We will be champions: Leaders’ confidence in ‘us’ inspires team members’ team confidence and performance

K. Fransen¹, N. K. Steffens², S. A. Haslam², N. Vanbeselaere³, G. Vande Broek¹, F. Boen¹

¹Department of Kinesiology, KU Leuven, Leuven, Belgium, ²School of Psychology, The University of Queensland, St Lucia, QLD, Australia, ³Center for Social and Cultural Psychology, KU Leuven, Leuven, Belgium

Corresponding author: Katrien Fransen, Department of Kinesiology, KU Leuven, Tervuursevest 101, Box 1500, 3001 Leuven, Belgium. Tel.: +32 16 376445, Fax: +32 16 329196, E-mail: katrien.fransen@faber.kuleuven.be

The present research examines the impact of leaders’ confidence in their team on the team confidence and performance of their teammates. In an experiment involving newly assembled soccer teams, we manipulated the team confidence expressed by the team leader (high vs neutral vs low) and assessed team members’ responses and performance as they unfolded during a competition (i.e., in a first baseline session and a second test session). Our findings pointed to team confidence contagion such that when the leader had expressed high (rather than neutral or low) team confidence, team members perceived their team to be more efficacious and were more confident in the team’s ability to win. Moreover, leaders’ team confidence affected individual and team performance such that teams led by a highly confident leader performed better than those led by a less confident leader. Finally, the results supported a hypothesized mediational model in showing that the effect of leaders’ confidence on team members’ team confidence and performance was mediated by the leader’s perceived identity leadership and members’ team identification. In conclusion, the findings of this experiment suggest that leaders’ team confidence can enhance members’ team confidence and performance by fostering members’ identification with the team.

The success of the leaders of any group or team hinges on their capacity to inspire and energize those they lead (Bass & Riggio, 2006). In this regard, it appears that leaders who transmit an aura of confidence may have an advantage over those who cultivate doubt and trepidation (Fransen et al., 2015a). Yet while being seen as confident in one’s own abilities as a leader may help build one’s leadership credentials, is there anything to be gained from being confident in the abilities of the team that one is leading? In the present research we suggest there is. More specifically, we propose that a leader’s confidence in the team’s abilities has a direct impact on the confidence of team members and enhance their capacity to perform. We also propose and test a process account in which leaders’ confidence in the team is understood to exert its effects by strengthening perceptions of leaders’ identity leadership and by fostering members’ identification with the team.

Previous research on contagion effects has suggested that the behavior and emotional states of leaders can spread automatically to those of followers (e.g., Sy & Choi, 2013). Speaking to this possibility, research has accumulated compelling evidence that contagion within groups and organizations is manifested on a range of registers including affective tone (Barsade, 2002), emotions (Pugh, 2001), goal setting (Aarts et al., 2004), physical imitation (Dijksterhuis & Bargh, 2001), and the apportioning of blame (Fast & Tiedens, 2010). Moreover, theoretical claims and tentative evidence suggest that leaders’ confidence in a better future can also be contagious. In this regard, Norman et al. (2005) postulate that leaders’ sense of hope can feed into followers’ hopefulness, while Avey et al. (2011) demonstrate that leader positivity can prove contagious in transferring to followers’ own degree of positivity. Yet while contagion phenomena have been widely observed, we know relatively little about the processes through which such effects arise. This is a gap in the literature that the present research seeks to address. In particular, we assert that contagion effects can be accounted for in part by relevant social-psychological variables. More specifically, we suggest that we can gain a better understanding of such effects by drawing on theorizing in the social identity tradition that draws attention to the importance of leaders’ and team members’ sense of shared social identity (a sense of ‘us’) as a basis for processes of influence and efficacy.

Moreover, it is noteworthy that previous research suggests that leaders’ confidence in their own abilities has an impact on their capacity to influence followers (Hannah et al., 2012). However, little research has examined whether and how leaders’ confidence in the
collective (i.e., ‘us’) might affect members’ efficacy and performance. The present research aims to address this void by examining the impact of leader team confidence on members’ team confidence and performance. Beyond this, we also propose mediational hypotheses concerning the ways in which leaders’ confidence in the team comes to exert its impact – suggesting that this results from its capacity both to signal identity leadership and to foster team members’ identification with the team.

Leaders’ confidence in the team

A growing body of evidence indicates that followers are more likely to be influenced by leaders who engage in group-oriented leadership (e.g., Haslam et al., 2011; Yámmarino et al., 2012). In this regard, one approach that lays particular emphasis on the importance of a sense of shared group membership (i.e., a sense of ‘us’) for leadership processes is the social identity approach (Tajfel & Turner, 1979; Haslam, 2004). This approach builds on an assumption that in their social and organizational lives people can – and routinely do – define the self not only in terms of their personal identity as unique individuals (i.e., as ‘I’ and ‘me’) but also in terms of their social identity as members of groups, teams and other collectives (i.e., as ‘we’ and ‘us’). Moreover, research has argued and demonstrated that self-definition in terms of social identity is a basis for group behavior (Turner, 1982). In particular, this is because it underpins group members’ capacity to engage in processes of leadership and followership (Ellemers et al., 2004).

Building on this approach, we assert that one way in which leaders can build a sense of shared identity with followers (and hence influence them) is by inspiring confidence both (a) in themselves as representatives of the group and (b) in the abilities of the group as a whole. Speaking to the former point, previous research has demonstrated that leaders’ confidence in their own abilities is associated with, among other things, leaders’ perceived charisma (De Cremer & van Knippenberg, 2004), as well as followers’ engagement (De Cremer & Wubben, 2010) and performance (Chemers et al., 2000; for a review see Hannah et al., 2012). Nevertheless, there is as yet little evidence that a leader’s expressions of confidence in the team will have similarly positive effects. However, we propose that it will, in part because leaders’ confidence in the team serves to consolidate team members’ sense that the leader is attuned to the importance of social identity. Furthermore, it will strengthen team members’ sense that the leader has aspirations and confidence in the team members’ ability to advance group goals (i.e., confidence in their ability to ‘do it for us’; Haslam et al., 2011). However, beyond team members’ psychological state, we propose that leaders’ confidence in the team should also affect the team’s actual behavior (Chemers et al., 2000; Hannah et al., 2012), that is, team members’ capacity to perform.

Some evidence for these propositions comes from research by Fransen et al. (2015a) which showed that when leaders had high (rather than low) confidence in their (basketball) team, members were more likely to have confidence in the team themselves and to display enhanced individual performance (in the form of free-throw success). This study suggested that leaders’ confidence in a team has important consequences for team dynamics. Nevertheless, the study had two significant limitations. First, the research did not employ a (neutral) control group and thus did not establish whether the association between leader team confidence and team outcomes is explained by the positive impact of confident leaders or the negative impact of non-confident leaders. Second, the research examined effects on individual performance that did not require any interaction or coordination between players (Van der Vegt & Janssen, 2003). Accordingly, it is unclear whether leaders’ confidence in the team only affects the performance of individual members or (as we propose) has a positive impact on the effectiveness of a team unit as a whole (as reflected in collective performance). It is therefore necessary to address these issues in order to clarify the significance of leader team confidence at both a theoretical and practical level, not least because in most (if not all) team activities, it is the performance of the unit as a whole that determines success or failure.

Leader team confidence as a basis for identity leadership and team identification

Beyond the question of whether leader team confidence increases members’ team confidence and performance, a further unresolved question is precisely why it has this impact. As noted above, the social identity approach asserts that leaders are influential to the extent that they effectively manage a shared identity – by creating, advancing, representing, and embedding a shared sense of ‘us’ (Haslam et al., 2011; Steffens et al., 2014). Yet while identity leadership of this form has been shown to stimulate followership (e.g., Haslam & Platow, 2001), very little research has investigated the concrete leader behaviors that encourage followers to believe in a person’s identity leadership. However, it is in precisely this regard that we postulate leaders’ confidence in the team will prove important – that is, as a concrete behavior that provides group members with evidence both that leaders are oriented toward their interests and goals and that they are motivated (and able) to advance these group interests and goals.

Furthermore, because leaders’ expressions of confidence in the team convey a sense that a shared
identity is positive, distinct, and enduring (all factors that have been shown to encourage social identification; e.g., Branscombe & Wann, 1991; Ellemers, 1993), this should also serve to reinforce team members’ own identification with the group (Reicher et al., 2005; Huettermann et al., 2014). On this basis, we hypothesize that leaders’ team confidence promotes members’ team confidence and performance in two key ways: first, by communicating leaders’ own group-based credentials as a leader; second, by encouraging team members to engage with the collective enterprise. The former should make followers more likely to recognize and embrace the leader’s identity leadership; the latter should make followers more likely to identify with the team.

The present research

The above arguments can be distilled into four key hypotheses. In line with the categorization proposed by Fransen et al. (2014b), this involves distinguishing between two types of team confidence: (a) collective efficacy (i.e., the process-oriented confidence in the team’s ability to work collectively), and (b) team outcome confidence (i.e., the outcome-oriented confidence in achieving the team goals).

H1. Leaders’ confidence in the team will have a positive impact on members’ (a) collective efficacy and (b) team outcome confidence.

H2. Leaders’ confidence in the team will have a positive impact on members’ perceptions of (a) teammates’ collective efficacy and (b) teammates’ team outcome confidence.

H3. Leader confidence in the team will have a positive impact on both (a) team performance and (b) members’ individual performance.

H4. In line with previous research, we expect that (a) the impact of leader team confidence on members’ performance is partly mediated by team members’ team confidence (Fransen et al., 2015a); (b) leaders’ impact on members’ team confidence is in turn partly mediated by members’ team identification (Fransen et al., 2014a, 2015a); and (c) leaders’ impact on members’ team identification is in turn mediated by leaders’ perceived identity leadership (Steffens et al., 2014).

Method

Procedure and participants

We contacted the presidents of 11 Flemish soccer clubs located in the southeastern provinces of Flanders, Belgium. Two conditions had to be fulfilled in order for clubs to be eligible for participation: (a) the club needed to have players in the targeted age range from 12 to 17 years, and (b) training sessions of different teams within a club needed to take place on the same location at the same time. Furthermore, we contacted the organizers of two youth soccer camps, which also included players in the targeted age range. Five clubs and one organizer of a soccer camp agreed to invite their players to participate, yielding a response rate of 46% (i.e., 6 of 13). A total of 144 male soccer players, on average 14.2 years old (SD = 1.2) with 7.9 years of experience as soccer player (SD = 2.3), took part in the experiment. Three clubs did not respond to our invitation. The remaining three clubs did not fulfill the aforementioned conditions (i.e., concerning age range and similar training sessions at the same time).

Participants were divided into 36 groups of four players. In order to rule out prior familiarity between participants, each group consisted of players from different teams. During a training session, the research assistant introduced himself and provided the players with an overview of the upcoming tasks. Informed consent was obtained from all participants, and they were guaranteed full confidentiality. After this introduction, each group of four players participated in the experiment at the same time, out of sight of the remaining players. All players who agreed to participate completed the experiment. After the experiment, participants were informed about the aim of the experiment and the outcome of the soccer contest. The study’s design was approved by the ethics committee of the KU Leuven, Belgium.

Experimental design

Each experimental session took place on a soccer pitch and lasted about 45 min. We provided all players of these newly assembled teams with identical soccer shirts, so as to facilitate players’ identification with their newly created team. In this respect, our artificial experimental setting better resembled the setting of a real competition.

Each team of four players was complemented by a male confederate (hereafter termed ‘team leader’), who was unknown to participants. Two confederates of the same age (20 years old) and with similar soccer skills functioned alternately as team leader. They were randomly appointed to a team, but in such a way that both confederates participated in the same number of teams within each of the three experimental conditions. The results of the present study were similar for both confederates.

To ensure that participants perceived our confederate to be the leader of the team, we introduced him as the team captain. Because previous literature suggests that more competent and older players are more likely to be perceived as a leader (Moran & Weiss, 2006; Price & Weiss, 2011), we selected two highly skilled soccer players (with playing experience at the national level) who were on average six years older than participants to be team leader. Finally, before the actual experiment started, the team participated in a short soccer quiz, in which the team had to give the correct answers to a series of questions. Because our confederate already knew the answers to all questions in advance, he was able to further consolidate his leader status.

The experiment included two test sessions, which followed the same procedure and encompassed both a passing task and a dribbling-shooting task. The cover story was that each team was participating in a large soccer contest, organized by Soccer Talent Flanders (i.e., a fictitious organization), aiming to identify the best young soccer talent in the country. As such, the participants were very motivated to complete the tasks as well as possible in order to obtain the highest overall team
score (i.e., an overall team score for the four players). To ensure that participants would always do their best, we told them that the first test session (without manipulation) and the second test session (in which participants were exposed to the experimental manipulation) were equally important and that the scores would be aggregated to obtain an overall score.

The experiment started with a passing task, represented schematically in Fig. 1. Unlike the previous experiment of Fransen et al. (2015a), in which basketball players had to shoot individual free-throws, the present task required intense interaction between the players. The team leader started the exercise and passed the ball to the second player, thereafter immediately received the ball back from the second player before passing the ball to the third player, and so on, until all players had bounced the ball back. Following completion of the first round, the team leader passed the ball back to the second player, who then started the exercise anew. All players moved one cone to the left while the team leader occupied the last cone. The team finished the task once every player had completed the passing task four times (adding up to a total of 20 rounds). The goal was to complete the task as fast as possible. To minimize learning effects, the team leader (i.e., the confederate) instructed his team to perform a trial before starting the real test, so that every player understood the task well beforehand. In order to control for a possible effect of the leader’s performance, the team leader performed the exercise as well as possible during both test sessions regardless of the experimental condition.

The second task was a dribbling-shooting task, as represented in Fig. 2. In contrast to the passing task, but similar to the experimental study of Fransen et al. (2015a), this dribbling-shooting task required only very little interaction between the players. Although the players were told that only their team performance, together with the team performance on the passing task, would be used to determine their overall score (and as a result their place in the ranking), we also recorded the players’ individual performance (i.e., the time taken to complete the task). As in the passing task, the team started with a trial. Once all the players had indicated that they clearly understood the exercise, the team leader started the task. He dribbled between five cones, after which he tried to shoot at goal, demarcated by two cones. This shot had to be taken from behind a marked line (see Fig. 2). Subsequently, the leader completed the same exercise with a ball that was already placed in position by the experimenter. As soon as the leader clapped his hands, the second player could start the exercise. The exercise was completed once each player had performed the complete exercise four times. To control for the possible confounding influence of the team leader’s performance, the leader was instructed to perform the exercise as fast as he could.

**Manipulation**

After installing our confederate as the leader of the team, we manipulated the level of team confidence expressed by the team leader. During the first test session, the leader acted in a neutral fashion, regardless of the experimental condition. However, during the second test session, the team confidence expressed by the leader varied as a function of the experimental condition. More specifically, the team leader expressed high team confidence in 12 randomly selected teams, acted neutrally in 12 other randomly selected teams (i.e., control condition), and expressed low team confidence in the remaining 12 teams.

Fransen et al. (2014b) distinguished between two types of team confidence: process-oriented team confidence (i.e., collective efficacy) and outcome-oriented team confidence (i.e., team outcome confidence). In the present experiment, we manipulated the leader’s expression of both types of team confidence. More specifically, the leader expressed high, neutral, or low confidence in (a) the team’s abilities to complete the required processes well (e.g., confidence in the team’s abilities to communicate well, support each other, and exert maximum possible effort) and in (b) the team’s potential to win the contest.

To determine the behaviors and actions that indicate high or low levels of collective efficacy and team outcome confidence, we relied on the sources of high and low team confidence identified by previous research (Fransen et al., 2012, 2015b). To standardize our manipulation, we developed a detailed script for each experimental condition, including all the actions (and their frequency) that the team leader had to perform. First, the script for the high-confidence condition prescribed that the team leader displayed positive body language (i.e., enthusiastic, confident) throughout the entire test session and communicated his confidence in the abilities of his team to perform the required processes well and to outperform opponents. The prescribed behavior and communications were indicated by standardized phrases such as “Great passing. Keep going!” and “Nice ball control!”. With respect to the timing of feedback, the team leader was asked to provide individualized positive feedback to his teammates during each trial. When a player missed a shot, the team leader was asked to cheer him up (e.g., “Keep up, I know you can do it”). Over the course of the test session, the leader was asked to give four compliments to the team (e.g., “Great play, team! Keep it up and we will win this contest easily!”).

Second, the script for neutral team confidence prescribed that the leader acted exactly as he had in the first test session: he organized the exercise but did not encourage his teammates or express either high or low team confidence. Third, the script for the low-confidence condition prescribed the leader to display discouraged body language (i.e., groaning, hanging his head and shoulders) throughout the entire test session and to react in an angry and frustrated manner when his teammates missed a goal attempt. Furthermore, the team leader made it clear that he had lost all confidence in the team’s abilities to perform the actions well and to win the contest. This expression of low team confidence was indicated by standardized phrases such as “Your level of performance is really poor, even my grandma could do better” or “I don’t call this soccer anymore, this is hopeless”. Again, the team leader was asked to give each teammate negative feedback during each trial (e.g., “Once again, poor ball control”). When a player performed a good action, the team leader reacted in a discouraging manner (e.g., “That was about time”, “Purely luck”), up to two times per test session for each player. Over the course of

![Fig. 1. A schematic representation of the passing task. Solid lines represent the player’s movement, while the dashed lines represent the ball’s movement.](Image)
Participants completed a two-page questionnaire after the first test session (having performed both the passing and the dribbling-shooting test) and after the second test session (having performed both tests again).

Manipulation checks

Perceived leader status. In line with previous research (Fransen et al., 2015a), we assessed whether our attempts to ensure that our confederate was seen as the leader of the team were successful. Therefore, we asked participants to answer the question “To what extent do you perceive each of your teammates to be a leader of your team?” on a scale ranging from −3 (not at all) to 3 (completely). We then compared the perceived leader status of the appointed leader to that of the other players.

Perceived leader team confidence. As noted earlier, we distinguished between two types of team confidence: process-oriented team confidence (i.e., collective efficacy) and outcome-oriented team confidence (i.e., team outcome confidence). To test whether differences in team leader’s collective efficacy (high vs neutral vs low) were perceived as such by participants, they responded to the item “During the previous soccer test, how confident was your leader in the abilities of your team to successfully perform the requested tasks?” With regard to team leader’s team outcome confidence, participants answered the question “During the previous soccer test, to what extent did your leader believe that your team would win this soccer contest?” In line with previous research (Fransen et al., 2015a), participants answered both questions after the first and the second test session on a scale from −3 (not at all) to 3 (completely). Participants did not only assess the perceived team confidence of their leader but also assessed the perceived team confidence of their other teammates by answering both questions for every teammate.

Collective efficacy. After both test sessions participants’ collective efficacy was assessed using the 5-item Observational Collective Efficacy Scale for Sports (OCESS; Fransen et al., 2014b). Previous research within a sports setting confirmed the convergent and discriminant validity of the scale revealing a sound factorial structure and demonstrating that the scale is highly internally consistent (with Cronbach’s alpha’s exceeding 0.85; Fransen et al., 2015a, 2014b). An example item from the OCESS is “During the previous soccer contest, I was confident that my teammates would encourage each other.” Participants responded to the items on 7-point scales anchored by 1 (not at all confident) and 7 (extremely confident). Confirmatory factor analysis verified the psychometric structure of this scale after the first (χ² = 4.16; df = 4; CFI = 1.00; TLI = 1.00; RMSEA = 0.02; 90% CI = [0.00; 0.13]; SRMR = 0.02) and the second test session (χ² = 4.59; df = 3; CFI = 1.00; TLI = 0.99; RMSEA = 0.06; 90% CI = [0.00; 0.17]; SRMR = 0.01). The scale’s internal consistency was very good to excellent (α = 0.84 and α = 0.93 after the first and second test sessions, respectively).

Team outcome confidence. In line with previous research (Fransen et al., 2014a, b, 2015a), we assessed participants’ team outcome confidence after both test sessions with the single item “During the previous soccer test, I was confident that my team would win the game.”

Team identification. Based on previous research (Doosje et al., 1995), team identification was measured using three items (“I feel very connected with this team”, “Being a member of the team is very important to me”, and “I am very happy that I belong to this team”). This scale has been proven to be a reliable and highly internally consistent scale for sports research (e.g., Fransen et al., 2014a, c, 2015a). Participants responded to the three items after the second test session on a 7-point scale anchored by −3 (strongly disagree) and 3 (strongly agree). As in previous research, these items formed a reliable scale (α = 0.87). In addition, confirmatory factor analysis substantiated the structure of the present scale (χ² < 0.001; df = 0; CFI = 1.00; TLI = 1.00; RMSEA < 0.001; 90% CI = [0.00; 0.00]; SRMR < 0.001).

Identity leadership of the team leader. To assess the extent to which the team leader was perceived to engage in identity leadership, we asked participants to complete the Identity Leadership Inventory–Short Form (ILI-SF; Steffens et al., 2014) on scales anchored by −3 (strongly disagree) and 3
Fransen et al.

(Strongly agree). The ILI-SF included the following four items: “Our captain is a model member of our team”, “Our captain acts as a champion for our team”, “Our captain creates a sense of cohesion within our team”, and “Our captain creates structures that are useful for our team”. The internal consistency of the ILI-SF proved to be excellent in the present study (α = 0.97) and confirmatory factor analyses substantiated the psychometric structure of this scale (χ² = 4.63; df = 2; CFI = 1.00; TLI = 0.99; RMSEA = 0.10; 90% CI = [0.00; 0.22]; SRMR = 0.01).

Performance. The objective criterion measure of team performance in the passing task was indicated by the time taken to complete the task. The dribbling-shooting task allowed us to measure players’ individual performance as the individual time taken to complete the exercise (i.e., the aggregate time each individual took to complete the four trials). In addition, players assessed their own performance during the previous test session (i.e., including both the passing task and the dribbling-shooting task) by responding to the item “I performed well during the previous soccer test” on a scale ranging from −3 (Strongly disagree) to 3 (Strongly agree).

Results

Manipulation checks

Perceived leader status

The appointed team leader was clearly perceived to be the player who had the highest leader status in the team (M = 2.35; SD = 0.88). The status of the remaining players in the team, averaged across all teams, was 1.29 (SD = 1.16). A Shapiro–Wilk test revealed that the distribution of the leader status of both the team leader and the participants deviated significantly from the normal distribution (p < 0.001). Therefore, we used the non-parametric Wilcoxon signed rank test, which confirmed that the team leader was perceived to have significantly greater leader status than all remaining players (p < 0.001; r = −0.5). The effect size, r, was calculated by dividing the test statistic, z, by the square of the number of observations. Effect sizes range between 0 and 1, with the benchmarks of r = 0.10 for small effects (explaining 1% of the variance); r = 0.30 for medium effects (explaining 9% of the variance); and r = 0.50 for large effects (explaining 25% of the variance) (Haslam & McGarty, 2014).

Further analyses revealed that, before the second test session, the team leader was perceived as the person with the highest status in 30 of the 36 teams. In the six remaining teams (three teams for both confederates who acted as team leader), the difference between the perceived leadership quality of our confederate and the perceived leadership quality of the best leader in the team did not exceed 0.25 scale points on a 7-point scale.

Perceived leader team confidence

Table 1 indicates the extent to which players perceived their leader and each of their other teammates (a) to be their leader in the abilities of their team to perform all tasks successfully (i.e., expressing collective efficacy; CE), and (b) to believe that their team was going to win the contest (i.e., expressing team outcome confidence; TOC).

A Shapiro–Wilk test indicated that the distribution of these variables deviated significantly from the normal distribution (p < 0.001). The non-parametric Kruskal–Wallis Test revealed significant differences between the three experimental conditions in the second test session (χ²(2) = 68.04; p < 0.001 for CE and χ²(2) = 62.11; p < 0.001 for TOC). To provide more insight in the individual contrasts, we conducted separate Mann–Whitney U tests as non-parametric post-hoc tests, with a Bonferroni correction leading to a critical significance threshold of α = 0.05/3 = 0.016. The results revealed that all the conditions significantly differed from each other. More specifically, the leader was perceived to express greater team confidence in the high-confidence condition than in the neutral condition (U = 618.0; p < 0.001; r = −0.31 for CE and U = 662.0; p = 0.001; r = −0.26 for TOC). In contrast, the leader was perceived to express lower confidence in the low-confidence condition than in the neutral condition (U = 374.5; p < 0.001; r = −0.41 for CE and U = 368.5; p < 0.001; r = −0.41). Large differences were found between the perceived expressed confidence in high- and low-confidence condition (U = 183.5; p < 0.001; r = −0.54 for CE and U = 179.0; p < 0.001; r = −0.53 for TOC).

Furthermore, the Wilcoxon signed rank test indicated that in the high-confidence condition (i.e., the second test session), the team leader was perceived to express significantly more team confidence than other players (p < 0.001; r = −0.36 for CE and p = 0.003; r = −0.69 for TOC). In the neutral condition a significant, but small difference emerged between the expressed collective efficacy of the team leader and that of other players (p = 0.03; r = −0.19 for CE and p = 0.06; r = −0.20 for TOC). Finally, in the low-confidence condition players perceived their team leader to express significantly less team confidence than their teammates (p < 0.001; r = 0.45 for CE and p < 0.001; r = 0.37 for TOC). These findings confirm that the manipulation of the expressed confidence of the team leader (high vs neutral vs low) was successful.
Tests of H1: Team leader’s influence on members’ team confidence

We tested the contagion of leaders’ expressed confidence on team members’ confidence in two ways: assessing (a) the effect on players’ collective efficacy (as presented in Fig. 3; H1a) and (b) the effect on players’ team outcome confidence (as presented in Fig. 4; H1b). The Shapiro–Wilk test revealed that the distribution of both types of team confidence deviated significantly from the normal distribution (all \( p < 0.001 \)). Accordingly, we used the non-parametric Kruskal–Wallis Test, which revealed significant differences in players’ team confidence across the three experimental conditions (\( \chi^2(2) = 44.87; P < 0.001 \) for CE and \( \chi^2(2) = 38.43; P < 0.001 \) for TOC).

The non-parametric post-hoc Mann–Whitney U tests, with a Bonferroni correction leading to a critical significance threshold of \( \alpha = 0.016 \), revealed that each of the conditions significantly differed from each other. In other words, players’ team confidence was significantly higher when the leader expressed high team confidence than when the leader acted neutrally (\( U = 612.5; p = 0.001; r = -0.27 \) for CE and \( U = 730.5; p = 0.002; r = -0.22 \) for TOC). Moreover, when the leader expressed low team confidence, players’ team confidence was significantly lower than when the leader acted neutrally (\( U = 231.0; p < 0.001; r = -0.49 \) for CE and \( U = 333.0; p < 0.001; r = -0.45 \) for TOC).

In addition, Wilcoxon signed rank tests compared the changes in team confidence from the first to the second test session. Results revealed that when the leader expressed high team confidence, players were more confident in the team’s abilities (\( p < 0.001; r = 0.55 \) for CE) and in the team’s chances on success (\( p = 0.001; r = 0.34 \) for TOC) in the second test session than in the first (where the leader had acted neutrally). When the leader’s expression of team confidence remained neutral, there were no significant differences.
differences in players’ team confidence between the second and first test sessions \( (p = 0.05; r = 0.21 \text{ for CE and } p = 0.17; r = 0.15 \text{ for TOC}) \). Finally, when the leader expressed low team confidence, players had lower confidence in their team \( (p = 0.01; r = -0.26 \text{ for CE and } p = 0.07; r = -0.18 \text{ for TOC}) \) after the second test session than after the first. These findings support the contagion of both collective efficacy (H1a) and team outcome confidence (H1b) throughout the team, starting by the confidence expressed by the leader.

Tests of H2: Team leader’s influence on members’ perceptions of teammates’ team confidence

The contagion of team confidence throughout the team was demonstrated not only by the influence of the leader on members’ own team confidence but also manifested itself in players’ perceptions of their teammates’ team confidence. Table 1 presents players’ perceptions of teammates’ collective efficacy (H2a) and teammates’ team outcome confidence (H2b) across the three experimental conditions. The distribution of the data for both constructs deviated significantly from the normal distribution \( (p < 0.001) \), as indicated by a Shapiro–Wilk test. Non-parametric Wilcoxon signed rank tests revealed that when the leader expressed high confidence, players also perceived their teammates to be more confident than in the first test session \( (p = 0.02; r = 0.25 \text{ for CE and } p = 0.001; r = 0.34 \text{ for TOC}) \). With respect to the neutral experimental condition, no significant differences emerged in the perceived team confidence of players’ teammates across the two test sessions \( (p = 0.52; r = 0.07 \text{ for CE and } p = 0.05; r = 0.15 \text{ for TOC}) \). However, when the leader expressed low team confidence, this had a negative impact on players’ perceptions of their teammates’ team confidence \( (p < 0.001; r = -0.39 \text{ for CE and } p = 0.009; r = -0.27 \text{ for TOC}) \). These findings support our predictions that the confidence expressed by the leader would also affect members’ perceptions of teammates’ collective efficacy (H2a) and teammates’ team outcome confidence (H2b).

Tests of H3: The impact of perceived leader’s confidence on players’ performance

As described above, two separate tasks were performed: the passing task (which was very interactive) and the dribbling-shooting task (which was more individual-oriented). We will consider performance on each of these in turn. A Shapiro–Wilk test revealed that both team and individual performance data did not differ significantly from the normal distribution, in either the first test session \( (p = 0.78 \text{ for team performance; } p = 0.07 \text{ for individual performance}) \) or the second \( (p = 0.82 \text{ for team performance; } p = 0.07 \text{ for individual performance}) \).

Passing task

In the passing task, team performance was measured objectively as the time (in seconds) that the team took to complete the exercise four times, so that the faster a team completed the exercise, the better its performance. Figure 5 presents team performance during both the first and the second test sessions across the three experimental conditions. Because this test reflects team performance, we analyzed the results at the team level. A one-way ANOVA showed that players’ performance in the first test session did not differ significantly across the three experimental conditions \( (F(2,33) = 0.73; p = 0.49; \eta^2 = 0.04) \), indicating a successful randomization of the participants across the experimental conditions.

To compare team performance between the second and first test sessions, we conducted an ANOVA with time as a within-subjects repeated measure (second vs first test session) and confidence expressed by the team leader (high vs neutral vs low) as a between-subjects variable. Results revealed a
significant main effect for time such that overall the performance of the teams improved from the first to the second session \((F(1,33) = 35.56; \ p < .001; \ \eta^2_p = 0.52)\). However, this effect was conditioned by a significant interaction between time and experimental condition \((F(2,33) = 12.13; \ p < 0.001; \ \eta^2_p = 0.42)\). More specifically, when the leader expressed high team confidence, team performance significantly improved in the second session \((t = 9.31; \ p < 0.001; \ d = 1.55)\). A Bonferroni post-hoc test, following a one-way ANOVA with performance improvement as dependent variable, revealed that the improvement in the high-confidence condition was significantly greater than the improvement in the neutral condition \((p = 0.02; \ d = 3.01)\) and in the low-confidence condition \((p < 0.001; \ d = 4.88)\). It should be noted, though, that performance also increased in the neutral condition (though to a lesser extent; \(t = 2.42; \ p = 0.03; \ d = 0.40)\). Given that the leader acted identically in both test sessions, this performance improvement in the neutral condition is most likely explained by a practice effect. In contrast, when the leader expressed low team confidence, there was no significant difference in team performance across the two sessions \((t = 0.26; \ p = 0.80; \ d = 0.04)\). Because the neutral condition was characterized by significant performance improvement, it thus appears that the leader’s low confidence inhibited a learning effect, and consequently negatively affected the team’s performance. In any event, the overall pattern of these findings clearly supports H3a in showing that the team’s performance varied as a function of the perceived leader’s team confidence.

Dribbling-shooting task

Although the teams were instructed to aim for optimal team performance, we also tracked the individual performance of each player, namely, the time that each individual player took to perform the exercise twice. Individual performance was averaged over the four trials on which the task was performed and results were analyzed at the individual level. Players’ individual performance during the first and the second test session across the three experimental conditions is presented in Fig. 6.

As in the passing task, a one-way ANOVA revealed no significant effect across the three experimental conditions for individual performance, which further supports a successful randomization of our participants. To test the impact of the leader’s behavior on participants’ performance, we conducted an ANOVA with time as a within-subjects repeated measure (first test session vs second test session) and the team leader’s team confidence (high vs neutral vs low) as a between-subjects variable. The results revealed a significant main effect for time \((F(1,133) = 53.23; \ p < .001; \ \eta^2_p = 0.29)\), such that players’ performance improved from first to second session, an improvement that can be attributed to a learning effect. However, this main effect was qualified by a significant interaction between time and experimental condition \((F(2,133) = 4.99; \ p = 0.008; \ \eta^2_p = 0.07)\). A Bonferroni post-hoc test, following a one-way ANOVA with performance improvement as dependent variable, revealed that the interaction arose from the fact that this performance improvement was greater when the leader expressed high confidence than when the leader acted in a neutral manner \((p = 0.006; \ d = 3.13)\). These findings are in line with H3b, which predicted that the leader’s behavior would have a significant impact on team members’ individual performance.

Tests of H4: The mediating role of team identification, team confidence, and identity leadership

In the process of examining H4, we first sought to establish whether the mediation model in which leaders’ confidence in their team translates to the outcome-oriented confidence of team members by building team identification and collective efficacy, as postulated by Fransen et al. (2015a). We tested
this model by performing a confirmatory factor analysis (CFA) using STATA. To obtain a comprehensive indicator of the perceived team confidence of the team leader, we averaged members’ perceptions of the leader’s team outcome confidence and collective efficacy. The confirmatory factor analyses suggested the addition of a direct relation between team identification and team outcome confidence. The final model is shown in Fig. 7 ($\chi^2 < 0.001; \text{df} = 0; \text{CFI} = 1.00; \text{TLI} = 1.00; \text{RMSEA} < 0.001; 90\% \text{CI} = [0.00; 0.00]; \text{SRMR} < 0.001$), which also includes the standardized regression path coefficients and the proportions explained variance. In addition to the direct effects reported in the figure, the indirect and total effects are represented in Table 2. The findings revealed that both collective efficacy and team identification functioned as mediators in explaining how leaders impacted team members’ team outcome confidence. The findings of the previous basketball experiment by Fransen et al. (2015a) were thus also confirmed by the data in the present (soccer) experiment.

We also extended the model presented by Fransen et al. (2015a) in two important ways. First, we looked more closely at the impact of team leaders on their teammates’ identification with the team and examined whether identity leadership behavior mediated this relationship. Second, we included players’ perceptions of their individual performance across both tasks as a final outcome variable. We chose for this subjective measure for two reasons. First, all variables that are included in the model are individual-level variables and this subjective measure captures the players’ individual performance. Second, this measure included players’ perceptions of their individual performance perception during both the passing task (i.e., having as an objective measure only the team performance) and the dribbling-shooting task.

The findings revealed that, in line with H4a, members’ team confidence mediated the relationship between leaders’ perceived team confidence and members’ performance. Moreover, team identification was shown to mediate leaders’ impact on members’ team confidence, which confirms H4b. In addition, CFA confirmed H4c in showing that players’ perceptions of the team leader’s identity leadership fully mediated the relationship between the perceived team confidence of the leader and team members’ identification with the team. In sum, the data provided good support for the overall model, which is presented in Fig. 8 ($\chi^2 = 11.31; \text{df} = 6; \text{CFI} = 0.99; \text{TLI} = 0.98; \text{RMSEA} = 0.08; 90\% \text{CI} = [0.00; 0.15]; \text{SRMR} = 0.03$). In addition to the direct effects reported in this figure, the indirect and total effects are represented in Table 2.

---

**Fig. 6.** Mean individual performance across the four trials in the dribbling-shooting task in both test sessions across the three experimental conditions.

**Fig. 7.** Structural model of perceived leader team confidence and players’ team outcome confidence, with team identification and collective efficacy as mediators. Standardized regression coefficients are included, as well as the proportions of explained variance (in italics). *$p < 0.01$; **$p < 0.001$. Notes: When the current model was tested with the manipulated instead of the perceived team leader confidence as predictor (i.e., 1 for the high-confidence condition, 0 for the control condition, −1 for the low-confidence condition), the model revealed similar standard regression coefficients and model fit ($\chi^2/\text{df} < 0.001; \text{CFI} = 1.00; \text{TLI} = 1.00; \text{RMSEA} < 0.001; \text{pclose} = 1.00$).

---

**Table 2.** Standardized regression coefficients and proportions explained variance for the final model.
In the present research, we sought to examine the impact of leaders' confidence in a team on team members' confidence and performance as well as the processes that underpin this impact. Supporting H1, findings revealed a leader–team member contagion effect in process-oriented as well as outcome-oriented confidence. This meant that leaders' expressions of elevated confidence spilled over into team members' own confidence while their expressions of diminished confidence compromised team members' confidence. In contrast, when leaders' confidence was neither high nor low, there was no change in team members' confidence. In line with H2, this team confidence contagion manifested itself not only in participants' own team confidence but also in participants' perceptions of the expressed team confidence of team members.

Beyond this, the results also supported H3 in indicating that the impact of leaders' confidence in the team affected not only players' confidence but also
(a) a team’s coordinated performance in a group (passing) task and (b) members’ individual performance in a (dribbling) task. This meant that when leaders expressed high confidence in the abilities of the team this resulted in a marked increase in team performance (which was also found, albeit to a lesser extent, when leaders’ confidence was neutral). However, when leaders expressed low confidence in the team’s abilities, the team’s passing performance did not increase over time (i.e., from baseline to test session).

Moreover, in an additional task assessing team members’ individual (dribbling) performance, there was evidence that members’ individual performance increased over time regardless of whether the leader had acted neutrally, expressed high confidence, or low confidence (evidencing a pattern akin to a practice effect). However, improvement in individuals’ performance was more pronounced when the leader had expressed high confidence than when he had communicated low confidence or acted neutrally. Finally, supporting H4, the results shed light on the process underlying these effects in showing that leaders’ confidence in the team was translated into improved team member performance to the extent that leaders were seen to engage in identity leadership. This identity leadership behavior resulted in members having stronger identification with their team, which fostered members’ confidence in the team’s abilities and in its outcomes, which in turn impacted on their performance.

Implications for theory and practice

The present findings provide a new understanding of the role that leaders’ confidence plays in their capacity to influence those they lead. Previous work on this topic has shown that leaders’ confidence in their own abilities can enhance their effectiveness (De Cremer & van Knippenberg, 2004; Hannah et al., 2012). However, the present findings also point to the importance for team functioning of an alternative form of confidence that centers on the collective (team) and the abilities of its members.

In this regard, the present findings also advance beyond recent research by Fransen et al. (2015a) which showed that leaders who express low or high confidence in their team have differential impact on members’ responses but where it had been unclear whether results reflected the positive impact of high confidence or the negative impact of low confidence. To address this shortcoming, the present research included a control condition, which allowed us to establish that, compared to neutral leaders (i.e., those in the control condition) leaders who express elevated confidence have a positive influence on team members by inspiring confidence and fostering performance. At the same time, leaders who display a lack of confidence have a negative influence on team members by demoralizing them and compromising their performance. The findings of the present study thus point to a general process whereby expressions of high and low confidence have the capacity to trigger both virtuous and vicious flow-on effects on performance. Moreover, the findings also extend upon the work by Fransen et al. (2015a) in showing that the impact of leaders’ confidence in the team is not restricted to members’ individual performance but also extends to the team’s coordinated collective performance (i.e., shaping performance in group not just individual tasks).

The present results also enrich our understanding of contagion phenomena. For in addition to contagion in affectivity (Walter & Bruch, 2008), it is now also apparent that contagion between leader and team members can involve beliefs about collective abilities. At the same time, our research aimed to go beyond the mere demonstration of contagion by exploring (a) the processes that underpin it as well as (b) its broader impact on team functioning. Indeed, while the term contagion implies automatic transfer of a particular experience from source to target, our findings point to the importance of mediating variables that structure the contagion process. More specifically, they provide evidence of an indirect effect such that leaders’ team confidence results in enhanced perceptions of leaders’ identity leadership as well as members’ greater identification with the team, both of which then feed into increased team member confidence. Broadening our understanding of relevant outcomes, in addition to affecting team members’ confidence, the impact of leader confidence was also apparent in both individual and team performance. Such insights are important because they help us understand why, far from being inevitable, contagion sometimes occurs and sometimes does not (Hennig-Thurau et al., 2006).

Moreover, the present findings have implications for the literature on the sources of team member confidence and, in particular, the role that leadership plays in fostering this. In particular, they endorse the conclusions of previous research in showing that the expressed confidence of athlete leaders is an important source of athletes’ collective efficacy and team outcome confidence (Fransen et al., 2012, 2015b). Furthermore, our findings provide the first evidence that leaders’ confidence can enhance members’ own confidence and performance by bolstering appreciation of their identity leadership that centers on the perceived ability to create, advance, represent, and embed a shared sense of ‘us’ (Haslam et al., 2011; Steffens et al., 2014). This demonstration augments previous research in a variety of fields (e.g., in busi-
ness, educational, and sporting spheres) which has focused on the capacity for subordinates’ perceptions of leaders’ transformational leadership to feed into their own confidence (in their personal abilities or those of the collective; Beauchamp et al., 2011; Price & Weiss, 2013; Walumbwa et al., 2004).

Finally, the present findings also extend our understanding of the effects of identity leadership. In this regard, our findings are the first to demonstrate an association between identity leadership and objective individual and team performance (via team identification). In short, the study is powerful support for the claim that leaders’ cultivation of a sense of ‘we’ and ‘us’ among their team members is not just a ‘feel-good’ exercise but one that fuels the achievement of key group goals (see also Haslam et al., 2011; Steffens et al., 2014). By pointing to the importance of leaders’ expressions of team confidence, the findings also contribute to our understanding of specific leader behaviors that can act as antecedents of identity leadership. Moreover, while there may be different roads to identity leadership (as reflected in a wide array of context-specific leader behaviors), our findings suggest that leaders’ actions will have a positive impact on feelings and behaviors of team members primarily to the extent that these are seen (and felt) to foster shared identity.

Limitations and future research

For all its advantages over previous research (e.g., in terms of design, control, and measurement), the present study was not without limitations. Many of these arise from our decision to study newly formed groups in order to control for the influence of a range of extraneous variables (e.g., a history of prior interaction). This meant, for example, that we opted for an athlete leader (i.e., a research confederate), who was unknown to the other players (i.e., participants). Moreover, the confederate was older and more experienced than his teammates to ensure that he would be perceived as a leader by them. The age and skill difference of the selected leader may have increased the respect felt by the other players, which in turn may have caused the observed outcomes, rather than the leader status itself. However, on the other hand, it is plausible that in real soccer teams, in which athlete leaders have earned their leadership status through long-term interactions with their teammates, the impact of leaders is even more powerful than in this experimental context, in which the leader was a stranger to the other players. Accordingly, there would be value in future work testing our hypotheses with existing groups and teams and in fields other than sport. Such extensions would be important not only to enhance the external validity but also to clarify the longevity of the effects that we have uncovered and to explore potential reciprocal influences between leaders and team members.

The present experiment provided causal evidence that leaders’ confidence in their team has important consequences for team members’ confidence and performance – inferences that cannot be drawn from survey studies. Nevertheless, for all its attempts at realism, the experiment was by necessity contrived and effects were assayed over a relatively limited time frame. To address these issues, future research should investigate the impact of leaders’ team confidence over prolonged periods with a view to exploring possible feedback loops between performance and confidence (cf. Edmonds et al., 2009). For instance, it is entirely conceivable that the enhanced team performance that results from elevated leader confidence may establish reinforcing feedback loops that themselves enhance subsequent confidence. Another fruitful avenue for further research would also involve investigating how the confidence of athlete leaders impacts on aspects of group dynamics other than team identification and team confidence. For example, do they have an effect on team members’ enjoyment of team activities, and do they have any bearing on subjective well-being, stress, and health (e.g., in ways suggested by a social identity approach to health; Haslam et al., 2009)?

Conclusion

The present research elaborates upon previous research that has examined the impact of leaders’ confidence in their team on team members’ confidence and performance. The findings showed that leaders who avow their belief in ‘us’ are thereby able to encourage team members both to see them as effective managers of group identity and to consolidate their identification with the team – factors that in turn lead to enhanced confidence and superior team and individual performance.

In this way, leader confidence has been shown to have an uplifting influence on team member confidence and performance at the same time that leaders’ lack of confidence leads team members both to doubt those leaders and to distance themselves psychologically from the team in ways that compromise their capacity to perform. In sum, it appears that by articulating a belief that “we will be champions”, leaders are able to make ‘us’ matter in ways that inspire team members to carve out a path to success. They do this both by inspiring confidence in their own leadership and by making the team psychological real for its members. Ultimately, then, we conclude that the path to group success is paved with
acts of identity leadership that make both leadership and followership possible.

**Key words:** Athlete leaders, identity leadership, collective efficacy, team identification, social identity approach.

**Acknowledgements**

This research was supported by a PhD Fellowship (Aspirant) of the Research Foundation Flanders (FWO), awarded to Katrien Fransen. We are grateful to Toon Vandevenne, Stef Van Puytenbroeck, Jonas Schoubes, and Mathia Palaia for their assistance during the experiment.

**References**


De Cremer D, Wubben M. When does voice have to be more than only listening? Procedural justice effects as a function of confident leadership. J Pers Psychol 2010: 9: 69–78.


Price MS, Weiss MR. Peer leadership in sport: relationships among personal characteristics, leader...
Leaders’ confidence in ‘us’ inspires performance