

The myth of the team captain as principal leader: Identifying leadership roles and characteristics of athlete leaders within sports teams.

**Abstract**

Although coaches and players recognize the importance of leaders within the team, research on athlete leadership is sparse. The present study expands knowledge of athlete leadership by refining the current classification and exploring the importance of the team captain. An on-line survey was completed by 4451 players and coaches within nine different team sports in Flanders (Belgium). The results revealed that the proposed additional role of motivational leader was perceived as clearly distinct from the already established roles (task, social, and external leader). Furthermore, almost half of the participants (44%) did not perceive their captain as the principal leader on any of the four roles. These findings underline that the leadership qualities attributed to the captain as the team's formal leader are overrated. It can be concluded that leadership is spread throughout the team; the informal leaders rather than the captain take the lead, both on and off the field.

*Keywords:* athlete leadership, peer leaders, informal leadership, team confidence, leadership classification

## **Introduction**

Leaders are everywhere. Newspaper headlines routinely illustrate the importance of effective leaders: a prime minister leading the country, a business director leading a company, or a coach leading a sports team. Based on a generic definition of leadership as ‘a process whereby an individual influences a group of individuals to achieve a common goal’ (Northouse, 2010, p. 3), leadership processes should be similar in different contexts and their success and effectiveness should rely on similar factors (Weinberg & McDermott, 2002). However, in contrast with the abundant literature on leadership in organizational settings, the literature on leadership in sports is sparse (Riener & Chelladurai, 1995). Moreover, most studies concentrated on the coach of a team (see Chelladurai, 1994; Chelladurai & Riener, 1998 for reviews) even though leadership needs not to be restricted to the coach; players within the team can also fulfill important leadership functions (Northouse, 2010).

### **Athlete leadership**

Athlete leaders influence team cohesion, athlete satisfaction, and team confidence (Fransen et al., 2012; Price & Weiss, 2011; Vincer & Loughhead, 2010). For example, when an athlete leader clearly expresses team confidence, this positively affects the team confidence of his/her<sup>1</sup> teammates. Coaches and players on the field confirm the importance of athlete leaders. For instance, Chuck Noll, former head coach of a professional American football team and winner of four Super Bowls, stated: “On every team there is a core group who sets the tone for everyone else. If the tone is positive, you have half the battle won. If it is negative, you are beaten before you even walk out on the field.” Although these findings stress the crucial role of athlete leaders, a considerable gap exists between the importance assigned to athlete leadership and the efforts made to understand it (Riener & Chelladurai, 1995). Therefore, in the present study our goals were to extend our knowledge of athlete

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<sup>1</sup> To enhance the clarity of the text the male gender pronoun will be used in the remaining text. However, the statements are applicable to both male and female players.

leadership by refining the current athlete leadership classification (first aim) and by exploring the importance of the team captain as formal leader of the team (second aim).

### **Classification of athlete leadership**

Using role differentiation theory (Bales, 1950) athlete leaders can be classified based on their function. Leaders with an instrumental function are concerned with tasks, whereas leaders with an expressive function are concerned with interpersonal relationships. These two functions are not mutually exclusive: athlete leaders can simultaneously engage in both task and social behaviors (Rees & Segal, 1984; Todd & Kent, 2004; Voelker, Gould, & Crawford, 2011). A third, recently identified function of athlete leaders is the external function by which the leader represents the group at meetings and media gatherings (Eys, Loughhead, & Hardy, 2007; Loughhead, Hardy, & Eys, 2006).

Although this threefold leadership classification (i.e., task leader, social leader, and external leader) already specifies various functions of athlete leaders, it may still not be comprehensive enough. More specifically, Loughhead and colleagues (2006) characterized a social leader by qualities such as ‘this leader ensures teammates are involved and included in team events’ and ‘this leader offers support and is trusted by teammates.’ These characteristics relate to the expressive function in the role differentiation theory, but only refer to the concern with the interpersonal relationships off the field, not on the field. We therefore propose that the current classification lacks a leadership role that embodies the on-field interpersonal relationships. This proposition is supported by the numerous coaches and players who emphasize the importance of motivating and cheering during the game. The motivational speeches of coaches, the encouragement of teammates on the field, and even the chanting and cheering of fans are all basic ingredients of every sports game. In accordance with these on-field experiences, several studies indicated that motivating and encouraging behaviors are crucial for effective athlete leadership (Dupuis, Bloom, & Loughhead, 2006;

Holmes, McNeil, & Adorna, 2010). Furthermore, a case study of an elite handball team suggested that the absence of a socio-emotional leader on the field can lead to a collective collapse and subsequent severe defeat (Apitzsch, 2009).

Despite these preliminary indications, the on-field motivating function has not yet been empirically established and has, therefore, not yet been incorporated into current leadership classifications. Consequently, the first aim of the present study was to explore the validity and relevance of a more comprehensive classification of athlete leadership by including a fourth role, namely the motivational leader on the field. We hypothesize that the four leadership roles (task, motivational, social, and external leader) will emerge as clearly distinct roles.

To gain more insight into these four leadership roles, we also explored the characteristics of these different athlete leaders. Starting from models on coach leadership (Vella, Oades, & Crowe, 2010), athlete leaders were studied with respect to (a) their personal characteristics (e.g., experience, competence), (b) their behaviors (e.g., communicating, encouraging), and (c) their impact on teammates (e.g., team confidence). The present study will then apply this coach model to formal as well as to informal athlete leaders. Furthermore, while past research focused on leaders' characteristics in general, the present study will evaluate the degree in which these characteristics are associated with each of the four leadership roles.

### **Formal versus informal leaders**

Another way to classify athlete leaders is based on the formal or informal character of their leadership function. A formal leader is a player who has been prescribed that function formally by the coach or by the team, e.g., the team captain who has been formally appointed to be captain of the team. An informal leader on the other hand has no formal leadership position but becomes a team leader informally, as a result of the interactions that occur within

the team. Previous studies acknowledge the existence of both formal (e.g., a team captain) and informal athlete leaders within sports teams (Holmes, et al., 2010; Loughhead, et al., 2006).

So far, most studies focused on the team captain (Dupuis, et al., 2006; Grandzol, Perlis, & Draina, 2010; Voelker, et al., 2011). The captain is often assigned as “the” leader of the team; he is expected (a) to act as a liaison between the coaching staff and the players, (b) to act as a leader during all team activities, and (c) to represent the team at receptions, meetings, and press conferences (Mosher, 1979). Furthermore, the captain engages in both task and social behaviors, such as coaching their teammates or providing social support (Voelker, et al., 2011). Coaches, players, and sports media all seem to assume that the team captain takes the lead both on and off the field. Although the captain received most research attention, some studies explored the impact of informal leadership as well (Loughhead, et al., 2006). These studies emphasized that, although athlete leaders often have the formal position of team captain, other players within the team also have an important role as informal leader (Loughhead, et al., 2006).

The second aim of the present study was to compare the importance of the team captain as formal leader of the team with the importance of the informal leaders. Therefore, similarities and differences between the captain and informal athlete leaders were compared regarding several characteristics. In addition, we examined how many leadership roles are perceived as being primarily fulfilled by the team captain. Based on previous research, we expect that the team captain is perceived as most important leader (i.e., fulfilling most leadership roles) but that other players on the team also act as informal leaders.

## **Method**

### **Procedure**

To contact coaches and players within nine different team sports in Flanders (Belgium), we cooperated with the Flemish Trainer School, the organizers of the sport-specific schooling of

coaches in Flanders. Their database was used to invite 5535 certified coaches to complete a web-based questionnaire and to motivate their players to complete the player-specific version of this questionnaire. In order to enhance the variability of our sample, we also contacted non-certified coaches and their teams through the different Flemish sport federations. In total, 8509 players and 7977 coaches were invited to participate. Coaches and players who did not respond received a reminder two weeks later. No rewards were given for participation and all participants were guaranteed full confidentiality.

### **Participants**

In total, 4451 participants (3193 players and 1258 coaches) completed our questionnaire. This corresponds to an approximate response rate of 27%. Only participants above 15 years old were included, because a pilot study (N=30) had revealed that younger players encountered too many difficulties to complete the questionnaire correctly. More detailed information on the participants can be found in Table 1.

The sample included participants from nine different team sports in Flanders; basketball (N=1959; 44%), handball (N=116; 3%), hockey (N=127; 3%), ice hockey (N=72; 2%), korfbal (N=118; 3%), rugby (N=84; 2%), soccer (N=589; 13%), volleyball (N=1287; 29%), and water polo (N=99; 2%). These sports were selected because they are all Olympic team sports, with the exception of rugby which will be included in the 2016 Olympics. Korfbal was added based on the significant number of participants in Flanders (Scheerder, Thibaut, Pauwels, Vandermeerschen, & Vos, 2011).

### **Measures**

#### **Athlete leaders**

In order to determine the athlete leaders within a team, we started from the classification proposed by Loughhead, Hardy, and Eys (2006). These authors suggested that leaders serve three important team functions: task, social, and external functions. We extended this

classification by including an additional leadership role, namely the motivational leader on the field. The descriptions of the four leadership roles, based on Loughhead et al. (2006), were presented to all participants (see Table 2). The role of both task and motivational leader are fulfilled on the field, during practice, and during the game. The roles of social and external leader are fulfilled off the field.

After presenting the description of each leadership role, participants were asked to indicate which players in their team corresponded best with the description of each of the four leadership roles. They could also indicate that a specific leadership role was not present in their team. In addition, they were asked whether these perceived leaders correspond with the team captain or not. With this type of assessment it can be established whether one or more leadership roles are concentrated in one single player or instead various players occupy the different roles. The perceived quality of these leaders was assessed on a 7-point Likert scale, ranging from -3 (“very bad”) to 3 (“very good”).

### **Characteristics associated with the athlete leaders**

The present study uses a new method to measure leaders’ characteristics, because leadership is very dependent on the specific team context. A young player with two years of experience might function as a leader in a youth team but not in an adult team with more experienced players. As a result, the perceived effectiveness as a leader might not be determined by the characteristics of the leader in absolute terms, but by his characteristics relative to the characteristics of his teammates. However, so far, athlete leaders’ characteristics have been measured in absolute terms (e.g., Loughhead & Hardy, 2005; Price & Weiss, 2011). This type of measurement conflicts with the context-dependency of athlete leadership. To address the need for context-dependent measures of athlete leadership, the present study measures the characteristics of athlete leaders in a relative way by comparing the leader with the other players on the team. Each of the four leadership roles was evaluated with respect to: (a)



personal characteristics (e.g., experience, competence), (b) behaviors (e.g., communicating, encouraging), and (c) the impact on teammates' team confidence.

### ***Personal characteristics***

With respect to the personal characteristics, two different types of assessment scales were used. The status of the player (bench player versus starter) and the average playing time were assessed on a 5-point Likert scale ranging from 1 ("almost never") to 5 ("almost always").

The other characteristics (age, years of sport experience, highest level ever played, team tenure, sport competence, liking by the teammates, and optimism) were assessed relative to their teammates on a scale anchored by -3 ("the least of my team") and 3 ("the most of my team"). An example is: "Compared to my teammates this person is optimistic."

### ***Leadership behaviors***

Regarding the behaviors of the leaders, we measured both perceptions of body language (e.g., expression of enthusiasm, self-confidence, positive emotions) and perceptions of actual behaviors (e.g., communicating, effort on training, cheering). All behavioral characteristics were measured in comparison with the other players within the same team on a scale anchored by -3 ("the least of my team") and 3 ("the most of my team"). An example is: "Compared to my teammates, this person exerts most effort on the field."

### ***Impact on teammates' team confidence***

With respect to impact on teammates, we focused on team confidence, and more specifically the perception of winning confidence contagion ("If this leader clearly believes during the game that our team will win the game, I will have more confidence that our team will win."). Team confidence contagion was measured in an absolute way on a scale ranging from -3 ("strongly disagree") to 3 ("strongly agree").

### ***Characteristics of the team captain***

The assessed characteristics of the team captain were: status of the captain (starter versus bench player), average playing time, age, sport experience, team tenure, highest level ever played, sport competence, and training effort. These characteristics were measured in comparison with the other players within the same team on a scale anchored by -3 (“the least of my team”) and 3 (“the most of my team”).

## **Results**

### **Occurrence and overlap of leadership roles in a sports team**

Frequency analyses revealed that the roles of task leader, motivational leader, and social leader were perceived to be present in the teams of most participants; respectively 77.5%, 77.4%, and 71.3% of the participants identified a task, a motivational, and a social leader on their team. Only half of the participants (52.1%) indicated an external leader on their team.

As noted earlier, a single player can occupy multiple leadership roles within a team. Table 3 gives an overview of the overlap between the different leadership roles. The number of players who occupy only a single leadership role is provided in parentheses on the diagonal. For example, half of the players (49.9%) who perform the role of task leader do not perform any other leadership role (motivational, social, or external). The percentage of task leaders who also perform the motivational, social, or external leadership role is respectively 18.8%, 10.2%, and 9.8%. In 22.5% of the participants’ teams no task leader was perceived to be present. Also, because one player can occupy three or four leadership roles, it is understandable that these percentages do not add up to 100%.

Our results revealed also that in only 2% of the teams the same player fulfilled all four leadership roles. Furthermore, the overlap between the leadership roles is relatively limited. Not more than 20% of the athlete leaders fulfilled two specific leadership roles in the same team. These findings indicate that the four leadership roles emerge as clearly distinct roles and

that leadership is spread throughout the team so that different players within the team occupy the various leadership roles.

The number of athlete leaders who are perceived to occupy only one leadership role is relatively high (see Table 3; in parentheses on the diagonal) in each of the nine team sports; the number of unique task leaders varies between 45.9% and 59.6%, for motivational leaders this number varies between 40.9% and 55.9%, for social leaders between 46.3% and 55.9%, and for external leader between 26.0% and 48.8%.

### **Influence of background characteristics**

Regression analyses tested whether the dispersion of leadership roles within a team was predicted by background characteristics, such as the function of the participant (player or coach), team level, and team gender. The overlap between different leadership roles was not significantly predicted by any of these background characteristics ( $\beta > .05$ ); players and coaches of male and female teams, regardless of the level, perceived a similar overlap between the different leadership roles in their team. With respect to the number of leaders occupying a single leadership role, only the participant's function emerged as a significant predictor ( $\beta > .05$ ); players indicated more unique external leaders than coaches did ( $\beta = .13$ ). In general, both players and coaches of male and female teams, within all nine sports, and of all competition levels have very similar perceptions on the dispersion of leadership within the team.

Based on these results, the newly proposed leadership role of motivational leader appears to be a clearly distinctive leadership role; the overlap with each of the other leadership roles does not exceed 18.8% on average. Within the nine different sports, the highest overlap is found in ice hockey where 26.4% of the motivational leaders also perform the role of task leader. Furthermore, 49.7% of the motivational leaders perform no other

leadership role within the team. These results confirm that our new classification of leadership roles is more comprehensive than previous ones.

### **The most important leader**

After assigning the leadership roles to players within their team, participants had to indicate which of these players they perceived as the most important leader. If this leader had multiple leadership roles, they had to indicate their most important role. Table 4 presents which leader the participants indicated as most important.

The results indicate that most participants perceive the task leader as the most important leader, followed by the motivational leader. The social leader and the external leader are perceived as less important. The nine different team sports all revealed the same order of perceived importance of the different leaders; the task leader is always perceived as the most important leader (39.7%-51.1%), followed by the motivational leader (22.6%-35.8%). The number of coaches and players who perceived the social or the external leader as most important leader did not exceed 20%, with exception of handball where 25% of the players and coaches listed the social leader as the most important leader. As a result, leadership roles on the field are clearly perceived as more important than the leadership roles outside the field, regardless of the sport or the level on which participants play or coach.

### **Leaders' characteristics**

#### **Characteristics associated with the different leadership roles**

Table 5 shows to what extent each of the characteristics is associated with each of the four leadership roles. The bold values represent which leader outscores the other leaders on a specific characteristic. Paired t-tests were conducted to verify whether the best leader significantly outscores the second best leader on that specific characteristic. Moreover, the characteristics most strongly associated with each of the leadership roles (i.e., the values in bold) are grouped together.

The results in Table 5 indicate that the task leader outscores the other leaders regarding his sport specific talent (e.g., most experience, played on highest level, best player) and his tactical communication, even when the team is performing badly. The motivational leader on the other hand is perceived as having a key impact on the other players' motivation. His positive body language, his optimistic attitude, his enthusiasm, and his expression of team confidence are all perceived to contribute to the team confidence of his teammates. While the social leader is socially best accepted in the team, the external leader outscores the others in age and team tenure. It is important to note that all leaders score significantly above the scale midpoint '0' on all characteristics (all  $p < .001$ ), which means that they always are perceived to perform above team average.

#### **Most decisive characteristics for the perceived quality of the leader**

To establish the relative impact of each characteristic on the perceived quality of each kind of leader, separate linear regression analyses were performed for each leadership role. In each analysis, the perceived quality of that leader was the criterion and all characteristics described in Table 5 were the predictors. Table 6 presents the standardized regression coefficients for the characteristics that have a significant relation ( $p < .001$ ) with the perceived quality of a leader. Because our large sample resulted in extreme statistical power, only significant relations with a  $\beta$ -value above .10 will be discussed (i.e., explaining at least 1% of the variance in perceived quality of that leader).

The leader's impact on the team confidence of his teammates appeared to have a significant relation with the perceived quality of each of the four leadership roles. It is even the strongest predictor of the perceived quality of the task, motivational, and social leader. In addition, the better these leaders are accepted by their teammates, the better their perceived leadership quality is. Encouragement on the field is perceived as a decisive factor for the quality of leaders on the field, whereas effort exerted outside the field is most indicative for

the quality of an external leader, whose main function lies off the field. No significant gender differences emerged; for both male and female teams the characteristics presented in Table 6 were significantly associated with the perceived quality of the leaders.

### **The role of the team captain**

The results in Table 7 show that only 1% of the participants indicated that their captain fulfills all four leadership roles. In addition, almost half of the participants (43.6%) report that the team captain is not the most important leader on one of the four domains, neither on the field, nor off the field. These findings are consistent for both coaches and players of male and female teams, ranging from recreational to elite level, and within each of the nine sports. These findings contradict our hypothesis that the team captain is perceived to fulfill most leadership roles.

If the captain is perceived as being a primary leader, participants indicated most frequently that he was a task leader (31.7%) or a motivational leader (24.6%). Only 15.5% and 10.1% of the participants indicated that the team captain primarily fulfilled the role of social and external leader. In general, the team captain is more often perceived to perform a primary leadership role on the field than off the field, and this holds for the nine different sports. Across all sports, the team captain is most frequently seen as the primary task leader, followed by the primary motivational leader. Less than 20% of the participants perceive the team captain as the primary social or external leader.

Though, it should be noted that these percentages are relatively small, indicating that most participants do not perceive the team captain as the most important leader, neither on the field, nor off the field. In order to gain a better understanding of this limited role of the team captain, we compared the team captain and the other leaders on a number of characteristics (see Table 8).

The results indicate that the team captain scores significantly higher on team tenure ( $p < .05$ ), indicating that on average, the team captain is the player who played the longest on the team. On all other assessed characteristics there is at least one other leader who outscores the team captain. These results are in accordance with our observation that in most teams other players, rather than the team captain, occupy the leadership roles.

### **Discussion**

The present investigation extended the current knowledge on athlete leadership in two respects. First, a more comprehensive classification with four different athlete leadership roles was established. Second, we compared the perceived importance of the formal leader (i.e., the team captain) and the informal leaders of the team. The results will be discussed in relation to previous research on athlete leadership. We address the strengths and limitations of our study, formulate recommendations for future research, and highlight both theoretical and practical implications.

#### **Classification of athlete leadership**

With regard to the classification of athlete leadership, we added the new role of motivational leader to the already established leadership roles of task, social, and external leader (Loughead, et al., 2006). The results of the present study revealed that most participants identified a task, motivational, and social leader on their team, while only half of them identified an external leader on their team. In other words, the newly added motivational leadership role appears to be equally prominent as the already established task and social leadership roles. Our results also corroborate earlier studies, which clearly found the external leadership role to be less prominent (Eys, et al., 2007; Loughead, et al., 2006).

Although a player can perform several leadership roles at the same time, maximum 20% of our athlete leaders combined two specific leadership roles, indicating that the four leadership roles emerged as clearly distinct leadership roles. Leadership appears to be spread

throughout the team; different players within the team are perceived as being the primary leader with respect to the four roles.

Regarding the importance assigned to these different leadership roles, both task and motivational leader are perceived as more important than the social and external leadership roles. In contrast to previous research that assigned an equal importance to leaders' on- and off-field characteristics (Bucci, Bloom, Loughead, & Caron, 2012), our findings reveal that both players and coaches perceive the on-field leadership roles as more important than the off-field leadership roles, regardless of the sport or level they play or coach. The fact that half of the participants indicate no external leader on their team corresponds with the perception of the external leader as the least important leader on the team.

The new role of motivational leader is perceived as the second most important leadership role. In addition, the motivational leader outscores the other leaders on a substantial number of characteristics. These findings confirm our hypothesis that the proposed new leadership classification, including the motivational leader, is more comprehensive than previous classifications. Given the importance assigned to motivational leaders by players and coaches, the new leadership classification clearly improves the relevance and validity for coaching practice on the field.

### **Characteristics associated with the different leadership roles**

With respect to the characteristics of athlete leaders, the present study extends previous research in two ways. First, we used a context-dependent scale. Players had to assess the characteristics relatively, i.e., in comparison with the other players in the team. Second, instead of focusing on the characteristics of athlete leaders in general, we determined the strength of the association between a number of characteristics and each of the four leadership roles. We then related the impact of these characteristics to the perceived quality of that leader.



The task leader outscored the other leaders in sport competence, corroborating previous research indicating that all task leaders are starters, whereas only 50% of the social leaders had a starting position (Rees & Segal, 1984). In addition, the task leader has an important role as tactical communicator. When the team is performing poorly, his communicating skills become even more important in order to create a turnaround in performance.

While the task leader focuses on tactical communication, the motivational leader is perceived as the emotional communicator within the team. His optimism and enthusiasm, together with positive body language expressing team confidence, give the motivational leader the highest impact on the team confidence of his teammates. While previous research already indicated that athlete leaders are the most important source of their teammates' team confidence (Fransen, et al., 2012), the present study adds that it is mainly the motivational leader who plays this key role. Considering that players' team confidence has a strong impact on goal setting, effort, and persistence (Bray, 2004; Greenlees, Graydon, & Maynard, 1999), our results indicate that athlete leaders, and the motivational leader in particular, might serve as important catalysts in the relationship between team confidence and performance related outcomes.

Both the social leader and the external leader are recognized for the effort they exert for their team outside the field. The social leader is the best accepted leader by his teammates, consistent with earlier findings on peer acceptance as a typical characteristic for athlete leaders (Moran & Weiss, 2006). On the other hand, in accordance with previous findings (Loughead, et al., 2006), the external leader is the oldest player with the longest team tenure.

In order to improve leadership qualities, it is essential to know which characteristics determine the quality of a leader. Our results suggest that leaders with the strongest impact on

the team confidence of their teammates are perceived as the best leaders. This finding occurs for all four leadership roles and confirms the perception of ice hockey coaches that leaders have a large impact on their team by sharing their desire to win (Bucci, et al., 2012).

Furthermore, these results are in line with earlier findings that athlete leaders are the most important source of their teammates' team confidence (Fransen, et al., 2012).

Being socially well accepted by the team was also strongly associated with the perceived quality of task, motivational, and social leaders. Although this result contradicts previous findings that likeability is not a requirement for good leadership (Holmes, et al., 2010), it nevertheless fits in three well-known psychological theories. First of all, the self-determination theory indicates that the need for relatedness mediates the link between transformational leadership and commitment to the leader (Kovjanic, Schuh, Jonas, Van Quaquebeke, & Van Dick, 2012). In addition, the present findings are in line with the social identity approach, which states that individuals of a group are liked as a function of their perceived prototypicality (i.e., representativity) (Hogg, 1992, p. 125). It is precisely this in-group prototypicality that constitutes a precondition for effective leadership (Haslam, Reicher, & Platow, 2011). Furthermore, the observed impact of being well accepted by the team also fits the emotional contagion theory. A field study among engineers revealed the presence of emotional contagion between leaders and followers: leaders' positivity had a positive effect on followers' positivity (Avey, Avolio, & Luthans, 2011). This relationship is possibly mediated by emotional mimicry because it has been shown that people who like each other more (i.e., higher social acceptance), exhibit more spontaneous mimicry (McIntosh, 2006). Although more research is necessary, we propose that social acceptance functions as a mediator of the relation between team confidence of the leader and his perceived quality. The more the leader is socially accepted, the more emotional contagion will occur, the more

players will adopt the team confidence standards of their leader, and thus the higher they will perceive his quality.

### **The team captain**

In order to better understand the function of team captain, we analyzed which leadership roles the team captain performs. Our findings revealed that in only 1% of the teams, the captain is perceived as being the primary leader in all four roles. Even more remarkable is that almost half of the participants did not perceive their captain as the most important leader, neither on, nor off the field. These results clearly contradict the general conviction of players and coaches that the team captain is “the” leader of the team, both on and off the field. Although previous research already suggested that not only team captains but also other players can function as athlete leaders (Loughead & Hardy, 2005; Loughead, et al., 2006), our findings clearly go further. They suggest that the informal athlete leaders rather than the formal leader take the principal lead, both on and off the field. This pattern is obtained in all teams, regardless of team gender, sport or level, and thus underlines the general overrating of the leadership qualities of the team captain.

With regard to the captain’s characteristics, the captain only outscores the other leaders in terms of team tenure. Not the leadership qualities of a player but his team tenure seems to be the implicit criterion to be assigned as team captain, which is in line with our findings that the captain is not perceived as the most important leader in many teams.

Although many studies on athlete leadership still solely focus on the role of the team captain (Dupuis, et al., 2006; Grandzol, et al., 2010; Voelker, et al., 2011), our findings emphasize that informal athlete leadership, exhibited by other players besides the team captain, is indeed very important and can certainly no longer be ignored.

### **Limitations and suggestions for further research**

In addressing the limitations of the present study, several opportunities for future research emerge. Regarding the findings about the team captain, caution is recommended for two reasons. First, in our study we only asked which player and which leadership role constituted the best match. It is possible that the team captain is not perceived as the best leader on and off the field, but instead as second best. Therefore, we cannot conclude that the captain does not perform the given leadership roles at all. It remains true, however, that other players in the team are perceived as more important leaders than the captain.

Second, the team captain was evaluated on a rather limited number of characteristics. It is possible then that the team captain has other qualities than those we studied. As such, the captain's function might be focused on other issues than leadership, e.g., on being the confidant of the coach. Only future research can clarify the exact function of the team captain. Interviews with coaches and players about their definition of the function of team captain and about the selection criteria used to assign this function could provide more clarity.

Also, two issues should be highlighted with regard to the design of the present study. First, individual players and coaches, rather than complete teams, completed the online questionnaire, making it impossible to conduct analyses at the team level. From a research perspective, it is clear that further investigation on team level is warranted to determine to which extent players and coaches indicate the same player as task, motivational, social, and external leader.

Second, the present study utilized a cross-sectional design, as did most other studies on leadership (Moran & Weiss, 2006; Price & Weiss, 2011). Previous longitudinal research revealed that the percentage of task, social, and external leaders within a team remained relatively stable from the beginning to the end of a season (Eys, et al., 2007; Loughead, et al., 2006). We only examined athlete leadership at the end of the season to give all players adequate time to develop team relationships and to gain insight in the athlete leadership

within their team. However, future studies should consider a longitudinal design to further clarify the distinction between formal and informal leaders. A longitudinal design would allow researchers to verify whether informal leaders are perceived as the most important leaders during the whole season or whether the influence of formal leaders shifts towards informal leaders during the season.

### **Implications for theory and practice**

The strengths of our study include the broad variety of players and coaches in our sample; men and women, of all ages and experience levels, active at all levels of nine different team sports in Flanders. The large sample size and the consistency of our findings, regardless of level, sport, or team gender, testify to the reliability of our findings.

From a theoretical perspective, the present study extends previous research by the development of a more comprehensive athlete leadership classification. In addition, a new context-dependent measure was used to assess the specific characteristics of each of the four leader types. The results revealed that athlete leadership is spread throughout the team. The informal leaders rather than the team captain take the lead within a team, both on and off the field. These findings are consistent with the new paradigm of shared leadership in the organizational literature (Pearce & Conger, 2003).

From a practical perspective, coaches can rely on these findings to elect their team captain more consciously by taking leadership qualities into account, rather than team tenure. Furthermore, coaches should realize that not only the team captain but also other team members can and should take up leadership roles. Recognition of the importance of leadership suggests that coaches should allocate time and effort to the identification and development of leadership (Bucci, et al., 2012; Price & Weiss, 2011). Identification of the informal leaders within the team can help coaches to guide these leaders and further develop their leadership capabilities. Our findings suggest that coaches should stimulate the athlete leaders to express

their team confidence, to encourage their teammates, and to show their enthusiasm, even when their team is losing. This strengthened athlete leadership has the potential to create a more optimal team functioning that leads to a better team performance. The present study revealed that leadership is everywhere, not only at the top of a team, but also inside, not always formally recognized, but nevertheless extremely important.

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Table 1

*Sample characteristics*

Player (P) / Coach (C)	Mean age (years)	Average experience (years)	Team gender Men (♂) / Women (♀)	Level Elite level (E) National level (N) Provincial level (P) Regional level (RG) Recreational level (RC) Youth (Y)
3193 P (72%) 1258 C (28%)	29.01	14.14	2756 ♂ (62%) 1577 ♀ (35%) 118 ♂+♀ (3%) <sup>a</sup>	267 E (6%) 1104 N (25%) 2346 P (53%) 311 RG (7%) 144 RC (3%) 279 Y (6%)

<sup>a</sup>Korfball is a mixed gender team sport.

Table 2

*The definition of the four leadership roles, as presented to the participants.*

Leadership role	Definition
Task leader	A task leader is in charge on the field; this person helps the team to focus on our goals and helps in tactical decision-making. Furthermore the task leader gives his teammates tactical advice during the game and adjusts them if necessary.
Motivational leader	The motivational leader is the biggest motivator on the field; this person can encourage his teammates to go to any extreme; this leader also puts fresh heart into players who are discouraged. In short, this leader steers all the emotions on the field in the right direction in order to perform optimally as a team.
Social leader	The social leader has a leading role besides the field; this person promotes good relations within the team and cares for a good team atmosphere, e.g., in the dressing room, in the cafeteria or on social team activities. Furthermore, this leader helps to deal with conflicts between teammates besides the field. He is a good listener and is trusted by his teammates.
External leader	The external leader is the link between our team and the people outside; this leader is the representative of our team towards the club management. If communication is needed with media or sponsors, this person will take the lead. This leader will also communicate the guidelines of the club management to the team regarding club activities for sponsoring.

Table 3

*Overlap between the different leadership roles performed by one player. The number of players who occupy only a single leadership role is provided in parentheses on the diagonal.*

	Task leader	Motivational leader	Social leader	External leader
Task leader	2220 (49.9%)	838 (18.8%)	454 (10.2%)	434 (9.8%)
Motivational leader	838 (18.8%)	2214 (49.7%)	512 (11.5%)	283 (6.4%)
Social leader	454 (10.2%)	512 (11.5%)	2127 (47.8%)	451 (10.1%)
External leader	434 (9.8%)	283 (6.4%)	451 (10.1%)	1482 (33.3%)
No leader present	1003 (22.5%)	1008 (22.6%)	1276 (28.7%)	2132 (47.9%)

Table 4

*The most important leader*

The most important leader	Number of participants	Percent	Valid Percent
Task leader	1668	37.5	42.1
Motivational leader	1263	28.4	31.9
Social leader	703	15.8	17.8
External leader	325	7.3	8.2
Total	3959	88.9	100.0
Missing values	492	11.1	

Table 5

*The characteristics for each leadership role, including means and standard deviations. Paired t-tests reveal whether the difference with the second best leader is significant.*

Characteristics	Task leader	Motivational leader	Social leader	External leader
Starter in game <sup>a</sup>	<b>4.74<sup>**</sup> ± 0.72</b>	4.52 ± 0.97	4.12 ± 1.33	3.96 ± 1.50
Most playing time <sup>a</sup>	<b>4.58<sup>**</sup> ± 0.72</b>	4.37 ± 0.89	3.99 ± 1.20	3.84 ± 1.40
Dares to adjust his teammates on the field when they do something wrong	<b>2.08<sup>**</sup> ± 0.98</b>	1.56 ± 1.18	1.16 ± 1.35	1.31 ± 1.39
Gives the most tactical advice to his teammates during the game	<b>2.02<sup>**</sup> ± 1.06</b>	1.28 ± 1.27	0.84 ± 1.40	1.01 ± 1.53
Best player	<b>1.78<sup>**</sup> ± 0.92</b>	1.42 ± 1.06	1.07 ± 1.20	0.91 ± 1.30
Radiates the most self-confidence on the field	<b>1.73<sup>**</sup> ± 1.06</b>	1.49 ± 1.16	1.15 ± 1.20	1.03 ± 1.32
Most years of experience	<b>1.69<sup>**</sup> ± 1.16</b>	1.26 ± 1.32	1.17 ± 1.33	1.43 ± 1.38
Communicates the most when the team is performing poorly	<b>1.60 ± 1.20</b>	1.53 ± 1.13	1.09 ± 1.26	1.08 ± 1.36
Most capable of creating a turnaround in performance when the team is behind	<b>1.58<sup>**</sup> ± 1.23</b>	1.36 ± 1.26	0.96 ± 1.35	0.80 ± 1.46
Played on the highest level	<b>1.37<sup>**</sup> ± 1.29</b>	0.96 ± 1.25	0.76 ± 1.28	0.79 ± 1.41
Communicates the most when this leader is performing poorly himself	<b>0.84 ± 1.43</b>	0.78 ± 1.37	0.44 ± 1.40	0.43 ± 1.50
Facial expressions or body language most clearly express positive emotions during the game	2.03 ± 1.08	<b>2.20<sup>**</sup> ± 0.97</b>	2.10 ± 1.04	1.93 ± 1.13
Encourages his teammates strongly during the game	1.72 ± 1.01	<b>2.13<sup>**</sup> ± 0.85</b>	1.65 ± 1.03	1.46 ± 1.17
Exerts most effort on the field	2.02 ± 0.91	<b>2.09<sup>**</sup> ± 0.87</b>	1.86 ± 1.00	1.74 ± 1.12
Most influence on the team confidence of his teammates	1.97 ± 1.11	<b>2.01 ± 1.07</b>	1.77 ± 1.14	1.71 ± 1.22
Most expression of team confidence when the team is in the lead	1.75 ± 1.00	<b>1.91<sup>**</sup> ± 0.94</b>	1.61 ± 1.02	1.55 ± 1.07
Most enthusiastic when the team makes a point	1.51 ± 1.05	<b>1.78<sup>**</sup> ± 1.00</b>	1.58 ± 1.04	1.43 ± 1.11
Most optimistic	1.50 ± 1.10	<b>1.73<sup>*</sup> ± 1.02</b>	1.64 ± 1.06	1.34 ± 1.16
Most expression of team confidence when the team is behind	1.43 ± 1.17	<b>1.63<sup>**</sup> ± 1.10</b>	1.23 ± 1.14	1.14 ± 1.21

Cheers the most	1.16 ± 1.29	<b>1.56** ± 1.24</b>	1.40 ± 1.27	1.20 ± 1.30
Exerts most effort during practice	1.41 ± 1.11	<b>1.47* ± 1.10</b>	1.20 ± 1.18	1.06 ± 1.30
Most enthusiastic when the team is performing poorly	0.67 ± 1.32	<b>1.00** ± 1.27</b>	0.74 ± 1.27	0.57 ± 1.33
Most enthusiastic when this leader is performing poorly himself	0.25 ± 1.36	<b>0.43** ± 1.35</b>	0.21 ± 1.33	0.12 ± 1.38
Socially best accepted by his teammates	1.67 ± 1.07	1.77 ± 1.02	<b>1.94** ± 0.98</b>	1.51 ± 1.15
Exerts most effort outside the field	1.48 ± 1.17	1.57 ± 1.10	1.91 ± 1.04	<b>1.93 ± 1.07</b>
The oldest player	1.04 ± 1.40	0.79 ± 1.37	0.91 ± 1.35	<b>1.30** ± 1.35</b>
For the longest time player in the team	0.69 ± 1.84	0.63 ± 1.83	0.83 ± 1.75	<b>1.19** ± 1.73</b>

*Note.* The highest mean value for each characteristic is in boldface.

<sup>a</sup>These characteristics were rated on a 5-point Likert scale (1 to 5). All the other characteristics were measured on a 7-point Likert scale (-3 to 3).

\* p<.01; \*\* p<.001

Table 6

*Regression analyses for each of the four leadership roles evaluating the association between the leader's characteristics and the perceived quality of that leader. For each significant association ( $\beta > .10$ ;  $p < .001$ ) the standardized regression coefficient is shown.*

Specific characteristics	Task leader	Motivational leader	Social leader	External leader
R <sup>2</sup>	.260	.215	.164	.186
Most influence on the team confidence of his teammates	.162	.158	.165	.169
Most enthusiastic when the team is performing poorly	.120			
Socially best accepted by his teammates	.119	.139	.162	
Encourages his teammates strongly during the game	.110	.148		
Exerts most effort outside the field				.228

*Note.* All  $p < 0.001$ .



Table 7

*Participants' perceptions of the leadership roles performed by the team captain*

Number of leadership roles occupied by the captain	N	Percent
0	1940	43.6%
1	1635	36.7%
2	659	14.8%
3	171	3.8%
4	46	1.0%

Table 8

*The mean values for the characteristics of both the team captain and the four leadership roles*

	Team Captain	Task leader	Motivational leader	Social leader	External leader
Status (starter versus bench player) <sup>a</sup>	4.61	4.74	4.52	4.12	3.69
Average playing time <sup>a</sup>	4.44	4.58	4.37	3.99	3.84
Age	1.14	1.04	.79	.91	1.30
Sport experience	1.54	1.69	1.26	1.17	1.43
Team tenure	1.23	.69	.63	.83	1.19
Highest level ever played	1.00	1.37	.96	.76	.79
Sport competence	1.38	1.78	1.42	1.07	.91
Training effort	1.23	1.41	1.47	1.20	1.06

<sup>a</sup>These characteristics were assessed on a scale from 1 (“almost never”) to 5 (“almost always”), while the other characteristics were assessed on a scale from -3 (“the least of my team”) to 3 (“the most of my team”).