaches who had already participated to recommend others (Patton, 2015).

Table 1.1 *Coach Demographics*

Name (Pseudonym)	Gender	Age	Years at Elite-level	Qualification	Level of coaching
Alice	Female	37	5	UEFA A	FA Centre of Excellence
Beth (Ex-professional)	Female	34	10	UEFA A	FA Centre of Excellence
Cecile	Female	34	10	UEFA A	League One
Dillon	Male	35	4	UEFA A	Premiership Club
Ed (Ex-professional player)	Male	26	9	UEFA A	Premiership Club
Fabio	Male	30	11	UEFA A	Premiership and League One
Gary	Male	45	21	UEFA A	Women's Super League
Hugh	Male	25	8	UEFA A	League One
Ivan (Ex-professional player)	Male	31	13	UEFA A	FA Centre of Excellence
Javier (Ex-professional player)	Male	47	19	UEFA A	FA Coach Education, Former academy and Premiership Club coach
Kurt (Ex-professional player)	Male	53	20	UEFA A	FA Coach Education, Former Academy and Premiership Club coach Former England U21 coach

Research team

The research team was made up of three researchers. The first author is a female postgraduate sport psychology student who has been exposed to an elite football coaching environment, both as an athlete and a coach. She was involved in the qualitative design of the study including; conducting interviews, transcription, initial analyses of data and is the lead on the composition of the paper. Her ability to relate to coaches at their level was advantageous, both during the interviews, where perceived empathy may have increased disclosure (Willig, 2008) and when analysing the data. The second author is a female sport psychology academic. She contributed towards the design of the study, was consulted on the questions for the interview guide, and commented on drafts of the paper. Views from a female health psychology academic specialising in qualitative research methods were solicited during the data analysis phase.

Interview Schedule

A well thought out and developed interview schedule is a crucial element of a semi-structured face to face interview (Thomas, 2013). The interview schedule comprises a list of questions which act as a guide for the interviewer to collect as much information as possible from participants' responses. A mix of questions were generated from the review of literature to enable us to pick up unexpected findings. Some questions were designed around the four dimensions of AL (Avolio & Gardner, 2005; Gardner et al., 2005; Walumbwa et al., 2008). These questions were sourced from items included in the authentic leadership questionnaire (ALQ; Walumbwa et al., 2008). No major modifications were made to the wording of questionnaire items. Minor modifications were made to questionnaire items to reflect coaching and sport. Furthermore, items adopted from the questionnaire were reworded to create open-ended questions to prompt coaches to provide in-depth responses and fruitful discussion to assist the researcher to gain a deeper understanding of their experiences.

Furthermore, in order to reduce bias and establish some kind of rapport with coaches' questions were formulated to ensure that their meaning was 'crystal clear' (Cohen, Manion & Morrissson, 2011, p.205). Establishing a good rapport early in the interview process helps to put the interviewee at ease, developing trust (Thomas,2013). Strategies such as 'talking about the weather, about your journey, about anything inconsequential that will break the ice' can be useful in building rapport and trust (Thomas, 2013, p.161). By building trust, the researcher is viewed as a non-judgmental, neutral individual who will listen to interviewees' views in a sensitive manner. Subsequently, this will guide the course of the interview allowing interviews to openly disclose their opinions (Corbin & Straus, 2015). However, awkward silences and pauses are an inherent part of face to face interviewees, with some coaches perhaps withholding information or providing information they feel is socially and professionally acceptable. In such cases, having established rapport and trust with each

coach, questions can be tweaked accordingly. Consequently, this will facilitate in capturing the complexity of coaches varied experiences in different contexts and generate holistic situated knowledge.

Questions on self-awareness related to the coaches' understanding of not only their own strengths and limitations but how they affect others. For example, "How aware are you of how your players think and feel about how you act?" Questions on relational transparency sought to examine coaches' level of openness and truthfulness that encourages others to be forthcoming with their ideas, challenges, and opinions; an example question is "How do you gain respect from your players?" Questions on internalised moral perspective were designed to investigate how coaches set and model a high standard of ethical and moral conduct. An example question: "Under what circumstances would you consider players unethical conduct as acceptable?" Finally, for balanced processing of information, questions aimed to reflect the degree to which coaches solicit sufficient opinions and viewpoints, both positive and negative, prior to making important decisions. Coaches were asked, "How do you evaluate your coaching?"

Additional questions were used to introduce coaches' individual experiences for example "What does effective coaching mean to you?". Additional questions were also used to probe, check understanding of behaviour, thoughts, feelings, emotions, and beliefs. For example, "How did you react when that happened?". Furthermore, additional questions were also used to enable us to cover the wide range of possible issues that might be relevant to coaches but that fell outside existing literature on AL. For example, "What characteristics do you associate with a successful coach?". This flexible approach to interviewing coaches allowed greater depth of exploration than could be achieved through focusing on only questions derived directly from the four dimensions of AL and enabled context specific

themes to arise. For the alignment of the research questions, the interview questions, and supporting literature, see Appendix 1b.

Procedure

After gaining university ethical approval for the study, a purposive sampling strategy (Patton, 2002) was used to recruit participants based on the criteria outlined at the beginning of this section. Prior to being selected for an interview, coaches were invited to participate in the study via email, which stated the purpose of the study, addressing issues such as anonymity, freedom to withdraw from the study, and consent. When participants expressed an interest to participate, they were asked to complete a brief biographical and demographic information sheet. A total of 17 coaches expressed their interest in participating and returned their forms. After studying the information provided, twelve coaches were selected based on the criterion for inclusion. Once provisionally selected, follow-up phone calls were conducted to further ascertain suitability. The coaches that were not selected to participate were thanked for expressing an interest and reasons for non-selection were explained (e.g., could not be interviewed within the deadline for data collection). Out of the five coaches not selected to participate, three agreed to participate in the pilot study. One out of the twelve selected participants withdrew from the study. Coaches' participation was voluntary.

Coaches were interviewed by the first author at a location of their choice. Permission was sought for the interview to be audiotaped and for the interviewer to take notes if required. Prior to the interview, participants were briefed on the nature of the study, issues of anonymity were reiterated, and pseudonyms were used to protect the identity of participants. The main part of the interview proceeded with a series of general questions (e.g. coaching history); it also included general questions on leadership and coaching. Following questions posed in the interview were based on the four dimensions of AL. The interviewer did not mention authenticity, authentic leadership, define or use terms specific to the four dimensions

to avoid leading participant's responses to reflect a preconceived idea. Once the interview ended, participants were thanked for their participation. Audio recordings varied from 44.57 to 93.30 minutes, with a mean of 69.29 minutes.

Reliability and Validity

Several measures were employed to establish the reliability and validity of the study. These were guided by Lincoln and Guba's (1985) naturalistic approach to aspects of validation- in addition to Smith and McGannon's (2017) recommendations for rigour in qualitative research. First, reviews from undergraduate students, fellow academics and coaches established credibility. These reviews assessed whether the ALQ was a viable instrument to develop questions for the interview. This process was facilitated in clarifying the developed questions, avoiding bias, meaning and interpretation. Undergraduate students reviewed the initial questions to ensure that the questions addressed the research question and the wording was accurate and appropriate. The researcher provided the undergraduate students with the opportunity to ask questions and contribute to edits. Resulting questions were then 'screened' by fellow academics and coaches. Once questions and comments were addressed and adjusted where necessary, they were deemed valid by the research team.

Second, the use of open-ended questions allowed the researcher to explore the cohesiveness of concepts to achieve transferability (Smith & McGannon, 2017). That is, the questions used in interviews were coherent and consistent throughout all interviews. The process of checking, rechecking and documentation of the various stages of the research process (i.e. research questions, recruitment and data analyses) substantiate the confirmability and robustness of the study. Third, conducting pilot studies tested interview questions for reliability. These studies allowed the researcher to review the questions and seek feedback to ascertain which questions to retain, modify or remove.

Finally, member reflections of the interpretations of findings were shared between the researcher and coaches interviewed as a form of member checking. Member checking or participation validation checks assess the trustworthiness of the research and results (Lincoln & Guba, 1985). Member reflections are a step further; together a researcher and participants engage in reflections to explore gaps study limitations, gaps in the results or similarities in interpretations of the research output (Schinke, McGannon, & Smith, 2013). According to (Smith & McGannon, 2017) member reflections promote ethical practice for both parties to "create robust, meticulous, and intellectually enriched understanding through generating additional insights and dialogue" (p.117). Given the nature of AL- and the contemporary methodological thinking of the study the abovementioned steps substantiate the quality of the qualitative data.

Data Analyses

All data were transcribed verbatim to include both the coaches and interviewer's speech. A thematic analysis (Bazeley, 2013) was adopted to analyse transcripts (see below for detailed steps). A combination of both deductive and inductive reasoning was employed in order to leave the possibility of finding new and unexpected themes, as well as focusing on the four dimensions of AL; this approach is compatible with my paradigmatic position as 'subtle realists'. This procedure of integrating both inductive and deductive elements is known as abductive reasoning (Sparkes & Smith, 2013). According to Ryba, Haapanen, Mosek & Ng (2012), this process involves movement between everyday meanings (inductive) and theoretical explanations (deductive) acknowledging the creative process of interpretation when applying a theoretical framework to participants' experiences.

The analysis was undertaken in 4 steps. Step 1: A blind inductive line-by-line open coding process undertaken by authors (primary author and health psychology academic). Authors undertook this process by initially making notes of codes on the text, then grouping

codes through the use of idea webs (Pope, Mays, & Popay., 2007). Step 2: Both researchers brought their findings together and compared the coding translations (Pope et al., 2007). This allowed for an integration of the most common findings expressed in a way that honoured the expressions used by participants when a category could not be agreed upon a third reviewer (second author) provided a decision. Step 3: The primary author tabulated (Boeije, 2010) the results. The primary author then considered how the results compared against previously identified theory (Walumbwa et al., 2008), known as importing concepts (Sandelowski and Barroso, 2002) as part of the abductive reasoning. This created a new and adjusted thematic structure. Step 4: The primary author then continued interviewing and considered the results for theoretical saturation of the main concepts. Saturation of some themes appeared at interview 8, but interviews were continued until the process was sure. Finally, results were then written up. Please email the primary author for an audit trail of this process.

Results

This section outlines the components of AL as perceived by professional football coaches. They are explained further by sub-themes using verbatim quotes to highlight coaches' voices. Only sub themes that arose from all eleven coaches' narratives are included herein. The accounts analysed here supported the four dimensions of AL; self-awareness, relational transparency, internalised moral perspective and balanced processing (Walumbwa et al., 2008).

Self-awareness

Coaches' accounts support the emergence of self-awareness as a dimension of AL. For all the coaches, demonstrating a high level of self-awareness was a critical component of their coaching practice; however they did so in several ways. Coaches were aware that they

needed to understand how their actions impacted players and reported the importance of being able to identify their own strengths and weaknesses.

Awareness of how actions may impact players. All coaches recognised that players observed their behaviour and needed to behave appropriately. Alice spoke about how players had the ability to "suss you out really quickly" and how the manner in which she "carries" herself as well as how the implications of her actions affect the team's performance and the players' feelings. She goes on to describe that as a coach you need to have the ability to "manage yourself and intervene within yourself to act appropriately". This was echoed by Gary, who shared the same belief about the importance of understanding one's position and the responsibility that comes with being a coach:

> Gary: I take my responsibility as a role model very seriously at the end of the day the way I am you know reflects the way my players are. Conducting myself properly, treating them as I would like to be treated myself. Setting the right example.

Coaches acknowledged the implications their actions had on players and the importance of leading by example. Ivan viewed his players' "attitudes and actions" as a reflection of him as a coach. This was associated with the high standards he demands of his players, "I wouldn't allow it to [standards to slip] it goes against who I am!" Furthermore, coaches discussed in various ways how their role as a role model was facilitated by the ability to communicate effectively; maintaining respect and trust, as well as organisational skills. "You have to be presentable, organised…ensure players progress so you also need to listen to your players" (Ed). The coaches' desire to excel and strive for excellence also made them passionate, committed and motivated about their role.

Coaches also accepted that actions ultimately had consequences. This did not perturb any of the coaches in that they all expressed that they were confident in their knowledge and experience to make decisions. They felt this was inherent through learning from mistakes

made in their early coaching experiences. Ivan gave an example where he nearly got into an altercation with staff of an opposing team. He expresses how thoughts were directed towards caution as "a moment of madness will wreck my career". He continued stating that he needed to be sensible "…in my head thinking no, no, no". In sum, coaches agreed that they needed to display appropriate emotions and behaviour.

Ability to identify own strengths and weaknesses. These coaches recognised the significance of acknowledging their own strengths and weaknesses. Although the coaches were highly qualified and knowledgeable, they were quick to highlight the fact that they were still learning:

> Gary: You've got to be willing to fail and you've got to be willing to take criticism so you know you need to be confident in your knowledge, you know what you do well and not so well.

Coaches spoke passionately about constantly seeking improvement and individual growth to produce elite footballers. Ed gave an account of how he is trying to be more varied in terms of his coaching behaviour, "Trying to work out which ones worked best, and find a part that I think works for me". He goes on to explain that he also values his players' opinions when things are not going well.

In order to identify and address strengths and weaknesses, coaches felt that this was important in order to avoid complacency. Hugh stressed the need to create an environment where players can provide constructive criticism to coaches in order to improve. He goes on to say:

> You might have something really powerful...an environment where a player says, 'you know what, no, I didn't see that at all'. We've got to put them in more situations where they challenge us.

As such coaches sought to learn to maximise their strengths and work on their weaknesses and acknowledged the importance of knowing that their impact on players can never be underestimated.

Relational Transparency

Accounts presented by participants identified relational transparency as a component of AL. Trust and honesty, challenging players' decision making and respect to and from players emerged as central subthemes supporting relational transparency.

Trust and honesty. All coaches place a high priority in being honest and developing trust. Coaches considered the reciprocal nature of behaving in an honest and trustworthy manner, acknowledging that in order to ensure transparency they also need allow players to express themselves freely:

> Javier: You want to be able to trust your players, in terms of saying "Well, that's what I want you to do today on the pitch" to "Right, I need that job done" knowing that it will get done. There must be trust on that side, but they need to be able to trust you as well, and know that you will always be honest with them. Honesty is a massive issue. If you lie to a player and say "Yes, you had a great day today" when you were supposed to say, "Well you had a good game, but you weren't great" then you're setting them up to fail. So, the honesty issue is massive.

Coaches discussed the need to be approachable, sharing narratives of how their various relationships with players were built over time by being consistent in their behaviour. This is echoed by Hugh who highlights that coaches should be supportive. He specifies situations where players are experiencing a difficult time or situation, "You can give them that sense of security, that you know, we're gonna do this, this is why we're gonna do it, let's have a little bit of trust...trust me that this might be the right thing for you to do."

Coaches were aware of how brutal some elite sports environment may be perceived in terms of players' self-confidence when being honest. They discussed at length how they managed to find a balance; still managing to enhance confidence when faced with challenges such as being honest about players' prospects of not becoming professional footballers, often providing alternatives in lower leagues or a change in profession. Consequently, coaches agreed that future relationships were determined retrospectively based on the degree of trustworthiness and honesty when providing feedback in such situations.

The coaches reported that an integral part of developing trust was also in challenging players' decision making. They explained the need to empower players by valuing and encouraging athletes' independence, personality, ideas, potential, and progression. Ed provides an example of specific behavioural strategies that he uses to challenge his player's decision making and shares his strategies:

> Ed: There are loads of ways – asking questions, listening to what they are saying during their little drinks breaks and their understanding of it…giving them lots of ownership of their learning as well, erm, and allowing them to ask questions themselves as well such as "Why are we doing that?" and "What is the reason for that?" That kind of thing.

Coaches also emphasised how these challenges facilitated them in imparting as much knowledge as possible to players. They described how, through challenging players, they aimed to equip each player with skills, behaviours, values, and strategies that would build each player to elite level, providing them with "the tools to make safe decisions" (Fabio). He goes on to describe various detrimental dictatorial characteristics he has observed over his career that contributed to a break down in trust. He concluded his story by stating, "You need to give players the opportunities trust you by challenging some of their decisions…but you have to be careful not to go OTT (over the top)."

Respect to and from players. All coaches discussed the necessity and significance of having a reciprocal level of respect. Respect was initiated through an alignment of values as well as coaches' ability to encourage and treat players equally. Javier discussed the importance of respect and achieving mutual understanding:

> Javier: You need to be true to yourself really, you know build up that two way respect between you and the players. But what you need to do is respect their beliefs and hopefully they will respect your beliefs in return. I am not sure it's about forcing your beliefs on them it's about respecting each other's beliefs

All coaches recognised that respect was earned over a period of time by setting clear standards. Coaches also acknowledged that respect was gained through their knowledge because of their coaching qualifications, as well as previous experiences. Beth explained that

being an A Licence coach and ex-professional football player contributed to establishing respect early on when initiating relational transparency with players.

Coaches stressed one of the fundamentals of developing and maintaining respect was considering individual differences in players. Coaches agreed, discussing how respect is an avenue for building players' self-confidence. All the coaches commented on players being exposed to an intense environment, therefore showing how coaches were conscious in ensuring they were doing their job properly. Ivan's approach to developing respect through specific behavioural strategies is represented by the following:

> Ivan: The best way to gain respect is by showing your players you have a wealth of knowledge, that you understand what you're doing, that you've been there… "These are my success stories and this is how I'm going to try and help you improve as a player."

Overall, coaches agreed that to bring the best out of their players they must develop trusting relationships based on mutual respect.

Internalised moral perspective

Internalised moral perspective was discussed by coaches as a construct of AL. For all coaches, the subject of morality and ethical conduct was one they reported very robustly with various narratives shared. Hugh highlights the importance of coaches possessing "inherent underlying principles". Gary goes on to relay that he has high morals, beliefs and ethics:

> Gary: It's just the way I am. I can't bring myself to break rules and I try to pass it on to the players. It's a bit...And it doesn't lend itself to the professional game... I guess it goes back to showing young people how to behave.

Kurt explains that he placed importance on the fact that how players perform reflects the coaches' "philosophy/moral compass". He continues his narrative by providing an example where he would tell his players to "get up and carry on" unless they were injured. Morally he felt "embarrassed and insulted" if his players feigned injury, trying to get another player booked. This was something he strove to instil in his players. However, in contrast,

later in the interview when discussing a scenario where it was a "must win situation", he talks about the 'professional foul' the example given was, you tell your player take a booking (yellow card) because counter attacking is part of the game now and to stop the counter, you take a booking:

> Kurt: You'd be happy if one of your players prevented a goal scoring opportunity. As a manager I'd say well done, its game management you've broke down the game

The above-mentioned illustrates the complexities discussed by all coaches with respect to gamesmanship and cheating. Specifically, the wording of the terms in narratives being shifted and constructed to represent the 'norm' in the sport. The implications were evident in the narratives shared, not only for them personally, but for the overall ethical climate.

Gamesmanship and cheating. All coaches were prepared to discuss their gamesmanship and cheating. They expressed the importance of sharing their experiences as this was a current and relevant topic, they felt this needed to be addressed in order to minimise the occurrence of cheating and certain aspects of gamesmanship to preserve the integrity of the game:

> Cecile: "Well, how do you want to win that game?" As a coach, your own integrity, and your morality, regarding it (cheating). If there was a blatant cheating aspect, I would say 'no'. Do you want the players to win because they were the better team? You want the players to win because of the way you play and your philosophy.

This sentiment was shared by Dillon, who states that he is aware that some coaches encourage diving, but disagrees with it, "They've got to look at themselves in the mirror at the end of the day and I'd rather be a better coach and a better manager and win within the laws of the game". However, the moral dilemmas faced by coaches were highlighted by all coaches. Javier provides a scenario where if his team are at a disadvantage as a result of not engaging in tactical gamesmanship and his job is on the line, his "morals were compromised." Coaches elaborated further stating how the nature of the game is a feature in

demonstrating the complexities coaches face addressing gamesmanship and cheating to be 'inherent' in football. This was also echoed by Kurt who provides an example of his experiences:

> Kurt: I used to have instances with a lad who used to go down for penalties, he was an expert at clipping his own heels (inaudible) you know he wasn't always getting them and he was getting booed. "Wait until you get properly touched and then you can go down", he had this great touch, don't get me wrong all the lads would be made up, they got a penalty and you'd score and win the game but ultimately I think as a coach you can't (inaudible) you've got to say "Look we have to play fairly"

Through their various narratives, all coaches agree that the presence of cheating and occurrences of gamesmanship (that change the outcome of the game) was not acceptable. Specifically, coaches discussed laying down rules and regulations. Javier spoke about the methods he used, "In the professional game there are things you can make sure you do (morally) so the players don't[cheat]". When asked to elaborate on tape, he would not do so as he feared this would make him and the club he worked for identifiable. Furthermore, coaches discussed the difficulties of addressing gamesmanship and cheating. This is summarised well by Dillon who states:

> Dillon: Even though I might not agree with it, I'm not going to take the big moral high ground and say I want to see football played with no fouls at all because that's cheating. People miss time tackles, people make conscious decisions to do certain things and that's part of the game. I don't agree with it but if you're not teaching your players...are you doing them a disservice. I'd probably say yes

Values and standards. All coaches were prepared to share their experiences of striving for success by having a clear vision of what they wanted to achieve. Coaches' values and standards emerged as a fundamental element in understanding their goals and the journeys they envisaged both for themselves and their players. In addition, coaches' values and standards served as an introduction to and selling their "philosophy" to their players. Cecile states that the values and standards she requests of her players are "non-negotiable". She discussed at length how her values and standards derived from her father. She illustrates

this by providing an example of not accepting "late, sloppy and lazy" players and "never asking players what you wouldn't expect from yourself." For him:

> Cecile: Your own personal values and beliefs have to be strong. I think as a coach if I allow my values, beliefs to slip and allow my standards to slip I leave myself in a really vulnerable position

One common element that coaches agreed with was their pursuit of excellence in ensuring high standards. This was facilitated through their commitment, passion and motivation which in turn resulted in players "buying into their system" and following them. Furthermore, coaches acknowledged that their accomplishments in relation to their organisational skills were a reflection of their values and standards.

Balanced processing

Coaches accounts support the emergence of balanced processing as a dimension of AL. Thus, was supported by two subthemes, evaluation and facilitation.

Evaluation. On evaluation, Ed explains what happened when a coaching session did not go well. He expressed how it left him feeling frustrated. He goes on to say:

> Ed: It made me question myself. So you then wonder what you did wrong this time and whether it was me, or the players. I went over it again…pen and paper, in my sleep. We went back to it the other day and for some reason it clicked straight away, this time I communicated, I didn't communicate it well enough the first time.

On the whole, coaches discussed the importance of evaluating their coaching, stressing that it was a necessary continuous process embedded in their practice. They also commented on the various ways they evaluate their coaching practice. The role of the players' views and opinions was also an integral part of the evaluation process. For Beth, as with the other coaches, evaluation was an organisational tool/skill to make sense of "what worked well and didn't work well" determining modifications (or not) to make in the future. She continues her narrative by discussing the inclusion of her players in this process. Beth stated, "Quite often I will design something that looks good on paper, but I will tell 'em it

looks good on paper and if it works cool and if it doesn't, we'll stop it and do something else."

In addition, coaches shared their experiences of evaluation being facilitated through learning from others. Coaches acknowledged advice given by fellow coaches and mentors but highlighted as identified by Dillon "not to copy anyone" and that it was the retention of information given that was important when acting on advice whilst preserving consistency in being true to oneself.

Facilitation. Coaches viewed feedback from players as a way coaching to facilitate player development, both in football and society in general. Their responsibility being to help players understand common objectives and assisting them to plan and achieve their goals without taking a particular position:

> Beth: Seeing players improve, seeing where they are. We are facilitators. We can't suddenly say "My coaching has made that person and I am the only person that has made that player whoever they are. We all have a part. It's like teaching... I think that is an important part – giving them those social skills. How they treat each other, how they respect each other, and then seeing them do well.

The comparison of facilitation through coaching with teaching was one that was expressed by all coaches. Coaches' roles as facilitators were accomplished by fostering life skills development. Hugh provides an example where he is dealing with a player with challenging behaviour he goes on to say:

> Hugh: We work at this club, that we can try and change him as a person and as a player. And it's an ongoing process, he's not going to change overnight but I think we can work with him and we can help him.

He shares his experiences in identifying his role in helping the player "both socially and psychologically more than we've got to help him technically and tactically because he's got unbelievable technical and tactical ability." Similarly, Kurt likens his role to that of a parent realising through his own experiences of how to become successful and recognise common pitfalls. He adds that it is about providing players with "building blocks" that will be

instilled in players' lives, recognising the reality that some players will fail in becoming professional footballers. Ivan shares his approach to dealing with such situations by stating:

> Ivan: I spend a lot of time on the phone to players that we haven't given anything to and trying to set them up for their next careers because I know what it was like when I was a young lad when I was released, and I was given no help. It was, 'OK, see you later, off you go, crack on.' So, I'm always trying to be conscious of how did I feel as a young player and I think that's helped me massively as a coach… is drawing on previous experience and the good and the bad if that makes sense?

Dillon summarises this final subtheme and overall coaches' experiences by acknowledging that his role "is to make a difference in someone's… I was going to say football career, but life."

Discussion

The present study provides the first qualitative inquiry of AL in a sporting context through the lenses professional football coaches. The four related dimensions of AL; self-awareness, relational transparency, balanced processing and internalised moral perspective were identified from interviews by adopting an abductive exploratory approach to the thematic analyses. Through this process, it was also possible to identify clearly how themes were generated from the raw data to uncover subthemes within the subculture in relation to the four dimensions of AL.

Coaches' narratives contributed to the understanding of self- awareness as a component of AL. Self-awareness refers to the degree to which a leader is aware of his or her strengths, limitations, how others view him/her and how they impact followers (George, 2003; Walumbwa et al., 2008). Throughout their interviews, coaches showed that they were highly aware of their behaviour, priorities, and strategies. In addition, coaches highlighted the attention they continued to give to ensure they understand who they were and what they do. Effective coaches need to have a keen understanding of their strengths and weaknesses, behavioural tendencies, and cognitive models (Vella et al., 2010). This is line with previous

work which found that the ability to identify strengths and weaknesses are characteristics of a coach who is self-aware (Thelwell, Lane, Weston & Greenlees, 2008). This research found a coach's effectiveness was influenced by his/her ability to judge his/her own and others' emotions (Thelwell et al., 2008). Therefore, a comprehensive self-understanding provides the coach with a benchmark for AL; becoming a coach who is cognitively aware of their existence within the context in which they operate.

Findings support relational transparency as a dimension of AL. Relational transparency refers to the level at which a leader is open and honest with followers which in turn encourages followers to be forthcoming with their ideas, challenges and opinions (Gardner et al., 2011; Kernis, 2003). All coaches indicated that demonstrating high levels of openness, self-disclosure and trust in their interactions were significant in maintaining a close relationship with players. Relational transparency has been acknowledged to enhance interpersonal relationships (Ilies, Morgerson & Nahrgang, 2005; Kernis, 2003). Therefore, coaches sought to build credibility and trust by encouraging diverse view points and building networks of collaboration (Avolio & Gardner, 2005). This idea is supported by research in sport using the conceptual model of coach athlete relationships which postulates that coaches who work diligently to create meaningful relationships are likely to get more production from their players (Jowette, 2007). Furthermore, literature on relationship building at professional football level has shown that strong relationships help coaches produce confident and secure players (Jones, Armour, & Potrac, 2003).

Internalised moral perspective was identified as a construct of AL. Internalised moral perspective pertains to the degree to which a leader sets a high standard for moral and ethical conduct (Walumbwa et al., 2008). It is, however, important to highlight the complexities of reporting these findings, as some may argue that coaches' narratives did not support this theme. Overall the coaches in this study aimed to promote a positive and ethical climate,

reducing unethical practices in football. For example, coaches reported that coaching was a reflection of their 'philosophy'. This is supported by research in the sport philosophy literature which suggests that authenticity ensures that actions and decisions serve to enhance what they expect from players and preserving the integrity of sport as this may impact athletic careers (Ronkainen et al., 2015). However, coaches acknowledged that despite their in**h**erent values, beliefs and morals, they were faced with the "uncontrollables" accounted for by the 'win at all cost' mentality of modern day football (Cooke et al, 2014), which could exacerbate gamesmanship and cheating. In addition, leadership in sport research suggests that coaches' ethical conduct lacks emphasis within existing models (Vella et al., 2010). In this study, coaches agreed that one's internalised moral perspective should seek to reduce gamesmanship (that can change the outcome of the game) and not condone cheating at any level. Thus, AL in coaches relates to moral values, standards and ethical conduct that foster a positive and ethical climate (Walumbwa et al., 2008).

Coaches' accounts support balanced processing as dimension of AL. Balanced processing relates the extent a leader seeks, analyses and objectively considers all available information prior to making decisions even if such viewpoints challenge their own (Avolio & Gardner, 2005; Walumbwa et al., 2008). Coaches discussed how adapting their coaching involved both an analysis of situations as well as observing the feedback of the players. Coaches reported that although they were highly qualified and knowledgeable, they were continually going through a developmental process. This was enabled formally through professional development courses, as well as informally through mentors and peers as well as through interactions with players. Coaches viewed this as advantageous in their development as well as players' development which they had continued after completion of their qualifications as on-the-job learning provided instant feedback. Although, not specifically addressing 'credible coaching' such practices in sport have been found to be salient in

successful coaches where feedback for analysis, has been shown to be effective (e.g., Becker & Wrisberg, 2008). Results suggest that balanced processing extends beyond coaching practice to the facilitation of shaping each individual player into either a professional football player or a member of society. Again, coaches were aware that that their inherent values and beliefs moulded the degree of balanced processing which subsequently determined their behaviour and the resulting climate.

Results support the Walumbwa and colleagues' (2008) four component model of AL. Results also supports the notion that the four dimensions are not separate distinct constructs but are interconnected; supporting the conceptualisation of AL as a root construct (Walumbwa et al., 2008). The themes presented in this study reinforce the combined effort and desire it takes to promote AL as part of the coach. An important aspect of AL is a leader's motivation to promote a positive and ethical climate (Gardner et al., 2011). Together the four themes demonstrate the coaches' resolution to take responsibility for their role, as well as that of their clubs. Consequently, they are conscious of the input of effort required to create a positive and ethical climate. The behaviours derived from our sub-themes produce a coherent picture of these coaches' perceptions of AL specific to the under explored context of English professional football coaches.

Strengths, future directions and reflexive commentary

The abductive approach to thematic analysis adopted did not limit this study, enabling me to obtain rich data analysing coaches' perceptions of AL in the subcultural context of English football. This exploratory approach aided in the emergence of sub-themes under the umbrella of the four dimensions of AL, a notable strength when considering the contribution of this study into the applicability and development of AL in sport. Consequently, this process can be replicated and assist future research. Furthermore, it would be interesting to consider AL in other sporting contexts (e.g., individual sport). The coaches interviewed in

this study were very willing to share their experiences of gamesmanship and cheating, as the topic was receiving a lot of media attention at the time when interviews were conducted. Future research may benefit from obtaining naturalistic data over a period of time to validate current findings. Furthermore, perceptions of AL in coaches from athletes could be explored to validate and advance this area of research.

Reflexive analysis is an important feature of qualitative research, requiring reflection on our positions within this work, and how this may have influenced the data collected and the resulting analysis. The first author, a sport psychology postgraduate student who conducted and analysed the interviews had experience of playing and coaching football at an elite level. Her position is likely to have encouraged disclosure on the part of the interviewees, but it may have limited what they felt willing to disclose to a colleague. The study's second author is an experienced sport psychology academic who provided critical input in the design of the study and offered different viewpoints from the first author when analysing the data. A health psychology academic who assisted with data analyses had no prior knowledge of AL but was an expert in qualitative research methods.

Conclusion

Overall, this study benefited from accessing an in-depth exploration of AL within an underexplored subculture of professional football coaches. Self-awareness, relational transparency, balanced processing and internalised moral perspective embedded within the literature support the existence of AL in sport. Although it is too early to propose detailed interventions aimed at reducing unethical practices in sport and preserve the integrity of coaches, it is evident that our findings encapsulate important dimensions of AL specific to the sport context aimed at promoting a positive and ethical coach created climate.

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CHAPTER 3

Study 2: Authentic leadership is related to satisfaction and commitment in athletes: The mediating role of perceived choice and trust

Abstract

Researchers have shown interest in studying leadership in sport. However, the concept of Authentic Leadership (AL) has received limited attention. In this study, we examined whether athletes' perceptions of coach AL were associated with their satisfaction and commitment, and whether trust and perceived choice mediated these relationships. Participants were 532 (322 males; M_{age} = 23.6; *SD* = 6.51 years) athletes from a variety of team sports (e.g., hockey, basketball, lacrosse), who completed questionnaires about perceived AL of their coach, perceived choice and trust in their coach, and their satisfaction and commitment. Structural equation modelling revealed that athletes' perceptions of their coach AL were positively related to their satisfaction and commitment, and these relationships were mediated by perceived choice and trust. The findings suggest that AL in coaches may facilitate satisfaction and commitment of athletes, and this may occur via choice and trust.

Keywords: coaching, integrity, positive athletic development, coach-athlete relationships.

Introduction

In recent years, there has been a resurgence in leadership-based research in sport (Vella, Oades & Crowe, 2010). This research has helped our understanding of coaching behaviours and their consequences for athletes (Houchin, 2011). However, little is known about athletes' perceptions of authenticity in coaches and how this may influence athlete outcomes (Vella et al., 2010). Authentic Leadership (AL) represents a contemporary model, encompassing a value-based approach not explicitly addressed in existing leadership models (Walumbwa, Avolio, Gardner, Wernsing & Peterson, 2008).

AL has been defined as a "pattern of leader behaviour that draws upon and promotes both positive psychological capacities and a positive ethical climate. These foster greater self-awareness, internalized moral perspective, balanced processing of information and relational transparency on the part of leaders working with followers, and fosters positive self-development" (Walumbwa et al., 2008 p.97). Although a variety of definitions of AL exist, Walumbwa and colleagues' definition has been used in many studies outside the sport domain as it captures the four critical dimensions of AL: internalised moral perspective, balanced processing, self- awareness, and relational transparency (Avolio & Gardner, 2005; Gardner, Avolio, Luthans, May, Walumbwa, 2005; Walumbwa et al., 2008).

Internalised moral perspective refers to the self-regulation of the leader's internal moral values and standards (Avolio & Gardner, 2005). Thus, authentic leaders' behaviour reflects their personal values and morals. This allows them to resolve ethical dilemmas and to influence others within their organizations to act in a consistently authentic and moral manner (Avolio, Gardner, Walumbwa, Luthans & May, 2004; Gardner et al, 2005). Balanced processing is how a leader objectively analyses all information relevant to a problem before ultimately making important decisions (Walumbwa et al., 2008). Leaders who display

balanced processing welcome the views of followers during the decision-making process, even when those views may challenge their position (Avolio & Gardner, 2005).

Self-awareness pertains to the degree to which leaders are conscious of their own strengths, weaknesses, and attributes, and involves an understanding of how other members within an organisation may view leaders and their abilities and attributes (Walumbwa et al., 2008). This allows leaders to develop their abilities in understanding how they reach the decisions they make and to work to improve strengths and alleviate weaknesses (Avolio & Gardner, 2005). Leaders who are self-aware are cognizant of their own beliefs, values, and emotions and can accurately assess these personal attributes (Gardner, Cogliser, Davis, Dickens, 2011). Consequently, authentic leaders are also able to comprehend more about how they influence others within and outside of their organizations (Kernis, 2003).

The final component of AL is relational transparency, which refers to possessing a high level of openness, sharing information and being honest with other organisational members (Walumbwa et al., 2008). It involves expressing genuine thoughts and feelings, as opposed to presenting a disingenuous self to others (Gardner et al., 2011). Relational transparency helps leaders to develop trust by communicating with followers (self-disclosure) and letting others into their thought processes, while at the same time refraining from demonstrations of inappropriate thoughts or emotions that could negatively influence followers' trust in their abilities (Kernis, 2003).

Empirical research has unanimously supported relationships between AL and positive follower outcomes including followers' satisfaction with supervisor, organisational commitment, extra effort, perceived team effectiveness, and performance (Gardner et al., 2011). Authentic leaders create environments conducive to effective working relationships (Penger & Cerne, 2014). Through the creation of these meaningful relationships, authentic

leaders raise levels of follower commitment, motivation, positive emotions, and subsequently facilitate positive follower behaviour (Walumbwa et al., 2008).

AL originated from researcher's observation and critique of the unethical way transformational leaders manipulate their followers (Bass & Steidlmeiner, 1999). Being consistent with one's deep self ultimately prevents authentic leaders from acting in a manipulative manner, and subsequently avoids the creation of false impressions to followers (Walumbwa et al., 2008). Many leadership models lack emphasis on the ethical and moral components of leadership. These are central in AL (Penger & Cerne, 2014). AL addresses the need for specific research into understanding perceptions of promoting ethical behaviour and positive sportsmanship in coaches who may benefit from engaging in the deep reflection required to be authentic (Houchin, 2011)

AL, Satisfaction, and Commitment

Athletes' perceptions of coach AL could be related to their satisfaction. Athlete satisfaction has been defined as "a positive affective state resulting from a complex evaluation of the structures, processes, and outcomes associated with the athletic experience" (Chelladurai & Reimer, 1997). The relationship between AL and satisfaction with one's supervisor has been documented in the organisational context (Gardner et al., 2011, Walumbwa et al., 2008). Coach AL may be associated with satisfaction because coaches viewed to be authentic are expected to treat athletes in an unbiased and considerate manner and involve them in problem-solving. Furthermore, if coaches model high ethical conduct, this could promote self-regulation of athletes' *own* actions, which may contribute to greater levels of satisfaction (Gardner et al., 2011). Penger and Cerne (2014) found that followers who worked under the guidance of authentic supervisors were more satisfied in their workplace, enjoyed their work, and were satisfied with the atmosphere in their department. In this study, I focused on a three-dimensional concept of satisfaction. The three dimensions are

(1) individual performance, which refers to satisfaction with athletes' performance; (2) personal treatment, which is satisfaction with the coaching behaviours that affect the individual directly and the team development indirectly; and (3) training and instruction, that refers to satisfaction with the training and instruction provided by the coach (Reimer & Chelladurai, 1998).

AL may also influence athlete commitment. This reflects the desire, and the resolve, to persist in a sporting endeavour over time (Scanlan & Simons, 1992). Empirical research shows that balanced processing of information, transparency in relationships, and consistency between values, words, and deeds (i.e., internalized moral perspective and regulation) exhibited by authentic leaders are associated with greater commitment (Emuwa, 2013; Walumbwa et al., 2008). Coach AL may engender athlete commitment because they would aim to broaden the interests of their athletes and motivate them to go beyond individual self-interest for the good of the team. Indeed, in a recent study, AL was associated with commitment in employees across sectors including banking, education, oil, and services industries (Emuwa, 2013).

Trust and Perceived Choice as Mediators

AL could be related to athlete satisfaction and commitment directly, but also indirectly, through trust in the coach. Trust has been defined as athletes' perceptions of the integrity, credibility, and benevolence of the coach (Dirks, 2000). In sport research, coach AL was significantly related to trust (Houchin, 2011). Authentic leaders communicate their views, openly discussing critical issues, and behave in accordance with their convictions (Walumbwa et al., 2008). Thus, coaches who are reported as authentic are likely to instil trust in their athletes, and this, in turn, may result in satisfaction and commitment. With support from social exchange theory (Blau, 1964), coach AL may motivate positive, reciprocal

attitudes and behaviours from athletes since leader–follower relationships are characterised by high respect, positive affect, and trust (Peas, Wesche, Streicher, Braun & Frey, 2012).

AL could also lead to satisfaction and commitment via perceived choice. This refers to the perception of having the flexibility to decide whether or not to engage in an activity (Reeve, Nix & Hamm, 2003). Authentic leaders encourage followers to make decisions about how they work (Walumbwa et al., 2008). In addition, authentic leaders create conditions or structures that facilitate two-way communication (Penger & Cerne, 2014). This provides coaching and constructive feedback, acknowledges followers' perspectives and interests, and involves them in decision-making (Avolio & Gardner, 2005). Examining Walumbwa and colleague's (2008) model from the perspective of self-determination theory (SDT), it was found that perceptions of choice in nurses rated highly in supervisors perceived as authentic (Wong & Laschinger, 2013). Authentic leaders are not compelled to protect a fragile ego or their status (Gardner et al., 2011). They do not feel threatened by followers (Penger & Cerne, 2014). Therefore, their followers are likely to feel that they are allowed room to make choices (Avolio & Gardner, 2005). Athletes' perceptions of choice could be associated with satisfaction and commitment since feedback from authentic leaders is aimed at supporting followers' independent thinking and decision-making.

The Present Research

Based on the literature reviewed above, the purpose of this study was to examine the relationships between athletes' perceptions of coach AL and satisfaction and commitment, and whether trust and perceived choice mediate these relationships. It was hypothesised that coach AL would be positively associated with athlete satisfaction and commitment (e.g., Emuwa, 2012; Penger & Cerne, 2014; Wong & Laschinger, 2013) and that these relationships would be mediated by trust (e.g., Dirks & Ferrin, 2002; Peus et al., 2012) and perceived choice (e.g., Shapira-Lishchinsky & Tsemah, 2014; Wong & Laschinger, 2012).

As such, this study aimed to offer initial, cross-sectional substantiation that coaches perceived to be authentic, could be related to athletes' commitment and satisfaction because athletes trust their coach and perceive themselves to have choice. Previous research on athlete gender and their perceptions of coaches' leadership style indicates that different mediational relationships may occur because behaviours and relationships between behaviours may vary due to social conditions (e.g., Cronin, Arthur, Hardy & Callow, 2015). Thus, it was decided to examine possible gender differences within the context of our hypotheses.

There is scant research examining the potential consequences of AL in sport (Houchin, 2011). This paper aims to address the need for research demonstrating the efficacy of self-awareness, transparent, ethical and high integrity leadership and for a theoretical framework explaining the process and impact of such leadership (Vella et al., 2010). The current study adds to the literature on several accounts. First, this study aims to provide initial evidence that AL in coaches, as perceived by athletes, is related to satisfaction and commitment. Second, to examine whether trust mediates the relationships between AL and satisfaction and commitment. Even though relationships between AL and group performance and cohesion have trust as a mediator, understanding other consequences of AL that may be explained through this process, would advance our knowledge in this area of research (Houchin, 2011). Third, it is proposed that perceived choice mediates the relationship between AL and commitment and satisfaction. As such, we hypothesise that (a) AL exhibited by coaches positively influences athletes' commitment and satisfaction directly and (b) trust and perceived choice mediate these relationships.

Method

Participants

The study adopted a convenience sampling strategy. Convenient sampling allows the researcher to draw a sample from the larger population, which is readily available and

convenient (Patton, 2015). Snowball sampling (referrals from initial participants to generate additional participants) was also used in order to identify teams (Parton, 2015). Participants were 532 athletes (322 males) aged 18-57 years (M_{age} = 23.61, *SD* = 6.51) from a range of team sports (football *n*=187; basketball *n*=84; netball *n*=85; hockey *n*=31; volleyball *n*=30; futsal *n*=26; lacrosse *n*=21; gaelic football *n*=10; other *n*=58), who reported their perceptions of their coaches' AL (*n* = 37; 28 males) from 45 teams. All coaches held a UK minimum Level 1 qualification endorsed by UK coaching for their respective sporting governing bodies. UK coaching ensures the levels and standards of coaches across sports conform to common levels.

Athletes completed measures of their perceived choice and trust in coach, and their satisfaction with, and commitment to, their sport participation. In total 214 University, 199 non-league recreational, 72 national league non-professionals and 20 professional league athletes were recruited across the United Kingdom. On average, at the time of data collection, participants had been playing their sport for 9.32 years (*SD* = 6.90), played for their current team for 2.1years (*SD* = 1.06) and played for their current coach for 1.96 seasons (*SD* = 1.00). The criterion for eligibility was for athletes to have been coach by their current coach for a minimum of one full season.

Measures

Authentic leadership. Authentic leadership in sport was measured using an adapted version of the 16-item Authentic Leadership Questionnaire that assesses the four dimensions of AL (Walumbwa et al., 2008). We adapted the stem to "My coach…." before each statement. Example items included "encourages everyone to speak their mind" (relational transparency, five items), "demonstrates beliefs that are consistent with actions" and "makes decisions based on high standards of ethical conduct" (internalised moral perspective, four items), "seeks feedback to improve interactions with players" (balanced processing, three

items), and “shows he or she understands how specific actions impact others” (self-awareness, four items). Participants were asked to respond to each statement regarding their coach’s leadership style on a 5-point Likert scale ranging from 1 (*not at all*) to 5 (*frequently if not always*). Walumbwa and colleagues (2008) have provided evidence of the internal reliability of the scale with each sub- scale and the overall 16-item scale, $\alpha > .70$.

Athlete satisfaction. Athletes’ satisfaction with their sport experience was assessed using the Athlete Satisfaction Questionnaire (Reimer & Chelladurai, 1998), which consists of three subscales comprising 11 items. The stem “How satisfied are you with….” was used for each statement. Example items are “the improvement in your skill thus far” (individual performance, three items), “the recognition you receive from your coach” (personal treatment, 5 items) and “the instruction you receive from your coach” (training and instruction, 3 items). Participants were asked to think about their experiences with their coach and indicate how satisfied they were. They responded on a Likert scale ranging from 1 (*not satisfied at all*) to 7 (*extremely satisfied*). Riemer and Chelladurai (1998) provided evidence for the internal consistency of the scale ($\alpha > .85$ to $\alpha > .92$)

Sport commitment. We measured sport commitment using the commitment subscale from the Sport Commitment Model (Scanlan, Carpenter, Schmidt, Simons & Keeler, 1993), which has four items. The items are “How dedicated are you playing for this team?” with response options ranging from 1 (*not at all dedicated*) to 5 (*very dedicated*). “How hard would it be for you to quit playing for this team?” with response options ranging from 1 (*not hard*) to 5 (*very hard*). “How determined are you to play for this team?” with response options ranging from 1 (not at all determined) to 5 (*very determined*). “What would you be willing to do to keep playing for this team?” with response options ranging from 1 (*nothing at all)* to 5 (*a lot of things*). Participants were asked to think about their experiences with their

current team and respond to each statement. The scale demonstrated adequate internal consistency (α >. 89; Scanlan et al., 1993).

Perceived choice. This variable was measured using the perceived choice subscale of the Basic Needs Satisfaction in Sport Scale (BNSS; Ng, Lonsdale, & Hodge, 2011). The scale consists of four items, and examples are: "In my sport, I have a say in how things are done" and "I get opportunities to make decisions". Participants were instructed to think about their personal experiences with their team and indicate how true each statement was on a 7-point Likert scale of 1(*not true at all*) to 7 (*very true*). The scale demonstrated adequate internal consistency (α >. 82; Ng et al., 2011).

Trust. The Trust in Leader questionnaire developed by McAllister (1995) and adapted to sports settings by Dirks (2000) was utilised to measure perceptions of athletes' trust in their coach. The scale consists of nine items, and example items are: "I trust and respect my coach" and "I can freely share my ideas, feelings, and hopes with my coach". Participants were asked to think about their experiences with their coach, and to indicate their level of agreement with each statement on a Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The scale demonstrated adequate internal consistency for the trust questionnaire (α = .83 McAllister, 1995) and the adapted version for sport (α = .92 Dirks, 2000).

Procedure

Coaches were initially contacted by phone, email, or post with a brief description of the study purpose and a request for permission for their athletes to take part in the study. Coaches then received a follow-up letter via post or email reiterating the purpose of the study, procedures for confidentiality, and example items to be used in the questionnaire pack. Prior to completing the questionnaires, athletes were provided with an information sheet outlining the purpose of the study, that participation was voluntary, and responses would be

kept strictly confidential. Subsequently, participants were asked to complete an informed consent form and to think about their experiences with their current coach and team when completing the questionnaires. Questionnaires were administered at either the beginning (20 teams) or end (17 teams) of a training session and took approximately 10-15 minutes to complete. Questionnaires were counterbalanced to avoid order effects.

Results

Preliminary Analyses

Prior to the main analyses, preliminary data screening was conducted to check for normality, outliers and missing values for each variable. When missing data is below 5%, any method for replacing missing values is appropriate (Tabachnick & Fidell, 2001). Missing data in the entire data set (0.7%) for each variable were replaced with the mean of the respective variable. The univariate skewness (range -1.10 to 1.04) and kurtosis (range -.02 to 1.00) values of the study variables were within acceptable ranges (e.g., skewness <3.0 and kurtosis <10.0; Kline, 2016).

Descriptive Statistics, Alpha Coefficients, and Zero-Order Correlations

Descriptive statistics, Cronbach's alpha coefficients, and zero-order correlations for all variables are presented in Table 2.1. On average, participants perceived their coach to display AL behaviour 'sometimes' to 'fairly often'. They also reported 'high' levels of commitment and trust and 'moderate' levels of satisfaction and perceived choice. All measures showed very good to excellent internal consistency (alpha range = .88 – .99; Kline, 2016). All variables had medium-to-large correlations with each other (see Cohen, 1992).

Table2.1

Variables	*M*	*SD*	1	2	3	4	5
1. Authentic Leadership	3.74	.64	(.92)				
2. Trust	5.53	1.02	.62*	(.93)			
3. Perceived Choice	4.73	1.40	.44*	.46*	(.91)		
4. Commitment	4.23	0.70	.31*	.33*	.38*	(.88)	
5. Satisfaction	5.11	1.05	.64*	.75*	.49*	.32*	(.94)
6. Gender	1.43	.50	.04	-.02	.06	.14*	-.28

Descriptive Statistics, Cronbach's Alpha Coefficients, and Bivariate Correlations among all Variables

Note. Alpha coefficients are presented in the diagonal. Possible range of scores: 1 to 5 for AL and commitment and 1 to 7 for perceived choice, trust and satisfaction. Gender was coded as 1 = *male*, 2 = *female*

* $p < .01$

Main Analyses

The purpose of this study was to examine whether athletes' perceptions of coach AL are related to their satisfaction and commitment and whether trust and perceived choice mediate these relationships. Confirmatory Factor Analyses (CFA) using the robust maximum likelihood method with EQS software version 6.1 (Bentler, 2003) were employed to ascertain the factor structure of the scales used. A combination of fit indices (Bentler, 2007) were examined to determine the degree of model fit, including the Satorra-Bentler chi-square (S-Bχ^2), the Comparative Fit Index (CFI), the Standardized Root Mean Square Residual (SRMR), and the Root Mean Square Error of Approximation (RMSEA). Hu and Bentler (1999) proposed that acceptable fit of a hypothesized model to the data is indicated when the CFI is close to .95, the SRMR is close to .08, and the RMSEA is close to .06. However, it has been noted that when testing complex models, these criteria may be overly restrictive (e.g., Marsh, Hau, & Wen, 2004). In addition, the RMSEA is sensitive to model complexity and often falsely indicates a poor fitting model in cases with small degrees of freedom (Kenny, Kaniskan, & McCoach, 2014).

CFAs of the scales assessing perceived choice (S-Bχ^2 [2] = 18.62, $p < .001$; CFI = .99; SRMR = .02; RMSEA = .13, CI = .08 – .18) and commitment (S-Bχ^2 [2] = 14.95, $p < .001$; CFI = .98; SRMR = .03; RMSEA = .11, CI = .06–.17), demonstrated good model fit, yet the CFA of the trust variable did not. Inspection of the normalized residual covariances revealed that there was large residual covariance between two items: "If I shared my problems, he/she would respond" and "I can freely share my ideas, feelings and hopes". The similarity in item wording suggested that one of these items was redundant, and therefore the former was removed. The re-specified model had acceptable model fit (S-Bχ^2 [20] =151.63, $p < .001$; CFI = .92; SRMR = .05; RMSEA = .11, CI = .10–.13).

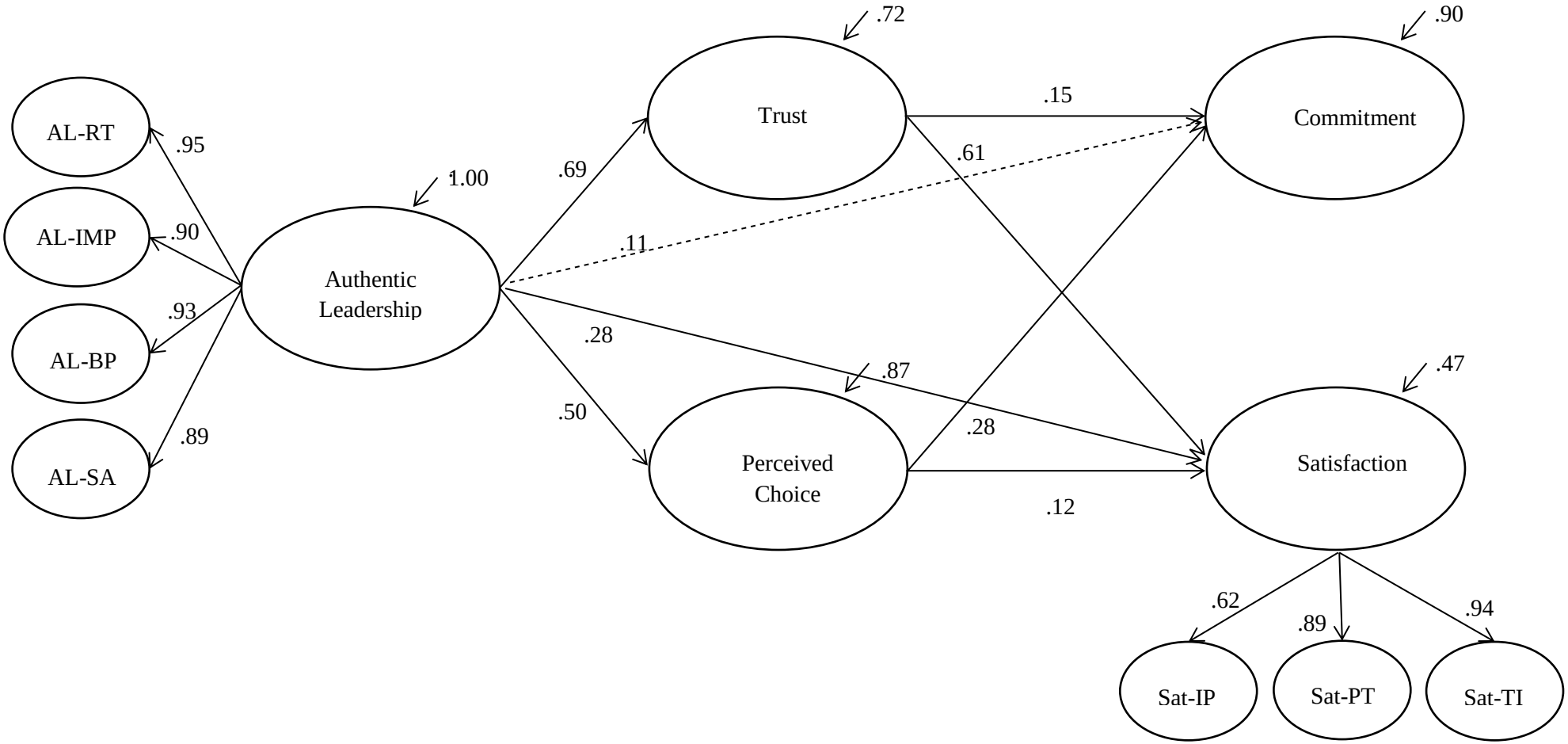
Due to the hierarchical nature of the AL variable (Walumbwa et al., 2008), a second order CFA was conducted. In this model, the first-order factors of relational transparency, internalised moral perspective, balanced processing, and self-awareness are explained by the higher order factor of AL. This model fitted the data well: S-Bχ^2 (100) =365.02, $p < .001$; CFI = .92; SRMR = .05; RMSEA = .07 (CI = .06–.08). A similar second-order CFA was conducted for the satisfaction variable, which consisted of three lower order factors; this also showed good model fit: S-Bχ^2 (41) =84.92, $p < .001$; CFI = .99; SRMR = .04; RMSEA = .05, CI = .03–.06.

Structural model. The proposed structural model (see Figure 2.1) was tested using the robust maximum likelihood estimation method (Mardia's normalized estimate of multivariate kurtosis = 75.40). Standardized factor loadings of the item indicators in the structural model were all satisfactory (>.40; Pituch & Stevens, 2016) and ranged from .41 to .90 (median loading $\beta = .72$). Fit indices revealed that the data fit the model reasonably well: S-Bχ^2 (845) =1874.63, $p < .001$; CFI = .92; SRMR = .06; RMSEA = .05 (CI = .05–.05), and all structural pathways were statistically significant, with the exception of the direct relationship between coach AL and athlete commitment. AL was a strong positive predictor

of both trust and perceived choice. In turn, trust was a moderate positive predictor of commitment, and a strong positive predictor of satisfaction. Perceived choice was a moderate predictor of commitment and a weaker predictor of satisfaction. Coach AL explained 48% of the variance in trust and 25% in perceived choice, and in turn, authentic leadership, perceived choice and trust explained 20% of the variance in commitment, and 78% of the variance in satisfaction.

Figure 1.1

Structural model of the relationships between authentic leadership, trust, perceived choice, commitment, and satisfaction.



Note. All regression coefficients are standardized. Solid lines and dotted lines represent significant and non-significant associations between constructs, respectively. For clarity of presentation, the individual indicators for all latent factors and the variances of the seven authentic leadership and satisfaction first-order factors are omitted. AL-RT, AL-IMP AL-BP, and AL-SA refer to the four components of Authentic Leadership (Relational Transparency, Internalized Moral Perspective, Balanced Processing, and Self-Awareness, respectively). Sat-IP, Sat-PT, and Sat-TI refer to the three components of Satisfaction (Satisfaction with Individual Performance, Satisfaction with Personal Treatment, and Satisfaction with Training and Instruction, respectively

Testing indirect effects. To assess the presence and magnitude of indirect effects decomposition effects were requested of effects in the structural model (Bollen, 1987), which provided a breakdown of direct, indirect, and total effects. Direct effects represent the effects of the predictor variable (AL) on the outcome variables (i.e., commitment and satisfaction) while controlling for the mediators (i.e., trust and perceived choice). Indirect effects are the effects of AL on commitment and satisfaction via trust and perceived choice and are the product of the two individual pathways comprising the mediated effect. Total effects are the sum of the direct and indirect effects.

To determine the significance of these effects, bootstrapping procedures were employed in line with the recommendations of Preacher and Hayes (2008). 1000 bootstrap samples with replacement from the original sample were utilized to obtain the standardized parameter estimates and associated 95% Confidence Intervals (CI). There is evidence of a significant effect when the bootstrap-generated 95% CI does not contain zero (Shrout & Bolger, 2002; Preacher & Hayes, 2008).

The total, direct and indirect effects of AL on commitment were: .35, 95% CI = .26 to .44; .12, 95% CI = -.02 to .27; and .24, 95% CI = .13 to .36, respectively. Specific indirect effects of AL to commitment were: via trust .10, 95% CI = .01 to .29 and via perceived choice: .14, 95% CI = .08 to .21. The total, direct and indirect effects of AL on satisfaction were: .77, 95% CI = .70 to .81; .28, 95% CI = .17 to .39; and .48, 95% CI = .38 to .58, respectively. Specific indirect effects of AL to satisfaction were: via trust .42, 95% CI = .31 to .53 and via perceived choice .06 95% CI = .01 to .10. The percentage of the total effect accounted for by the indirect effect conveys the degree of mediation. The percentage of the total effect of AL on the outcome variables mediated by trust and perceived choice was 68% for commitment and 63% for satisfaction.

Gender invariance. Multisample structural equation modeling (Byrne, 2006) was employed to determine the equality of the model across genders. Separate baseline models were constructed for male and female athletes, followed by an unconstrained baseline multigroup model, and three subsequent increasingly constrained models in which the factor loadings, factor variances, and structural paths were constrained to be equal. As the direct relationship between authentic leadership and commitment was non-significant in the full model, this parameter was excluded from the multigroup analyses.

All structural paths were found to be significant in the baseline model for male athletes, yet in the baseline model for females, the relationship between trust and commitment was not significant. The multigroup baseline model showed acceptable fit to the data: S-Bχ2 (1694) = 3021.22, $p < .001$; SRMR = .07; CFI = .91; RMSEA = .04 (CI = .04–.04). Two factor loadings associated with the AL (relational transparency), and trust factors were found to vary across the two gender groups and were therefore released in the subsequent models. Factor variances and structural pathways were all found to be non-invariant. An equality constraint was not placed on the structural pathway between trust and commitment due to its non-significance for the female group. Unstandardized parameter coefficients (Hair, Anderson, Tatham, & Black, 1998) for the relationship between trust and commitment were $b = .29$, and $b = .01$, for male and female athletes, respectively. The fit of the most restrictive model was acceptable: S-Bχ2 (1744) = 3055.73, $p < .001$; SRMR = .09; CFI = .91; RMSEA = .04 (CI = .04–.04) and the decrease in CFI value compared with the unconstrained multigroup model was less than .01, which is considered to be indicative of model invariance (Cheung & Rensvold, 2002).

Discussion

AL is a leadership style which is underexplored in the sporting domain and has been explicitly proposed as the future of leadership theory-building by experts in the field (Vella et

al., 2010). The present research sought to extend the literature by examining Walumbwa et al.'s model of AL in coaches via athletes' perceptions. This study examined whether (a) AL was associated with satisfaction and commitment and (b) whether trust and perceived choice mediated these relationships.

Consistent with our hypothesis, athletes' perceptions of coach AL had positive direct effects on their satisfaction. If athletes perceive their coach to be considerate of their opinions, open and honest, unbiased in understanding how their actions may impact them, and a role model of high ethical standards may facilitate satisfaction with improvements in their skill, the recognition they receive from their coach and their coaches' teaching of tactics and skills. Results are consistent with the theoretical predictions of Walumbwa and colleagues' model of AL and extend findings in other contexts, where followers who viewed their supervisor to be an authentic leader reported greater satisfaction (e.g., Penger & Cerne, 2014; Wong & Laschinger, 2012).

Within the current study, evidence was found for the indirect relationship between AL and satisfaction via trust. This suggests that coaches, who openly communicate with their athletes, are honest and act in a way that is consistent with their beliefs may engender athletes' trust, and it may be because of this trust, that athletes experience higher satisfaction with various aspects of their sport experience. Identification processes associated with the reciprocal nature of AL could account for this relationship (Walumbwa et al., 2008). That is, trust is determined by the personal experiences had with a coach and the relationships that are subsequently created (Mach et al., 2010). Findings are also in line with research which showed that trust in coach mediated the link between AL and group performance as well as group cohesion (Houchin, 2011). They also extend previous work (Emuwa, 2013) by showing that trust may explain the link between AL and satisfaction.

As predicted, the relationship between AL and satisfaction was also mediated by perceived choice. Athletes, who perceived their coaches as authentic leaders, also felt that they were given choice and had a say in how things are done during their interactions with their coach. In turn, because athletes perceive they have a choice in their performance goals, and the support and training provided by their coach, this may facilitate a sense of satisfaction. This is in line with the conceptualisation of AL from the perspective of STD theory (Deci & Ryan, 2000). Research in nurses also found that AL was associated with perceived choice (Wong & Laschinger, 2013). Findings provide insights into perceived choice as a mechanism through which coach AL may be associated with athlete satisfaction.

Athletes' perceptions of coach AL were related to commitment indirectly via trust. Specifically, AL was a strong positive predictor of trust, which in turn was a moderate positive predictor of commitment. Results suggest that coaches who are authentic leaders could inspire trust in their athletes. In turn, athletes who feel they can freely share their ideas, feelings, and hopes may consider their coach to be trustworthy, and this could reinforce their commitment. Drawing from assertions of Blau's (1964) social exchange theory results support the notion that trust improves the quality of exchange in relationships, and bridges leadership and follower outcomes. Results extend previous work (Houchin, 2011) by showing that trust mediates the relationship between AL and commitment. Findings suggest that coaches should be mindful of behaving with integrity and transparency as this could lead to trust, which in turn may increase commitment (Zhang & Chelladurai, 2013).

Mediation analysis also revealed an indirect effect of AL on commitment via perceived choice. This is an important finding as it offers the first indication of an additional mechanism that may explain the relationship between AL and commitment. Results suggest that authentic coaches also encourage players to speak their mind, listen and seek feedback from their players, and in turn, the perceptions of choice athletes experience may lead to

higher sport commitment. This is consistent with previous research in educational contexts, where positive associations were found between teachers' perceptions of AL and commitment (Shapira-Lishchinsky & Tsemah, 2014).

Some of the interesting findings that were those involving athlete gender. Multigroup analyses showed that the proposed model was largely similar in males and females. A somewhat surprising result was that in female athletes the link between trust and satisfaction was non-significant. This finding is in line with Korabik and Ayman's (2007) integrative model of gender and leadership, which depicts the effect of gender on the relationships between leader behaviours and follower outcomes. According to these authors leader behaviours and follower outcomes are influenced by three factors: socio demographic gender (e.g., expectations of role behaviours), contextual cues (e.g., the gender makeup of the group) and intrapsychic processes (e.g., gender role orientation in both parties). This finding could also be explained by future research into group orientations among females (Kashima, Yamaguchi, Kim, Choi, Gelfand & Yuki, 1995).

Practical Implications

These findings have implications for coaches and practicing sport psychology professionals. First, it may be advantageous for coaches to promote integrity and openness with their athletes by creating a deeper sense of moral principles, engaging athletes in making decisions, and sharing their thoughts and feelings, so that they communicate values and beliefs that perhaps resonate with their athletes. Consequently, coaches should foster an open climate of discussion and exchange with their athletes, for example through frequent team reflection, planning training sessions, and preparation for competition. Second, for sport psychology professionals, results suggest that AL interventions may be a potential avenue for applied practice. AL could be influential in shaping the athletes' development, which should not be ignored by practicing professionals (Vella et al., 2010). As sport psychology

professionals are trained and equipped to facilitate the development of athletes' and in some cases coaches, potential remains for applied work in this domain. Interventions to improve coaches' relational transparency, internalised moral perspective, balanced processing, and self-awareness may be valuable to addressing moral conduct that takes place in sport. For example, providing multisource feedback could enhance coaches' self-awareness and eliminate the potential discrepancy between self- and athlete- perceptions. The use of group discussions could also make coaches understand athletes' perspectives, helping them process information in an unbiased manner.

Limitations and Future Directions

The present research revealed some interesting and important findings and offers several avenues to develop the literature body further. First, the data are cross-sectional, thus, we are unable to draw firm inferences regarding the direction of causality in the identified relationships. Longitudinal research may help shed light on the temporal order of the variables examined. Future research should examine how coaches' AL develop relationships with athletes over time how this may influence the mediators investigated here and the outcomes of satisfaction and commitment. Randomised experimental designs in which the independent variable and the mediator are manipulated would also fully test the direction of these relationships (see MacKinnon, Lockwood, Hooffman, West, & Sheets, 2002). For example, script-based designs to investigate the influence of AL (high vs. neutral vs. low) on the current study variables could generate relevant data concerning alternative sequential steps (e.g., AL- satisfaction- perceived choice).

We also used a questionnaire that has been developed for use in organisational contexts. Although we adapted the questionnaire to the context of sport, it may be useful to examine whether AL in coaches utilising a sport-specific measure is the same as AL in leaders in other contexts. Future research could improve on this study by examining other

sport specific variables as consequences of AL (e.g., psychological well-being and burnout). Researchers could examine antecedents of AL (e.g., dispositional variables, resilience, emotional intelligence, self-esteem) in addition to the consequences of AL for the coaches themselves (e.g., performance and motivation), to extend our understanding of AL behaviours in sport. Finally, future research should also add to this study by collecting measures of other related leadership constructs such as transformational leadership to compare the effects of their leadership styles to distinguish their effectiveness.

Conclusion

In this study, it was found that athletes' perceptions of coach AL positively predicted satisfaction both directly and indirectly via perceived choice and trust, and commitment indirectly through the same mediators. Coaches who are viewed by their athletes to be authentic may lead to athletes experiencing greater trust and perceptions of choice. This in turn may reinforce athletes' sport satisfaction and commitment. AL may be worth considering by sports psychology and coaching researchers, and applied practitioners who are aiming to improve coach-athlete dyads, reducing occurrences of unethical coaching behaviours and promoting positive experiences for athletes.

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CHAPTER 4

Study 3: Authentic leadership in sport: Its relationship with athletes' enjoyment and commitment and the mediating role of autonomy and trust

Abstract

Consequences of leadership styles have become a noteworthy area of research for sport psychology researchers. However, there is scant research on the concept of Authentic Leadership (AL). To date, research in sport has demonstrated that AL is associated with positive outcomes for athletes such as satisfaction, commitment, trust and perceptions of choice. In this study, we examined whether athletes' perceptions of coach AL were associated with their commitment and enjoyment and whether trust in coach and perceived autonomy mediated these relationships. Participants were 435 athletes (female = 211) from team (e.g., football, hockey; n = 338) and individual sports (e.g., boxing, swimming; n = 97) who completed questionnaires about perceived AL of their coach, perceived autonomy and trust in their coach, and their enjoyment and commitment. Structural equation modelling revealed that athletes' perceptions of their coach AL were positively related to their enjoyment and commitment and these relationships were mediated by perceived autonomy and trust. The findings suggest that AL in coaches may facilitate enjoyment and commitment in athletes, and this may occur via autonomy and trust.

Keywords: athlete well-being, integrity, coaching

Introduction

Over the past 30 years, the field of leadership has emerged as a salient area of research and covers an increasingly diverse range of topics relevant to success in sporting domains. This is in response to the demand in the understanding of coaching behaviours and consequences of these behaviours on athletes (Vella, Oades, & Crowe, 2010). Athletes' perceptions of a coach directly regulate behavioural responses, and factors such as trust in a coach and autonomy-supportive environments could have consequences for athletes (Morton, 2016). Authentic leadership (AL) (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008) is a construct that has caught researchers' attention and has gained recognition and position within leadership studies in sport (e.g., Bandura, Kavussanu, & Stebbings, 2016; Houchin, 2011).

AL has been defined as a "pattern of leader behaviour that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, internalized moral perspective, balanced processing of information and relational transparency on the part of leaders working with followers, fostering positive self-development" (Walumbwa et al., 2008 p.94). According to Walumbwa and colleagues (2008), AL is composed of four related dimensions: self-awareness, internalised moral balanced processing and relational transparency.

Self-awareness pertains to the degree to which leaders are conscious of their own strengths, weaknesses, and attributes, and involves an understanding of how other members within an organisation may view leaders and their abilities and attributes (Walumbwa et al.,2008). Internalised moral perspective refers to the self-regulation of the leader's internal moral values and standards (Avolio & Gardner, 2005). Thus, authentic leaders' behaviour reflects their personal values and morals. This allows them to resolve ethical dilemmas and to

influence others within their organizations to act in a consistently authentic and moral manner (Avolio, Gardner, Walumbwa, Luthans & May, 2004; Gardner et al, 2005).

Balanced processing is how a leader objectively analyses all information relevant to a problem before ultimately making important decisions (Walumbwa et al., 2008). Leaders who display balanced processing welcome the views of followers during the decision-making process, even when those views may challenge their position (Avolio & Gardner, 2005). relational transparency, which refers to possessing a high level of openness, sharing information and being honest with other organisational members (Walumbwa et al., 2008). It involves expressing genuine thoughts and feelings, as opposed to presenting a disingenuous self to others (Gardner et al., 2011).

AL originated from Bass & Steidlmeier's (1999) observation and critique of the unethical way transformational leaders manipulate their followers (Gardner et al., 2011). Although transformational leadership requires authenticity as part of their characteristics of being visionary and of high moral character, the distinction between the two lies on the faith of authentic leaders in their own deep sense of self-values and beliefs (Sagnak & Kuruoz, 2017). Therefore, an authentic leader "leads with purpose" and takes more consideration of contextual and organizational factors that influence the effectiveness of leadership and ensures the psychological well-being of followers (Penger & Cerne, 2014). Moreover, AL is not limited to the authenticity of leadership, but it extends to authenticity of true sustainable leader-follower relationship or "followership" that enhances the performance of leadership at different levels (Emuwa, 2013).

To date, research supports the notion that coaches who are viewed to be authentic create transparent two-way relationships with athletes (Bandura et al., 2016; Houchin, 2011). Through the creation of these meaningful relationships, authentic leaders raise levels of follower commitment, motivation, and positive emotion, and subsequently facilitate positive

follower behaviour (Sagnak & Kuruoz, 2017). The integrity, respectability, and trustworthiness of authentic leaders is key in creating high-quality exchange relationships (Emuwa, 2013). For example, authentic leaders are viewed as being respectful and trusting each of their followers. This is likely to be reciprocated by followers (Norman, Avolio & Luthans, 2010).

Only two studies have investigated AL in sport. Houchin (2011) examined whether AL predicted higher levels of trust, team cohesion, and group performance in 109 student athletes most of whom were females, from various team sports. An adapted and abbreviated version of the authentic leadership questionnaire (ALQ; Walumbwa et al., 2008) was used, trust, perceived performance were measured using single item measures in addition to task and social cohesion (Carron, Brawley, & Widmeyer, 1998). Athletes who perceived their coach to be authentic reported greater trust in the coach; this in turn positively predicted their perceptions of group cohesion and performance. In a second study, coach AL was associated with trust, perceptions of choice, commitment and satisfaction in a heterogeneous sample of 532 team sport athletes (Bandura et al., 2016). In this study, athletes who perceived their coach to be authentic reported higher commitment and satisfaction. Coach AL, commitment and satisfaction were indirectly related via trust and perceived choice (Bandura et al., 2016). Taken together results from these two studies suggest that AL may have important consequences in the context of sport (Bandura et al., 2016; Houchin, 2011).

AL, enjoyment, and commitment

AL is associated with affective responses, such as attitudes, and emotions (Gardner et al., 2011). Coaches perceived to be authentic could result in athletes feeling more motivated and connected with their coach through positive role modelling and mutual respect and trust (Emuwa, 2013). Due to these positive relationships, they may experience enjoyment, which

is a positive emotional response to sport and includes feelings such as fun, pleasure, and liking (Scanlan, Russell, Beals, & Scanlan, 2003).

Through the creation of meaningful relationships, authentic leaders allow followers to share a deeper understanding with a leader and therefore aid the promotion of positive emotional states, such as enjoyment (Emuwa, 2013). AL is characterised by a leader's ability to provide constructive feedback, remain hopeful and confident, authentic leaders are able to influence optimism and positive emotions such as enjoyment in followers (Sagnak & Kuruoz, 2017). There is scant research to support the relationship between AL and enjoyment in athletes. AL research has focused on levels of follower satisfaction as a positive emotional outcome (Penger & Cerne, 2014; Walumbwa et al., 2008). In sport, coach AL has been found to be directly related to satisfaction in athletes (Bandura et al., 2016). These findings pave the way for future studies to examine other positive emotional states, such as enjoyment.

AL may also influence athlete commitment, which reflects the desire and resolve to persist in a sporting endeavour over time (Scanlan & Simons, 1992). This is because authentic leaders demonstrate an understanding of strengths and weaknesses; they gain an insight into the self through exposure to others and being cognizant of one's impact on other people (Gardner et al., 2011). With clarity and understanding of their capabilities, and with the willingness to be self-aware, a coach viewed to be authentic will be less likely to engage in defensive behaviors and more likely to correct personal predispositions. Research has shown that these characteristics potentially increase commitment in followers of authentic leaders (Gatling, Kang, & Kim, 2016). Furthermore, authentic leaders have been shown to encourage followers to identify with the core values of the collective organization that they represent in addition to the leader (Emuwa, 2013). Thus, authentic coaches may stress the importance of attending to the shared interests of the team and individual leading to

commitment. Previous research has shown that coach AL is indirectly related to commitment via trust and perceptions of choice (Bandura et al., 2016).

Trust and autonomy as mediators

In this study, we expect AL to be related to enjoyment and commitment in athletes directly, but also indirectly, through trust in the coach. Trust has been defined as athletes' perceptions of the integrity, credibility, and benevolence of the coach (Dirks, 2000). Trustworthiness is proposed to be an intrinsic feature of AL (Gardner et al., 2011). Previous research has provided evidence to support the relationship between athletes' perceptions of AL and trust (Bandura et al., 2016; Houchin, 2011). These findings suggest that coaches who do not show consistency between words and actions, or who frequently lie, will hardly be trusted by their athletes. On the contrary, authentic leaders are expected to build trust in their followers via their supporting behaviour (Peus, Wesche, Stricher, Braun, & Frey, 2012).

Recent research supports the importance of trust an intervening variable when examining consequences of AL on athlete outcomes (Bandura et al., 2016). These researchers found that coaches who were perceived to be authentic, openly communicated with their athletes, were honest and acted in a way that is consistent with their beliefs, had athletes who reported greater trust. Furthermore, athletes who felt that they could freely share their ideas, feelings, and hopes considered their coach to be trustworthy, which in turn was associated with commitment and satisfaction. Based on these findings and the theoretical predictions of AL (Walumbwa et al., 2008), I expect trust to mediate the relationship between AL and enjoyment in athletes.

We also expect AL to be related to enjoyment and commitment in athletes indirectly via autonomy. Autonomy refers to "being the perceived origin or source of one's own behaviour" (Deci & Ryan, 2008). Autonomy is one of the three basic psychological needs specified in the self-determination theory (SDT), and encompasses three aspects (Ryan &

Deci, 2008a). First, internal perceived locus of causality (IPLOC) indicates whether a person believes that his or her actions are initiated and regulated by a personal force (Reeve, Nix & Hamm, 2003). Second, volition refers to an unpressured willingness to engage in an activity (Reeve et al., 2003). Finally, perceived choice pertains to the perception of having decision-making flexibility to choose whether to engage in an activity (Reeve et al., 2003). Autonomy is satisfied when one is provided with choice over actions, perceived control and an active role in the decision-making process (Ryan & Deci, 2008a).

According to SDT, one of main intrinsic needs that motivate athletes to initiate behaviour and contribute to psychological health and wellbeing is autonomy (Deci & Ryan, 2008). SDT research suggests that when leaders create autonomy-supportive environments, follower actions become self-determined. Self-determined behaviour has been extensively linked with enjoyment, enhanced effort, and commitment in the context of sport (Morton, 2016). Previous research has shown that out of the three basic psychological needs the influence of autonomy was rated higher in supervisors viewed to be authentic (Sagnak & Kuruoz, 2016). Furthermore, autonomy positively affected intrinsic motivation which was also associated with organisational commitment, satisfaction and trust in leaders viewed to be authentic (Penger & Cerne, 2014). In sport perceived choice was a mediator in the relationship between athletes' perceptions of AL and commitment and satisfaction in a recent study (Bandura et al., 2016). However, previous research has not investigated the overall construct of autonomy considering its different aspects. The current study aims to address this limitation.

The Present Study

As the literature reviewed above indicates, AL is an important construct that has features not evident in other models used to understand leadership in sport. Specifically, this is the only leadership construct that encompasses a moral component (i.e., internalized moral

perspective) as well as transparency in the interactions of the leader with followers. Together with the focus on enhancing self-awareness and objectively analysing information these features make AL a unique construct that could have implications for important athlete outcomes. However, to date, this construct has received very little attention in the context of sport. This form of leadership can increase well-being in athletes because it is a positive form of leadership (Morton, 2016; Vella et al., 2010).

Previous research found an indirect relationship between AL and commitment and satisfaction via trust and perceptions of choice in team sports (Bandura et al., 2016). The current study aims to build on this research in several ways. First, this research will determine if previous findings are replicated with an independent sample of athletes. This is important because replication should attest to the robustness of the findings, thus increasing our confidence in them. Second, the present study will extend previous research in athletes from individual sports. Third, the current study will measure the construct of autonomy in a more complete manner assessing different aspects of this construct. We hypothesised that coach AL – as determined via athlete perceptions - would be positively associated with athlete enjoyment and commitment (e.g., Bandura et al., 2016; Emuwa, 2013) indirectly through trust (e.g., Bandura et al., 2016; Houchin, 2011) and autonomy (e.g., Gardner et al., 2011; Walumbwa et al., 2008).

Method

Participants

A convenience purposive sampling strategy was employed in study. Convenience purposive sampling focuses on characteristics on a population that are of interest and would best enable answers to research questions developed (Patton, 2015). The sample in this study were university athletes coached by a minimum level 1 certified coach accredited by their relevant sport governing body. Convenience purposive sampling was deemed fitting because participants were readily available a willing to participate. Convenience purposive sampling

also ensures balance of group sizes when multiples groups are selected. Snowball sampling was also used by asking coaches and athletes who had already participated to recommend others (Patton, 2002).

Participants were 435 athletes who were members of the British universities and colleges sport (BUCS) league aged 18-44 years (M_{age} = 19.94, *SD* = 2.08), who rated 21 coaches (32 % female). BUCS consists of two regional leagues and each sport can have up to four teams according to athletic ability from the same university or college competing. The sample included both female (*n* = 208) and male (*n* = 227) athletes from team sports (e.g., football, hockey; *n* = 344) and individual sports (e.g., boxing, swimming; *n* = 97). In total, 298 athletes had a male coach and 137 athletes had a female coach and on average they had been playing their sport for 10.95 years (*SD* = 7.25), played for their current team for 1.69 years (*SD* = .96) and played for their current coach for 1.63 seasons (*SD* = 1.00).

Measures

Authentic leadership. Authentic leadership in sport was measured using an adapted version of the 16-item Authentic Leadership Questionnaire that assesses the four dimensions of AL (Walumbwa et al., 2008). I adapted the stem "My leader/supervisor…" to "My coach…." before each statement and minor changes to wording were made to some items to reflect the context (e.g., followers was changed to players). Example items included "encourages everyone to speak their mind" (relational transparency, five items), "demonstrates beliefs that are consistent with actions" and "makes decisions based on high standards of ethical conduct" (internalised moral perspective, four items), "seeks feedback to improve interactions with players" (balanced processing, three items), and "shows he or she understands how specific actions impact others" (self-awareness, four items). Participants were asked to respond to each statement regarding their coach's leadership style on a 5-point Likert scale ranging from 1 (*not at all*) to 5 (*frequently if not always*). Walumbwa and

colleagues have provided evidence of the internal reliability of the scale with each sub- scale (self-awareness α = .92, relational transparency α = .87, internalised moral perspective α = .76, balanced processing α = .81) and the overall 16-item scale, α = .70 (Walumbwa et al., 2008). Previous research has confirmed the factorial validity of the ALQ with results from CFAs (χ^2 = 1865.31, df = 1214, χ^2/df = 1.54, $p < .01$, CFI = .97, RMSEA = .05) of the 4-factor model showing strong loadings (.84 to .90) on intended factors (Rego et al., 2014) Several studies have confirmed the factorial, discriminant, construct, nomological, face and content validity of the ALQ (see Roof, 2014 for a review).

Trust. The Trust in Leader questionnaire developed by McAllister (1995) and adapted to sports settings by Dirks (2000) utilised to measure perceptions of athletes' trust in their coach. Two adaptations were made to the original instrument based on interviews with basketball coaches. First, two items were dropped, as interviews with coaches suggested they would not apply to the sporting context. Second, minor wording changes were made to the retained items to reflect the context (e.g., the referent was changed to coach). The scale consists of nine items, and example items are: "I trust and respect my coach" and "I can freely share my ideas, feelings, and hopes with my coach". Participants were asked to think about their experiences with their coach, and to indicate their level of agreement with each statement on a Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The scales demonstrated adequate internal consistency for the trust questionnaire (α = .83; McAllister, 1995) and the adapted version for sport (α = .96; Dirks, 2000).[23, 17] Factorial validity of the measure has been reported to be adequate with factor loadings ranging from .84 to .96 (Dirks, 2000).

Autonomy. Autonomy was assessed using the Basic Needs Satisfaction in Sport Scale (BNSSS), which has ten items (BNSSS, Ng, Lonsdale & Hodge, 2011). Participants responded to the stem: "Below are some sentences that describe personal feelings or

experiences you might have regarding your sport". Participants indicated how true each of the statement was on a 7-point Likert scale 1 (*not true at all*) to 7 (*very true*). Autonomy is divided into three subscales, namely, internal locus of causality (IPLOC), perceived choice, and volition. Example items include: "In my sport, I have a say in how things are done" (autonomy – choice), "In my sport, I really have a sense of wanting to be there" (autonomy – IPLOC), and "I feel I participate in my sport willingly" (autonomy – volition). Initial research has supported acceptable reliability validity of the BNSSS (Cronbach's alpha = .61 – .82).[24] This research also confirmed the factorial validity of the BNSS with factor loadings ranging from .80 to .89. Results from CFAs revealed the 3-factor model (χ^2 (32, N = 371) = 57.16, $p < .01$, NNFI = .99, CFI = .99, SRMR = .05, RMSEA = .05, RMSEA 90% CI = .03-.07) with item scores showing strong loadings on intended factors (Ng et al., 2011). Preliminary evidence also supported the nomological validity of subscale scales scores (Ng et al., 2011).

Sport commitment. We measured sport commitment using the commitment subscale from the Sport Commitment Model (Scanlan, Carpenter, Schmidt, Simons & Keeler, 1993). The items are "How dedicated are you playing for this team?" with response options ranging from 1 (*not at all dedicated*) to 5 (*very dedicated*). "How hard would it be for you to quit playing for this team?" with response options ranging from 1 (*not hard*) to 5 (*very hard*). "How determined are you to play for this team?" with response options ranging from 1 (not at all determined) to 5 (*very determined*). "What would you be willing to do to keep playing for this team?" with response options ranging from 1 (*nothing at all)* to 5 (*a lot of things*). Participants were asked to think about their experiences with their current team and respond to each statement. The scale demonstrated adequate internal consistency (α =. 89; Scanlan et al., 1993) Recent research has supported the factorial validity of the commitment subscale of

the sport commitment model (χ^2 = 174.31, df = 1.14, χ^2/df = 1.04, p < .01, CFI = .99, RMSEA = .05) with factor loadings ranging from .88 to .92 (Morton, 2016).

Enjoyment. We assessed enjoyment with the four-item enjoyment subscale of the sport commitment model (Scanlan, Carpenter, Lobel, & Simons, 1993). Example items are "Do you enjoy playing for this team?" and "Do you like playing for this team?" Responses were made on a Likert scale, with anchors of 1 (*not at all*) and 5 (*very much*). Participants were asked to think about their experiences with their current team and respond to each statement. The scale demonstrated factorial and discriminant validity and reliability ($\alpha \geq .90$) in past research (Scanlan et al., 1993). CFAs (dχ^2/df:1.01/2, RFCI:1.000, SRMR:0.003, RMSEA:0.000) conducted on recent data supports this early research with factor loadings for enjoyment ranging from .92 to 94 (Al-Yaaribi, Kavussanu & Ring, 2016).

Procedure

Ethical approval to conduct this study was granted by the investigators' University School ethics committee. Head coaches were initially contacted by phone, email, or post with a brief description of the study purpose and permission to approach their athletes. Coaches then received a follow-up letter via post or email reiterating the purpose of the study, procedures for confidentiality, and example items to be used in the questionnaire pack. Upon permission from the coach, athletes were approached prior to, or after a training session. Athletes provided written consent, prior to completing the questionnaires which took approximately 15 minutes. Players were asked to respond to the questionnaire independently and as honestly as possible when thinking about their experiences with their current coach.

Results

Descriptive Statistics, Alpha Coefficients, and Zero-Order Correlations

Descriptive statistics, Cronbach's alpha coefficients, and zero-order correlations for all variables are presented in Table 3.1. On average, participants perceived their coach to display

AL ‘sometimes’ to ‘fairly often’. They also reported ‘high’ levels of trust and ‘moderate’ levels of autonomy, commitment, and enjoyment. All measures showed very good to excellent internal consistency (alpha range = .85 – .95). Values above .80 and .90, respectively, are considered as very good and excellent indicators of internal consistency, based on Kline’s (2016) recommendations for interpreting reliability coefficients. All variables had medium-to-large correlations with each other (see Cohen, 1992).

Table 3.1

Descriptive Statistics, Cronbach's Alpha Coefficients, and Bivariate Correlations among all Variables

Variables	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12
1. AL	**3.78**	**0.68**	**(.85)**											
2. AL-IMP	3.86	0.87	.76*	(.83)										
3. AL-RT	3.89	0.63	.84*	.49*	(.86)									
4. AL-SA	3.76	0.77	.86*	.44*	.70*	(.84)								
5. AL-BP	3.62	0.74	.87*	.50*	.65*	.75*	(.83)							
6. Trust	**5.70**	**1.08**	**.61***	**.33***	**.61***	**.59***	**.54***	**(.87)**						
7. Autonomy	**5.50**	**0.82**	**.34***	**.15***	**.34***	**.34***	**.32***	**.39***	**(85)**					
8. Aut-V	6.44	0.73	.29*	.16*	.32*	.25*	.26*	.29*	.69*	(.84)				
9. Aut-C	4.48	1.32	.25*	.80*	.23*	.29*	.24*	.28*	.83*	.25*	(.82)			
10. Aut-I	4.43	0.75	.29*	.15*	.29*	.26*	.28*	.33*	.75*	.67*	.33*	(.83)		
11.Commitment	**4.19**	**0.67**	**.21***	**.15***	**.20***	**.20***	**.16***	**.30***	**.40***	**.22***	**.31***	**.36***	**(.88)**	
12.Enjoyment	**4.59**	**0.58**	**.36*.**	**.25*.**	**.35***	**.35***	**.27***	**.44***	**.41***	**.33***	**.26***	**.40***	**.43***	**(.95)**

Note. Alpha coefficients are presented in the diagonal. Possible range of scores: 1 to 5 for AL enjoyment and commitment and 1 to 7 for autonomy and trust. AL-RT, AL-IMP AL-BP, and AL-SA refer to the four components of Authentic Leadership (Relational Transparency, Internalized Moral Perspective, Balanced Processing, and Self-Awareness). Aut-V, Aut-C, and Aut-I refer to the three components of autonomy (volition, choice and IPLOC).

* p <.01

Confirmatory Factor Analysis

Before testing the hypothesized model that AL is related commitment and enjoyment indirectly via trust and autonomy. We examined the factorial structure of each scale. Confirmatory Factor Analyses (CFA) using the robust maximum likelihood method with EQS software (Bentler, 2003) were employed to ascertain the factor structure of the scales used. A combination of fit indices (Bentler, 2007) were examined to determine the degree of model fit, including the Satorra-Bentler chi-square (S-Bχ^2), the Comparative Fit Index (CFI), the Standardized Root Mean Square Residual (SRMR), and the Root Mean Square Error of Approximation (RMSEA). Hu and Bentler (1999) proposed that acceptable fit of a hypothesized model to the data is indicated when the CFI is close to .95, the SRMR is close to .08, and the RMSEA is close to .06. However, it is worth noting that when testing complex models, these criteria may be overly restrictive (e.g., Marsh, Hau, & Wen, 2004). In addition, the RMSEA is sensitive to model complexity and often falsely indicates a poor fitting model in cases with small degrees of freedom (Kenny, Kaniskan, & McCoach, 2014).

CFAs of the scales assessing enjoyment (S-Bχ^2 (2) = 5.30, $p < .001$; CFI = 1.00; SRMR = .01; RMSEA = .06, CI = .00 – .13) and commitment (S-Bχ^2 (2) = 5.16, $p < .001$; CFI = .99; SRMR = .02; RMSEA = .06 CI = .00 –.13), demonstrated excellent model fit. Due to the hierarchical nature of the AL variable (Walumbwa et al., 2008), a second order CFA was conducted. In this model, the first-order factors of relational transparency, internalised moral perspective, balanced processing, and self-awareness are explained by the higher order factor of authentic leadership. This model fitted the data well: S-Bχ^2 (86) =248.36, $p < .001$; CFI = .92; SRMR = .05; RMSEA = .07 (CI = .06–.08). A similar second-order CFA was conducted for the autonomy variable, which consisted of three lower order factors (perceived

choice, IPLOC and volition); this showed very good model fit: S-Bχ^2 (32) =73.10, $p < .001$; CFI = .96; SRMR = .03; RMSEA = .05 (CI = .03–.07).

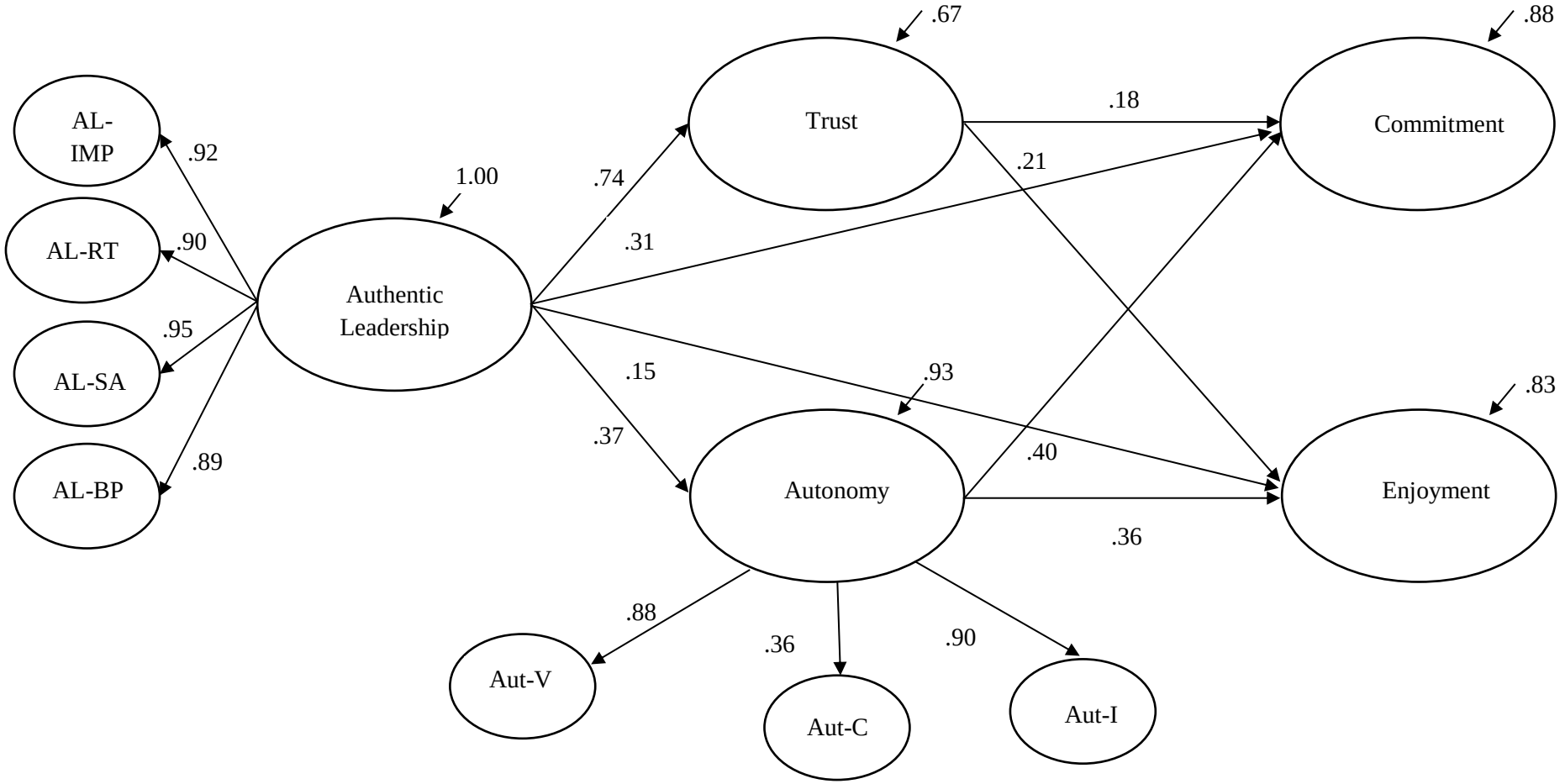
CFAs indicated that items tapping into the trust variable (S-Bχ^2 (27) = 260.6, $p <$ .001; CFI = .80; SRMR = .07; RMSEA = .14, CI = .13 – .16) should be revised. Based on inspection of the standardized residual matrix and the modification indices, problematic items were removed one at a time and factor models were re-evaluated. Researchers have proposed this stepwise technique, as it maintains the factorial structure of a scale, while retaining only the best available indicators (Byrne, 2008; Hoffman, 1995). Two items were omitted in the trust measure: 'If I shared my problems with my coach he/she would respond constructively and caringly' and 'I can freely share my ideas, feelings and hopes with my coach". It is important to note that the removal of these items from each scale can also be supported from a conceptual standpoint. The similarity in these items wording and another indicator with high factor loadings suggested these items were redundant and were removed. The revised model had good fit (S-Bχ^2 (14) =67.79, $p < .001$; CFI = .93; SRMR = .03; RMSEA = .09, CI = .07–.12).

Measurement model. The recommended two-step approach was adopted to test our hypothesis. Prior to testing the structural model, the psychometric properties of the measurement model were examined (Anderson & Gerbing, 1988). The measurement model tests the relationships between observed variables and their posited factors (Anderson & Gerbing, 1988). The measurement model consisted of all items (N = 41) measuring AL (n *=16*), autonomy (n = *10*) trust *(*n = *7*), commitment (n= *4*) and enjoyment (n = *4*). This model fitted the data well S-Bχ^2 (514) = 566.67, $p < .001$; CFI = .94; SRMR = .06; RMSEA = .02 (CI = .07–.11). Standardized factor loadings of the item indicators in the measurement model were all satisfactory (>.40; Pituch & Stevens, 2016) and ranged from .41 to .90 (median loading = .70).

Structural model. The proposed structural model (see Figure 2.1) was tested using the robust maximum likelihood estimation method (Mardia's normalized estimate of multivariate kurtosis = 212.08). Fit indices revealed that the data fitted the model well: S-Bχ^2 (725) =1237.53, $p < .001$; CFI = .93; SRMR = .07; RMSEA = .04 (CI = .03–.09), and all structural pathways were statistically significant. AL was directly related to both commitment and enjoyment respectively. AL was a strong positive predictor of trust and a moderate positive predictor of autonomy. In turn, trust was a moderate positive predictor of enjoyment and also a positive predictor of commitment. Autonomy was a moderate predictor of both commitment and enjoyment. Coach AL explained 55% of the variance in trust and 14% in autonomy, and in turn, AL, autonomy, and trust explained 23% of the variance in commitment, and 31% of the variance in enjoyment.

Figure 2.1

Structural model of the relationships between authentic leadership, trust, autonomy, commitment, and enjoyment.



Note. All regression coefficients are standardized. Solid lines represent significant and associations between constructs, respectively. For clarity of presentation, the individual indicators for all latent factors and the variances of the seven authentic leadership and satisfaction first-order factors are omitted. AL-RT, AL-IMP AL-BP, and AL-SA refer to the four components of Authentic Leadership (Relational Transparency, Internalized Moral Perspective, Balanced Processing, and Self-Awareness, respectively). Aut-V, Aut-C, and Aut-I refer to the three components of autonomy (volition, choice and IPLOC.

Mediation Analysis

We examined the mediating role of trust and autonomy using the bootstrapping procedure outlined by Preacher and Hayes (2008), with 1000 bootstrap samples and estimates of indirect effects. A sampling distribution of the indirect effect was yielded, allowing for the point estimate, standard error, and bias-corrected (BC) confidence interval (CI) of the mediation effect. Bootstrapping allows for higher analytical power combined with lower risk of committing Type I error when testing indirect effects (Preacher & Hayes, 2008). BC 95% confidence intervals were used in the present study for identifying significant mediation effects (Preacher & Hayes, 2004, 2008). There is evidence of a significant effect when the bootstrap-generated 95% CI does not contain zero (Shrout & Bolger, 2002; Preacher & Hayes, 2008). AL significantly predicted commitment through trust ($\beta = .22$, 95% CI = .08 to .22) and autonomy ($\beta = .19$, 95% CI = .12 to .24). AL also significantly predicted enjoyment through trust ($\beta = .51$, 95% CI = .40 to .62) and autonomy ($\beta = .26$, 95% CI = .09 to .16). The percentage of the total effect accounted for by the indirect effect conveys the degree of mediation. The percentage of the total effect of AL on the outcome variables mediated by trust and autonomy was 68% for commitment and 61% for enjoyment.

Discussion

Previous research has provided evidence that coach AL facilitates an environment that enhances athletes' satisfaction, trust, commitment and perceptions of choice (Bandura et al., 2016; Houchin, 2011). The purpose of the study was to examine coach AL as perceived by athletes and whether this was related to their enjoyment and commitment indirectly through trust and autonomy. The adoption of novel conceptual models such as AL is often open to refutation (Morton, 2016). Therefore, the main goal of this study was to extend and

build upon previous research in support of the application of AL in the context of sport (Bandura et al., 2016; Houchin, 2011).

AL and Enjoyment

Consistent with our hypothesis, athletes' perceptions of coach AL had positive direct effects on their enjoyment. Athletes who perceive their coach to be open and honest and a role model for high ethical standards could feel more motivated eliciting feelings such fun and liking associated with enjoyment. This is in line with previous research where employees working under authentic supervisors were reported to enjoy their work and were more satisfied with the working atmosphere (Penger & Cerne, 2014). Findings also support previous research in sport which suggests that coaches who were viewed to be authentic had athletes who percieved higher satisfaction, a positive psychological state linked to enjoyment (Bandura et al., 2016).

Within the current study, we found an indirect relationship between AL and enjoyment via trust. This result suggests that coaches, who openly communicate with their athletes, are perceived as and acting in a way that is consistent with their beliefs by being honest may engender athletes' trust, and it may be because of this trust, that athletes experience enjoyment. Specifically, interactions that develop between the coach and athlete could create positive social exchanges by building credibility and winning the respect and trust of followers (Norman et al., 2010). Findings extend previous work by showing that the process through which coaches may facilities enjoyment is because AL elicits athletes' trust which in turn makes them enjoy the experiences (Bandura et al., 2016; Houchin, 2011). This is also consistent with research on coach-athlete relationships see (Jowette, 2007) which support the idea that athletes are happier if they trust their coach.

As predicted, the relationship between AL and enjoyment was also mediated by autonomy. Athletes, who perceived their coaches as authentic leaders, did not feel forced or

coerced but rather, had a say in how things were done and participated willingly in pursuing their own goals. Results suggest that through the satisfaction of autonomy, athletes are more likely to be intrinsically motivated which builds up levels of confidence and persistence, which in turn could be related to enjoyment (Ryan & Deci, 2008a; Sagnak & Kurutoz, 2017). The indirect relationship between AL and enjoyment via autonomy is also an important finding as the current study encompasses all aspects of autonomy to explain its working in the hypothesised relationships.

AL and Commitment

These results support our hypothesis that athletes' perceptions of AL were positively associated with commitment, replicating that of previous research (Bandura et al., 2016). This result suggests that coaches viewed to be authentic could have athletes who feel more dedicated and determined because they are achieving their goals and objectives which are associated with commitment. In addition, athletes could feel more committed due to coaches being viewed as considerate of their individual wants, needs, and desires. Indeed, these findings are in line with prior research in organisational settings which has shown AL in supervisors had employees who reported higher commitment (e.g. Emuwa, 2013; Walumbwa et al., 2008). Furthermore, findings extend that of previous research in sport by showing a direct relationship between AL and commitment (Bandura et al., 2016).

We also found that athletes' perceptions of AL were related to commitment indirectly through trust. These findings substantiate those of previous work in showing that the process through which coaches enhance commitment in athletes is because AL elicits trust, in turn this trust leads commitment (Bandura et al., 2016). Coaches viewed to be authentic leaders are likely to engender trust in their athletes. Results are consistent with the view that if athletes feel that can freely share their ideas, feelings, and hopes they may consider their coach to be trustworthy, and this could reinforce their commitment. Indeed, trust is crucial

for successful coach-athlete relationships (Jowette & Nezlek, 2012) and the inclusion of individual sport in the current study supports the view that this may also be pertinent at this level.

Mediation analysis also revealed an indirect effect of AL on commitment via autonomy. Results suggest that AL in coaches allows room for athletes to make choices and participate in their sport willingly, and in turn, the autonomy athletes may experience could lead to higher sport commitment. This is consistent with the view that autonomy promotes positive psychological states including enjoyment (Ryan & Deci, 2008). These findings extend previous research by highlighting that coaches may lead to enjoyment in athletes since AL supports autonomy and because of is they enjoy their experiences (Bandura et al., 2016).

Limitations of the Study and Directions for Future Research

The present research revealed some interesting findings but also has some limitations. One limitation of the current study involves the cross-sectional design. There is a possibility that the direction of the relationships in this study may occur in some other fashion (e.g., AL-enjoyment- commitment) as data were collected on the same occasion. Thus, it will be important for future research to employ longitudinal designs to help provide a better understanding of the temporal order of study variables. Future research should examine AL and how relationships with athletes develop over time that could then be examined in terms of its impact on the mediators (trust and autonomy) and the outcomes (enjoyment and commitment). In addition, to fully test the direction of these relationships, the independent variable and the mediator could be manipulated in randomised experimental designs (see MacKinnon, Lockwood, Hooffman, West, & Sheets, 2002). An updated version of the original instrument to measure commitment and enjoyment, the sport commitment questionnaire-2 is recommended for future research (Scanlan, Chow, Sousa, Scanlan, & Knifsend, 2016). Future research could examine other variables as consequences of AL (e.g.,

motivational orientation and team sacrifice). From a SDT perspective, future research could include relatedness and competence. Finally, researchers could evaluate AL together with servant leadership given the importance of trust within both paradigms.

Conclusion

In conclusion, the results of this study demonstrate that athletes' perceptions of coach AL positively predict both enjoyment and commitment indirectly through autonomy and trust. Coaches viewed to be authentic may be perceived as trustworthy and inciting autonomy in athletes who as a result may experience enjoyment and are more committed. Consequently, we need to find ways to encourage coaches to adopt AL as this may support athletes' needs for autonomy and trust, promoting commitment and enjoyment.

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CHAPTER 5

Study 4: Authentic leadership and task cohesion: The mediating role of trust and team sacrifice

Abstract

A large body of literature has examined consequences of coaches' leadership style. However, the concept of Authentic leadership (AL) has received little attention. In this study we investigated whether AL predicted task cohesion and whether trust and team sacrifice independently mediate this relationship. A total of 338 (M_{age} =19.96, *SD* = 2.14) team sport athletes completed questionnaires assessing the aforementioned variables. Multilevel Structural Equation Modelling (MSEM) indicated that AL positively predicted task cohesion and this relationship was mediated by trust and team sacrifice. However, there were differential patterns in the indirect effect of trust on the relationship between AL and task cohesion for male and female athletes. Findings draw attention to the importance of AL in coaches and highlight the role of trust and team sacrifice on the identified relationships.

Keywords: coaching, authenticity, integrity, teambuilding

Introduction

Studies in sport have found that leadership behaviours in coaches are highly influential for individual and team outcomes such as performance and cohesion (e.g., Morton, 2016). Several leadership theoretical frameworks have been applied to coaching, for example, the multi-dimensional model of leadership (Chelladurai & Saleh, 1980) and transformational leadership (Bass, 1978). Although these models may focus on positive qualities of leadership, they have been extended to include a negative side to leadership (e.g., coercive coaching) (Vella, Crowe & Oades, 2010). Specifically, these theories do not reflect the focal components of authenticity in coaches. As such, a gap exists in the coaching literature regarding the importance of authentic leadership in sport.

Authentic leadership (AL) is defined as a ‘‘pattern of leader behaviour that draws upon and promotes both positive psychological capabilities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development’’ (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008, p. 94). Walumbwa and colleagues (2008) posit that AL comprises four related dimensions: self-awareness, internalized moral perspective, relational transparency, and balanced processing that go beyond the notion of being true to oneself.

Self-awareness pertains to the degree to which leaders are conscious of their own strengths, weaknesses, and attributes and how they demonstrate that he or she is cognizant of how they impact on others. Relational transparency is a leader’s presentation of their true thoughts and emotions in an open and transparent manner versus being fake or manipulative. Balanced processing is how a leader objectively analyses all information relevant to a problem before ultimately making important decisions. Internalized moral perspective relates

to the extent to which leaders' behaviours are directed by and are congruent with their personal values and moral standards (Walumbwa et al., 2008).

AL originated from Bass & Steidlmeier's (1999) observation and critique of the unethical way transformational leaders manipulate their followers and is thought to shape the high ethical standards needed in developing a culture that is consistent with high moral values and ethical follower behaviour (Braun & Nierberle, 2017). In attempt to distinguish between pseudo and genuine transformational leadership in sport, researchers introduced the term 'authentic' (e.g., Mills & Boardley, 2017). However, Bass and Steidlmeier argued that even "authentic transformational leaders may have to be manipulative at times for what they judge to be the common good" (1999 p. 186).

Demonstrating behaviour that presents no false impression and a match between words with actions is a key distinction of authentic leaders' ability to develop positive environments (Rego, Sousa, Marques, & Cunha, 2014). This in turn, allows followers to be physically, emotionally and cognitively engaged (Avolio & Gardner, 2005; Braun & Nierberle, 2017; Gardner, Cogliser, Davis, & Dickens, 2011). Thus, AL also represents a process of influence through leader behaviour aimed at positive follower development (Leroy, Anseel, Gardner & Leroy, 2015; Sagnak & Kuruoz, 2016).

Despite researchers' efforts to distinguish authentic transformational leadership in sport from pseudo (e.g. Mills & Boardley, 2017), the original theory or emerging research reflect the focal components of authenticity. AL is a promising paradigm in several contexts, yet there is scant research in sport. This lack of research is surprising given that authentic behaviours result in higher levels of individual, group, and organisational performance beyond that accounted for by prevalent leadership approaches (Avolio & Walumbwa, 2014). Unlike many leadership models which lack sufficient emphasis on the ethical and moral components of leadership, these are central in AL (Leroy et al., 2015).

AL moves beyond other models to serve as a foundation for understanding leadership in sport because it focuses on ethics and morality (Vella et al., 2010). AL was explicitly borne to address unethical practices (e.g., corruption), to restore confidence in leaders and maintain integrity (Gardner et al., 2011). Indeed, the integrity of coaches is increasingly being brought to question (Mills & Boadley, 2017). As such, AL addresses the need for specific research into understanding perceptions of promoting ethical behaviour and positive sportsmanship in coaches who may benefit from engaging in the deep reflection required to be authentic (Vella et al., 2010).

Only one peer reviewed study has investigated authentic leadership in sport. In this study, authentic leadership was associated with athletes' enjoyment and commitment directly and indirectly via trust and autonomy (Bandura & Kavussanu, 2018). Research in sport has found that authentic leadership positively predicted athletes' satisfaction and commitment and trust and perceived choice mediated these relationships (Bandura, Kavussanu, & Stebbings, 2016). In another study, Houchin (2011) found an indirect positive relationship of authentic leadership with performance and group cohesion via trust. Although these studies have produced some interesting findings it is evident that authentic leadership in sport has been scarcely addressed in the extant literature.

The current study builds upon this work in three ways. First, given that task cohesion is positively related to performance across numerous sports and salient in training and competition (Eys et al., 2009a) it is important to determine whether Houchin's (2011) can be replicated with a larger independent sample of athletes. This replication is important to increase our confidence in the effects of authentic leadership on task cohesion, particularly since Houchin's (2011) study consisted a small mainly female sample. Second, to examine the tenets of authentic leadership by exploring additional mechanisms to explain its relationship with task cohesion. Third, given that authentic leadership is as a multilevel

construct (Leroy et al., 2015), I aim to incorporate levels of analyses across all participants and within each sport team.

One important outcome of AL is task cohesion. Task cohesion is the degree to which team members strive to work together towards achieving performance-related goals, both in competition and practice (Eys, Loughead, Bray, & Carron, 2009a, 2009b). It has been suggested that authentic leaders are aware individual differences and can bring out the best in individuals to create high-task cohesive teams (Gardner et al., 2011). Peus and colleagues (2012) showed that certain behaviours for example positive interactions and providing constructive feedback was a major factor in developing task cohesion in followers.

AL is also characterised with an alignment between leader-follower goals and self-development (Walumbwa et al., 2008); therefore, if teammates are encouraged to work together towards achieving common goals, it is likely that task cohesion will increase. Furthermore, by encouraging different behaviours related to bonding and support of the team (e.g. commitment and high moral ethical conduct) We expect that task cohesion will increase as athletes will look to emulate these behaviours (Rego et al., 2014).

A potential mediator between AL and task cohesion is trust in coach. Trust in coach is defined as athletes' perceptions of the integrity, credibility, and benevolence of a coach (Dirks, 2000). Authentic behaviour creates transparent two-way relationships through positive social exchanges (Walumbwa et al., 2008). It is reasonable to expect that athletes would have an increase in trust if a coach manifests positive values, shows integrity consistently, is transparent, and accountable. Indeed, Peus and colleagues (2012) reported that authentic leaders develop collaborative relationships, build credibility and gain the respect of followers when they display high ethical standards, values and beliefs, thereby building trusting relationships.

AL could be related to task cohesion through trust. Given that AL is characterised by behaviours related to creating high-quality relationships that bond groups, it is not surprising that prior research has identified trust to be associated with cohesion in teams with coaches perceived to be authentic (Houchin, 2011). It is reasonable to expect that if a coach is perceived to be self-aware, transparent and having high moral standards, athletes are more likely to have confidence in the ethics of the coach and working toward common goals associated with high- task cohesion in teams. Collaborative processes between authentic leaders and followers contribute to the creation of trust since followers are involved and participate in decision making (Rego et al., 2014). This, in turn, may foster task cohesion because teams have consistent shared group values and goals (Prapavessis et al., 1997).

AL could also lead athletes to make sacrifices for their team. Sacrifice is defined as "group members voluntarily initiating an action or giving up prerogative or privilege for the sake of another person or persons" (Prapavessis & Carron, 1997, p. 231). Team sacrifice has been conceptualised to include three behaviours. First, social sacrifice relates to sacrifices athletes make in their social lives. Second, outside sacrifice involves sacrifices athletes make in their personal lives. Third, inside sacrifice pertains to sacrifices athletes make in practice and competition (Prapavessis & Carron, 1997). Prapavessiss and Carron (1997) propose that inside sacrifice comprises both personal (e.g. sacrifices athletes make for themselves) and team (e.g. sacrifices athletes make for their team). In this study we examine team sacrifice.

Although there is no study examining AL and team sacrifice in sport, some research in organisational psychology provides evidence for the link between the two variables. Organisational citizenship behaviours are like team sacrifice because both promote the functioning of the team but are not necessarily rewarded. Two previous studies reported a positive relationship between AL and organisational citizenship behaviours (Valsania, Leon, Alonso, & Cantisano, 2012; Walumbwa et al., 2008). This research suggests that if a coach

supports each individual athletes' development, athletes a likely to make sacrifices of their team. (Walumbwa et al., 2008). It is reasonable to expect that if a team has a shared identity with goals and values because a coach is transparent, consistent and involves athletes in decision making, athletes are more likely to make sacrifices. Collective-oriented behaviors such as being able to identify team goals as a result of AL could encourage athletes to make sacrifices for the team.

Drawing on Prapavessis, Carron, and Spink's (1997) conceptual model of team building, AL could also be linked with task cohesion through sacrifice. It is reasonable to suggest that since authentic leaders create bonds among group members, if "a participant is asked to give up something of value for his/her group becomes, because of this sacrifice, more attracted to that body" (Zander, 1985, p. 7). Given that task cohesion also involves an athlete's attraction to his or her team (Widmeyer, Brawley, & Carron, 1985), athletes making sacrifices for their team could experience higher task cohesion within that team. Team sacrifice is related to helping behavior, loyalty, and virtue (Valsania at al., 2012). In sport, this is supported by research, which has shown that sacrifices are positively related to task cohesion (Cronin, Arthur, Hardy, & Callow, 2015; Prapavessis & Carron, 1997). Both team sacrifice, and task cohesion are key aspects during practice and competition in sport. I, therefore, expect team sacrifice to mediate the relationship between AL and task cohesion.

The Present Research

The literature reviewed above suggests that AL in coaches could lead to greater task cohesion in athletes, and that trust and team sacrifice may play a role in this process (e.g. Peus et al., 2012; Rego et al., 2014). The purpose of this study was to examine whether AL would be related to task cohesion indirectly through trust and team sacrifice. We hypothesised that coach AL would positively predict task cohesion (e.g., Houchin, 2011) and that this relationship would be mediated independently by trust (e.g., Bandura & Kavussannu,

2018) and team sacrifice (Walumbwa et al., 2008). We hypothesised that the relationship between AL and task cohesion via trust and team sacrifice would be different in male and female athletes.

Method

Participants

A number if sampling strategies were utilised in this study, First, a purposive sampling strategy was employed. Purposive sampling focuses on characteristics on a population that are of interest and would best enable answers to research questions developed (Patton, 2015). The sample in this study were university teams coached by a minimum level 1 certified coach accredited by their relevant sport governing body. Purposive sampling was deemed fitting because teams as it ensures balance of group sizes when multiples groups are selected. Second, convenience sampling was adopted by recruiting coaches and athletes that were available and willing to participate. Third, snowball sampling was used by asking coaches and athletes who had already participated to recommend others. Snowball sampling has its advantages given that it helps the researcher to discover characteristics about a specific population that they may not be aware existed (Patton, 2015).

Participants were 338 athletes from a variety of team sports (netball n = 55, hockey n = 51, rugby union n =31, rugby league n = 26, cricket n = 26, American football n = 25, football n = 22, Gaelic football n = 19, water polo n = 18, dodgeball n = 15, korfball n = 15, basketball n = 13, ice hockey n = 12, volleyball n = 10)). Two athletes' responses were removed as they were the only ones in their team who rated their coach. Consequently, the final sample consisted of 336 athletes aged between18-44 years (M_{age} = 19.96, SD = 2.14) who rated coaches (29 % female) from 25 teams ($M_{team\ size}$ = 13.4 athletes). The sample included both female (n = 172) and male (n = 164) athletes. 240 athletes had a male coach

and 96 athletes had a female coach, played for their current team for a mean of 1.66 years (*SD* = .92) and played for their current coach for 1.61 seasons (*SD* = .95).

Measures

Authentic leadership. Authentic leadership in sport was measured using an adapted version of the 16-item Authentic Leadership Questionnaire that assesses the four dimensions (Walumbwa et al., 2008). The stem "My coach…." was used before each statement. Example items included "encourages everyone to speak their mind" (relational transparency, five items), "demonstrates beliefs that are consistent with actions" and "makes decisions based on high standards of ethical conduct" (internalised moral perspective, four items), "seeks feedback to improve interactions with players" (balanced processing, three items), and "shows he or she understands how specific actions impact others" (self-awareness, four items). Participants were asked to respond to each statement regarding their coach's leadership style on a 5-point Likert scale ranging from 1 (*not at all*) to 5 (*frequently if not always*). Walumbwa and colleagues (2008) have provided evidence of the internal reliability of the scale with each sub- scale and the overall 16-item scale, α = .70.

Trust. The Trust in Leader questionnaire developed by McAllister (1995) and adapted to sports settings by Dirks (2000) was utilised to measure perceptions of athletes' trust in their coach. The scale consists of nine items, and example items are: "I trust and respect my coach" and "I can freely share my ideas, feelings, and hopes with my coach". Participants were asked to think about their experiences with their coach, and to indicate their level of agreement with each statement on a Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The scale demonstrated adequate internal consistency for the trust questionnaire (α =.83; McAllister, 1995) and the adapted version for sport (α = .92; Dirks, 2000).

Team sacrifice. Athletes' perceptions of sacrifice were measured using the 8 -item subscale of the Group Sacrifice Scale (GSS; Prapavessis & Carron, 1997). Examples included "My teammates are willing to put aside their own personal goals if they conflict with the team's goal" and "My teammates are willing to adopt a style of play not suited to their talents for the good of the team." Participants were asked to indicate the degree to which they agreed with each statement on a Likert scale ranging from 1 (*strongly disagree*) to 9 (*strongly agree*). Cronin et al (2015) have provided evidence of the internal reliability for teammate sacrifice, $\alpha = .90$.

Task cohesion. Task cohesion was measured using the Group Environment Questionnaire (Eys, Carron, Bray, & Brawley, 2007). Example items include "I like the style of play of this team" and "We all take responsibility for any loss or poor performance by our team." Participants were asked to assess their perceptions of their current team. Each item was scored on a scale ranging from 1 (*strongly disagree*) to 9 (*strongly agree*). The psychometric properties of task cohesion as a subscale of the Group Environment Questionnaire have repeatedly been demonstrated (see Eys et al., 2009b). The reliability of task cohesion was assessed in the current study and found to be acceptable, $\alpha = .84$.

Procedure

Ethical approval to conduct this study was granted by the investigators' University School ethics committee. Head coaches were initially contacted by phone, email, or post with a brief description of the study purpose and permission to approach their athletes. Coaches then received a follow-up letter via post or email reiterating the purpose of the study, procedures for confidentiality, and example items to be used in the questionnaire pack. Upon receiving permission from the coach, athletes were approached prior to, or after a training session. Athletes provided written consent, prior to completing the questionnaires which took

approximately 15 minutes. Players were asked to respond to the questionnaire independently and as honestly as possible when thinking about their experiences with their current coach.

Data Analysis

Taking into account the nested nature of the data of athletes within teams, multilevel modeling was used to test the hypotheses that trust, and team sacrifice independently mediated the relationship between AL and task cohesion. Indeed, the intraclass correlation coefficients in this sample for AL (.17), team sacrifice (.24), trust (.15) and task cohesion (.11) indicated that a meaningful proportion of variance was explained at the team level for each of the variables, and multilevel modeling was appropriate. A 1-1-1 multilevel structural equation modeling (MSEM) mediation model with athletes at Level 1 and teams at Level 2 was specified and analyzed on Mplus (V.7; Muthén & Muthén, 2012). The MSEM approach was utilized due to its superior ability to deal with the conflation of Within (athlete) and Between (team) components of effects that are evident in mediation models that involve linkages between Level 1 variables (Preacher, Zyphur, & Zhang, 2010). Essentially, MSEM enables the examination of indirect effects at both the athlete and team levels independently of each other. The independent examination of effects allows for the analysis of unbiased within (athlete) level effects, which is of interest in this study.

The indirect effects of the *a* (AL predicting trust or team sacrifice) and *b* (trust or team sacrifice predicting task cohesion) paths (cf. Bauer, Preacher, & Gil, 2006) were tested with the Monte Carlo Method for Assessing Mediation (MCMAM; Bauer et al., 2006; MacKinnon, Lockwood, & Williams, 2004) calculator developed by Selig and Preacher (2008). MCMAM was used to test the indirect effects of a multilevel mediation model because it has demonstrated unbiased indirect effects under most conditions and returns robust confidence interval coverage (Bauer et al., 2006). The MCMAM calculator was specified at the 95% confidence interval and 20, 000 repetitions. We also explored potential

gender effects on the independent indirect effects of trust and team sacrifice on the relationship between AL and task cohesion by specifying separate MSEM mediation models for male and female athletes.

Results

Descriptive Statistics, Alpha Coefficients, and Zero-Order Correlations

Descriptive statistics, Cronbach's alpha coefficients, and zero-order correlations for all variables are presented in Table 4.1. On average, participants perceived their coach to display AL behaviour 'sometimes' to 'fairly often'. They also reported 'high' trust and task cohesion and perceived their teammates to make sacrifices 'moderately' to 'highly'. All measures showed good to excellent consistency (alpha range = .77 – .94; Kline, 2016). All variables had medium-to-large correlations with each other (see Cohen, 1992).

Table 4.1

Descriptive Statistics, Cronbach's Alpha Coefficients, and Bivariate Correlations among all Variables

Variables	*M*	*SD*	1	2	3	4
1. Authentic Leadership	3.81	.59	(.87)			
2. Trust	5.70	1.08	.70*	(.94)		
3. Team Sacrifice	6.30	1.10	.33*	.28*	(.77)	
4. Task Cohesion	5.63	.80	.43*	.45*	.47*	(.84)
5. Gender	1.51	.50	-.05	-.09	.10	.05

Note. Cronbach's alpha coefficients are presented in the diagonal. Possible range of scores: 1 to 5 for AL,1 to 7 for trust and task cohesion, and 1-9 for team sacrifice. Gender was coded as 1 = *male*, 2 = *female*

* p <.01

Multilevel Mediation Analysis

Both MSEM models of trust mediating the relationship between AL and task cohesion, and team sacrifice mediating the relationship between AL and task cohesion were modeled with fixed Level 2 effects. This is after adopting models with random Level 2 effects did not significantly improve model fit and yielded non-significant between group variances across all main effects of the models. Thus, as recommended by Bauer et al. (2006), the indirect effects of the MSEM mediation models with fixed Level 2 effects were quantified with the simple product term *a* x *b*. For the hypothesis that trust would mediate the relationship between AL and task cohesion, multilevel mediation analysis revealed a significant indirect effect (β_a = .66, SE = .05, *p* = .00; β_b = .22, SE = .08, *p* = .01; $\beta_{\text{Indirect Effect}}$ = .14, SE = .06, p = .01, 95% CI [.03, .26]) (see Figure 3.1). Additionally, there was a significant indirect effect of AL on task cohesion through team sacrifice (β_a = .28, SE = .06, *p* = .00; β_b = .31, SE = .04, p = .00; $\beta_{\text{Indirect Effect}}$ = .09, SE = .03, p = .00, 95% CI [.04, .15]) (see Figure 3.2). It is noteworthy that the main effects for the *a* and *b* paths were positive and significant across both mediation models.

Figure 3.1: *Trust as a mediator of the relationship between AL and Task Cohesion*

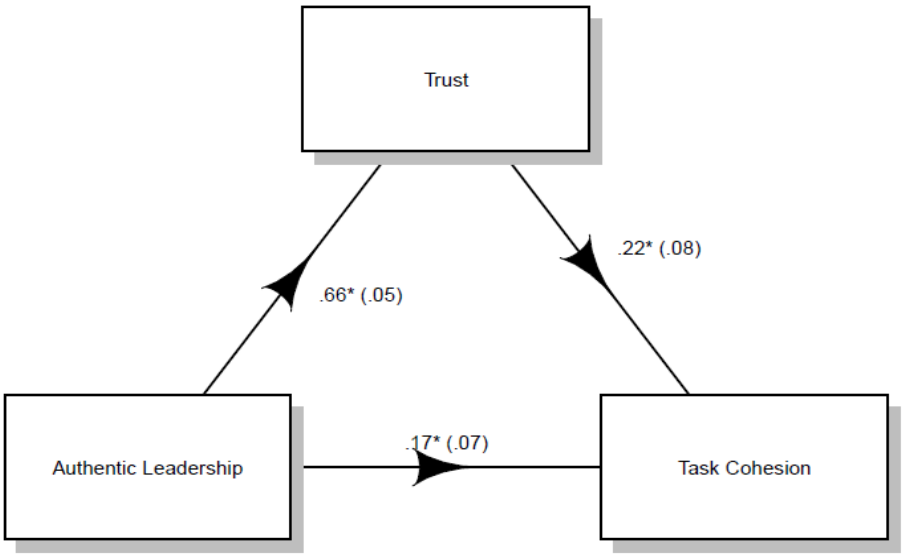
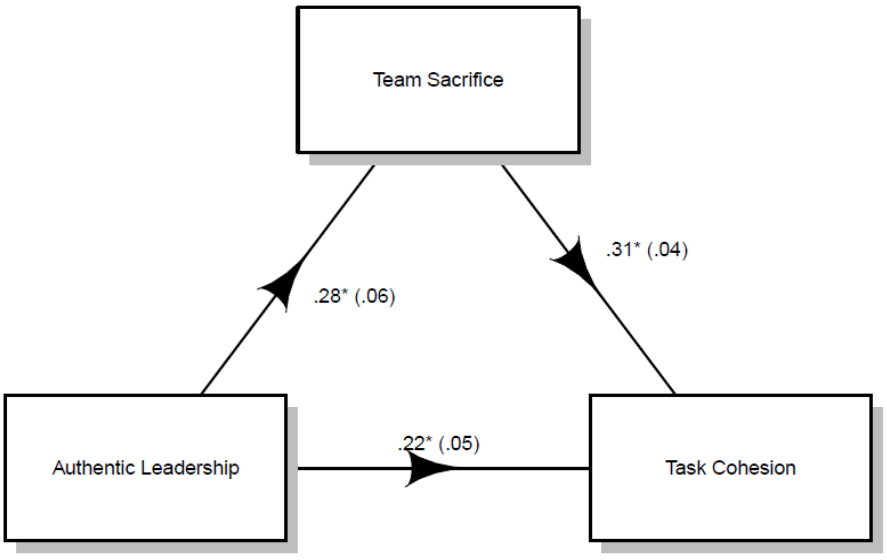


Figure 3.2: *Team sacrifice as a mediator of the relationship between AL and Task Cohesion*



Although gender did not significantly correlate with any of the variables specified in the mediation model, we tested the effects of athlete gender on the independent mediating effects of trust and team sacrifice on the relationship between AL and task cohesion. Separate

MSEM mediation models were specified for male and female athletes for this. The indirect effect of trust mediating the relationship between authentic leadership and task cohesion was significant for male athletes but non-significant for female athletes (see Table 4.2). The indirect effect of team sacrifice mediating the relationship between AL and task cohesion was significant for both male and female athletes (see Table 4.2).

Table 4.2

Within (athlete) level multilevel mediation analyses

	a path		*b* path		*ab*		95% CI	
	β	SE	B	SE	*β*	SE	LL	UL
Mediator: Trust								
All Athletes	.66*	.05	.22*	.08	.14*	.06	.03	.26
Male Athletes	.70*	.05	.25*	.10	.17*	.07	.03	.30
Female Athletes	.66*	.07	.18	.10	.12	.07	-.01	.26
Mediator: Team Sacrifice								
All Athletes	.28*	.06	.31*	.04	.09*	.03	.04	.15
Male Athletes	.24*	.09	.29*	.06	.07*	.03	.01	.14
Female Athletes	.35*	.07	.33*	.04	.11*	.03	.06	.17

Note: *a* path = independent variable (authentic leadership) and mediator variable; *b* path = mediator variable and dependent variable (task cohesion); *ab* = indirect effect SE = Standard Error; CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit.

*$p < .05$.

Discussion

Over the past few decades a large body of literature has emerged focusing on positive forms of leadership in sport (e.g., Cronin et al., 2015). However, to date, very few studies have examined the consequences of AL in sport. The present study sought to fill this gap in the literature by examining whether AL predicts task cohesion and whether trust and team sacrifice mediate this relationship.

In line with our hypothesis, findings showed that athletes who perceived their coach to be authentic leaders, for example, listening to different points of view before making decisions and admitting when they have made mistakes, also perceived higher task cohesion in their team. These findings are consistent with research examining AL and cohesion in sport (Houchin, 2011). Drawing from the conceptual model of team building (Prapavessis, Carron & Spink, 1997), athletes who reported higher task cohesion may have felt their coach was able to blend individuals and bond athletes together by communicating team goals effectively. Findings support and extend those of previous research (Houchin, 2011) by showing that coach AL for example demonstrating beliefs that are consistent with actions may facilitate in high-task cohesive teams.

As expected, trust mediated the relationship between AL and task cohesion, such that the more coaches were viewed to be authentic, the higher their trust and this in turn increased their perceptions of task cohesion. This is in line with the social exchange theory (Blau, 1964), which suggests that trusting relationships mediate the effects of leadership style on followers' behaviours. Previous work (Bandura & Kavussanu, 2018) also found links between AL in coaches and trust. These findings suggest that the mechanism through which AL may influence task cohesion may be through trust. Findings provide further support for the assumption that athletes' trust in coaches perceived to be authentic could have profound effects on task cohesion in teams (Houchin, 2011).

In relation to that AL to team sacrifice there was a sigificant positive realatonship. Similarly, within organisational psychology, research has shown that AL positively predicts organisational citizenship behaviours (Valsania et al., 2015, Walumbwa et al., 2008). In the present study authentic leadership was related to team sacrifice. This finding suggests that coaches should display relational transparency, self-awareness, internalised moral perspective and balanced processing as these behaviours are related to team sacrifice. For example,

coaches could display openly behaviours they expect from the team (e.g., extra practice sessions for individuals outside of scheduled sessions) or by setting ambitious yet realistic goals for the team.

Team sacrifice also mediated the relationship between AL in coaches and task cohesion, with athletes who felt their teammates made sacrifices reporting higher levels of task cohesion. That is, AL, for example coaches saying exactly what they mean could raise awareness of sacrifices made (e.g., athletes carrying out responsibilities they do not like for the good of the team) may be a viable method of increasing task cohesion. In this study, the relationship between AL and task cohesion could be partly explained by team sacrifice. This is consistent with previous research in sport (Cronin et al., 2015; Prapavessis & Carron, 1997) which has shown that team sacrifice was related to task cohesion. This result also supports the view that making a sacrifice for the group causes individuals to be attracted to the group (Zander, 1995). Findings suggest that coach AL could increase task cohesion indirectly by increasing team sacrifice and provide initial evidence consistent with the hypothesised mediational model. This relationship was non-significant in both male and female athletes.

Some interesting findings emerged from this study involving gender and the mediating role of trust. For male athletes trust mediated the AL to task cohesion relationship, in contrast, trust did not play a significant role in the mediation in female athletes. This finding is in line with Korabik and Ayman's (2007) integrative model of gender and leadership. According to these authors leader behaviours and follower outcomes are influenced by three factors: socio demographic gender, contextual cues and intrapsychic processes. It seems possible that for males, athletes trust is more important when tasks involve working together towards a common goal. In other words, AL practices which engender trust are central to team functioning for males compared to female athletes Within

sport, this is the first study to offer evidence that gender may play a role in the relationship between authentic leadership and certain outcomes for athletes. Further research could seek to substantiate these initial findings.

Practical Implications

The identified relationships among AL, team sacrifice, trust, and task cohesion have important practical implications. Findings enhance our understanding of the mechanisms through which AL may influence task cohesion. Coaches should try to engage in authentic behaviours (i.e. relational transparency, self-awareness, internalised moral perspective and balanced processing) as these behaviours could influence trust, team sacrifice and task cohesion. Coaches ought to put great emphasis on the quality of relationship between themselves and their athletes and among athletes. The centrality of these relationships influences athletes' trust, team sacrifice and task cohesion. Coaches could help athletes by highlighting the importance of team goals associated with task cohesion (e.g., discussing goals to be achieved in a practice session and reflecting on them at the end of the session). Similarly, team building interventions could encourage both coaches and athletes to express their expectations associated with team sacrifice (either verbally or in writing) of the team. It is important to note that some sacrifice behaviours may have detrimental consequences for athletes as individuals but may benefit the team (e.g., playing while injured). Responsible coaches, however, would put the health and safety of each athlete ahead of the team. Therefore, coaches should be aware of the potential beneficial and detrimental consequences of team sacrifice.

Study Limitations and Future Research Directions

The present study revealed some interesting findings however it also has some limitations. First, our data are cross-sectional, which means causality cannot be established between variables; our results simply provide evidence for the hypothesised model. Future

studies should investigate the causal relationships using longitudinal or experimental designs. Second, in relation to the AL to team sacrifice relationship, future research could investigate other potential consequences of AL (e.g., effort, self-efficacy) to fully understand how these behaviours influence athlete wellbeing via sacrifice. Third, future research could also benefit from making comparisons between AL behaviours in male and female coaches.

Fourth, qualitative methods may help to fully explain athletes' reasoning behind what they perceive as AL in their coach, why this makes them trust their coach (i.e. how to build strong relationships) and how this creates a high cohesive team willing to make sacrifices. This will also help researchers and practitioners to understand what these behaviours "look like" and manifest. Consequently, alternative methods such as historiometric approaches (Ligon, Harris, & Hunter, 2012) may be more interesting and promising than questionnaires-in developing our understanding of AL. Historiometric methodologies rely on available historical records turning qualitative information into quantitative indices that help in understanding leader differences (Ligon et al., 2012).For example the AL-trust-task cohesion is a complex dynamic which ca be developed over time, mainly as a response to coaches' behaviour.

Fifth, very few studies have been conducted on AL and its consequences. Future studies should replicate the current study using a generic sporting population in addition to coaches and athletes functioning in elite environments. This will determine if the same sentiment is shared regarding AL and its consequences across different sporting contexts. This could give practitioners and researchers a better understanding of what methods could be employed to improve trust, task cohesion, team sacrifice as well as how to better develop authentic coaches. Strategies should also be developed to "sell" these ideas to sport governing bodies to get their buy-in for future AL development. Subsequently, future studies could also consider examining different forms of leadership to determine the most effective leadership

style. The possibility certainly exists that other leadership approaches may be more appropriate for youth sport, recreational sport and high-pressure elite environments, and other types of leader behaviours may motivate more positive responses depending on the context.

Conclusion

In summary, this study extends our understanding of the positive consequences of AL in sport. Specifically, our findings extend earlier work (Bandura et al., 2016; Houchin, 2011) by identifying relationships between AL and athletes' trust, team sacrifice and task cohesion. The present study makes a significant contribution to the literature that highlights AL as a value-based approach to leadership with important consequences for athletes' experiences because coaches display self-awareness, balanced processing, relational transparency and importantly internalised moral perspective. Indeed, results suggest that authentic leadership behaviours promote trust and sacrifice in athletes which in turn enhance the task cohesion of sports teams.

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CHAPTER 6

General Discussion

This thesis focused on AL as conceptualised by Walumbwa et al. (2008). Research questions posed in this thesis also concern consequences of AL in sport. Investigating consequences of AL for athletes is important because this knowledge could be used to advise coaches and practitioners whether AL is likely to enhance athletes' emotional states (i.e. trust, autonomy, satisfaction, commitment and enjoyment) and team outcomes (i.e. task cohesion and team sacrifice). These factors are associated with positive athletic experiences.

This thesis had four purposes: the first was a qualitative examination of AL in sport as perceived by professional football coaches. Second, to examine whether AL was related to satisfaction, commitment and enjoyment. Third, to examine mediators of the link between AL and the abovementioned variables. Fourth, to examine the relationship between AL and task cohesion via trust and team sacrifice. These purposes were investigated in five studies.

The purpose of study one was to examine professional football coaches' perceptions of AL. The second study examined whether AL was related to commitment and satisfaction and whether trust and perceived choice mediated these relationships. The third study investigated whether AL was related to commitment and enjoyment and whether trust and autonomy mediated these relationships. The fourth study examined the relationship between AL and task cohesion and the mediating role of trust and team sacrifice. Thus, thesis purpose 1 was investigated by Study and thesis purpose 2 and 3 were examined in studies 2 and 3. Thesis purpose 4 was examined in study 4. Findings and results derived from these five studies are outlined and discussed below.

Assessment of AL in Sport as Perceived by Football Coaches

The first thesis purpose was to examine AL in sport as perceived by professional football coaches. In study 1 the four dimensions of AL: internalised moral perspective, balanced processing of information, relational transparency and self-awareness were substantiated in the context of sport. These were further explained by context-specific

subthemes based on participants' perceptions. The findings are in line with the extant qualitative literature on AL. Indeed, the results from study 1 are consistent with a study in education where interviews with teachers and their pupils showed the emergence of the four dimensions of AL (Glynn & Raffaelli, 2010).

Results from study 1 contributed to the understanding of self- awareness as a component of AL. Coaches reported that they were highly aware of their behaviour, priorities and strategies. In addition, coaches highlighted the attention they continued to give to ensure they understand who they were and what they do. Effective coaches need to have a keen understanding of their strengths and weaknesses, behavioural tendencies, and cognitive models (Vella, Oades & Crowe, 2010). This is line with previous work which found that the ability to identify strengths and weaknesses are characteristics of a coach who is self-aware (Thelwell, Lane, Weston & Greenlees, 2008). This research found a coach's effectiveness was influenced by his/her ability to judge his/her own and others' emotions (Thelwell et al., 2008). Therefore, a comprehensive self-understanding would make a coach viewed to be authentic cognitively aware of their existence within the context in which they operate.

Findings from study 1 support relational transparency as a construct of AL. Coaches indicated that demonstrating high levels of openness, self-disclosure, and trust in their interactions was significant in maintaining a close relationship with players. Relational transparency has been acknowledged to enhance interpersonal relationships (Ilies, Morgerson & Nahrgang, 2005; Kernis, 2003). Therefore, coaches sought to build credibility and trust by encouraging diverse viewpoints and building networks of collaboration (Avolio & Gardner, 2005). This idea is supported by research in sport using the conceptual model of coach-athlete relationships which postulates that coaches who work diligently to create meaningful relationships are likely to get more production from their players (Jowett, 2007)

Internalised moral perspective as an aspect of AL was reported in study 1. Overall the coaches in this study aimed to promote a positive ethical climate, reducing unethical practices in football. For example, coaches reported that coaching reflected their ‘philosophy'. This is supported by research in the sports philosophy literature which suggests that authenticity ensures that actions and decisions serve to enhance what they expect from players and preserving the integrity of sport as this may impact athletic careers (Ronkainen, Tikkanen & Nesti, 2015). However, coaches acknowledged that despite their inherent values, beliefs and morals, they were faced with the "uncontrollables" accounted for by the ‘win at all cost' mentality of modern-day football (Cook, Littlewood, Nesti, Crust, Allen-Collinson, 2014), which could exacerbate gamesmanship and cheating. Thus, through positive role modelling; behaviour should be ethical in case it is reciprocated and inherited by athletes.

Coaches’ accounts support balanced processing and as a dimension of AL in the context of sport. Coaches reported how they adapted their coaching through analysing situations as well as observing the feedback of the players. Coaches reported that although they were highly qualified and knowledgeable, they were continually going through a developmental process. This was enabled formally through professional development courses, as well as informally through mentors and peers as well as through interactions with players. Coaches viewed this as advantageous in their development as well as players’ development which they had continued after completion of their qualifications as on-the-job learning provided instant feedback. Although not specifically addressing ‘credible coaching’ such practices in sport have been found to be salient in successful coaches where feedback for analysis, has been shown to be effective (e.g., Becker & Wrisberg, 2008).

This thesis responds to the call for further research by extending research on AL from a contextual point of view. Due to challenges facing coaches today, the suitability and the applicability of the known leadership models are questioned (Vella et al., 2010). There is,

therefore, the need to explore contemporary models of leadership that would be suitable to meet current challenges yet still be relevant for the future as well. This redirection of research towards AL is an effort towards the understanding of leadership practice in sport beyond that of transformational leadership (Ykhymenko-Lescroat, Brown & Peskus, 2015).

In summary, findings from study 1 support Walumbwa and colleagues (2008) model of AL. Findings suggest that coaches perceived to be authentic are highly aware of their own capabilities and how their actions impact others. They know where they stand on important issues. Their leadership approach is grounded in a set of core ethical values and their decision-making is guided by high standards of ethical conduct. Such coaches would express their thoughts, feelings, and values in a transparent and genuine manner, demonstrating consistency with their actions. Coaches perceived to be authentic would strike a balance between acting in accord with a strong set of personal convictions and fostering open two-way communication with athletes, through seeking their input, listening actively, and being open to having their deeply held positions challenged). Results from study 1 substantiate Walumbwa et al.'s (2008) which proposes that these characteristics and abilities are fundamental to AL.

Reflective account

Giving insights of the world of the researcher can be valuable for both the reader and the researcher. Through reflective diary, the researcher can have a 'continual internal dialogue' and a 'critical self-evaluation' of his/her 'positionality' (Berger, 2015, p. 220). The positionality can include the personal and biographical characteristics, personal and professional experiences along with beliefs, values, biases, assumptions, and emotions of the researcher (Savvides, Al-Youssef, Coli & Garrido, 2014). It is significant to provide my background and ideological stances about my personal interest morally driven leadership practices in football.

I have always had a passion for football. Having played and coached at a high standard, I have been exposed to several methods of coaching. When embarking on my career as a coach I came across the term ‘coaching philosophy’. This was a word that was continually drummed into my young coaching head. What is your ‘philosophy as a coach?’ and ‘who are you as a coach’. I found myself saying what everyone else said, honest, trustworthy; all the nice things. I started to question this term ‘coaching philosophy’ when I started working with professional football coaches. Why do certain behaviours occur even though you have a ‘coaching philosophy? Does saying that you have a ‘coaching philosophy’ make you a better coach? How does one develop a ‘coaching philosophy’? In fact, what is a ‘coaching philosophy’? These are questions that remained unanswered until; through academia, I came across AL. I viewed this as a concept that may help me answer some of these questions. I felt it was important to speak to the very people I thought would benefit most.

I kept a research diary from the beginning until the end of each study, aiming to record a great range of ideas about coaching, AL and reflections of my methodological, theoretical decisions and actions. To achieve this memos and notes were made throughout my journey to compare my perspectives prior to the conduct of the study with the collected data and my reflections on these. As a novice researcher through a reflective diary, I recognised my integral role in the process of data collection, and I got familiar with my identity as a researcher. Specifically, being part of the social context explored, I also acknowledged my theoretical stances and my own preconceptions (Charmaz, 2014) which could have had any influence on the study. For example, my position is likely to have encouraged greater disclosure on the part of the participants, but it may have limited what they felt willing to disclose to a colleague.

While exploring participants’ experiences and beliefs, a relationship was

shaped, sharing the same premises about authenticity in coaches, trusting and respecting each other from one coach to another. This connection gave me a sense of responsibility to listen to their voices and care for what they shared and report it accurately. As such, the abductive approach to thematic analysis adopted did not limit these studies, enabling me to obtain rich data and understanding the workings of AL in the context of sport.

Consequences of coach AL for athletes

Studies 2, 3, and 4 offered cross-sectional examination of relationships between an independent variable (IV), dependent variables (DV), mediating and moderating variables. AL was identified as the main independent variable (influencing factor or predictor). Trust in coach, perceived autonomy (perceptions of choice), commitment, satisfaction, enjoyment, team sacrifice, and task cohesion were identified as dependent variables (what is being measured). In addition, mediating and moderating effects are assessed.

In studies 2, 3 and 4 trust in coach was identified as a mediator variable to explain how AL may influence commitment, satisfaction, enjoyment and task cohesion. Autonomy (perceived choice) was identified as a mediator variable to explain how AL may influence commitment, satisfaction, enjoyment in studies 2 & 3. In study 4, team sacrifice was identified as a mediator variable to explain how AL may influence task cohesion. In study 4, gender was assessed as a moderating variable. Thus, gender was used to determine whether the relationship between AL, trust and task cohesion and AL team sacrifice and task cohesion was different for male and female athletes.

AL, satisfaction, commitment and enjoyment

The second thesis purpose was to investigate the link between AL and satisfaction, commitment, and enjoyment. In study 2, in a sample of 532 athletes, AL was positively related to athlete satisfaction. Satisfaction is a positive affective state and was measured using three dimensions of the athlete satisfaction questionnaire (Chelladurai & Riemer, 1997).

Results are consistent with organisational research, where followers who viewed their supervisor to be an authentic leader reported greater satisfaction (Penger & Cerne, 2014). In sport, athletes' preferred and perceived coach behaviour influenced performance, personal treatment and training and instruction satisfaction (Reimer & Toon, 2001). While transformational leadership in sport focal outcome is performance (Callow et al., 2008) results suggest that AL reflects a broader focus beyond performance.

This result can be explained based on the conceptualisation of AL that authentic leaders are open and honest, lead by example and show genuine care and concern for their followers. This, in turn, has a positive impact on followers reciprocating these behaviours into their own functioning, hence heightened satisfaction (Avolio & Gardner 2005; Gardner, Cogliser, Davis & Dickens, 2011). In support, Wang and colleagues (2014) found that authentic leaders communicate organisational goals clearly and in turn followers experience positive emotions like satisfaction. Similarly, in this study, athletes who viewed their coach to display AL were satisfied with their individual performance, personal treatment and training and instruction.

Athletes' perceptions of AL positively predicted commitment in two studies. Study 2 consisted of 532 participants, Study 3 had 435 athletes from a variety of team sports. The relationship between AL and commitment shown in these studies support the majority of organisational literature (Emuwa, 2013; Walumbwa et al., 2008). Furthermore, the relationship between AL and enjoyment shown in study 3 revealed that AL behaviours have the capability to influence athlete's positive emotions associated with enjoyment (i.e. pleasure and fun). Price and Weiss (2000) showed that enjoyment as conceptualised in the sport commitment model (Scanlan, Carpenter, Schmidt, Simons & Keeler, 1993) can influence athletes' dedication to sport. Committed athletes are reflected in various positive outcomes such as performance (Morton, 2016).

The positive relationship between AL and commitment in studies 2 and 3 is a significant finding. Results suggest that because athletes are emotionally connected with their coach and hence are committed, participate voluntarily and not because they need to (Scanlan et al., 1993). To support this finding, Walumbwa et al. (2008) demonstrated in previous research that followers are emotionally attached to leaders viewed to be authentic, which, in turn, results in organisational commitment. According to Walumbwa and colleagues (2008) if followers and more committed this could leader to increased levels of performance. With clarity and understanding of their capabilities, and with the willingness to be self-aware, a coach viewed to be authentic will be less likely to engage in defensive behaviours and more likely to correct personal predispositions. Research has shown that these characteristics potentially increase commitment in followers of authentic leaders (Gatling, Kang, & Kim, 2016).

AL revolves around mechanisms such as high-quality interpersonal relationships (Walumbwa et al., 2008) which generates a social bond through interaction between the coach and athlete, hence commitment (Scanlan, Chow, Sousa, Scanlan & Knifsend, 2016). Authentic leaders have been shown to encourage followers to identify with the core values of the collective organisation that they represent in addition to the leader (Emuwa, 2013). Thus, authentic coaches may stress the importance of attending to the shared interests of the team and individual leading to commitment

Findings for this significant and positive relationship between AL and commitment in studies 2 and 3 can be further explained by authentic leaders' ability to be transparent, open and honest. Through relational transparency and internalised moral perspective followers to do not feel manipulated and know the true character of authentic leaders, which fosters trusting relationships (Avolio & Walumbwa, 2014). Thus, findings suggest coaches who interact in an open and non-defensive manner create an environment that elicits commitment.

Indeed, Ilies and colleagues (2005) have found that followers of authentic leaders were emotionally attached to organisational goals, which, in turn, had an impact on organisational commitment.

The mediating role of trust and autonomy

The third thesis purpose was to investigate mediators of the links between AL and satisfaction, commitment, enjoyment. In studies 2 and 3, AL was a strong positive predictor of trust. In turn, trust was a moderate positive predictor of commitment in studies 2 and 3, a strong positive predictor of satisfaction in Study 2 and a moderate positive predictor of enjoyment in study 3. The relationship between AL and trust in studies 2 and 3 shown in this thesis extend existing literature (Houchin, 2011). Specifically, the findings provide the links between AL and trust and a range of outcomes, whereas Houchin's (2011) study considered performance and group cohesion as outcomes.

Studies 3 and 4 support Walumbwa et al.'s (2008) conceptualisation of AL. Coaches perceived to be authentic build trusting relationships with their athletes due to the quality of their exchange relationships (Blau, 1964; Walumbwa et al., 2008). Trust has been shown to be crucial for effective coach-athlete relationships (Dirks, 2000). The results shown in studies 2 and 3 suggests that coach AL cultivates trust, and which in turn engenders their commitment, enjoyment and satisfaction. Specifically, athletes who perceived their coaches to be authentic may have developed a stronger sense of attachment to their team. This may foster athlete's sense of belonging to the team and their desire to work towards team goals. Indeed, previous research (Houchin, 2011) has shown that athletes are likely to trust their coach if he/she encourages them to openly share their opinions, truly listen before coming to his/her own conclusions and demonstrates that they understand how their actions impact athletes. Consequently, results suggest that AL engenders trust, all of which increases athletes' commitment, enjoyment, satisfaction and task cohesion.

Mediation of the relationship between AL, satisfaction commitment and enjoyment via autonomy (perceived choice) was shown in both studies 2 and 3. Autonomy is of the three basic psychological needs and encompasses three aspects: internal perceived locus of causality (IPLOC), volition and perceived choice In Study 2 AL was a strong positive predictor of perceived choice. In turn, perceived choice was a moderate predictor of commitment and a weaker predictor of satisfaction. In study 3 AL was a moderate positive predictor of autonomy. In turn, autonomy was a moderate predictor of both commitment and enjoyment. The finding of autonomy (perceived choice) added to our understanding of another mechanism that could explain the relationship between AL and the abovementioned variables.

The mediation of autonomy (perceived choice) shown in studies 2 and 3 may be beneficial for athletes in several ways. First, athletes who perceived their coaches as authentic leaders did not feel forced or coerced but rather, had a say in how things were done and participated willingly in pursuing their own goals. Furthermore, results suggest that AL in coaches allows room for athletes to make choices and participate in their sport willingly. Indeed, providing athletes with freedom of choice when participating in athletic activities through autonomy-support has been conceptualised as a major influence on the adaptive perceptions of leadership behaviours (Mageau &Vallerand, 2003).

Second, AL behaviours involve providing choice (where appropriate), providing non-controlling feedback and avoiding controlling behaviour (Gardner Cogliser, Davis & Dickens, 2011; Walumbwa et al., 2008). Results suggest that collectively, maintaining these behaviours in the coach-athlete relationship will foster a positive motivational climate where adaptive perceptions of these behaviours aid in the satisfaction of autonomy (Carpentier & Mageau, 2013). In turn, athletes experience higher levels of commitment, enjoyment and

satisfaction. Results are consistent with Walumbwa and colleagues' (2008) predictions that AL to promote positive psychological states including autonomy.

AL and task cohesion

The fourth thesis purpose was to examine the relationship between AL and task cohesion via trust and team sacrifice. In a sample of 338 team sport athletes, in Study 4 AL had a significant and positive direct relationship with task cohesion. Task cohesion is the degree to which team members strive to work together towards achieving performance-related goals, both in competition and practice (Eys, Loughead, Bray, & Carron, 2009a, 2009b). This is a significant finding given that previous research suggests that authentic leaders identify with core values of the collective organisation (Avolio & Walumbwa, 2014). Transformational leadership in sport research has also revealed such findings (Callow et al., 2008). However, previous research has shown that this is more explicit and central to AL (Banks et al., 2016). While this thesis did not make a comparison between the two theories this research may explain the strong relationship between AL and task cohesion.

The relationship between AL and task cohesion shown in study 4 extend existing literature (Houchin, 2011). This research found that AL positively predicted group cohesion (Houchin 2011). The relationship between coach leadership and task cohesion has been shown to be important for improved performance given that they are both salient to training and competition (Prapavessis & Carron, 1997). Drawing from the conceptual model of team building (Prapavessis, Carron & Spink, 1997), athletes who reported higher task cohesion may have felt their coach was able to bond athletes together by communicating team goals effectively. Results help us to understand how AL may have an influence in creating high-task cohesive teams. This is an important finding given that previous research has shown that task cohesion is more salient in training and competition in comparison to social cohesion (Kim & Cruz, 2016).

The mediating role of Team Sacrifice

In study 4, there was a significant indirect effect of AL on task cohesion through trust. This finding substantiates Houchin's (2011) findings which have shown that AL was related to group cohesion via trust. Another mechanism to explain why AL was related to task cohesion was examined in study 4. Findings showed that AL was positively related team sacrifice which in turn was positively associated with task cohesion. Specifically, athletes who viewed their coach to be authentic, for example, coaches saying exactly what they mean, raised awareness of sacrifices made (e.g., athletes carrying out responsibilities they do not like for the good of the team). This, in turn, may have influenced task cohesion which supports the view that making a sacrifice for the group causes individuals to be attracted to the group (Zander, 1995). This extends previous research in sport which has shown that team sacrifice was related to task cohesion (Cronin, Arthur, Hardy & Callow, 2015; Prapavessis & Carron, 1997).

The finding that team sacrifice mediated the link between AL and task cohesion extends Houchin's (2011) work as it shows how research can help understand additional mechanisms to explain this link. Furthermore, this finding adds to existing literature (Cronin et al., 2015) which has shown a link between transformational leadership in sport and team sacrifice. Previous research suggests that because AL focuses on having strong values and beliefs, this in turn, could explain the stronger relationship between AL and OCB beyond that of transformational leadership (Banks, McCauley, Gardner & Guler., 2016). Such behaviours may not always produce tangible individual rewards but promote the functioning of the group (i.e. team sacrifice). This is an important finding because such behaviours have been shown to explain why AL is more strongly associated with task cohesion hence elevated levels of group performance (Banks et al., 2016).

The moderating role of gender

In study 4 we also examined the influence of gender on the relationship between AL and task cohesion via trust. The findings were consistent with previous research showing that gender moderated the relationship between coaching behaviour and team cohesion (Morton, 2016). For male athletes, trust mediated the AL to task cohesion relationship, in contrast, trust did not mediate this relationship in female athletes. It seems possible that for males, athletes trust is more important when tasks involve working together towards a common goal. In other words, AL practices which engender trust are central to team functioning for males compared to female athletes. Within sport, this is the first study to offer evidence that gender may play a role in the relationship between AL and certain outcomes for athletes. However, further research could seek to substantiate these findings.

Leadership is inherently multilevel, so our understanding of effective leadership will be limited if we fail to integrate athlete-level processes with team-level processes (Cronin et al., 2015). In order to fill this gap, in study 4 multilevel analysis of the hypothesised relationships examined the effects of AL on individual- and group-level outcomes, respectively. In study 4 the were no significant differences between group variances (athlete and team). This a significant finding given that coaches face a challenging balancing act. On the one hand, they need to develop and motivate individual athletes to ensure that each athlete is capable of, and willing to, complete his or her own tasks; on the other hand, they need to facilitate collaboration and build trust among team members so that the team functions effectively as a whole. Overcoming this challenge requires capabilities in both individual and team leadership. In study 4 a clear distinction between AL–athlete interactions and AL– team interactions generated a greater understanding of the interplay and connections between those two levels. As such results from Study 4 study extend multilevel research in the domain of AL.

Findings provide support for the process through which AL could influence athletes' satisfaction, commitment and enjoyment, trust and autonomy directly. In addition, in studies 2 and 3 trust and autonomy were tested as mediators in the same model in order to examine the influence of each variable these outcomes. In study 2, AL had a significant impact on both trust and perceived choice in equal measure. In turn, the influence of trust was more effective on satisfaction in comparison to commitment. Conversely, the influence of perceived choice was greater on commitment than satisfaction. Coach AL explained 48% of the variance in trust and 25% in perceived choice, and in turn, AL, perceived choice and trust explained 20% of the variance in commitment, and 78% of the variance in satisfaction. The percentage of the total effect of AL on the outcome variables mediated by trust and perceived choice was 68% for commitment and 63% for satisfaction.

In study 2 & 3 the strength of the relationship between AL and trust was stronger than the relationship between AL and autonomy (perceived choice). The model tested in study 3 revealed that trust, as a mediator influenced enjoyment to a greater extent than commitment. Autonomy was shown to have the same influence on both commitment and enjoyment. Coach AL explained 55% of the variance in trust and 14% in autonomy, and in turn, AL, autonomy, and trust explained 23% of the variance in commitment, and 31% of the variance in enjoyment. In studies 2 and 3 we can draw confidence in the AL-trust- commitment and AL- autonomy-commitment. Through replication, the similarity of the findings in studies 2 and 3 provide greater validity to novel research where results can be uncertain.

In study 4 trust and team sacrifice were examined independently as mediators in separate models to explain the relationship between AL and task cohesion. The strength of the relationship between AL and task cohesion was greater for trust when compared to team sacrifice. In turn, both trust and team sacrifice were shown to have similar effects on task cohesion. Each mediational model was tested for male and female athletes in order to

examine gender as a moderator. The results indicated that for females AL, was positively related with task cohesion via trust commitment but is not statistically significant. All four studies highlight trust as a fundamental element of AL. Thus, a culture of trust in coach AL has important implications for athletes' satisfaction, commitment, enjoyment and task cohesion.

In summary, findings provide support for Walumbwa and colleagues' (2008) model of AL, which proposes that AL is associated with positive outcomes (Avolio & Gardner 2005; Gardner et al. 2011; Luthans & Avolio 2003). Findings in this thesis revealed that AL was associated with athletes' satisfaction, commitment and enjoyment. Furthermore, this thesis examined autonomy (perceived choice) and team sacrifice as mediating mechanisms to explain the relationship between AL and athlete outcomes. Furthermore, findings in this thesis extend previous research on the relationship between AL athletes' trust and its mediating role on the relationship between AL and athlete outcomes including task cohesion (Houchin, 2011). Overall the findings underline the importance of authentic relationships between coaches and athletes.

Implications for Coaching Practice

This thesis demonstrated that AL has could enhance trust, autonomy and team sacrifice. In turn, these variables influence satisfaction, commitment, enjoyment and task cohesion. In general, coaches are striving for long-term success and the 'win at all cost' mentality may have a profound impact on coaches' integrity (Nesti & Littlewood, 2011). Coaches need to take their athletes' well-being into consideration and incorporate tenets of AL given that the may lead to positive attitudes and behaviours among athletes such as team sacrifice, enjoyment, commitment and satisfaction.

Findings from study 1 demonstrate that developing authentic leaders in professional football coaches has some important implications given that being authentic is perceived in a

positive way. For example, developing authentic coaches could involve purposeful training interventions to educate and aid coaches in becoming self-aware and building transparent relationships (Avolio & Gardner, 2005). This will typically include highly developed self-awareness skills, how to reveal the AL-self, and how to develop a clear moral framework for athletes and leadership practice. Shirey (2006) also suggests several methods of how self-awareness, relational transparency, internalised moral perspective and balanced processing can be developed. These methods include (but not limited to) learning the art of reflection and conducting personal strengths and weakness inventory.

Studies 2 and 3 identified relationships among, AL, trust, autonomy (perceived choice), commitment, satisfaction and enjoyment which have implications for both coaches and practicing sport psychology professionals. Coaches ought to place greater emphasis in promoting integrity and openness with their athletes to build trusting relationships-exhibiting relational transparency. By displaying balanced processing and self-awareness, coaches are encouraged to engage athletes in making decisions, and share their thoughts and feelings to foster autonomy. In turn, internal moral perspective, for example creating a deeper sense of moral principles and communicating values and beliefs that resonate with athletes could boost commitment and satisfaction. Consequently, coaches should foster an open climate of discussion and exchange with their athletes, for example through frequent team reflection, planning training sessions, and preparation for competition.

In study 4 the identified relationships among AL, team sacrifice, trust, and task cohesion have important practical implications. Findings enhance our understanding of the mechanisms through which AL may influence task cohesion. Coaches should try to engage in authentic behaviours (i.e. relational transparency, self-awareness, internalised moral perspective and balanced processing) as these behaviours could influence trust, team sacrifice and task cohesion. Coaches ought to put great emphasis on the quality of the relationship

between themselves and their athletes and among athletes. The beneficial outcome of these exchanges influence athletes' trust, team sacrifice and task cohesion.

Coaches could help athletes by highlighting the importance of task cohesion (e.g., discussing team goals to be achieved in a practice session and reflecting on them at the end of the session). Similarly, team building interventions could encourage both coaches and athletes to express their expectations associated with team sacrifice (either verbally or in writing) of the team. It is important to note that some sacrifice behaviours may have detrimental consequences for athletes as individuals but may benefit the team (e.g., playing while injured). Responsible coaches, however, would put the health and safety of each athlete ahead of the team. Therefore, coaches should be aware of the potential beneficial and detrimental consequences of team sacrifice.

In studies 2, 3 and 4 trust emerged as an important outcome of AL. Trust leads to positive outcomes due to how it binds the coach and the athlete, processes and the environment together (Jowett, 2007). With the highly competitive environment and difficult problems some sporting environments face today, it is important that coaches actively foster athletes' trust if they wish to lead effectively and be successful in the long-term There are several ways through which coaches can stimulate trust authentically and thus develop positive relationships with their athletes, such as showing, concern, employing effective communication methods (e.g., avoiding complex language and ensuring communication is transparent) (Hsieh & Wang, 2015). By developing such trust, not only will athletes' willingness to reciprocate increase (Jowette, 2007), but so will their level of commitment, satisfaction, enjoyment and task cohesion.

For sport psychology professionals, results derived from studies 2, 3 and 4 suggest that AL interventions may be a potential avenue for applied practice. AL could be influential in shaping the athletes' development, which should not be ignored by practicing professionals

(Vella et al., 2010). As sport psychology professionals are trained and equipped to facilitate the development of athletes' and in some cases coaches, potential remains for applied work in this domain. Interventions to improve coaches' relational transparency, internalised moral perspective, balanced processing, and self-awareness may be valuable to addressing moral conduct that takes place in sport. For example, providing multisource feedback could enhance coaches' self-awareness and eliminate the potential discrepancy between self- and athlete-perceptions. The use of group discussions could also make coaches understand athletes' perspectives, helping them process information in an unbiased manner

Overall, results from this thesis have some implications for sport governing bodies in the United Kingdom. Sports governing bodies should invest into or consider AL development and creating authentic cultures. If governing bodies reinforce authentic cultures- this will ensure that coaches demonstrate the qualities and capabilities of AL resulting in positive outcomes. However, as noted by Avolio and Walumbwa (2014), because each follower-leader relationship is unique not all followers will respond to AL. Thus, incorporating AL into existing models of leadership in sport may be more beneficial for athletes. In other words, if higher standards of leadership are to be delivered, governing bodies need to implement strategies that will teach, embed values, knowledge and skills that support AL. As highlighted by Hsieh & Wang (2015) organisations should "treasure and develop authentic leaders" (p. 2342) in order to gain the benefits from their leadership, especially in today's environment with higher complexity and uncertainty.

Another way of promoting AL behaviour in sport is to recruit coaches via specific assessments (e.g., questionnaires and personality tests) or interviews to demonstrate that they have characteristics aligned with AL development. The identification of coaches who self-develop should become a priority in the hiring and promotion. Recruitment of such individuals would create an environment where individuals communicate with integrity and a

transparent manner. Such an environment could create a certain degree trust, autonomy and willingness to engage in team sacrifices. In turn, this may lead to heightened levels of athlete satisfaction, commitment, enjoyment and high-task cohesive teams.

Limitations and Future Directions

Although there are interesting findings in this thesis, there are also a number of limitations. First, the generalisability of my findings from studies 1. Specifically, this study was limited to football from the subcultural context of English coaches. Future research should address this by collecting data from a larger pool of participants from several backgrounds, sport, nations and a wider variety in age. Furthermore, it would be interesting to consider AL in other sporting contexts (e.g., individual sport). The coaches interviewed were very willing to share their experiences of gamesmanship and cheating, as the topic was receiving a lot of media attention at the time. Future research may benefit from obtaining naturalistic data over a period of time to validate current findings. In addition, the results do not represent a definitive view of coaches, however, they can be utilised as a basis for future research. This study may also include social desirability and leniency biases; however, the choice to utilise interviews was viewed as necessary to obtain a rich understanding into an AL which quantitative methods cannot provide.

Second, in studies 2, 3 and 4 it is recognised that the use of self-reporting carries limitations in terms of bias and social desirability. The questionnaires used collected attitudinal data as opposed to actual behaviour. To aid interpretation and understanding of coaches' behaviour and practice, rigorous application of other quantitative methods (e.g. observational techniques) complimented by sound interpretations of qualitative data has been recommended (Partington & Cushion, 2014). Studies, 2, 3 & 4 followed previous cross-sectional research designs. However, causality cannot be established between variables; our results simply provide evidence for the hypothesised model. Future research could use

longitudinal or experimental designs to investigate the causal relationships. For example, randomised experimental designs in which the independent variable and the mediator are manipulated would fully test the direction of these relationships (MacKinnon, Lockwood, Hoffman, West & Sheets, 2002).

Third, researchers may consider measuring sport commitment using the updated version of the sport commitment model (SCQ-2) (Scanlan, Chow, Sousa, Scanlan & Knifsend, 2016). Preliminary evidence has shown that the ability to assess both enthusiastic and constrained commitment provides a more comprehensive picture of the commitment process. Enthusiastic commitment is associated with four sources: sport enjoyment, valuable opportunities, other priorities, and desire to excel-mastery achievement. Constrained commitment is associated with five sources: sport enjoyment, valuable opportunities, other priorities, social constraints, and personal investments-loss. Thus, by utilising this measure in future research; we gain a complete understanding of how the various sources of commitment function. The behavioural consequence of the two commitment states and actual persistence can also be examined in this manner. This may be particularly useful during the early stages of interventions to understand whether athletes of coaches viewed to be authentic are enthusiastically committed or constrained to continue sport involvement.

Fourth, from the perspective of Self-determination theory (SDT) in Studies 2 and 3, it is recognised that the use of autonomy (perceived choice) only captures one of the three basic psychological needs for intrinsic motivation. Future research could include relatedness and competence. Within STD competence refers to “feeling effective in one’s ongoing interactions with the social environment and experiencing opportunities to exercise and express one’s capabilities” (Ryan & Deci, 2002, p.7). Relatedness refers to “feeling connected to others, to having a sense of belongingness both with and other individuals and with one’s community” (Ryan & Deci, 2002). In the sport context, relatedness may result

from interactions from a variety of individuals, including teammates, training peers, coaches, parents and others involved in sports participation. Indeed, previous research has shown that these three basic needs predict intrinsic motivation, satisfaction and well-being in athletes (e.g., Deci & Ryan, 2008). Therefore, it is plausible to expect that these may influence athletes' psychological growth, integrity and wellbeing which are considered innate to competence, autonomy and relatedness combined.

Finally, studies 2, 3 and 4 used a questionnaire that has been developed for use in organisational contexts to measure AL. Although the questionnaire was adapted to the context of sport, it may be useful to examine whether utilising a sport-specific measure is the same as AL in leaders in other contexts. Future research could utilise findings from study 1 to develop a sport-specific measure of AL. This will allow future research to compare consequences of AL with other established leadership models in sport. For example, researchers could evaluate AL together with servant leadership given the importance of trust within both paradigms.

Conclusion

Taken together, in this thesis the qualitative study identified the four dimensions of AL (relational transparency, balanced processing, internalised moral perspective and self-awareness) as defined by Walumbwa and colleagues (2008). In addition, results suggest that AL is positively related to commitment, enjoyment and satisfaction. In addition, AL is linked to commitment, enjoyment and satisfaction indirectly through trust and autonomy. Furthermore, results suggest that AL is positively associated with task cohesion. Mediation findings suggest that trust and team sacrifice may help to understand the link between AL and task cohesion.

Based on the results from this thesis coaches may benefit from engaging in the deep reflection required to be authentic. Coaches who are viewed to be authentic may lead to

athletes experiencing greater trust and autonomy. This, in turn, may reinforce athletes' sport satisfaction, commitment and enjoyment. Furthermore, AL behaviours could promote trust and team sacrifice which in turn may enhance task cohesion in team sports. Consequently, I suggest intervention-based research to find ways for coaches to adopt AL. As such, AL may be worth considering by sports psychology and coaching researchers, and applied practitioners aiming to improve coach-athlete dyads, reducing unethical coaching behaviours and promoting positive experiences for athletes.

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APPENDICES

Appendix 1-Study 1 Material

Appendix 1a- Study 1 Information Sheet

Dear Coach
My name is Comille Bandura, and I am a PhD student at the University of Birmingham working with Dr Maria Kavussanu in the School of Sport, Exercise and Rehabilitation Sciences. I would like to invite you to participate in my research investigating effective coaching. This involves taking part in an interview about your coaching experiences. Participation is completely voluntary, and you can withdraw your participation at any time.

Procedure
If you agree to participate in my research, I will conduct an interview with you at a time and location of your choice. The interview will involve questions about coach behaviors that promote a positive environment in football and will last about 60-90 minutes. With your permission, I will audiotape and take notes during the interview. The recording is to accurately record the information you provide and will be used only for transcription purposes. If you choose not to be audiotaped, I will take notes instead. If you agree to being audiotaped but feel uncomfortable at any time during the interview, I can turn off the recorder at your request. I expect to conduct only one interview; however, follow-ups may be needed for added clarification. If so, I will contact you by mail/phone to request this.

What are the risks of taking part?
There are no risks in taking part in this study. However, the interviews will explore your experiences as a coach and challenge some of these experiences. For some people, this might make you feel uncomfortable. You are free to decline to answer any questions you do not wish to, or to stop the interview at any time.

Confidentiality
If the results of this study are published or presented, individual names and other personally identifiable information will not be used. If you do not want to use your own name in recording the interview, you can choose a fictional name to protect your identity. Any information that might identify you or your social networks will be changed or made anonymous (for example names of football clubs, players, other individuals etc.) To minimise risks of confidentiality we will limit access to original recordings to 3 people: The primary researcher (myself), my supervisor Dr Maria Kavussanu, and an expert researcher in qualitative studies, Dr Brett Smith. Audio tapes will be stored in a locked secure place and once transcribed computer data will be password protected.
When the research is completed, I may save the tapes and notes for use in future research done by myself.

Will I be paid?
You will not be paid for taking part in this study. However, the information gained from this research will be used to make recommendations for best practice. We can provide a copy of the research findings if you are interested.

Questions
The study has been reviewed and approved by the University of Birmingham Ethics Committee and Football Association. If you have any questions about this research, please feel free to contact me. I can be reached on 079…… or

Thank you in anticipation,
Yours Sincerely,
Comille Tapiwa Bandura

Appendix 1b-Study 1 Interview Guide

Inductive questions.

1. Can you tell me what made you get into coaching?
2. How would you describe yourself as a coach?
3. What does leadership mean to you?
4. How do you define success? A successful coach?
5. List what barriers/challenges you face as a coach? How do you deal with these challenges?
6. If you were to aspire to a leader who it be and why? i.e. what characteristics do, they possess.

Deductive Questions

Transparency:

To what degree does the coach reinforce a level of openness with others that provides them with an opportunity to be forthcoming with their ideas, challenges and opinions?

Relational Transparency (R) presenting one's authentic self (as opposed to fake or distorted self) to others. Such behaviour promotes trust through disclosures that involve openly sharing information and expressions of one's true thoughts and feelings while trying to minimize displays of inappropriate emotions (Walumbwa, Avolio, Gardner, Wernsing & Peterson, 2008, p. 95).

1. What expectations do you have of your players? How do you communicate these expectations?
2. How get your players to 'work for you'. How do you gain the respect of our players? **(T)**
3. How do you ensure your players know the difference between right and wrong? **(T)**? **(T/B)**
4. How do you deal with conflict within the team? **(T/B)**
5. Can you describe how you set your 'grounds rules' to your players? Ensure players follow rules and procedures set by you? **(T)**
6. How do you treat players that act or go against professional conduct? How do you address this? **(T/B)**
7. How do you instil a level of trust in your players? **(T)**
8. Can you provide examples of where you have had to be brutally honest with a player? How did you go about telling the player? How did the player respond to this? **(T)**
9. How do you respond to a player who has made a mistake?

Self-Awareness:

To what degree is the coach aware of his or her strengths, limitations, how others see him or her and how the leader impacts others?

Self-Awareness (S) demonstrating an understanding of how one derives and makes meaning of the world and how that meaning-making process impacts the way one views himself or herself over time. It also refers to showing an understanding of one's strengths and weaknesses and the multifaceted nature of the self, which includes gaining insight into the self through exposure to others, and being cognizant of one's impact on other people (Walumbwa et al., 2008, p. 95).

1. Can you describe a situation where your players did not respond to your coaching methods?

- How did this make you feel?
- Why do you think they did not respond to your coaching methods?
- At what point did you realise that your coaching methods were not working?
- What adjustments did you make to your coaching?
- Who did you consult when you realised you had to make changes to your coaching style? **(S/T/B/)**

2. Can you describe a situation where your coaching methods were criticised? Can you provide an example where your actions could have been described as unprofessional?

- What led you to act this way?
- How did your players react to this?
- How did you reflect on this experience?
- Who helped you to reflect on this experience? How have you changed your coaching methods based on this experience? **(S/T/B/)**

3. How do you identify areas of weaknesses in your coaching?

- Who do you discuss this with?
- How do you address this?
- Why do you need to identify areas of weakness?

4. How do you identify your strengths as a coach?

- Why do you need to identify your strengths as a coach?

Balanced Processing:

To what degree does the coach solicit sufficient opinions and viewpoints prior to making important decisions?

Balanced Processing (B) showing that they objectively analyse all relevant data before coming to a decision. Such people also solicit views that challenge their deeply held positions (Walumbwa, Avolio, Gardner, Wernsing & Peterson, 2008, pp. 95–96).

1. Decision-making process, how do you evaluate your coaching? Why do you evaluate your coaching? Who helps you evaluate your coaching? **(B)**
2. How do you measure whether your coaching style is effective or not? How do you prepare for coaching sessions **(B)?**

Ethical/Moral:

To what degree does the coach set a high standard for moral and ethical conduct?

Internalized Moral Perspective (M) refers to an internalized and integrated form of self-regulation. The sort of self-regulation is guided by internal moral standards and values versus group, organizational, and societal pressures, and it results in expressed decision making and behaviour that is consistent with these internalized values (Walumbwa, Avolio, Gardner, Wernsing & Peterson, 2008, p. 95).

1. What are your moral beliefs when it comes to coaching? **(E/M)**
2. To what extent do your own personal morals/ethics play in your role as a coach?
3. Can you describe a situation where you have acted against your personal beliefs?
4. Can you tell me how you define unethical behaviour? Can you provide examples?
5. Under what circumstances would you consider players unethical conduct as acceptable/unacceptable? **(E/M)**

Is there anything else you would like to add about your experiences as a coach that we haven't explored?

Coach Contact Letter-Study 2

UNIVERSITY OF BIRMINGHAM

School of Health Sciences

School of Sport, Exercise & Rehabilitation Sciences
Edgbaston,
Birmingham
B15 2TT

3 November 2015

Dear Sir/Madam:

We are a research team from the School of Sport, Exercise and Rehabilitation Sciences at the University of Birmingham, who are presently conducting a study that examines effective coach behaviour in team sports. Specifically, we are trying to find out whether coaches' coaching style has consequences for athletes' prosocial behaviour, enjoyment, commitment, and performance.

The project is led by Dr. Maria Kavussanu, is part of the PhD research of Miss Comille Bandura; and is conducted with the assistance of four Year 3 students; details of all team members can be found at the end of this letter. We are writing to ask for permission to administer a questionnaire to your players at the beginning or end of a **training session,** of your choice. The questionnaire will take approximately 10-15 minutes to complete and example items can be found at the back of this letter. All responses will remain strictly **confidential,** and nobody will be identified by name at any time. For participation in the study, players need to be 18 and over and to have been coached by you for a minimum of one season.

We would be grateful if you agree to help us conduct our study. Our aim is to understand effective coaching and your assistance in accomplishing this goal is invaluable. To express our appreciation, if you allow your players to participate in this study, we will provide you with a summary report of the 'key' findings, if you indicate an interest in these.

Thank you very much for taking the time to consider this proposition. One of us will contact you over the next few days by telephone, to discuss this in more detail. In the meantime, if you have any questions, please do not hesitate to contact one of us.

Sincerely Yours,

Dr. Maria Kavussanu Miss Comille Bandura Mr Neophytos Charalambous

Mr Tom Adams Mr Isaac Vaughan Miss Ella Malloy

Player Information Sheet and Consent Form-Study 2

UNIVERSITY OF BIRMINGHAM

School of Health Sciences

Dear Athlete:

The following questionnaire is part of a study conducted by the School of Sport, Exercise, & Rehabilitation Sciences at the University of Birmingham. The purpose of the study is to examine the role of coaching style on athletes' motivation, satisfaction, and performance. The study is part of the PhD of Miss Comille Bandura and is conducted with the assistance of four Year 3 students. We would like to invite you to participate in this study by completing the attached questionnaire, which will take approximately 10-15 minutes to complete.

For this questionnaire to be useful, it is **very important that you answer all questions honestly**. Please note that all information will be kept **strictly confidential** and will only be used for research purposes. Data will be securely held in a locked cabinet at the university for 10 years. Participation in this study is **voluntary** and you are free to withdraw before March 30th, 2016 via contacting the lead investigator Dr. Maria Kavussanu. If you have any questions, we will be happy to answer them. Thank you very much for your time.

Sincerely,

Miss Comille Bandura
Tel: 079……

Dr. Maria Kavussanu
Tel. 0121 ……...
m.kavussanu@bham.ac.uk

Miss Ella Malloy
077…….

Mr Neophytos Charalambous
074…….

Mr Thomas Adams
078…….

Mr Isaac Vaughan
075…….

Statement of Consent
I have read the Information Sheet. I am willing to undergo the investigation but understand that I am free to withdraw at any time without having to give an explanation. Signature_____ Date _____

Appendix 2 - Study 2 Questionnaires

Appendix 2a: Demographics questionnaire items

1. Gender: Male □ Female □	2. Age: _____
3. Your sport: _____	4. Number of years playing this sport: ____
5. Current team name: _____	6. League your team plays: _____
7. If you are a student, please indicate for which team you play: 1st □ 2nd □ 3rd □ 4th □	
8. Length of time playing for <u>this team</u>: Less than 1 year □ 1-2 years □ 3-4 years □ 5-6 years □ More than 6 years □	
9. Length of time training with <u>this coach</u>: Less than 1 year □ 1-2 years □ 3-4 years □ 5-6 years □ More than 6 years □	
10. Coach gender: Male □ Female □	

Appendix 2b- Adapted Authentic Leadership Questionnaire (Walumbwa et al., 2008)

*Below are some statements about your coach. Please indicate how often each of these statements **fits your coach's coaching style** by circling the relevant number*

My coach…	**Not at all**	**Once in a while**	**Some times**	**Fairly often**	**Frequently if not always**
1. Says exactly what he or she means	1	2	3	4	5
2. Admits mistakes when they are made	1	2	3	4	5
3. Encourages everyone to speak their mind	1	2	3	4	5
4. Tells you the hard truth	1	2	3	4	5
5. Displays emotions exactly in line with feelings	1	2	3	4	5
6. Demonstrates beliefs that are consistent with actions	1	2	3	4	5
7. Makes decisions based on his or her core values	1	2	3	4	5
8. Asks you to take positions that support your core values	1	2	3	4	5
9. Makes difficult decisions based on high standards of ethical conduct	1	2	3	4	5
10. Solicits views that challenge his or her deeply held positions	1	2	3	4	5
11. Analyses relevant data before coming to a decision	1	2	3	4	5
12. Listens carefully to different points of view before coming to conclusions	1	2	3	4	5
13. Seeks feedback to improve interactions with players	1	2	3	4	5
14. Accurately describes how others view his or her capabilities	1	2	3	4	5
15. Knows when it is time to re-evaluate his or her position on important issues	1	2	3	4	5
16. Shows he or she understands how specific actions impact players	1	2	3	4	5

Appendix 2c- Basic Needs Satisfaction in Sport Scale (BNSS; Ng, Lonsdale, & Hodge, 2011)

*Below are some statements that describe experiences you might have in **your team.** Please indicate how true each statement is by circling the appropriate number.*

In my team…	**Not at all true**						**Very true**
1. I get opportunities to make choices	1	2	3	4	5	6	7
2. I have a say in how things are done	1	2	3	4	5	6	7
3. I can take part in the decision-making process	1	2	3	4	5	6	7
4. I get opportunities to make decisions	1	2	3	4	5	6	7

Appendix 2d- The Trust in Leader questionnaire (McAllister, 1995; Dirks, 2000)

*Please think about your experiences **with your coach** and indicate your level of agreement with the following statements. Please respond **honestly.***

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
1. I trust and respect my coach	1	2	3	4	5	6	7
2. I can talk freely to my coach about difficulties I am having on the team and know that he/she will want to listen	1	2	3	4	5	6	7
3. If I shared my problems with my coach, he/she would respond constructively and caringly	1	2	3	4	5	6	7
4. I can freely share my ideas, feelings and hopes with my coach	1	2	3	4	5	6	7
5. I would feel a sense of loss if my coach left	1	2	3	4	5	6	7
6. My coach approaches his/her job with professionalism and dedication	1	2	3	4	5	6	7
7. Given my coach's past performance, I see no reason to doubt his/her competence	1	2	3	4	5	6	7
8. I can rely on my coach not to make my job (as a player) more difficult because of poor coaching	1	2	3	4	5	6	7
9. Other players consider my coach to be trustworthy	1	2	3	4	5	6	7

Appendix 2e- Sport Commitment Model (Scanlan, Carpenter, Schmidt, Simons & Keeler, 1993)

Please circle the number that best answers the following questions.

1. How dedicated are you to continue playing for this team?					
	1 not at all dedicated	2 a little dedicated	3 sort of dedicated	4 dedicated	5 very dedicated
2. How hard would it be for you to quit playing for this team?					
	1 not at all hard	2 a little hard	3 sort of hard	4 hard	5 very hard
3. How determined are you to keep playing for this team?					
	1 not at all determined	2 a little determined	3 sort of determined	4 determined	5 very determined
4. What would you be willing to do to keep playing for this team?					
	1 nothing at all	2 a few things	3 some things	4 many things	5 a lot of things

Appendix 2f- Athlete Satisfaction Questionnaire (ASQ; Reimer & Chelladurai, 1998)

Please think about your experiences in your team with your coach. Then read the following statements and indicate ***how satisfied you are*** *by circling the number that best reflects your feelings. Please respond* ***honestly.***

How satisfied are you with…	**Not at all satisfied**			**Moderately satisfied**			**Extremely satisfied**
1. The degree to which you have reached your performance goals	1	2	3	4	5	6	7
2. The improvement in your performance	1	2	3	4	5	6	7
3. The improvement in your skills thus far	1	2	3	4	5	6	7
4. The recognition you receive from your coach	1	2	3	4	5	6	7
5. The friendliness of your coach to you	1	2	3	4	5	6	7
6. The level of appreciation your coach shows when you do well	1	2	3	4	5	6	7
7. Your coach's loyalty towards you	1	2	3	4	5	6	7
8. The extent to which your coach supports you	1	2	3	4	5	6	7
9. The training you receive from your coach	1	2	3	4	5	6	7
10. The instruction you receive from your coach	1	2	3	4	5	6	7
11. Your coach's teaching of tactics and techniques of your position	1	2	3	4	5	6	7

Coach Contact Letter-Studies 3 and 4

UNIVERSITY OF BIRMINGHAM

School of Health Sciences

1 October 2016

Dear Sir/Madam:

We are a research team from the School of Sport, Exercise and Rehabilitation Sciences at the University of Birmingham, who are presently conducting a study that examines effective coach behavior in team sports. Specifically, we are trying to find out whether coaches' coaching style has consequences for athletes' commitment, enjoyment, and cohesion.

The project is led by Dr. Maria Kavussanu, is part of the PhD research of Miss Comille Bandura; and is conducted with the assistance of five Year 3 students; details of all team members can be found at the end of this letter. We are writing to ask for permission to administer a questionnaire to your players at the beginning or end of a **training session,** of your choice. The same questionnaire will be administered at three time points at the beginning, middle and end of your current season and will take approximately 10-15 minutes to complete. Example items can be found at the back of this letter. All responses will remain strictly **confidential,** and nobody will be identified by name at any time. For participation in the study, players need to be 18 and over.

We would be grateful if you agree to help us conduct our study. Our aim is to understand effective coaching across a competitive season and your assistance in accomplishing this goal is invaluable. To express our appreciation, if you allow your players to participate in this study, we will provide you with a summary report of the 'key' findings, if you indicate an interest in these.

Thank you very much for taking the time to consider this proposition. One of us will contact you over the next few days by telephone, to discuss this in more detail. In the meantime, if you have any questions, please do not hesitate to contact one of us.

Yours Sincerely,

Miss Comille Bandura Dr. Maria Kavussanu Mr. Oliver Thorpe

Miss Charlotte Crisp Mr. Thomas Rosser Mr. Daniel Wells

Mr. Luke Davis

Player Information Sheet and Consent Form-Studies 3 and 4

University of Birmingham

School of Sport, Exercise & Rehabilitation Sciences
Edgbaston, Birmingham
B15 2TT

Dear Athlete

The following questionnaire is part of a study conducted by the School of Sport, Exercise, & Rehabilitation Sciences at the University of Birmingham. The purpose of the study is to examine the role of coaching style on athletes' performance, cohesion, enjoyment and commitment. We would like to invite you to participate in this study by completing the attached questionnaire, which will take approximately 10-15 minutes to complete. You will also be asked to complete the same questionnaire at middle and end of the season.

For this questionnaire to be useful, it is **very important that you answer all questions honestly**. Please note that all information will be kept **strictly confidential** and will only be used for research purposes. Data will be securely held in a locked cabinet at the university for 10 years. Participation in this study is **voluntary** and you are free to withdraw before March 30th, 2017 via contacting the lead investigator Dr. Maria Kavussanu. If you have any questions, we will be happy to answer them. Thank you very much for your time.

Sincerely,

Miss Comille Bandura
Tel: 079…….

Dr. Maria Kavussanu
Tel. 0121 …….

Mr. Oliver Thorpe

Miss Charlotte Crisp

Mr. Thomas Rosser

Mr. Daniel Wells

Mr. Luke Davis

Statement of Consent
I have read the Information Sheet. I am willing to undergo the investigation but understand that I am free to withdraw at any time without having to give an explanation. Signature_____ Date _____

Appendix 3 – Study 3 Questionnaires

Appendix 3a: Demographics questionnaire items

Date:	1. Date of Birth:
2. Gender: Male □ Female □	3. Age: _____
4. Your sport: _____	5. Number of years playing this sport: ____
6. Length of time playing for <u>this university</u> including this season: 1 season □ 2 seasons □ 3 seasons □ 4 seasons □	
7. Length of time training with <u>the coach you have **most** contact with</u> including this season: 1 season □ 2 seasons □ 3 seasons □ 4 seasons □	
8. Coach gender: Male □ Female □	
9. Please indicate for which team you play: 1st □ 2nd □ 3rd □ 4th □	

Appendix 3b-Adapted Authentic Leadership Questionnaire (Walumbwa et al., 2008)

*Below are some statements about your coach. Please indicate how often each of these statements **fits your coach's coaching style** by circling the relevant number*

My coach…	**Not at all**	**Once in a while**	**Some times**	**Fairly often**	**Frequently if not always**
1. Says exactly what he or she means	1	2	3	4	5
2. Admits mistakes when they are made	1	2	3	4	5
3. Encourages everyone to speak their mind	1	2	3	4	5
4. Tells you the hard truth	1	2	3	4	5
5. Displays emotions exactly in line with feelings	1	2	3	4	5
6. Demonstrates beliefs that are consistent with actions	1	2	3	4	5
7. Makes decisions based on his or her core values	1	2	3	4	5
8. Asks you to take positions that support your core values	1	2	3	4	5
9. Makes difficult decisions based on high standards of ethical conduct	1	2	3	4	5
10. Solicits views that challenge his or her deeply held positions	1	2	3	4	5
11. Analyses relevant data before coming to a decision	1	2	3	4	5
12. Listens carefully to different points of view before coming to conclusions	1	2	3	4	5
13. Seeks feedback to improve interactions with players	1	2	3	4	5
14. Accurately describes how others view his or her capabilities	1	2	3	4	5
15. Knows when it is time to re-evaluate his or her position on important issues	1	2	3	4	5
16. Shows he or she understands how specific actions impact players	1	2	3	4	5

Appendix 3c- The Trust in Leader questionnaire (McAllister, 1995; Dirks, 2000)

*Please think about your experiences **with your coach** and indicate your level of agreement with the following statements. Please respond **honestly.***

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
1. I trust and respect my coach	1	2	3	4	5	6	7
2. I can talk freely to my coach about difficulties I am having on the team and know that he/she will want to listen	1	2	3	4	5	6	7
3. If I shared my problems with my coach, he/she would respond constructively and caringly	1	2	3	4	5	6	7
4. I can freely share my ideas, feelings and hopes with my coach	1	2	3	4	5	6	7
5. I would feel a sense of loss if my coach left	1	2	3	4	5	6	7
6. My coach approaches his/her job with professionalism and dedication	1	2	3	4	5	6	7
7. Given my coach's past performance, I see no reason to doubt his/her competence	1	2	3	4	5	6	7
8. I can rely on my coach not to make my job (as a player) more difficult because of poor coaching	1	2	3	4	5	6	7
9. Other players consider my coach to be trustworthy	1	2	3	4	5	6	7

Appendix 3d- Basic Needs Satisfaction in Sport Scale (BNSS; Ng, Lonsdale, & Hodge, 2011)

*Below are some sentences that describe **personal feelings or experiences** you might have about **your sport**. Please circle the number that indicates how true each of the phrases is. Please respond **honestly**.*

	Not at all true			Somewhat true			Very true
1. I feel that I am being forced to do things that I don't want to do	1	2	3	4	5	6	7
2. I have a say in how things are done	1	2	3	4	5	6	7
3. I get opportunities to make decisions	1	2	3	4	5	6	7
4. I participate willingly	1	2	3	4	5	6	7
5. I feel I am pursuing goals that are my own	1	2	3	4	5	6	7
6. I really have a sense of wanting to be there	1	2	3	4	5	6	7
7. I feel I am doing what I want to be doing	1	2	3	4	5	6	7
8. I can take part in the decision-making process	1	2	3	4	5	6	7
9. I get opportunities to make choices	1	2	3	4	5	6	7
10. I choose to participate in my sport according to my own free will	1	2	3	4	5	6	7

Appendix 3e- Sport Commitment Model (Scanlan, Carpenter, Schmidt, Simons & Keeler, 1993)

*Please think about your experiences **playing your sport** and **circle** the **number** that **best answers** the following questions.*

1. Do you enjoy playing your sport?				
1 not at all	2	3 Somewhat	4	5 very much
2. Are you happy playing your sport?				
1 not at all	2	3 Somewhat	4	5 very much
3. Do you have fun playing your sport?				
1 not at all	2	3 Somewhat	4	5 very much
4. Do you like playing your sport?				
1 not at all	2	3 Somewhat	4	5 very much

Please circle the number that best answers the following questions.

1. How dedicated are you to continue playing your sport?					
1 not at all dedicated	2 a little dedicated	3 sort of dedicated	4 dedicated	5 very dedicated	
2. How hard would it be for you to quit playing your sport?					
1 not at all hard	2 a little hard	3 sort of hard	4 hard	5 very hard	
3. How determined are you to keep playing your sport?					
1 not at all determined	2 a little determined	3 sort of determined	4 determined	5 very determined	
4. What would you be willing to do to keep playing your sport?					
1 nothing at all	2 a few things	3 some things	4 many things	5 a lot of things	

Appendix 4 – Study 4 Questionnaires

Appendix 4a: Demographics questionnaire items

Date**:**	1. Date of Birth:
2. Gender: Male □ Female □	3. Age: _____
4. Your sport: _____	5. Number of years playing this sport: ____
6. Length of time playing for <u>this team</u> including this season: 1 season □ 2 seasons □ 3 seasons □ 4 seasons □	
7. Length of time training with <u>the coach you have **most** contact</u> with including this season: 1 season □ 2 seasons □ 3 seasons □ 4 seasons □	
8. Coach gender: Male □ Female □	
9. Please indicate for which team you play: 1st □ 2nd □ 3rd □ 4th □	

Appendix 4b-Adapted Authentic Leadership Questionnaire (Walumbwa et al., 2008)

*Below are some statements about your coach. Please indicate how often each of these statements **fits your coach's coaching style** by circling the relevant number*

My coach…	**Not at all**	**Once in a while**	**Some times**	**Fairly often**	**Frequently if not always**
1. Says exactly what he or she means	1	2	3	4	5
2. Admits mistakes when they are made	1	2	3	4	5
3. Encourages everyone to speak their mind	1	2	3	4	5
4. Tells you the hard truth	1	2	3	4	5
5. Displays emotions exactly in line with feelings	1	2	3	4	5
6. Demonstrates beliefs that are consistent with actions	1	2	3	4	5
7. Makes decisions based on his or her core values	1	2	3	4	5
8. Asks you to take positions that support your core values	1	2	3	4	5
9. Makes difficult decisions based on high standards of ethical conduct	1	2	3	4	5
10. Solicits views that challenge his or her deeply held positions	1	2	3	4	5
11. Analyses relevant data before coming to a decision	1	2	3	4	5
12. Listens carefully to different points of view before coming to conclusions	1	2	3	4	5
13. Seeks feedback to improve interactions with players	1	2	3	4	5
14. Accurately describes how others view his or her capabilities	1	2	3	4	5
15. Knows when it is time to re-evaluate his or her position on important issues	1	2	3	4	5
16. Shows he or she understands how specific actions impact players	1	2	3	4	5

Appendix 4c- The Trust in Leader questionnaire (McAllister, 1995; Dirks, 2000)

*Please think about your experiences **with your coach** and indicate your level of agreement with the following statements. Please respond **honestly***

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
1. I trust and respect my coach	1	2	3	4	5	6	7
2. I can talk freely to my coach about difficulties I am having on the team and know that he/she will want to listen	1	2	3	4	5	6	7
3. If I shared my problems with my coach, he/she would respond constructively and caringly	1	2	3	4	5	6	7
4. I can freely share my ideas, feelings and hopes with my coach	1	2	3	4	5	6	7
5. I would feel a sense of loss if my coach left	1	2	3	4	5	6	7
6. My coach approaches his/her job with professionalism and dedication	1	2	3	4	5	6	7
7. Given my coach's past performance, I see no reason to doubt his/her competence	1	2	3	4	5	6	7
8. I can rely on my coach not to make my job (as a player) more difficult because of poor coaching	1	2	3	4	5	6	7
9. Other players consider my coach to be trustworthy	1	2	3	4	5	6	7

Appendix 4d- Group Sacrifice Scale (GSS; Prapavessis & Carron, 1997)

Please respond to each of the following statements and indicate the degree to which you agree with each statement is by circling the appropriate number. Please respond ***honestly.***

	My teammates are willing….	**Strongly disagree**								**Strongly agree**
1.	To carry out responsibilities they don't like for the good of the team	1	2	3	4	5	6	7	8	9
2.	To carry out responsibilities they are not competent at for the good of the team	1	2	3	4	5	6	7	8	9
3.	To adopt a style of play not suited to their talents for the good of the team	1	2	3	4	5	6	7	8	9
4.	To accept playing less when they are not performing to the best of their abilities for the good of the team	1	2	3	4	5	6	7	8	9
5.	To put aside their own personal goals if they conflict with the team's goal.	1	2	3	4	5	6	7	8	9
6.	To play with injury, if necessary, for the good of the team	1	2	3	4	5	6	7	8	9
7.	**NOT** to challenge an umpire's decision for the good of the team	1	2	3	4	5	6	7	8	9
8.	**NOT** to engage in verbal conflict with their opponents for the good of the team.	1	2	3	4	5	6	7	8	9

Appendix 4e- Group Environment Questionnaire (Eys, Carron, Bray, & Brawley, 2007)

*The following statements are designed to assess your perceptions of **your team as a whole.** Please circle the number that best indicates your level of agreement with each of the statements.*

	Strongly disagree						Strongly agree
1. I'm happy with the amount of playing time I get	1	2	3	4	5	6	7
2. I'm happy with my team's level of desire to win	1	2	3	4	5	6	7
3. This team gives me enough opportunities to improve my personal performance.	1	2	3	4	5	6	7
4. I like the style of play on this team	1	2	3	4	5	6	7
5. Our team is united in trying to reach its performance goals	1	2	3	4	5	6	7
6. We all take responsibility for any loss or poor performance by our team	1	2	3	4	5	6	7
7. Our team members have consistent aspirations for the team's performance	1	2	3	4	5	6	7
8. If members of our team have problems in practice, everyone wants to help them, so we can get back together again	1	2	3	4	5	6	7
9. Our team members communicate freely about each athlete's responsibility during competition and practice	1	2	3	4	5	6	7

Appendix 5- Example of Transcribed Interview for Study 1

Interview Date: 02/07/2014 **Time: 16:40** **Location:XXXX**

Can you tell me how you got into coaching?

[redacted]

CB: What level coach are you at the moment?

[redacted]

CB: How long have you had that for?

[redacted]

CB: And how long did you have your Level 3 for?

[redacted]

CB: Impressive! If you don't mind me asking, how old are you?

[redacted]

CB: Even more impressive! How would you describe yourself as a coach?

[redacted]

CB: What age groups are you coaching?

[redacted]

CB: And why is that?

[redacted]

CB: Is that your preference – the order of each group?

[redacted]

CB: And what does effective coaching mean to you?

[redacted]

CB: And how do you ensure that they learn?

[redacted]

CB: You mention setting them up to fail sometimes – have you ever faced a situation where that hasn't gone the way you wanted?

[redacted]

CB: You've spoken about the two different contexts. Do you find yourself coaching differently when you're coaching attacking phases of play and defensive phases of play?

[redacted]

CB: How? What are those differences?

[redacted]

CB: How would you define success?

[redacted]

CB: Yes, as a coach.

[redacted]

CB: What do you mean by not the nicest football?

[redacted]

[redacted]

CB: At what point, do you think?

[redacted]

CB: If you had an under 15s player watching that game, and you were basically saying that's acceptable at that level, and they then did that in the training session, in the next game, and their justification was "Well we watched it at that first team game"…?

[redacted]

CB: But surely that's something we should be teaching, even at academy level?

[redacted]

CB: Within coaching you said you think personally it should be introduced at that level. Do you consciously tell your players about some of these things that do happen in the real game?

[redacted]

CB: What expectations, if any, do you have of your players?

[redacted]

CB: How do you communicate those expectations?

[redacted]

CB: Can you describe how you gain respect from your players? There obviously is an element of respect.

[redacted]

CB: You've mentioned environment a few times. What is that environment that you want to create for you yourself, personally?

[redacted]

CB: What does trust between a player and a coach mean to you?

[redacted]

[redacted]

CB: Have you ever been in a situation where you haven't been honest with a player?

[redacted]

CB: Similarly, have you ever been in a situation where you don't trust your players?

[redacted]

CB: As a group.

[redacted]

CB: How do you deal with conflict within a team?

[redacted]

CB: If it's fighting …

[redacted]

CB: And why do you just let them get on with it?

[redacted]

CB: Why would that be controversial?

[redacted]

CB: Going back a bit, you spoke about honesty – can you provide me with an example or describe a situation where you have had to be brutally honest with a player?

[redacted]

CB: Do you think your own previous learning and experiences kind of helped within your coaching, you to identify with your players more than other coaches?

[redacted]

CB: Just touching on that, in your view, what are the characteristics of a good leader, as the coach?

[redacted]

CB: You spoke about evaluating your coaching. How do you evaluate your coaching?

[redacted]

[redacted]

CB: Can you describe a situation where players didn't respond to your coaching methods?

[redacted]

CB: How did that make you feel?

[redacted]

CB: Did you manage to figure it out?

[redacted]

CB: Within yourself, did you see differences between each time on the pitch?

[redacted]

CB: Was that as a result of you evaluating what had previously happened?

[redacted]

CB: Can you describe a situation where your actions might be described as being unprofessional?

[redacted]

[redacted]

CB: Why?

[redacted]

CB: Are you more open with the older age groups?

[redacted]

CB: Are you conscious of some of the emotions that you display at all?

[redacted]

CB: Is that how you are ordinarily?

[redacted]

CB: We spoke about evaluating. How do you identify the weaknesses in your coaching?

[redacted]

CB: And what are your weaknesses?

[redacted]

[redacted]

CB: Just focusing on that command style, would you say that's part of your characteristic?

[redacted]

CB: So why would you want to change it?

[redacted]

CB: Have you had players criticise you for that command style you've got?

[redacted]

CB: Would you want them to tell you negatives?

[redacted]

CB: Do you think changing your style might allow them to challenge you?

[redacted]

CB: To summarise, how aware are you about your players feel about you and how you act?

[redacted]

[redacted]

CB: At the beginning of the interview you said something about the club's philosophy. You obviously have your own personal philosophies, so what is your own personal philosophy?

[redacted]

CB: You obviously have some sort of belief system with regards to how you play football, so what are your moral beliefs when it comes to coaching?

[redacted]

CB: Well, you are talking about the untidy football if you like. Yesterday Jordan asked me what my beliefs were and I said that, as a coach, I believe you need to be aggressive. But outside of being a coach, I am not an aggressive person. But the environment I am in when I am coaching – I want my players to be aggressive.

[redacted]

CB: I spoke about the two different contexts that I have. Do you find yourself having a coaching moral, if you like, as opposed to in other aspects of your life?

[redacted]

[redacted]

CB: Can you describe a situation where you may have acted against your morals? So where you say you are quite a competitive person, have you ever thought: "I will go extreme"? Have you ever encouraged your players to cheat for example?

[redacted]

CB: Would you do that again?

[redacted]

CB: You provided me a brief example of finding ways to beat them, can you give any other examples of where you think that would be acceptable?

[redacted]

CB: Yes.

[redacted]

CB: Would you encourage your players to do it if you were to win a game that way, so to speak?

[redacted]

CB: And if you saw it happening…?

[redacted]

CB: How do you deal with players that do that?

[redacted]

[redacted]

CB: Would you find situations where that sort of behaviour would be acceptable?

[redacted]

CB: What are your thoughts on gamesmanship?

[redacted]

CB: How do you do that?

[redacted]

CB: Where would you then draw the line then XXXX?

[redacted]

CB: **And if they're comfortable with cheating?**

[redacted]

CB: **So it's things that would change the outcome of the game?**

[redacted]

CB: **That brings us to the end of the interview, is there anything else you'd like to add about your experiences as a coach?**

[redacted]

CB: **Any questions for me?**

[redacted]