Athlete Leadership in Sport Teams: Current Understanding and Future Directions

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Abstract

Leadership is a fundamental aspect of sports performance, particularly within team sport environments. Over the past 25 years there has been significant research exploring the role of the coach/manager in this regard. However, this only represents one aspect of leadership within the sporting domain. Equally important, although far less examined is the concept of athlete leadership.

The role of athlete leaders, both formal (e.g., the captain) and informal (such as motivators and cultural architects) can have a significant impact upon a range of team related factors including satisfaction, cohesion and team dynamics. However, the mechanisms through which this impact occurs are less well understood. Also, while the development of leadership skills has been proposed as an important aspect of coach development programmes there is very little consensus regarding the approaches that should be adopted in developing athlete leaders and their associated leadership skills.

This paper will review the existing literature relating to athlete leadership seeking to provide clarity regarding current understanding. Building upon this base the paper will then highlight future areas for research and theoretical development.

Keywords: athlete leadership, captaincy, leadership, team psychology

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Leadership is a fundamental aspect of sports performance, particularly within team sport environments. Leadership, by its very nature is applicable across a wide range of domains and contexts. This has, in turn, led to a broad spectrum of leadership definitions. For example, Barrow (1977, p. 232) defined leadership as "the behavioural process of influencing individuals and groups toward set goals", whereas Gray (2004, p. 76) adopted a slightly different approach suggesting that leadership is "knowing what should be done, and influencing others to cooperate in doing it." Athlete leadership has been defined more specifically as "an athlete, occupying a formal or informal role within a team, who influences a group of team members to achieve a common goal" (Loughead, Hardy, & Eys, 2006, p.144).

In relation to sports leadership, the majority of research over the past 25 years has focused on the roles and impact of both the coach and manager on the team (Cotterill, 2012). The role of athlete leaders, whilst no less important, has received far less attention (Fransen, Vanbeselaere, De Cuyper, Vande Broek, & Boen, 2014). Unfortunately, given the influence athlete leaders can exert upon the team and its processes this suggests a gap in current understanding.

Indeed, athlete leaders have been shown to positively influence team cohesion, athlete satisfaction, team identification, team confidence and the motivational climate within the team (e.g., Crozier, Loughead, & Munroe-Chandler, 2013; Fransen, Coffee, et al., 2014; Fransen, Haslam, et al., 2015; Fransen, Vanbeselaere, De Cuyper, Vande Broek, & Boen, 2015a; Fransen et al., 2012; Glenn, Horn, Campbell, & Burton, 2003; Price & Weiss, 2011, 2013; Vincer & Loughead, 2010; Watson, Chemers, & Preiser, 2001). In contrast, when athlete leaders do not fulfil their leadership role positively, their behaviour might have detrimental

consequences for the team confidence and performance of the team (Apitzsch, 2009; Fransen, Haslam, et al., 2015; Fransen, Steffens, et al., 2015).

This paper will review the existing literature relating to athlete leadership and seek to highlight future areas for research and theoretical development. In particular the paper will explore the different leadership roles that athletes can fulfill and the difference between formal and informal leaders. Furthermore, the present paper provides a deeper insight in the leadership structures in team sports, the assessment of athlete leadership and the leadership development of athlete leaders. Finally, based on the review of the current literature, we will outline the gaps in current knowledge and provide future directions for research.

Role-Specific Athlete Leadership Categorization

There are a number of ways in which athlete leadership can be categorized, one of which is to distinguish between the different roles that athlete leaders can occupy. The original evidence of role differentiation dates back to the mid 1950's (Bales & Slater, 1955; Slater, 1955). Two types of athlete leaders have been distinguished in work groups according to their function: (1) leaders with an *instrumental* function are focused on the accomplishments of the group tasks, while (2) leaders with an *expressive* function are concerned with interpersonal relationships. Bales and Slater (1955) argued for mutual exclusivity by demonstrating that team members fulfilling the role of instrumental leaders (i.e., scoring the highest on contributing ideas) were different from the team members fulfilling the role of expressive leader (i.e., being liked by teammates).

In the 1970s, a critical review on the role differentiation theory forced researchers to adopt a different research view (Lewis, 1972). This critique did not question the validity of the distinction between instrumental and expressive leadership functions. Rather, the argument was that these functions are not incompatible and oftentimes integrated. Consequently, a single person could fulfil both instrumental and expressive leadership

functions. Rees and Segal (1984) confirmed these critiques in sport teams and revealed a relatively high degree of leadership role integration, with athlete leaders fulfilling both instrumental and expressive leadership roles. Besides these 'multifunctional' leaders, some of the athlete leaders also tended to be specialized in either task or social roles.

Although the role differentiation theory has existed for a long time, only a few researchers have integrated the different roles into their athlete leadership research. Loughead et al. (2006) extended the athlete leadership categorization by the inclusion of a third external leadership role. This external leader represents the team's interests in communication with the external team environment (e.g., club management, media and sponsors). Fransen, Vanbeselaere et al. (2014) further built on this classification and developed a four-fold athlete leadership categorization, including two leadership roles on the field, namely the task leader (who provides tactical instructions to his/her teammates) and the motivational leader (who is the greatest motivator on the field); and two leadership roles off the field, namely the social leader (who cares for a good team atmosphere outside the field) and the external leader (who handles the communication with club management, media and sponsors). The detailed definitions of these four leadership roles are presented in Table 1. The study conducted by Fransen, Vanbeselaere et al. (2014) emphasized the relevance of this leadership classification by demonstrating that an effective fulfilment of the four leadership roles resulted in higher team confidence, stronger team identification and a better team ranking. Furthermore, the validity of the fourfold leadership categorization was further established when taking into account not only the best athlete leader, but the complete leadership structure in the team (Fransen, Van Puyenbroeck, et al., 2015b).

In contrast to previous findings (e.g., Rees & Segal, 1984), Fransen, Vanbeselaere et al. (2014) pointed to a high degree of leadership role differentiation when examining 4,451 players and coaches in nine different team sports: in only 2% of the teams, the same athlete

fulfilled the four leadership functions. In other words, in most teams, different athletes within the team occupied the various leadership roles. That role differentiation is a positive factor for the team's functioning became apparent in the study findings, which demonstrated that the number of different leaders in the team was positively correlated with team confidence, team identification and a higher place on the team ranking. In other words, teams in which the four leadership roles were occupied by different athletes in the team were characterized by a more optimal team functioning. Moreover, the positive effects of this role differentiation also apply within a specific leadership roles. In this regard, it was found for each of the four different leadership roles that the more leaders are identified within a specific leadership role, the higher the team's task and social cohesion (Fransen, 2014). These preliminary findings seem to suggest: the more leaders within a team, the better. However, it should be noted that in a particular leadership role, maximum three athletes were perceived as leaders.

Indeed, if we were all determined to play the first violin, we should never have an ensemble. In other words, there is no effective leadership without followers. While for some leadership roles a limited number of leaders may be more beneficial (e.g., when different task leaders communicate different tactical instructions, confusion may arise), for other leadership roles 'the more, the better' may apply (e.g., a lot of motivational leaders could be very helpful in tough situations). While there is some research exploring the ideal number of leader for each leadership role (e.g. Eys, Loughead, & Hardy, 2007) it is an area that would benefit from further investigation in the future.

Formal versus Informal Leadership

A second approach adopted in the literature to categorize athlete leadership is to explore the formal versus informal nature of the role (Carron & Eys, 2012). Whereas formal leadership roles are those that are prescribed or awarded (e.g., captains and vice-captains); informal roles are those that emerge within the team as a result of interactions between

teammates and the demands of the task (Cotterill, 2012). These informal leaders often act as the 'cultural architects' for the team. In general terms cultural architects are leaders who possess the ability to change the mindset of others (Railo, 1986). Informal leaders have been highlighted to both help and hinder the work of the formal leaders (Cotterill & Cheetham, 2015). One example of this relates to decision-making, the informal leaders can either support or undermine (disagree with) the decisions that are taken by the formal leader. The actions of these informal leaders can in turn impact upon the perceptions of the rest of the team and can further strengthen a shared vision or in turn spread discord in the team.

Previous literature mainly focused on the formal leaders of the team, thereby highlighting two main responsibilities (Cotterill, 2012): (1) to ensure that the needs and aspirations of team members are fulfilled; and (2) to ensure that the demands of the organization or club are satisfied and that the team is effective in terms of their goals and objectives. The specific role of the captain can however vary significantly from sport to sport, and across levels of performance (Cotterill, 2015). In some teams for example, in which team tactics are determined by the coach or manager, the captain might be only a formal leader on the pitch but a role model off the field. In other teams (e.g., the sport of cricket), the captains have greater responsibilities and make the majority of decisions on the pitch (Cotterill, 2015).

Loughead et al. (2006) demonstrated that the majority of task, social and external leaders occupied a formal leadership function. Although captains are perceived as being an important source of leadership within the team (Kozub & Pease, 2001; Loughead & Hardy, 2005), in many cases this is not necessarily true. There has been an increased focus in recent years on the importance of informal leaders, who can have significant authority and power within a group.

In a qualitative study, for example, the majority of athletes pointed out that not only the team captains, but also other teammates provided peer leadership to their teams

(Loughead & Hardy, 2005). Fransen, Vanbeselaere, et al. (2014) further emphasized the importance of these informal leaders by conducting a study with 4451 participants across nine different team sports, in which they demonstrated that only 1% of the participants indicated that their team captain was the best leader on all four leadership roles (i.e., task, motivational, social and external role). In 44% of the teams, the team captain was not perceived as best leader on any of the four leadership roles, neither on the field, nor off the field. In most teams the informal leaders, rather than the captain, were thus perceived as best leaders, both on and off the field.

More recently, a study using a network approach to leadership tempered these findings by demonstrating that leadership is shared within sport teams. More specifically, it was shown that only in half of the teams the team captain was perceived as best leader in general. In the other half of the teams, the informal leaders, rather than the team captain, were perceived as the real leaders (Fransen, Van Puyenbroeck, et al., 2015b). With regard to the specific leadership roles, the study findings demonstrated that in the majority of the teams, the captains were perceived as best task and external leader. However, on the motivational and the social leadership role mainly informal leaders were perceived as the best leaders.

We can conclude that leadership is shared within the team: the coach, the team captain and the informal athlete leaders are together taking the lead on the different leadership roles. These findings thus propose a radical shift from the traditional vertical view on leadership (in which the coach is viewed as the primary leader in the team) to the idea of shared leadership (in which the coach, together with the team captain and the informal leaders take the lead). In this article, we will outline how future research can further build on this idea of shared leadership by also taking informal leadership into account, rather than only focusing on the team captain. Before doing so, we will first look at the attributes and behaviours of athlete leaders: what is it that differentiates a true leader from the other players in the team?

Leadership Attributes and Behaviours

When looking at the factors that differentiate the leaders from their followers, we can distinguish between leadership traits (i.e. personality traits that are considered to be stable over time), leadership attributes (i.e. characteristics that may change over time) and leadership behaviours. With regard to leadership traits, athlete leaders have been characterized by higher levels of dominance, ambition, competitiveness and responsibility (Klonsky, 1991). In addition, Glenn and Horn (1993) revealed that competitive trait anxiety and masculinity were also characteristic traits for athlete leaders. Finally, Moran and Weiss (2006) further extended the list of characteristic leadership traits with instrumentality traits (i.e., independent, energetic, competitive, make decisions easily, never gives up, feel superior, self-confident and stands up well under pressure) and expressiveness traits (i.e., emotional, able to devote self completely to others, gentle, helpful to others, kind, understanding of others, aware of feelings of others and warm in relations with others).

In their search for characteristic leadership attributes, most research focused on age (Bucci, Bloom, Loughead, & Caron, 2012) and team tenure (Loughead et al., 2006; Rees & Segal, 1984; Tropp & Landers, 1979; Yukelson, Weinberg, Richardson, & Jackson, 1983). The research findings consistently revealed that older players who have been playing in the team for a longer period have a greater chance to be perceived as an athlete leader. Also, the level of experience and the player's popularity in the team have been cited as influencing the leadership status of a player and his/her impact on the team (Kim, 1992; Weese & Nicholls, 1986). Moreover, leaders are often selected based upon their skill level, starting status or sport-specific experience (Gill & Perry, 1979; Glenn & Horn, 1993; Loughead et al., 2006; Moran & Weiss, 2006; Price & Weiss, 2011; Yukelson et al., 1983). Furthermore, leaders are often characterized by a more central playing position than their teammates (Glenn & Horn, 1993; Klonsky, 1991; Lee, Patridge, & Coburn, 1983). This last point is well illustrated in a

study conducted by Melnick and Loy (1996) exploring the recruitment of captains in New Zealand rugby union teams. The results highlighted that the majority of team captains played in central positions (e.g., number eight and half-back).

One could wonder however if selecting the captain based on performance levels or playing position is the good choice. Fransen, Van Puyenbroeck, et al. (2015a) examined the quality of the provided athlete leadership, and more specifically to the extent to which teammates perceive their leader as a high-quality leader on the different leadership roles (i.e., task, motivational, social and external leader). Their findings demonstrated that neither playing time, nor age, team tenure or sport experience were the most important determinants of a player's leadership quality. Instead, it was the extent to which teammates felt closely connected to their leader that was most decisive in determining a players' leadership quality, not only with regard to leadership in general, but also for task, motivational, social and external leadership quality. It should be noted that this study was cross-sectional in nature, as a result of which the direction of this relation could also flow in the opposite way (i.e. leadership quality influencing athletes' perceptions of closeness to that leader). However, also Moran and Weiss (2006) pointed at the importance of friendship quality as predictor of athlete leadership skills, when interviewing soccer players and their coaches. More specifically, their findings revealed that, although coaches almost exclusively determined athlete leadership skills based upon playing ability, the players in the study highlighted the importance of a range of psychosocial variables including friendship quality, expressiveness, instrumentality and peer acceptance. Also other studies confirmed that a player's leadership status can be linked with teammates' ratings of interpersonal attraction and peer acceptance (Fransen, Vanbeselaere, De Cuyper, Vande Broek, & Boen, 2015b; Price & Weiss, 2011; Rees & Segal, 1984; Tropp & Landers, 1979). Wright and Cote (2003) corroborated these findings by

highlighting four important central characteristics in athlete leaders: high skill level, a strong work ethic, an advanced tactical knowledge and a good rapport with teammates.

Besides particular traits and attributes, leaders are also characterized by particular behaviours, which can range from task-related on-field behaviours over motivational on-field behaviours to social off-field behaviours. With respect to the task-related behaviours, effective communication skills, guiding group tasks and fostering goal attainment were established as key elements for leader effectiveness (Price & Weiss, 2011; Riggio, Riggio, Salinas, & Cole, 2003; Wright & Cote, 2003).

However, high-quality leaders go further than only preaching what to do and which tactical guidelines to follow; they walk the talk. By behaving like a role model and demonstrating a good work ethic, they set an example for their teammates (Bucci et al., 2012; Dupuis et al., 2006; Holmes et al., 2010). Moreover controlling their emotions and remaining positive during the game were established as key motivational leadership behaviours (Dupuis et al., 2006). A concrete example of this motivational behaviour is the expression of team confidence; an athlete leader who was confident in the team's abilities and its chances on success significantly impacted teammates' team confidence, their identification with the team and even their performance (Fransen, Haslam, et al., 2015; Fransen, Steffens, et al., 2015; Fransen, Vanbeselaere, et al., 2015a, 2015b; Fransen et al., 2012).

As previously discussed, the role of the leader is not restricted to his/her task on the field. Instead, research revealed also important social off-field behaviours that characterize a leader. Examples are being vocal and trustworthy, possessing good interpersonal skills, showing care and concern for others and facilitating relationships with teammates and discussions with the coaching staff (Dupuis, Bloom, & Loughead, 2006; Holmes, McNeil, & Adorna, 2010; Price & Weiss, 2011).

All these research findings provide useful information for leader selection (i.e., which traits are characteristic for high-quality leaders) and leader development (i.e., which attributes and behaviours can be taught). In addition, one of the latest trends in leadership research emphasizes the importance of leader's capacity to build a shared identity within the team (Rees, Haslam, Coffee, & Lavallee, 2015). The idea that social identity lays the platform for effective leadership is at the core of the Social Identity Approach to Leadership (Haslam, Reicher, & Platow, 2011). The Social Identity Approach asserts that the psychology and behaviour of team members is not only shaped by their capacity to think, feel and behave as individuals (in terms of their personal identity as 'I' and 'me'), but also, and often more importantly, as group members (in terms of their shared social identity as 'we' and 'us'). The recent application of this approach to leadership argues that leaders' effectiveness depends on the extent that leaders are able to create and manage a shared identity within a group. In other words, effective leaders are able to create a shared sense of 'we' and 'us' within the team. A quote from Drucker (1992, p. 14), a well-known researcher on leadership, nicely illustrates this leadership approach: "The leaders who work most effectively, it seems to me, never say 'I'. And that's not because they have trained themselves not to say 'I'. They don't think 'I'. They think 'team'."

Although the social identity approach to leadership originated in organizational settings, recent findings in sport settings also demonstrated that effective athlete leaders strengthen their teammates' identification with their team (Steffens et al., 2014). Moreover, both cross-sectional and experimental findings demonstrated that by creating a shared sense of 'us' within the team, athlete leaders strengthened their impact on teammates' team confidence and performance (Fransen, Coffee et al., 2014; Fransen, Haslam et al., 2015; Fransen, Steffens et al., 2015). The work of Steffens et al. (2014), in which an inventory has been created to assess this identity leadership, sheds more light on which leadership

behaviours are crucial to create a sense of 'us' within the team. We will provide more information on this questionnaire in the next section.

Benefits of effective Athlete Leadership in Sports Teams

Recent research exploring athlete leadership in sport has further highlighted the benefits of athlete leadership in teams by examining its relationship with a range of important team-related factors including: satisfaction and team dynamics (Aoyagi, Cox, & McGuire, 2008; Eys et al., 2007); its influence on task and social cohesion (Loughead, Fransen, Van Puyenbroeck, Hoffmann, & Boen, 2015); performance (Fletcher & Arnold, 2011); external perceptions of effective leadership (Schneider, Ehrhart, & Ehrhart, 2002; Todd & Kent, 2004); and links to the effectiveness of approaches to leadership within the team including transformational and transactional leadership (Price & Weiss, 2011; Rowold, 2006; Vidic & Burton, 2011; Zacharatos, Barling, & Kelloway, 2000).

We can conclude that effective athlete leadership is important as contemporary sources suggest that it has a positive effect on a range of factors including team confidence (Fransen, Coffee, et al., 2014; Fransen, Haslam, et al., 2015; Fransen, Steffens, et al., 2015), team resilience (Morgan, Fletcher, & Sarkar, 2013, 2015) and team functioning (Edmonds, Tenenbaum, Kamata, & Johnson, 2009). Furthermore, athlete leaders have been shown to ensure high standards and a strong work ethic, to help the team to handle adversity, to help to develop better team chemistry, to help the coach to better understand the team, to help to minimise and manage conflict, to help in recruiting players to the team and to offer the best insurance against indiscretion by teammates (Dupuis et al., 2006; Janssen, 2003).

Assessing Athlete Leadership

The typical characteristics and behaviours of athlete leaders have served as a means to construct scales and questionnaires to map athlete leadership quality. The first scale developed to assess athletes' leadership behaviours was the Player Leadership Scale (PLS;

Kozub, 1993). The PLS distinguished between instrumental or task leadership behaviours (e.g., helps to set goals for the team) and expressive or social leadership behaviours (e.g., helps to settle conflicts among team members). More recent research with interscholastic student athletes demonstrated that male student athletes generally perceived task leadership behaviours as significantly more important for athlete leaders than did female student athletes, who showed no favouritism between task and social leadership behaviours (Todd & Kent, 2004). For example, the leadership attribute 'being warm and friendly towards teammates' was rated as far more important by females than by males.

An often used measure to assess athlete leadership behaviour is the Leadership Scale for Sports (LSS; Chelladurai & Saleh, 1980), originally developed for coaches. The LSS includes five behaviours for effective leadership: (1) training and instruction; (2) democratic behaviour; (3) autocratic behaviour; (4) social support; and (5) positive feedback.

Loughead and Hardy (2005) used the LSS to compare the leadership behaviours of coaches and athlete leaders. Their findings revealed that coaches were perceived as exhibiting training and instruction and autocratic behaviours to a greater extent than athlete leaders, while athlete leaders exhibited more social support, positive feedback, and democratic behaviours than their coaches. However, Paradis and Loughead (2010) added that athlete leaders were perceived as most effective when providing training and instruction. Furthermore, formal athlete leaders were characterized by providing positive feedback, while informal leaders were characterized by democratic behaviour.

Another measure that has been used to assess athlete leadership behaviour is the Multifactor Leadership Questionnaire (MLQ; Bass & Avolio, 1995). The MLQ assesses a broad range of leadership styles from passive leadership, to transactional leadership (i.e., leaders who give contingent rewards to followers), to transformational leadership (i.e., leaders who transform their followers into becoming leaders themselves). Paradis and Loughead

(2010) revealed that individualized consideration (e.g., 'the leader differentiates among us') and inspirational motivation (e.g., 'the leader expresses confidence'), which are two dimensions of transformational leadership, were most decisive in determining the effectiveness of athlete leaders. Price and Weiss (2013) asked adolescent female soccer players to fill out the MLQ twice, once for their coach, and once for the teammate whom they perceived as the athlete leader. The results revealed that transformational leadership behaviours of both coaches and athlete leaders were positively related to perceived competence, intrinsic motivation, enjoyment, team cohesion and confidence. When both coach leadership and athlete leadership were examined together, it was demonstrated that athlete leadership behaviours were overshadowed by coach leadership behaviours when it comes to individual outcomes (i.e., perceived competence and enjoyment). However, with regard to team outcomes (i.e., task and social cohesion, collective efficacy), the transformational leadership behaviours of both coach and athlete leaders were important contributors.

As noted before, creating a sense of 'us' within the team is perceived as an essential leadership behaviour that facilitates effective leadership. Recently, a new measure has been developed to assess this leadership behaviour aimed to foster a shared identity within the team: the Identity Leadership Inventory (ILI; Steffens et al., 2014). The ILI distinguished between four dimensions of effective identity based leadership. First, leaders need to be *in-group prototypes* (i.e., represent the unique qualities that define the group and what it means to be a member of the group). Second, they need to be *in-group champions* (i.e., advance and promote the core interests of the group). Third, leaders need to be *entrepreneurs of identity* (i.e., bring people together by creating a shared sense of 'we' and 'us' within the group). Fourth and finally, leaders need to be *embedders of identity* (i.e., develop structures that facilitate and embed shared understanding, coordination and success). Moreover, the study of

Steffens et al. (2014) included 421 athletes of four different team sports who filled out the ILI in order to assess the identity based leadership of their team captain. Results revealed that the dimensions of identity prototypicality and identity entrepreneurship were most positively related to the perceived leadership quality of the team captain. The other dimensions of the captain's identity leadership behaviour were positively related to team confidence and task cohesion.

It should be noted though that most previous measures were originally developed for coaches or for organizational leaders and have afterwards been applied to measure athlete leadership behaviours. Two measures exist however that were originally developed for athlete leaders: a self-report measure and a teammate-rated measure. The self-report measure is named the Peer Sport Leadership Behaviour Inventory (PSLBI; Glenn, 2003), specifically aimed to assess athlete leadership behaviours. Price and Weiss (2011) updated the PSLBI based on a pilot study, which resulted in a 49-item scale, representing eight different leadership dimensions: motivation, character, creativity and intelligence, focus and commitment, problem-solving, compassion, responsibility and maturity and physical/technical skill. The study findings revealed that athletes who rated themselves higher on their athlete leadership behaviour also reported greater task and social cohesion and collective efficacy.

The teammate-rated measure is the Sport Leadership Behaviour Inventory (SLBI; Glenn & Horn, 1993), a 25-item measure, aimed to obtain teammates' ratings of athlete leadership behaviour for each member of the team except themselves. Glenn and Horn (1993) also validated a shortened 11-item version including the following leadership attributes: determined, positive, motivated, consistent, organized, responsible, skilled, confident, honest, leader and respected. Price and Weiss (2011) used the 11-item SLBI in their research and discovered a two-factor structure: (1) instrumental athlete leadership (i.e., confident,

consistent, skilled, determined, leader and respected); and (2) pro-social athlete leadership (i.e., honest, positive, organized and responsible). These findings demonstrated that athlete leaders who were perceived to engage more in instrumental leadership behaviours viewed themselves as more skilled, were more intrinsically motivated and felt accepted by their teammates. On the other hand, athlete leaders who demonstrated more pro-social leadership behaviours reported higher levels of perceived behavioural conduct (i.e., acting the way they know they are supposed to and avoiding things that get them in trouble).

The different questionnaires can be useful tools in identifying the leadership quality of athletes within the team. It should be noted though that the length of these questionnaires is often considerable and does solely allow self-report responses. However, team leadership is a socially constructed phenomenon and therefore highly dependent on the surrounding context. To identify the leadership structure in sport teams, it is therefore important to move beyond leaders' self-perceptions and take into account the leadership perceptions of all players in the team.

Identifying the Leadership Structure in Sport Teams

Many athlete leadership studies to date have focused on the team captain as the formal athlete leader of the team (e.g., Dupuis et al., 2006; Grandzol, Perlis, & Draina, 2010; Kent & Todd, 2004; Voelker, Gould, & Crawford, 2011). However, more recent studies have focused on the best athlete leaders, regardless of his/her formal leadership status (e.g., Fransen, Vanbeselaere, et al., 2014; Price & Weiss, 2013). It should be noted though that all these studies used a single leader as object of their investigation, thereby ignoring the remaining leadership structure in the team (e.g., the second or third best leader). Loughead et al. (2006) initially attempted to map the leadership structure in the whole team by asking participants to list the names of the team members who most strongly contributed to the team's task, social and external factors. Subsequently, 'team leaders' were classified as such if at least half of the

team members endorsed them as task, social or external leader. In addition, the authors classified athletes as 'peer leaders' if at least two team members endorsed these athletes as task, social or external leader.

Nevertheless, several limitations remain inherent to most athlete leadership research to date. First, the majority of research has been unable to capture the full leadership structure in the team, thereby encompassing not only the best leader on the different leadership roles, but also the leadership status of all other team members. A second shortcoming in the current literature is that most athlete leadership research has categorically distinguished between leaders and non-leaders. Because designating someone as a leader does not necessarily imply that the appointed leader also fulfils his/her leadership function well, information on the leadership quality remains concealed. For example, an athlete might designate a teammate as leader because of the dominance and authority this teammate conveys, which does not necessarily go hand in hand with high-quality athlete leadership. The lack of leadership *quality* perceptions in previous research is unfortunate given that in particular the quality with which a leadership role is fulfilled is decisive for the leader's effectiveness.

Recent studies by Fransen, Van Puyenbroeck, et al. (2015a; 2015b) addressed these two limitations by using Social Network Analysis (SNA) to construct leadership networks that capture the complete leadership structure in sport teams for each of the four leadership roles. SNA pictures groups in terms of networks, consisting of nodes (representing the individual actors) and ties (representing the relationships between the actors) (Wasserman & Faust, 1994). Over the past decade, SNA yielded explanations for social phenomena in a wide variety of areas, ranging from sociology and politics, over the use of social media and information sharing, to organizational research (Borgatti, Mehra, Brass, & Labianca, 2009). Only very recently, SNA has been used in organizational research to explain leadership phenomena.

Also in sport teams SNA constitutes the perfect method to investigate leadership networks because a sport team is a well-defined group of interdependent individuals, or in social network terms 'a full network' (Lusher, Robins, & Kremer, 2010). Despite these recommendations only a few studies have used this technique to provide more insight in the leadership structure of sport teams. For example, Lusher et al. (2010) constructed an influence network of an Australian football team by asking each of the players which teammate they considered as influential. The results revealed that most players rated the most skilled players in their team as influential. Unfortunately, the present networks were binary networks (relations represented by 0 '*not influential*' or 1 '*influential*'), thereby concealing information on the strength of these influence perceptions.

To address these limitations, researchers recently created valued leadership quality networks, in which the strength of the ties represents the perceived athlete leadership quality, ranging from 0 (*very poor leader*) to 4 (*very good leader*) (Fransen, Van Puyenbroeck, et al., 2015a; Fransen, Van Puyenbroeck, et al., 2015b; Loughead et al., 2015). Instead of focusing on the presence of athlete leaders, the present studies thus focused on the quality of athlete leaders. Furthermore, these studies did not only identify the network structure with regard to general leadership, but also with regard to task and motivational leadership on the field and social and external leadership off the field. Their results established the validity of the fourfold athlete leadership categorization and confirmed that leadership is spread throughout the team: different athletes occupy the four leadership roles (Fransen, Van Puyenbroeck, et al., 2015b).

SNA is in this regard a novel but promising tool to capture the full leadership structure in sport teams both on and off the field. As Fransen, Van Puyenbroeck, et al. (2015b) outlined, the analysis of the role-specific leadership networks for a specific team provides a sound diagnostic tool to identify the best athlete leaders on the different leadership roles. In

addition, SNA analyses provide insight in the existence of leadership cliques. For example, by using this technique, one can distinguish between the situation in which two athletes are perceived as high-quality task leaders by all other team members and the situation in which half of the team members perceives one athlete as the best task leader and the other half perceives another athlete as best task leader. Insight in the specific leadership structure thus clearly affects coaching practice, because especially in the latter situation, it might be important for the team effectiveness to formally appoint both leaders as task leaders.

Such a social network approach provides full insight in the leadership structure in a team, and provides more clarity on the importance of the formal versus informal leaders (Fransen, Van Puyenbroeck, et al., 2015b). Furthermore, the social network approach is ideally-suited to enhance on our knowledge on the specific leadership attributes (Fransen, Van Puyenbroeck, et al., 2015a). Finally, the approach allows for further examination of the antecedents and consequences of high-quality athlete leadership (e.g., Loughead et al., 2015).

Leadership Development in Athlete Leaders

The area of athlete leadership development in sport has until recently received very little attention within the literature. Indeed, there is a significant body of research that has explored the development of personal leadership skills through sport (Gould, Voelker, & Blanton, 2012; Martinek & Hellison, 2009), but much less that has explored the development of leadership knowledge, skills and behaviours in athletes (Voight, 2012). Blanton, Sturges and Gould (2014) developed a youth leadership club in which US high school athletes shared leadership principles. Gould and Voelker (2010) developed a captaincy development programme for high school captains adopting a workshop-based approach. This captaincy leadership development programme included a clinic (development group) and separate self-study team captain's guide. A core reflection on this programme by Gould and Voelker (2010) highlighted the importance in also developing a coach supervision programme

alongside the captain development programme. There are also a small number of examples in the literature of structured approaches to develop leadership skills in adult performance-focused athletes. Voight (2012), for example, implemented a 15-stage leadership development programme with two regional US volleyball teams. While the programme proved to be effective at this level, Voight recommended that future research should explore the delivery of similar intervention programmes at different levels (e.g., youth, recreational and professional levels). Finally, Cotterill (2015) developed a leadership development programme for elite (international) UK professional cricketers. The programme sought to develop athlete leadership at three specific levels: (1) captaincy development, (2) leadership skill development, and (3) personal growth and leadership development. These three levels had been earmarked as crucial in helping to develop leaders at an international level of performance. Reflections on the programme by the participants suggest that a formal development programme can be both beneficial and impactful in enhancing the leadership capabilities of elite players.

However, while the importance of both formal and informal leadership roles is acknowledged, there is very little evidence of structured development programmes being designed or applied in the literature. Indeed, in reviewing current practice at the collegiate level Voight (2012) summarised that much of the leadership training that team captains received consisted of either receiving a list of books or articles about leadership or a list of responsibilities that they must do without guidance or instruction. Therefore more research is required exploring both the development and application of applied leadership development programmes.

Although a useful starting point, these studies have almost exclusively focused on significantly different leadership development environments and have adopted very different approaches to leadership development. As a result, far more research exploring applied

intervention programmes is required. Indeed, it could be argued that a good starting point would be the development of a conceptual framework to underpin leadership development projects.

Gaps in Current Knowledge and Future Directions for Research

While there is an increasingly evidence base to underpin current understanding of athlete leadership and leadership development there still exists a number of gaps. First, future research on athlete leadership should further build on the idea of shared leadership by taking into account the informal athlete leaders, rather than only focusing on the team captain. When establishing leadership teams, the responsibilities are shared and the athletes' accountability is fostered. When a particular leader is not able to fulfil his leadership role well, other leaders can stand up, take the lead (Fransen & Vanbeselaere et al., 2014). Furthermore, leadership is not only important on the field. Also off the field, leaders can have a decisive impact on the team functioning (Cotterill, 2013). Ensuring that all four leadership roles are fulfilled (i.e. task and motivational leader on the field and social and external leader off the field) can help coaches in creating an optimal team environment (Fransen & Vanbeselaere et al., 2014). Furthermore, research investigating the role of the captain in this structure of shared leadership is sparse (Cotterill & Cheetham, 2015). There is little consideration of the specific role(s) of the captain, the skills, knowledge, behaviours and expertise required (Cotterill, 2013). Also, there has been little focused research exploring the challenges that athlete leaders face and the necessary on going developmental needs (Voight, 2012).

It is also important to emphasize that athlete leaders do not lead in a social vacuum, but instead are imbedded in a web of interpersonal relationships with their teammates and coach. Leadership is thus a socially constructed phenomenon, which is highly dependent on the surrounding context. As Ladkin (2010, p. 21) stated: "Trying to understand leadership without looking at the context is like trying to comprehend 'love' abstracted from the people

who feel and enact it. You may be able to capture a trace of it, but it is virtually impossible to really appreciate its full impact and significance as a detached observer."

Nevertheless, previous research has typically focused on individual self-perceptions when examining athlete leadership, thereby ignoring the surrounding team context. One of the few exceptions is the study by Price and Weiss (2011), in which participants were asked to assess the leadership behaviours of each of their teammates. Future research looking to further develop understanding in this area might look to build on the studies of Fransen, Van Puyenbroeck, et al. (2015a; 2015b), who adopted for the first time social network analysis to capture the full leadership structure in sport teams on the different leadership roles. Adopting this approach offer the researcher the opportunity to explore which leaders are perceived by their teammates as providing high-quality leadership.

Although most research to date has focused mainly on leadership analysis before or after the game, a more elaborate knowledge on how leaders impact their teammates during the game could mean a large knowledge gain in the field. Social network analysis is in this regard the perfect method to provide a deeper insight, not only in the leadership structure of the team, but also in the way that communication flows within the team. Specific SNA measures such as outdegree centrality, betweenness centrality and closeness centrality may reveal whether tactical/encouraging communication emanates from the leader and thereafter spreads throughout the team or whether leaders are important catalysers in strengthening and circulating these communication paths. For more information on these specific network measures, we refer to the work of Borgatti, Everett, and Johnson (2013). Similarly, future research could also map the way in which positive and negative emotions such as excitement, anger and anxiety flow throughout the team.

Also with respect to the attributes and characteristic behaviours of high-quality athlete leaders, SNA can be a useful tool to provide a deeper insight. More specifically, the

leadership quality of athletes in the team, as perceived by their teammates instead of through self-report (i.e. the indegree centrality in social network terms), can be linked with particular traits, attributes or behaviours. As a result, we can obtain a more profound insight in which factors really matter in selecting or developing athlete leaders.

Such research on the leadership attributes could provide more insight in the nature-nurture discussion with regard to athlete leadership, thereby trying to respond the everlasting question: are leaders born, or can they be made? In this regard, studies should include both pure personality traits (e.g., extraversion, optimism, dominance) and leadership behaviours in the same study to allow for a proper comparison between the relative importance of trait characteristics and leadership behaviours in determining the perceived leadership quality of an athlete. Such studies would also provide interesting insights with respect to talent identification (e.g., which characteristics are necessary to become a leader) and with respect to leadership development (e.g., which behaviours should be taught to athletes to become better leaders).

Finally, more research is required that explores the development of leadership skills in real world contexts, in particular evaluating the effectiveness of developmental intervention programmes. Programmes based in real sporting contexts, developed on a strong empirical foundation are important. The challenge is getting sports clubs and teams to ‘buy-in’ to the programme.

Conclusion

Athlete leadership is a crucial part of sport team functioning. As such a greater understanding of the concept has the potential to underpin significant gain in team functioning. It is important to recognise that leadership is shared within the team. Viewing the athlete leaders in isolation when looking at real performance domains is a mistake. A holistic understanding of leadership in the team environment that accounts for the manager, coaches,

formal and informal athlete leaders is important. Exploring team leadership at this level with provide a more realistic picture of the leadership needs, frameworks and roles at play.

An important gap in current understanding relates to the development of effective leaders across each of the roles in question, but in particular relating to athlete leadership roles. There are currently few studies that either propose, or deliver and evaluate intervention/development programmes. Further practice in developing the athlete leaders of the future needs to be built upon a strong empirical foundation. This however needs to be underpinned by the sharing of intervention case studies and other well-designed development plans. However, the challenge as in other domains of sport psychology is gaining access to the 'real' sporting domains to develop and deliver new approaches to leadership development. Particularly as to date there appears to be a lack of real structure and clarity to the development of athlete leaders in sport, or even at a basic level what the leadership roles are and what the knowledge, skills, and experience that are needs to be an effective athlete leader. Finally, there is also a need to explore whether the same in-team leadership needs are replicated across sport or whether the specific needs, and therefore required roles, vary according to the sport in question.

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