The effects of embedding social identities as a leader on perceived leadership outcomes and intentional mobilization of group members

Andrew L. Evans[11], Matthew J. Slater[2] & Michael Edwards[1]

[1]Sport, Health and Performance Enhancement, Nottingham Trent University, Nottingham, NG1 4FQ, England.

[2]Centre for Sport, Health and Exercise Research, Staffordshire University, Stoke-on-Trent, ST4 2DE, England.

Correspondence concerning this research article should be addressed to Andrew L. Evans, Directorate of Psychology and Sport, University of Salford, Salford, M5 4WT, England.

Email: a.l.evans@salford.ac.uk.

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[1] Present address: Directorate of Psychology and Sport, University of Salford, Salford, England, M5 4WT.

Abstract

According to Identity Leadership, effective leaders make the group matter by embedding social identities in material reality. Across two studies, we explored the potential importance of embedding social identities on group members' perceptions of leader trust, influence, conflict and intentional mobilization. In Study 1, 74 competitive varsity athletes read a vignette describing a coach who was either embedding or not embedding social identities. Participants presented with a coach who was embedding social identities reported their coach to be significantly more trustworthy and influential and less conflictual. Participants presented with a coach who was embedding social identities also reported significantly greater intentional mobilization. In Study 2, four soccer teams each comprising six athletes were assigned to one of two quasi-experimental conditions where a coach either: (1) spent two weeks embedding social identities before spending two weeks not embedding them or (2) spent two weeks not embedding social identities before spending two weeks embedding them. When a leader stopped embedding social identities after embedding them for two weeks, group members' trust in their leader significantly reduced. When a leader started embedding social identities after not embedding them for two weeks, group members' perceptions of leader trust and influence and intentional mobilization significantly increased. Taken together, findings provide preliminary evidence that embedding social identities is beneficial for leader outcomes and intentional mobilization compared to a non-embedding leadership approach.

Keywords: social identity leadership; embedding; trust; influence; conflict; intentional mobilization

Highlights

- Embedding social identities involves translating group values into reality through language, activities and future practices
- We explored the effects of embedding social identities experimentally across two studies in a sporting context
- Embedding social identities relates to greater leader trust, influence and intentional mobilization, and lower conflict
- Ceasing to embed social identities reduces leader trust
- Altering leader behaviours to embed social identities increases leader trust, influence and intentional mobilization

The effects of embedding social identities on perceived leadership outcomes and intentional mobilization of group members

Identity Leadership acknowledges that leadership is inextricably linked to group processes and that effective leadership involves creating, managing and advancing a shared social identity (Haslam, Reicher, & Platow, 2020). Research in sport is beginning to explore the importance of Identity Leadership as a general framework. Stevens et al. (2018) examined associations between perceptions of a leader's engagement in Identity Leadership, social identification and attendance to sport and exercise classes in 583 participants who belonged to a sports team or exercise group. Significant indirect effects were found for the relationship between perceptions of a leader's engagement in Identity Leadership and attendance to sport and exercise classes through social identification. Other research by Slater et al. (2019) has explored whether group values that are shared vs. not shared by leaders and group members influence mobilization (willingness to engage in a task) and task performance. Across two experiments, Slater et al. found that group members displayed greater mobilization when group values where shared compared to when group values were not shared. Furthermore, higher effort among group members mediated the relationship between shared group values and group members' improved task performance. In a recent cross-sectional study involving 412 athletes, Miller et al. (2020) found that social identification mediated the positive relationship between coaches' engagement in Identity Leadership behaviours and athletes' stress appraisals and performance. Applied research in disability soccer also exists documenting that a coaching group's engagement in Identity Leadership significantly increased athletes' social identification and the number of hours athletes spent practicing away from training camps (Slater & Barker, 2019). Overall, extant research suggests that engaging in Identity Leadership benefits outcomes pertinent to effective individual-level (e.g., mobilization) and group-level functioning.

The four principles of Identity Leadership

The Identity Leadership framework comprises four principles for effective leadership (for reviews, see Fransen, Slater, & Barker, 2020; Haslam et al., 2020; Steffens et al., 2014a). The first principle is that leaders should be prototypical of their group. In other words, leaders should aim to be representative of the group that they are leading. The importance of being perceived as prototypical of a group has received extensive empirical investigation and findings robustly and consistently demonstrate the positive influence of prototypicality for leadership (van Knippenberg, 2011). In sum, compared to non-prototypical leaders, research in non-sports settings shows that prototypical leaders generate greater support and endorsement from group members whilst resulting in greater perceived effectiveness, charisma and group-orientation (van Dijke & De Cremer, 2010; van Knippenberg & van Knippenberg, 2005).

The second principle is that leaders should advance the interests of their group in a contextually specific manner (Haslam et al., 2020). Leaders that think and behave in ways that reflect a group's values would be conceptualized as advancing the interests of their group. For example, a manager or coach who behaves with sportsmanship would be advancing the interests of a group in a context where that group values fair play. Compared to leaders that do not advance the interests of their group, research in non-sports settings shows that leaders who advance the interests of their group in a contextually specific manner generate greater support from group members (Kershaw & Alexander, 2003) and are more endorsed as leaders (Platow, Nolan, & Anderson, 2003).

The third principle is that leaders should be entrepreneurs of social identities by constructing group values that mobilize groups into collective action (Haslam et al., 2020). This principle therefore recognizes the proactive nature of leadership in that leaders can shape the social context to create and advance social identities (Reicher, Hopkins, & Haslam,

2005). Within a sports team, multiple group values may exist and thus a coach may aspire to redefine the group's identity by providing converging group values that are embraced by all group members. Here, a coach would be remaining prototypical of their group whilst evolving group values consistent with their vision. Consequently, group members would be mobilized to act for their leader because they willingly invest in their valued social identity (Slater et al., 2014). Research in non-sports settings shows that entrepreneurs of social identities are able to gain support from group members and mobilize their group (Haslam & Reicher, 2007). Being an entrepreneur of social identities has also been found to reduce burnout, increase task engagement, and elevate group performance (Steffens, Haslam, Kerschreiter, Schuh, & van Dick, 2014b).

The final principle is that leaders should be embedders of social identities (Haslam et al., 2020). Research suggests that effective leaders make the group matter by embedding social identities in material reality. In other words, this principle proposes that leaders need to ensure that a group's values are achieved in reality. According to Haslam et al., leaders can embed social identities by using language that emphasizes a group's values have been achieved. Leaders can also embed social identities by organizing social action through events or activities that encapsulate a group's values. So, a coach who organizes a fun training session for a sports team that values having fun would be embedding a social identity. Finally, leaders can embed social identities by building a future that helps groups realize their aspirations. For example, a chairman of a sports team that values ambition and success would be embedding a social identity when planning to upgrade training facilities or outlining a plan for improved player recruitment. In a classic BBC Prison Study experiment, Haslam and Reicher (2007) found that group members endorsed and were more willing to act for their leader when practical structures and concrete activities (e.g., discussion forums) were provided that facilitated the achievement of a group's values. Ultimately, Identity Leadership

proposes that embedding social identities means that group members will be mobilized to invest resources (e.g., time and effort) into their group membership because their social identity contributes to their sense of self (Slater et al., 2014).

In summary, each Identity Leadership principle has distinguishing features for effective leadership. Being prototypical is about "being one of us" by representing and embodying the qualities that define the group (Steffens et al., 2014a). Advancing the interests of a group is about "doing it for us" by championing collective interests that are pertinent to the group (Steffens et al., 2014a). Being an entrepreneur of social identities is about "crafting a sense of us" by creating a shared social identity and defining group norms and values (Steffens et al., 2014a). Being an embedder of social identities is about "making us matter" by using language, developing structures, events and activities, and building a future that enable group members to live out their salient group membership in material reality.

The present studies

To this end, it is clear that researchers in sport have explored the importance of Identity Leadership as a general framework (e.g., Stevens et al., 2018) and the effects of Identity Leadership interventions (Slater & Barker, 2019). But to our knowledge, no Identity Leadership research in sport has experimentally examined the effects of particular Identity Leadership principles on outcome variables. Researching particular Identity Leadership principles would therefore provide more in-depth investigations into their importance. In non-sports settings, researchers have predominantly focused on testing the effects of the first three Identity Leadership principles (e.g., Platow, Nolan, & Anderson, 2003; Steffens et al., 2014b; van Dijke & De Cremer, 2010), whilst less is known about the effects of embedding social identities. Accordingly, we focus on the effects of embedding social identities in our research. In doing so, our research: (a) contributes to Identity Leadership research in sport by exploring a particular Identity Leadership principle; and (b) adds to the relative dearth of research in

wider Identity Leadership literature on embedding social identities in comparison to other principles. In sum, our research is the first of its kind to specifically explore the effects of leaders embedding social identities on outcome variables known to be pertinent for leadership.

Specifically, across two studies, we explore the effects of leaders' engagement in embedding social identities on group members' perceptions of leadership outcomes (trust, influence and conflict) and intentional mobilization. A key feature of Identity Leadership is that leaders are able to be effective in salient groups because group members trust them (Hogg, van Knippenberg, & Rast III, 2012). Indeed, research (e.g., Giessner & van Knippenberg, 2008; van Knippenberg & Hogg, 2003) shows that trust plays a critical role in the effects of Identity Leadership on leader effectiveness. Trust has also been found to be important for several group processes including cooperation (De Cremer & van Knippenberg, 2005) and a coach's ability to inspire athletes (Figgins, Smith, Knight, & Greenlees, 2019). Another central feature of Identity Leadership is that leaders are able to influence group members because they embody the group's norms and values and operate within the parameters of a socially shared identity (Hogg et al., 2012). Thus, leaders are in a position to influence group members through salient group memberships which distinguishes Identity Leadership from other leadership approaches. The process of influence is rooted in the origins of Social Identity Theory (see Postmes, Haslam & Swaab, 2005), whereby salient group memberships influence the way group members think, feel and behave (Hogg et al.). A final key feature of Identity Leadership is that leaders are able to be effective in salient groups because they prevent conflict between themselves and group members (by creating a sense that "we are all in this together"). Drawing on Social Identity Theory, it is the shared act of leaders and group members putting aside their personal interests that causes leaders and group members to be similar in their pursuit of collective interests which prevents intragroup

conflict (Evans, Slater, Coffee, & Barker, 2017). Taken together, leader trust, influence and conflict are three widely assessed variables in Identity Leadership research and are key processes within Identity Leadership theory. We therefore aimed to explore the potential importance of embedding social identities (vs. not) on trust, influence and conflict.

Subašić, Reynolds, Turner, Veenstra, and Haslam (2011) called for Identity Leadership researchers to move beyond simply assessing perceived leadership by also capturing group members' mobilization as an indicator of effective leadership. We therefore selected mobilization as a final outcome variable in our research. Mobilization is also important to capture because one of the core functions of Identity Leadership is to have group members converge to a leader's vision to the extent that they are motivated and compelled to achieve it (Slater et al., 2014). Mobilization is therefore a key variable as it reflects leadership as an influential process of motivating group members to collective action (Northouse, 2015). We captured mobilization by assessing group members' intentions to engage in a task assigned by their leader (as in Slater et al., 2018; 2019).

Based on Identity Leadership theorizing, we hypothesized across both studies that, when a leader embeds social identities compared to a when a leader does not embed social identities, group members would report significantly greater leader trust and leader influence, and significantly lower conflict between themselves and their leader (H1). We also hypothesized across both studies that group members would report significantly greater intentional mobilization when a leader embeds social identities compared to when a leader does not embed social identities (H2). In Study 2, we also hypothesized that group members would report significantly increased leader trust and leader influence, and significantly reduced conflict between themselves and their leader, when a leader embeds social identities after a period of not embedding social identities (H3). Alternatively, we hypothesized that group members would report significantly reduced leader trust and leader influence, and

significantly increased conflict between themselves and their leader, when a leader stops embedding social identities after a period of embedding social identities (H4). Further, we hypothesized that group members would report significantly increased intentional mobilization when a leader embeds social identities after a period of not embedding social identities (H5). In contrast, we hypothesized that group members would report significantly reduced intentional mobilization when a leader stops embedding social identities after a period of embedding social identities (H6).

Study 1

Initial Identity Leadership research in non-sports settings has typically involved researchers comparing the effects of leaders upholding vs. not upholding Identity Leadership principles (e.g., an ingroup vs. a non-ingroup prototypical leader; De Cremer, van Dijke, & Mayer, 2010; van Knippenberg & van Knippenberg, 2005). Thus, we tested H1 and H2 by exploring the effects of embedding vs. not embedding social identities on trust, influence, conflict and intentional mobilization. We adopted an Experimental Vignette Methodology (EVM; see Aguinis & Bradley, 2014) in Study 1 where participants read a vignette describing a leader embedding or not embedding social identities in a sporting context. EVMs are well-established protocols in identity leadership research in organizational (De Cremer, Mayer, van Dijke, Schouten, & Bardes, 2009) and sports settings (Slater et al., 2018; 2019). For example, research by De Cremer et al. (2009) involved participants providing perceptions of a leader who was described as self-sacrificial or self-benefitting in a written script. Of the EVM approaches available, we adopted a paper and people approach because such studies have been used widely in leadership research (e.g., De Cremer et al.) and are appropriate when the goal of research is to explore explicit outcomes and processes (Aguinis & Bradley, 2014).

Method

Participants and Design

Participants were 74 (42 male; *M*age = 20.53 ± 1.97 years) experienced (*M*exp = 9.91 ± 4.70 years) competitive varsity athletes who belonged to university sports teams (football, netball, basketball, rugby league, rugby union, hockey and equestrianism). Participants were registered as students on one of six sports science undergraduate degree programmes at the same University in the East Midlands region of England. Participants ethnicities were White British (*n* = 64), Black British (*n* = 3), British Asian (*n* = 2) or White Spanish (*n* = 1).

A between-subjects design was employed where participants were randomly assigned to a Leader Embedder (LE) or a Leader Non-Embedder (LNE) condition. Based on a two condition between-subjects design, an alpha of .05, and using an effect size of $\eta_p^2 = .17$ from previous Identity Leadership research (Slater et al., 2018), 25 participants were required to achieve a power of .80 (based on Clark-Carter, 2010). Thus, our sample of 37 participants per condition provided adequate power and is in-line with Identity Leadership research in sport using EVM (*n* = 40 per condition; Slater et al., 2018).

Vignette Development

Vignettes were developed in line with recommendations for EVM studies by Aguinis and Bradley (2014) and, for transparency, are provided in S1 and S2. Aguinis and Bradley (2014) advised that participants reading one vignette as part of a between-subjects design should be presented with sufficient contextual information prior to reading manipulated elements. Each vignette therefore began by outlining the same contextual information about participants belonging to a sports team, identifying with a coach, sharing group values around being creative and innovative as a team and preparing for an upcoming National University sports tournament. Recruiting participants who were team sport competitors at University that were coached maximized the realism of vignettes. Basing vignettes around the scenario of preparing for a National University sports tournament also enhanced realism given that

participants were competing in University sport and were regularly involved in preparing for University competitions against other institutions. Indeed, Aiman-Smith, Scullen, and Barr (2002) emphasized that the scenario used in EVM should be familiar to participants otherwise responses after reading a vignette may be artificial.

Emphasizing that participants identified with the sports team described in their vignette suggested that group memberships were salient. Subsequent perceptions of leadership would be valid because group memberships were meaningful to participants. Researchers have also emphasized salient social identities in EVM approaches (e.g., Slater, et al., 2018; 2019). We also replicated researchers (Slater et al., 2018; 2019) that have emphasized a shared identity ("you and your coach belong to the same team") and shared values ("what matters most to your team and your coach is being creative and innovative as a team") with a coach. Such information was important to emphasize so that participants perceived their coach to adhere to the first three Identity Leadership principles within each vignette. Accordingly, this enabled us to manipulate the final Identity Leadership principle in the remaining elements of each vignette, creating LE vs. LNE conditions.

Descriptions of coach communication and behaviour that followed in each vignette were developed according to theoretical postulations of being an embedder or non-embedder of social identities (Haslam et al., 2011). In the LE vignette, the coach used rhetoric that communicated the team's values. The coach also organized activities (innovative training sessions) and constructed a future (consulting sports scientists and visiting facilities) in line with team values. Overall, the coach in the LE vignette was described as using language, engaging in activities and building a future that would enable group members to live out their salient and valued group membership. Alternatively, in the LNE vignette, the coach used rhetoric that communicated team values that were not salient to the group's identity. The coach also organized activities and constructed a future (organizing training sessions to work

on traditional methods) that were not in line with team values. Overall, the coach in the LNE vignette was described as using language, engaging in activities and building a future that would not enable group members to live out their salient and valued group membership.

Procedure and Measures

Ethical approval was granted by an institutional ethics panel. All participants read an information sheet and provided informed consent. Participants attended a university teaching room and read their vignette in silence to maximize concentration. After reading their vignette, participants selected the extent to which they were able to imagine their scenario by selecting: "*completely able*", "*somewhat able*" or "*completely unable*". Participants that checked "*completely unable*" (n = 4) were excluded from analyses. Participants then completed a questionnaire including measures of social identification, leader outcomes and intentional mobilization. Participants read the instruction "to what extent do you agree that…" and proceeded to rate the extent to which they agreed with items on a Likert scale ranging from 1 (*do not agree at all*) to 7 (*completely agree*).

***Social identification*.** We followed previous research (e.g., Slater et al., 2018) to check whether we had successfully immersed participants in their scenario by asking them to complete the Single-Item Social Identification scale (SISI; Postmes, Haslam, & Jans, 2013: "…you identify strongly with your team").

***Leader outcomes*.** We used a measure from Identity Leadership literature (see Giessner & van Knippenberg, 2008; Giessner, van Knippenberg, & Sleebos, 2009) to measure *leader trust*. The three-item scale (e.g., "…your coach is trustworthy") demonstrated good internal consistency (α = .74). Following Subašić et al. (2011), we developed a five-item scale to measure *leader influence* that was relevant for our context (e.g. "…the coach's desired training is important for your team"). The scale demonstrated very good internal consistency (α = .86). Finally, a two-item scale assessing *leader conflict* ("…your team and

coach are very likely to disagree" and "…there is a very high level of conflict between your coach and your team") was developed in line with descriptions of leader conflict in Identity Leadership (Hogg, 2015) and demonstrated good internal consistency (α = .76).

***Intentional mobilization*.** A five-item scale (see Slater et al., 2018; 2019) was used to measure intentional mobilization (e.g., "…you are strongly motivated to engage in your weekly training session"). This scale demonstrated very good internal consistency (α = .84) in line with past research (e.g., α = .87; Slater et al., 2018).

Results

***Social identification*.** No significant differences in social identification were found between the LE (M = 6.19 ± 0.75) and LNE conditions (M = 5.87 ± 0.84), $t(72) = 1.75$, p = .084. Social identification was significantly greater than the midpoint of the scale in the LE ($t(35) = 19.74$, $p < .001$) and LNE conditions ($t(37) = 14.35$, $p < .001$), indicating that members of each condition perceived a sufficient psychological connection with their group.

***Leader outcomes*.** Multivariate analyses (MANOVA) revealed a significant between-conditions effect for trust, influence and conflict, Wilks' Λ = .78, $F(3, 70) = 6.59$, p = .001, η_p^2 = .22. As shown in Table 1, Bonferroni-adjusted follow-up pairwise comparisons indicated that participants in the LE condition reported significantly higher trust (M = 5.80 ± 0.64 vs. 5.32 ± 0.78, p = .005) and influence (M = 5.94 ± 0.64 vs. 5.19 ± 1.00, $p < .001$), and significantly lower leader conflict (M = 2.08 ± 1.01 vs. 3.16 ± 1.44, $p < .001$), than participants in the LNE condition.

***Intentional mobilization*.** As displayed in Table 1, ratings of intentional mobilization were significantly higher in the LE condition (M = 6.00 ± 0.56) compared to the LNE condition (M = 5.48 ± 0.94), $t(61.15) = 2.88$, p = .005, d = .98.

Discussion

Compared to participants who read a vignette where a coach was described as not embedding social identities (LNE condition), participants who read a vignette where a coach was described as embedding social identities (LE condition) perceived their coach to be significantly more trustworthy and influential. Participants in the LE condition also reported significantly less conflict with their leader and significantly greater intentional mobilization for training. Study 1 findings therefore support H1 and H2 and provide preliminary evidence that embedding social identities is important for perceptions of leader trust, influence and conflict as well as the intentional mobilization of group members.

Study 2

In Study 2, we sought to further test H1 and H2, aiming to replicate the findings of Study 1. In addition, we sought to extend Study 1 by exploring the effects of embedding social identities on trust, influence, conflict and intentional mobilization in a naturalistic setting with real-life sports teams. Conducting Study 2 in a naturalistic setting maximizes ecological validity and mirrors previous multi-study Identity Leadership research that has conducted field research following initial experimental methodologies (e.g., De Cremer et al., 2009). To further extend Study 1, we took repeated measures of leader outcomes and intentional mobilization so that we could explore the effects of sustained periods of being an embedder or non-embedder of social identities. Taking repeated measures also enabled us to manipulate leader embeddedness through a within-subjects element of our research design. Our research design therefore allowed us to extend Study 1 findings by exploring the effects of: (1) becoming a leader embedder following a period of not embedding social identities on trust, influence, conflict and intentional mobilization; and (2) becoming a leader non-embedder following a period of embedding social identities on trust, influence, conflict and intentional mobilization. In this way, our research design enabled us to test H3, H4, H5 and H6.

Method

Participants and design

Four soccer teams each consisting of six athletes were recruited through convenience sampling. Each team competed in a different six-a-side league in the East Midlands region of England. Participants comprised 24 male recreational soccer athletes (*M*age = 25.70 ± 4.00 years) whose ethnicity was White British (*n* = 23) or White Polish (*n* = 1).

A between-within-subjects quasi-experimental research design was used whereby teams were randomly assigned to a Leader Embedder to Leader Non-Embedder (LE to LNE; *n* = 12) or a Leader Non-Embedder to Leader Embedder (LNE to LE) condition (*n* = 12). In the LE to LNE condition, a soccer coach embedded social identities for two weeks and then did not embed social identities for the following two weeks. In the LNE to LE condition, a soccer coach did not embed social identities for two weeks and then embedded social identities for the following two weeks. Based on a 2 (condition: LE to LNE vs. LNE to LE) X 4 (time: week 3 vs. 4 vs. 5 vs. 6) design, an alpha of .05, and using an effect size of $\eta_p^2 = .17$ from previous Identity Leadership research (Slater et al., 2018), 24 participants were required to achieve a power of .80 (based on Clark-Carter, 2010).

Procedure

Ethical approval was granted by an institutional ethics panel. All participants read an information sheet and provided informed consent. Teams were exposed to the same experimental procedure (see Figure 1 for an overview) on separate occasions. The procedure was delivered over six weeks and took place on a soccer pitch located at each six-a-side league's facilities. We decided to conduct Study 2 in a soccer context because of its high participation rate in the UK, and due to the third author being a qualified soccer coach. Focusing on one sport is in line with Fransen et al. (2014; 2015) who also chose to focus on one sport in their Identity Leadership research.

Week 1. The third author (a United Kingdom Level one soccer coach) introduced himself to participants and explained that he was an experienced and qualified soccer coach with an interest in soccer coaching. Participants then completed a questionnaire including the SISI (Postmes et al., 2013) to measure *social identification* (as used in Study 1). The questionnaire also asked participants to write the salient values attached to their group identity which formed a measure of *social identity content* (see Evans et al., 2017). Measuring social identity content was important so that the coach could promote soccer activities as being aligned (thus being a leader embedder) or not aligned (thus being a leader non-embedder) to social identity content at weeks three to six.

Week 2. Separately, the coach and the first author read the verbatim words/comments provided by participants within the social identity content measure. Accordingly, the coach and the first author summarized each team's values based on the words/comments provided and met to discuss their summaries. Both parties agreed with their summaries and felt that they provided an accurate representation of each team's values. Our measure of social identity content revealed that group members in teams 1, 2 and 4 converged on values around "fun" and "friendships". Group members in team 3 converged on values around "fun" and "winning". Each group member's words/comments included within the social identity content measure were therefore encapsulated by their team's values.

The coach explained to participants that the research team had reviewed the social identity content measure and used this information to understand team values. The coach then stated the specific team values to participants. The coach explained that they also shared the team's values and had previously coached teams that valued comparable aspects of social identity content. Aforementioned in Study 1, promoting shared group values was important so that participants perceived their coach to adhere to the first three principles of Identity Leadership. Participants then completed a single-item measure to check the accuracy of the

coach's interpretation of social identity content ("to what extent do you agree that your coach's interpretation of the values within your team is accurate") by rating the extent to which they agreed with this item on a Likert scale ranging from 1 (*do not agree at all*) to 7 (*completely agree*).

Weeks 3 to 6. Teams completed a weekly soccer activity across the remaining four weeks. Activities were selected based on literature (Russell, Benton, & Kingsley, 2010; 2011) that has used such activities to simulate soccer performance. Our activities were based on the main components of soccer including dribbling, passing, shooting, defending, attacking and possession (see S3 for further description). Before each activity, the coach performed a full demonstration and guided participants through a warm-up. Following each activity, participants completed a questionnaire including measures of *social identification*, *leader trust* (weeks 3-6: α = .80, .91, .77, and .80), *leader influence* (weeks 3-6: α = .83, .91, .90, and .92), *leader conflict* (weeks 3-6: α = .97, .95, .80, and .85) and *intentional mobilization* (weeks 3-6: α = .90, .86, .91, and .91) used in Study 1. The questionnaire also contained a single-item measure of *leader embeddedness* ("…your coach is helping you achieve the values that are important to your team"). Participants read the instruction "to what extent do you agree that…" and proceeded to rate the extent to which they agreed with all items on a Likert scale ranging from 1 (*do not agree at all*) to 7 (*completely agree*). At the onset of Study 2 (March 2014), no leader embeddedness measure existed in research. So, we developed a measure in line with conceptualizations of leader embeddedness within Identity Leadership (Haslam et al., 2011). Since data collection, Steffens et al. (2014) has developed the Identity Leadership Inventory (ILI) that has been found to have content, construct, discriminant and criterion validity and should be used in future research.

Manipulating LE and LNE. For the LE to LNE condition, soccer activities completed at weeks 3 and 4 were framed as being aligned to social identity content (LE)

whereas activities completed at weeks 5 and 6 were framed as not being aligned to social identity content (LNE). For the LNE to LE condition, soccer activities completed at weeks 3 and 4 were framed as not being aligned to social identity content (LNE) whereas activities completed at weeks 5 and 6 were framed as being aligned to social identity content (LE). For LE soccer activities, the coach informed group members that he had attended a meeting with a qualified professional soccer coach who specialized in developing and delivering soccer activities. The coach explained that the purpose of their meeting was to discover a soccer activity aligned to the team's social identity content. To make the meeting appear authentic, the coach presented a leaflet to participants including: (a) a picture of the coach and professional soccer coach (actually a confederate) meeting to discuss the soccer activity; (b) a picture of both coaches performing a demonstration of the activity; and (c) information summarizing the main points of the meeting. For LNE soccer activities, the coach informed participants that they would complete a soccer activity that was generic in nature and did not encapsulate their social identity content.

Results

Social identification. At week 1, no significant differences in social identification were found between the LE to LNE ($M = 6.67 \pm 0.49$) and LNE to LE conditions ($M = 6.75 \pm 0.45$), $t(22) = 0.43$, $p = .670$. Ratings of social identification were also significantly greater than the midpoint of the scale in the LE to LNE ($t(11) = 18.76$, $p < .001$) and the LNE to LE conditions ($t(11) = 21.06$, $p < .001$), indicating that members of each condition perceived a sufficient psychological connection with their group.

Interpretation of social identity content. At week 2, no significant differences in the coach's interpretation of social identity content were found between the LE to LNE ($M = 6.58 \pm 0.51$) and LNE to LE conditions ($M = 6.58 \pm 0.51$), $t(22) = 0$, $p = 1$. The coach's interpretation of social identity content was also significantly greater than the midpoint of the

scale in the LE to LNE ($t(11) = 17.38$, $p < .001$) and the LNE to LE conditions ($t(11) = 17.38$, $p < .001$), indicating that members of each condition strongly perceived their coach to have accurately interpreted in-group values.

Leader embeddedness. A 2 (condition: LE to LNE vs. LNE to LE) X 4 (time: week 3 vs. 4 vs. 5 vs. 6) mixed model ANOVA revealed a significant difference between conditions, $F(1, 22) = 31.45$, $p < .001$, $\eta_p^2 = .59$, a non-significant difference across time, $F(3, 66) = .57$, $p = .638$, and a significant interaction (condition X time), $F(3, 66) = 3.74$, $p = .015$, $\eta_p^2 = .15$, for perceptions of leader embeddedness. Follow-up Bonferroni-adjusted pairwise comparisons revealed significant differences between conditions at weeks 3 and 4 (see Table 2). Specifically, the LE to LNE condition reported greater perceptions of the coach as a leader embedder at week 3 ($p = .001$, CIs: 0.55, 1.79) and week 4 ($p = .001$, CIs: 0.47, 1.53) compared to the LNE to LE condition. No other significant comparisons were found.

Leader outcomes. A 2 (condition: LE to LNE vs. LNE to LE) X 4 (time: week 3 vs. 4 vs. 5 vs. 6) mixed model MANOVA indicated a significant main effect for condition, Wilks' $\Lambda = .48$, $F(3, 20) = 7.26$, $p = .002$, $\eta_p^2 = .52$, a non-significant effect for time, Wilks' $\Lambda = .72$, $F(9, 14) = 0.62$, $p = .766$, $\eta_p^2 = .28$, and a significant interaction (condition X time), Wilks' $\Lambda = .32$, $F(9, 14) = 3.34$, $p = .021$, $\eta_p^2 = .68$. Follow-up Bonferroni-adjusted pairwise comparisons revealed that the LE to LNE condition reported significantly greater leader trust and influence (all ps $< .001$) at weeks 3 and 4 (but not weeks 5 and 6), and lower conflict (at week 4 only; $p < .001$) compared to the LNE to LE condition (see Table 2). As shown in Figures 2-4, there is a clear difference in scores between-conditions for trust and influence at weeks 3 and 4, and conflict at week 4, which are then narrowed to close to no difference at weeks 5 and 6.

For trust, in the LE to LNE condition, scores significantly reduced from both week 3 (M difference = -0.70, $p = .039$, CIs: -1.37, -.02) and week 4 (M difference = - 0.84, $p = .015$,

CIs: -1.54, -0.13) to week 5 (but not week 6). In the LNE to LE condition, trust significantly increased from week 4 (but not week 3) to both week 5 (*M* difference = +0.72, *p* = .042, CIs: 0.02, 1.43) and week 6 (*M* difference = +1.05, *p* = .004, CIs: 0.28, 1.83). For influence, in the LNE to LE condition, scores significantly increased from week 4 (but not week 3) to both week 5 (*M* difference = +0.67, *p* = .029, CIs: 0.08, 1.26) and week 6 (*M* difference = +0.78, *p* = .002, CIs: 0.24, 1.33). Follow-up comparisons for influence in the LE to LNE condition and for conflict within both conditions were not significant.

***Intentional mobilization*.** A 2 (condition: LE to LNE vs. LNE to LE) X 4 (time: week 3 vs. 4 vs. 5 vs. 6) mixed-model ANOVA indicated a significant difference between conditions, $F(1, 22) = 21.28$, $p < .001$, $\eta_p^2 = .49$, a non-significant difference across time, $F(3, 66) = .25$, $p = .859$, and a significant interaction, $F(3, 66) = 6.18$, $p = .001$, $\eta_p^2 = .22$, for intentional mobilization. Bonferroni-adjusted pairwise comparisons indicated that the LE to LNE condition reported significantly greater mobilization compared to the LNE to LE condition at weeks 3 and 4 (see Table 2). Regarding the within-conditions effects, mobilization scores significantly increased from week 4 to week 5 in the LNE to LE condition only (*M* difference = +0.76, *p* = .042, CIs: 0.02, 1.51; see Figure 5). No other comparisons were significant.

Discussion

In Study 2, we found that group members' trust in their leader, perceived leader influence and intentional mobilization were all significantly higher in weeks 3 and 4 when a coach began by embedding social identities compared to when a coach began by not embedding social identities. Group members also reported significantly lower conflict with their leader in week 4 (but not week 3) when a coach began by embedding social identities compared to when a coach began by not embedding social identities. So, with the exception of leader conflict, Study 2 findings provide further support for H1 and H2 in a naturalistic setting. There were

also some notable changes in leader outcomes and mobilization when a leader changed their embedding approach. Specifically, when a leader moved from embedding social identities to not doing so (the LE to LNE condition), group members' trust in their leader significantly reduced. However, no significant changes were noted for influence, conflict or intentional mobilization. Thus, Study 2 findings provide some support for H3 and no support for H5. Alternatively, when a leader moved from not embedding social identities to doing so (the LNE to LE condition), groups members' trust in their leader, perceived leader influence and intentional mobilization all significantly increased. No significant changes were noted for conflict. Study 2 findings therefore provide some support for H4 and support H6.

General Discussion

Across two studies, we explored the effects of embedding social identities on group members' perceptions of leader trust, influence, conflict and intentional mobilization in a sporting context. In Study 1, sports team competitors who were presented with a vignette describing a leader embedder compared to those who were presented with a vignette describing a leader non-embedder reported significantly higher trust in their leader, leader influence and intentional mobilization, and significantly lower conflict. In Study 2, members of soccer teams whose leader began by embedding social identities reported significantly higher trust in their leader, leader influence and intentional mobilization compared to members of soccer teams whose leader began by not embedding social identities. Study findings converge to provide further support for H1 and H2. However, the lack of significant differences pertaining to leader conflict in Study 2 means findings relating to H1 should be interpreted with some caution. Additionally, Study 2 revealed that members of soccer teams' trust in their leader significantly reduced when their leader stopped embedding social identities after embedding them for two weeks. In contrast, Study 2 revealed that members of soccer teams' trust in their leader, perceived leader influence and intentional mobilization all

significantly increased when their leader started embedding social identities after not embedding them for two weeks. Overall, Study 2 findings provide some support for H3, H4 and H6, but no support for H5.

The current studies add to an emerging body of literature (e.g., Miller et al., 2020; Stevens et al., 2018) documenting the importance of Identity Leadership in sport. Identity Leadership should therefore be viewed as an approach to leadership that contributes to our understanding of leadership in sport psychology. More specifically, our line of research offers a promising first explorative step in determining the importance of leaders embedding social identities in sports teams for leader outcomes and intentional mobilization. The present studies therefore advance Identity Leadership research in sport by documenting the effects of a particular Identity Leadership principle rather than the effects of Identity Leadership as a general framework. The notion of embedding social identities has also been under-researched in wider Identity Leadership literature in non-sports settings.

In our line of research, we responded to calls by Subašić et al. (2011) to capture mobilization in addition to perceptions of leadership as a measure of effective leadership. Specifically, we build on Slater et al's (2019) research by demonstrating that embedding vs. not embedding social identities leads to greater intentional mobilization in varsity athletes (Study 1) and soccer athletes (Study 2). Finally, in Study 2, we tracked leader outcomes and intentional mobilization over time in an ecologically valid setting meaning that we could capture the effects of changing between being and not being an embedder of social identities. Study 2 therefore adds to the comparatively limited pool of longitudinal Identity Leadership research in sport in naturalistic settings.

The findings of both studies converge to suggest that embedding social identities relates to greater leader trust, influence, and intentional mobilization, and lower conflict, compared to not embedding social identities. In both studies, a leader was framed as

embedding social identities when they were translating what mattered to their group into reality. So, using rhetoric, organizing activities and building a future that encapsulates a group's values seem important for group members' perceptions of leadership and intentional mobilization. The findings of both studies therefore offer support to theoretical postulations that being an embedder of social identities is important in a sporting context.

The benefits of embedding social identities (Study 1) and altering leader behaviours to embed social identities (Study 2) are important. Greater levels of trust, influence and mobilization, and lower levels of conflict, are helpful outcomes for sports teams and organizations and may improve performance. For example, high levels of mobilization have been positively related to improved task performance (Slater et al., 2019). Accordingly, sports leaders who are able to embed social identities in practice may generate performance benefits. However, this postulation requires future research examination.

The only outcome variable to significantly change in each condition in Study 2 when leaders moved between embedding and not embedding social identities was perceived leader trust. Perceived leader trust may therefore be a particularly important variable to consider when exploring leaders as embedders of social identities. Research around other Identity Leadership principles in non-sports settings has demonstrated that more prototypical leaders garner increased levels of trust from group members (Giessner & van Knippenberg, 2008). Study 2 findings extend knowledge of Identity Leadership and trust by highlighting that group members' trust in their leader is quickly transformed based on changes a leader makes to whether they embed or do not embed social identities within their leadership.

Participants in Study 2 still reported moderately high values for all leader outcomes (except leader conflict which was moderately low) and intentional mobilization when presented with or receiving a leader non-embedder approach. Embedding social identities may therefore have an additive effect on leader outcomes and mobilization. To explain,

participants reported high levels of social identification across all conditions in Study 1 and 2 which may have somewhat buffered against the potentially damaging effects of being presented with a coach who did not embed social identities. Research highlights that social identities protect groups when under strain (Haslam et al., 2005) whilst other research illustrates that highly identified group members band together when experiencing threats to social identities (Ouwerkerk, De Gilder, & De Vries, 2000). Initial non-embedding leadership in Study 2 also involved the coach taking time to understand the group values before organizing activities that did not align with group values. Perhaps taking time to understand group values augmented perceptions of leadership and intentional mobilization but not to the levels that are achieved when this understanding is then embedded into practice.

Practically, study findings imply that those occupying leadership positions (e.g., coaches) should embed social identities. In Study 2, ceasing to embed social identities lowered group members' trust in their leader. Such findings suggest that it is important for coaches to first engage in embedding and continue to maintain this approach over time. In Study 2, altering leader behaviours to embed social identities increased group members' trust in their leader, perceived influence, and intentional mobilization. Becoming a leader embedder by altering leadership practice may therefore prove beneficial for sports leaders who may not have embedded social identities within their sports teams. Such findings emphasize the potential importance of providing Identity Leadership training to leaders of ineffective leadership regimes which could be investigated in future research.

The current studies have shortcomings and limitations which mean our research findings and implications should be interpreted with some caution. Research has demonstrated that the four principles of Identity Leadership are related (Steffens et al., 2014a; van Dick et al., 2018) meaning we may have elicited change in other Identity Leadership principles in both studies. Thus, a shortcoming of our research is that we did not measure all

four Identity Leadership principles. Future researchers should therefore use the ILI (Steffens et al., 2014a) to examine whether manipulations used in our research alter the Identity Leadership principles of prototypicality, advancement and entrepreneurship. Furthermore, although adopted by researchers (Slater et al., 2018; 2019) as an appropriate methodological approach, we acknowledge the difficulties in developing experimental vignettes. It could be that the vignettes used in Study 1 elicited change in other leadership variables such as perceived leader capability and legitimacy. So, whilst we focus on Identity Leadership in our research, we recognize that there are many opportunities for future leadership researchers in sport to assess a wider set of variables. To enhance the rigor of vignette development, future researchers could use an independent expert panel to scrutinize the conceptual appropriateness of vignettes. More broadly, future researchers could enhance scientific rigor by employing field (as in Study 2) and laboratory experimental designs (as in Slater et al., 2018; 2019).

In Study 1, we used EVM which lacks ecological validity. In Study 2 however, we overcame this limitation by exploring leader embeddedness in a naturalistic setting with intact sports teams. In Study 1, our sample comprised varsity athletes who competed for teams at one University in one region of England. In Study 2, we chose one sport to focus on for practical reasons. So, Study 2 findings cannot be generalized beyond soccer. Whilst using two different samples in two different designs can be viewed as a strength, our approach also presents a research gap. Study 1 involved competitive varsity athletes reading hypothetical vignettes. Meanwhile, Study 2 was conducted in a real-world sporting context with recreational soccer athletes. Future researchers could therefore conduct similar studies with competitive and elite athletes and teams in real sporting contexts.

Participants in Study 2 were familiar with being coached. However, we introduced participants to a coach whom they had not been coached by before. Our approach was

consistent with approaches used in extant research (Evans, Turner, Pickering & Powditch, 2018) and reflects the dilemma of using a researcher or confederate as a coach so that internal validity is maximized but experimental realism is threatened (Vargas & Madrigal, 2018). Perhaps future researchers could train actual coaches for delivery of quasi-experimental protocols. That said, even this approach would threaten realism as this would differ from typical coaching practice (Vargas & Madrigal, 2018). It is therefore recommended that future researchers utilize manipulation checks to ascertain the realism of experimental manipulations. Finally, participants in Study 2 indicated a specific set of group values around "fun", "friendships" and "winning". It is unknown whether there are other group values pertinent in sports teams and whether these differ across organizations. Future research could therefore explore types of group values in different contexts and perhaps develop a questionnaire that can be used to measure such values in research.

Unfortunately, we were unable to collect objective performance data across both studies. Future researchers could therefore explore the effects of embedding social identities on objective performance. Future researchers could also measure physiological and health outcomes (e.g., stress) alongside self-report measures (e.g., Slater et al., 2018).

In conclusion, the studies documented in our program of research provide an explorative investigation into the importance of embedding social identities. Our findings provide encouraging preliminary evidence that being an embedder of social identities is important for group members' perceptions of trust in their leader, leader influence, conflict and intentional mobilization.

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Table 1. Means, SDs and between-condition CIs for leader outcomes and intentional mobilization in the LE and LNE conditions in Study 1.

Variable	LE M ± SD	LNE M ± SD	CIs
Leader trust	5.80 ± 0.64	5.32 ± 0.78	0.15, 0.81*
Leader influence	5.94 ± 0.64	5.19 ± 1.00	0.36, 1.14*
Leader conflict	2.08 ± 1.01	3.16 ± 1.44	-1.65, -0.50*
Intentional mobilization	6.00 ± 0.56	5.48 ± 0.94	0.16, 0.87*

Note: *$p < 0.01$.

Table 2. Means, SDs and between-condition CIs for leader outcomes and intentional mobilization in the LE to LNE and LNE to LE conditions in Study 2.

Variable	Week 3 LE to LNE vs LNE to LE	Week 4 LE to LNE vs LNE to LE	Week 5 LE to LNE vs LNE to LE	Week 6 LE to LNE vs LNE to LE
Perceived leader embeddedness	6.58 ± 0.67 vs. 5.42 ± 0.79* (CIs: 0.55, 1.79)	6.25 ± 0.45 vs. 5.25 ± 0.75* (CIs: 0.47, 1.53)	5.83 ± 0.72 vs. 5.92 ± 0.67 (CIs: -0.67, 0.50)	5.83 ± 0.94 vs. 5.67 ± 0.65 (CIs: -0.52, 0.85)
Leader trust	6.39 ± 0.51 vs. 5.19 ± 0.61* (CIs: 0.72, 1.67)	6.53 ± 0.36 vs. 4.89 ± 0.78* (CIs: 1.12, 2.16)	5.69 ± 0.82 vs. 5.61 ± 0.60 (CIs: -0.53, 0.69)	6.00 ± 0.84 vs. 5.94 ± 0.66 (CIs: -0.59, 0.70)
Leader influence	6.18 ± 0.47 vs. 5.33 ± 0.72* (CIs: 0.34, 1.36)	6.47 ± 0.47 vs. 5.05 ± 0.56* (CIs: 0.98, 1.85)	5.88 ± 0.67 vs. 5.72 ± 0.50 (CIs: -0.34, 0.66)	5.95 ± 0.81 vs. 5.83 ± 0.53 (CIs: -0.70, 0.47)
Leader conflict	1.92 ± 1.53 vs. 3.04 ± 1.47 (CIs: -2.40, 0.15)	1.46 ± 0.40 vs. 3.50 ± 1.58* (CIs: -3.02, -1.07)	2.33 ± 1.29 vs. 2.79 ± 1.21 (CIs: -1.52, 0.60)	2.12 ± 1.19 vs. 3.00 ± 1.57 (CIs: -2.01, 0.35)
Intentional mobilization	6.30 ± 0.53 vs. 5.15 ± 0.74* (CIs: 0.61, 1.70)	6.33 ± 0.34 vs. 4.87 ± 0.90* (CIs: 0.89, 2.04)	5.65 ± 0.81 vs. 5.63 ± 0.64 (CIs: -0.60, 0.63)	5.88 ± 0.93 vs. 5.62 ± 0.56 (CIs: -0.38, 0.91)

Note: *$p < 0.01$.

Figure 1. Experimental procedure for Study 2

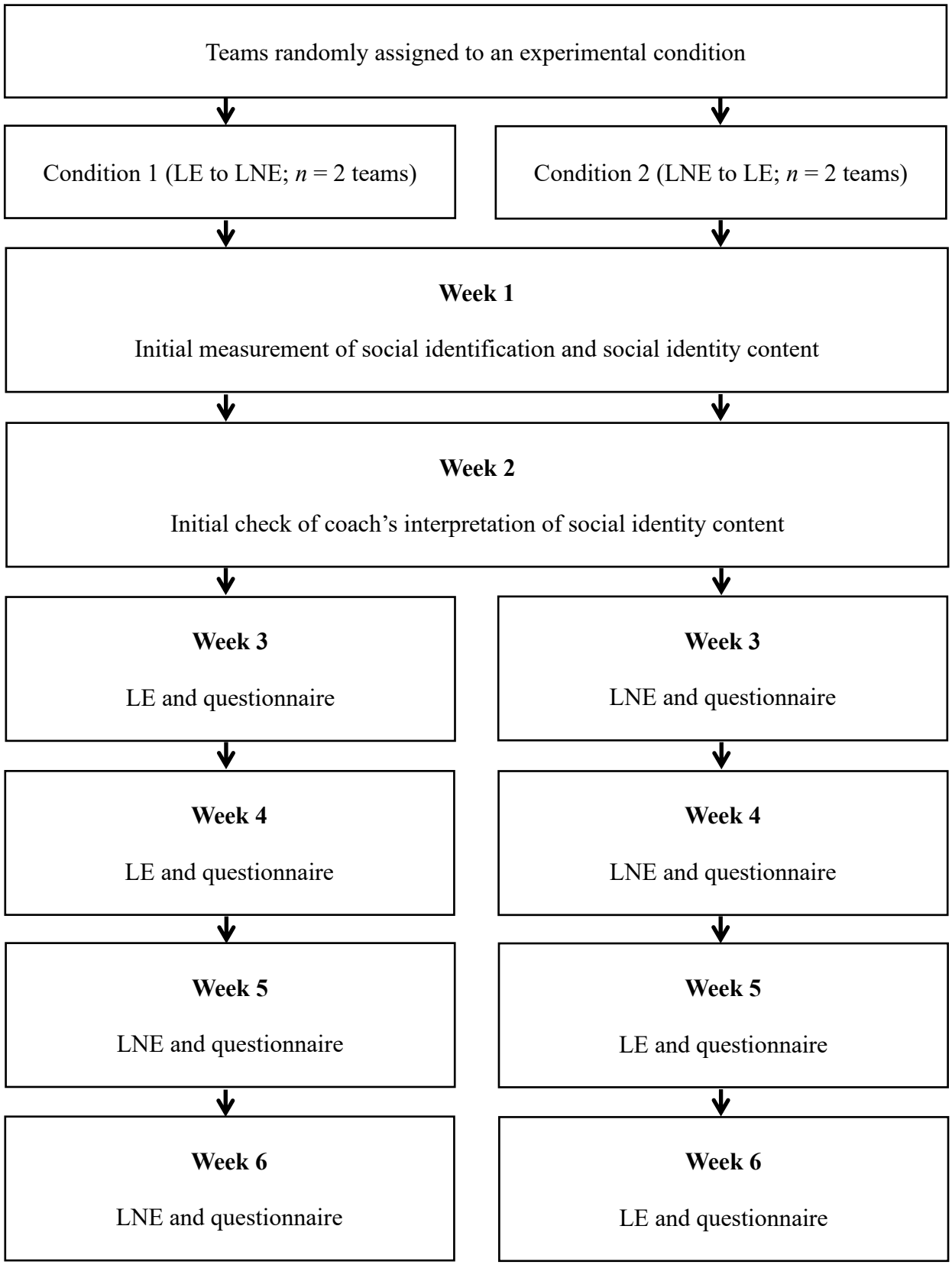


Figure 2. Ratings of leader trust across weeks in both conditions

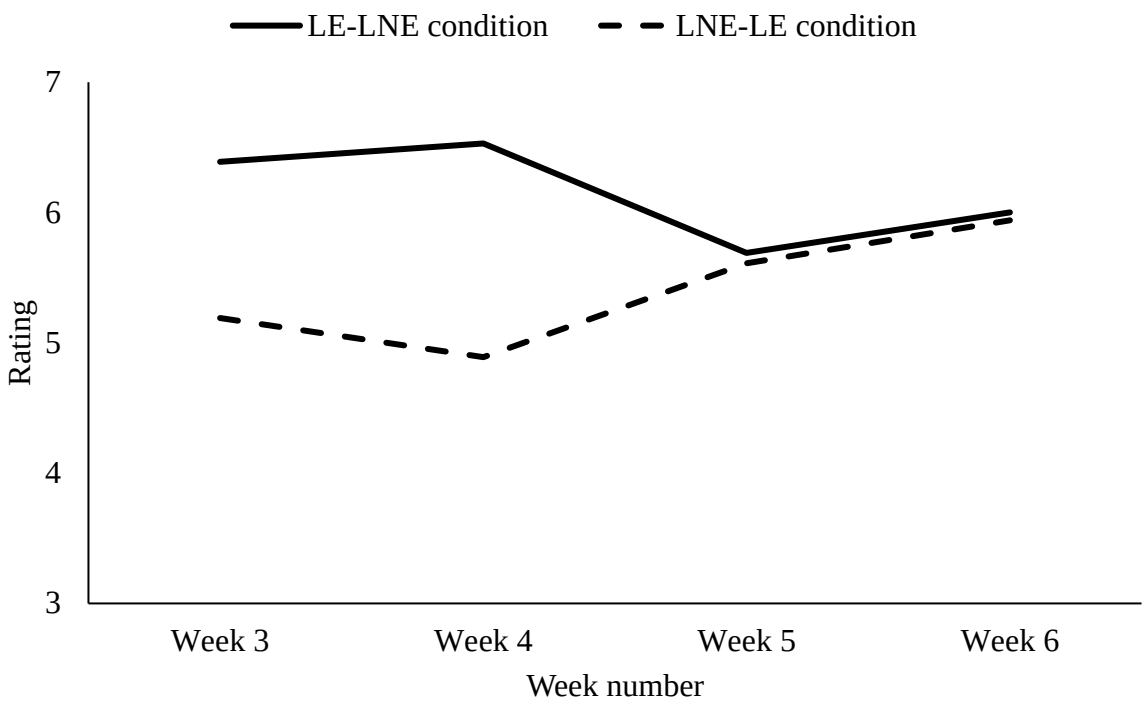


Figure 3. Ratings of leader influence across weeks in both conditions.

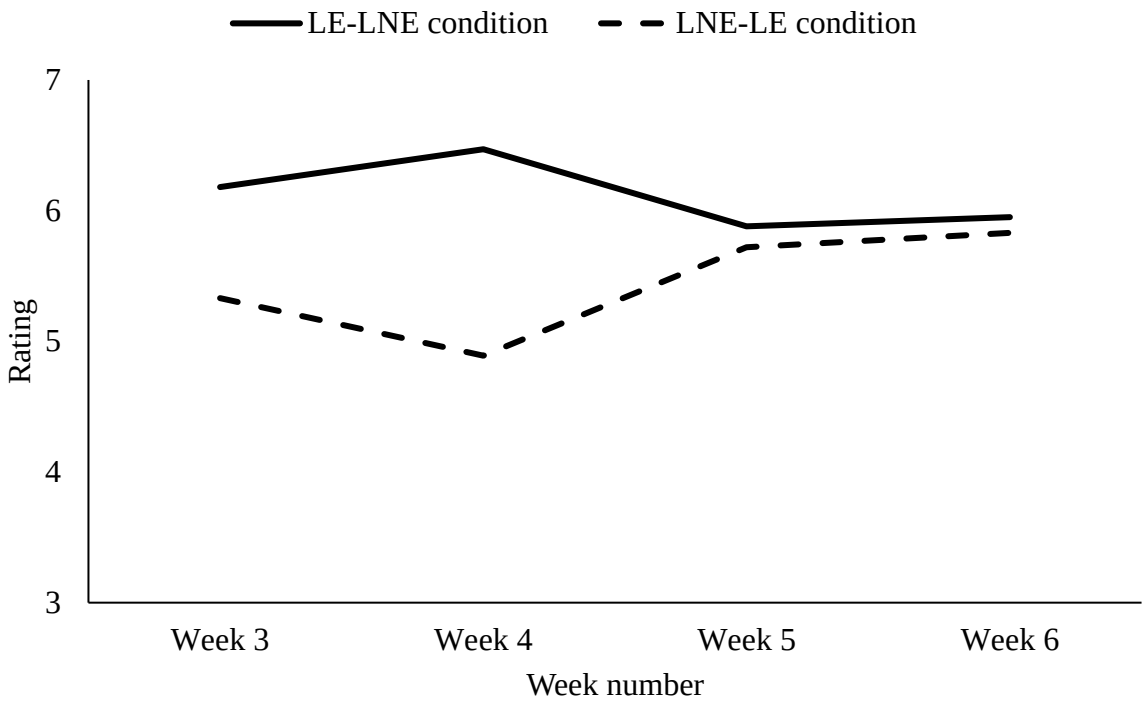


Figure 4. Ratings of leader conflict across weeks in both conditions.

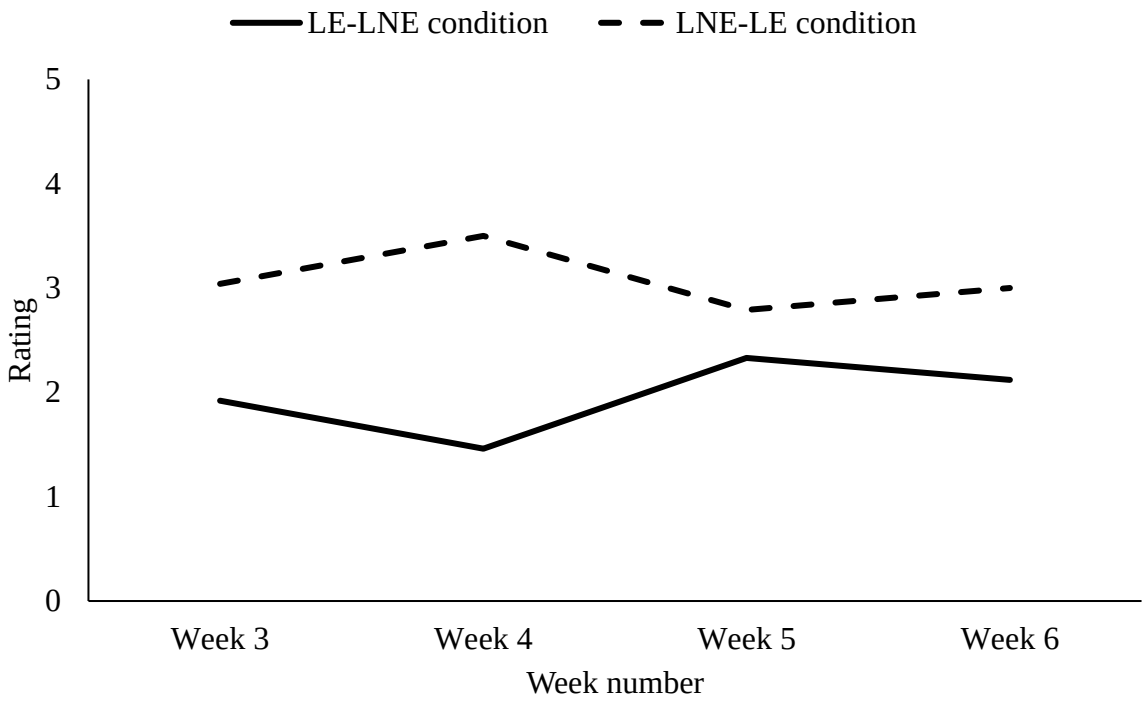
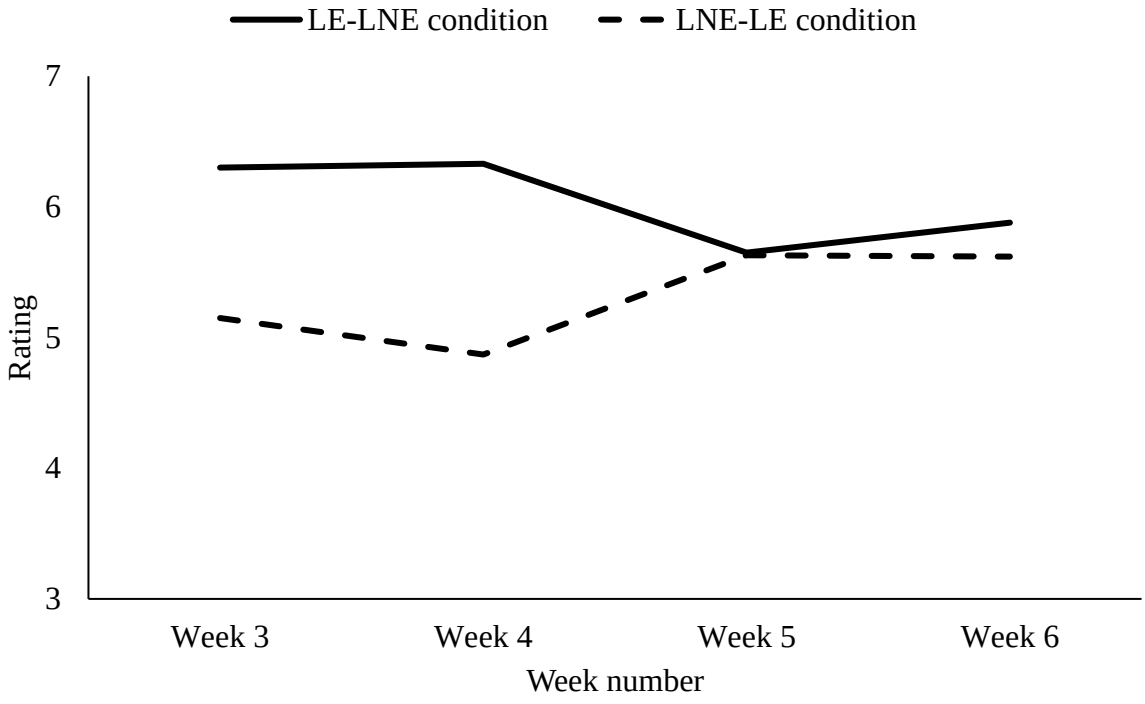


Figure 5. Ratings of intentional mobilization across weeks in both conditions.



S1:

Vignette used for Study 1 in the leader embedder condition

You are part of a sports team where you feel a great sense of belonging and emotional attachment. Your team also has a strong connection and bond with your coach. What matters most to your team and your coach is being creative and innovative as a team. Therefore, it is important for your team and your coach that you engage in tasks and activities that allow you to be creative and innovative. Overall, you, your team, and your coach all share the same values (i.e., being creative and innovative) and you all share the same vision for your team (i.e., to be creative and innovative). In six months' time your team will compete together at a National Championship tournament. In preparation for the tournament your coach has travelled to the tournament facilities on thirteen separate occasions and has consulted several Sport Scientists to discover some innovation for your team. As a result, your coach has organised a weekly training session where Sport Scientists will work with your team and your coach to test a variety of new innovative training methods. At the moment there are no other teams that are due to compete at the National Championship tournament that have recruited the expertise of Sport Scientists. Finally, in a recent interview your coach was asked the question: "What are the key qualities of your team?" Your coach responded with: "I think we should be proud of the crazy attention to detail and the innovation that we will try and show during the National Championships. We are different. We are unique. We are innovators."

S2:

Vignette used for Study 1 in the leader non-embedder condition

You are part of a sports team where you feel a great sense of belonging and emotional attachment. Your team also has a strong connection and bond with your coach. What matters most to your team and your coach is being creative and innovative as a team. Therefore, it is important for your team and your coach that you engage in tasks and activities that allow you to be creative and innovative. Overall, you, your team, and your coach all share the same values (i.e., being creative and innovative) and you all share the same vision for your team (i.e., to be creative and innovative). In six months' time your team will compete together at a National Championship tournament. In preparation for the tournament your coach has planned to use traditional coaching methods that are familiar to your team instead of consulting Sport Scientists who would provide some innovation for your team. As a result, your coach has organised a weekly training session where you will work on the same traditional training methods. At the moment there are several other teams that are due to compete at the National Championship tournament that are practicing the same traditional training methods as your team. Finally, in a recent interview your coach was asked the question: "What are the key qualities of your team?" Your coach responded with: "I think we should be proud of our preparation. We will be doing similar things as we have done before. We will be traditional."

S3:

Description of soccer activities

For activity 1, participants were separated into pairs (one attacker and one defender). Attackers were required to dribble a soccer ball past defenders and score between two cones. Defenders were required to prevent the attacker from scoring by covering the space between the attacker and cones and making a tackle when possible. For activity 2, participants were required to shoot a soccer ball towards either corner of a soccer goal. Participants could choose to strike the soccer ball first-time or take one touch to control the soccer ball before shooting. Participants were awarded 3 points for scoring between a cone and a goalpost (without taking a touch), 1 point for scoring between a cone and a goalpost (after taking a touch), and 0 points for scoring between the cones (in the centre of the goal). Participants were deducted 1 point if they missed the goal completely. For activity 3, participants were split into two groups. Team 1 were required to complete 5 consecutive passes with each team member completing at least one successful pass. Team 2 were required to intercept the soccer ball to gain possession before completing 5 consecutive passes themselves. Teams were awarded 1 point for making 5 consecutive passes. The first team to 5 points won. For activity 4, participants were required to keep a soccer ball amongst themselves within a circle whilst a defender positioned in the middle of a circle attempted to either tackle participants or force an error so that possession of the soccer ball was lost. The participant who lost possession was then required to swap roles with the defender.