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Leadership Efficacy in Youth Football: Athletes and Coaches Perspective

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Abstract

According to the Leadership Efficacy Model, leadership efficacy depends on leaders' tendency to make linear relationships between leadership philosophy, practice, and criteria (i.e., congruence of leadership cycles); if leaders make these linear relationships by using the optimal leadership profile; and if leaders considers the antecedent factors of leadership (favourability of conditions for leadership). This study compared the perceptions of athletes and their coaches regarding leadership cycles, and tested the moderator role of optimal leadership profile and leadership favourability in the relationship between leadership cycles and leadership efficacy. The study included 92 football athletes (ages under-17 and under-19) and respective coaches ($n = 5$). It was evaluated leadership cycles, leadership styles, leadership favourability, and sport performance perception. Athletes and coaches agreed on coaches' need to increase leadership cycles. Regression analyses confirmed that leadership congruency predicts higher perceptions of team performance in athletes. Moreover, optimal leadership profile and higher leadership favourability were associated with higher team and individual performance. However, these two factors did not moderate the relationship between leadership congruency and efficacy. Coaches should clarify better their leadership cycles and they have advantages in using the optimal leadership profile and considering the antecedent factors of leadership in order to establish the leadership cycles.

Keywords: Coaching leadership; Leadership styles, Sports performance; Leadership Efficacy Model, Leadership cycles.

Leadership Efficacy in Youth Football: Athletes and Coaches Perspective

The study of leadership efficacy represents a major topic for researchers interested in comprehending the factors that contribute to the success of followers, teams, and organizations (Kaiser et al., 2008; Northouse, 2018). The same scenario applies to sport contexts, where there is a need to clarify how coaches' leadership influence athletes and teams' sport performance (Horn, 2008). Several factors can influence the efficacy of leadership, most notably the coach's philosophy; the leadership styles; and the specific characteristics of leaders, team members and context where leadership occurs (Gomes, 2020; Kaiser et al., 2008; Northouse, 2018). Coaching philosophy refers to the values, beliefs, assumptions, attitudes, principles, and priorities assumed by the leader that can influence their actions and effectiveness criteria used to evaluate their activity (Gomes et al., 2018). Coaching philosophy represents a major topic of coaching literature and is a key factor because it determines how coaches define and interpret their own leadership role and responsibilities (Gould et al., 2017). However, there are also indications that our knowledge about how coaches translate their philosophy into specific leadership behaviours (Cushion & Partington, 2016; Lyle, 1999) and into effectiveness criteria to monitor the efficacy of philosophy and practice of leadership (Gomes et al., 2018; Jacobs et al., 2016) is still very scarce.

The translation of coaching philosophy into specific leadership styles is also somewhat limited, especially when considering the contributions of transformational leadership and the conjunction of other forms of leadership, as is the case of transactional leadership and decision-making leadership. In this case, there is abundant evidence regarding the benefits of transformational leadership (Bosselut et al., 2020; Cronin et al., 2015) when compared to other forms of leadership, as is the case of transactional leadership (Rowold, 2006). However, there is much less evidence of how leadership styles are related to coaching philosophy, influencing the way coaches apply their ideas, behaviours, and effectiveness criteria when leading athletes and teams. Thus, can leadership styles moderate the relation between the coaching philosophy and efficacy of leadership?

Understanding leadership efficacy is also a matter of comprehending the antecedent factors of leadership that can influence the effects produced by the coaching philosophy on athletes and teams' performance: the characteristics of leaders, team members and context where leadership occurs that, in conjunction, can determine the favourability of conditions for leadership (Gomes et al., 2018; Northouse, 2018). Specifically, Cook and colleagues (2020) reinforced that it is important to analyse the personal characteristics of leaders in terms of who they are, how they think and feel, and how they act within their environment. This last aspect related to environment captured the attention of scholars, specifically how contextual factors influence leadership and its outcomes; for example, aspects related to the task structure, the leader's formal authority, and the work-group norms can predict followers' motivation, satisfaction, and performance (Oc, 2018). Moreover, followers' characteristics should also be considered because there is evidence that aspects as locus of control, task ability, preference for structure can indeed influence the action of leaders (Sosik & Jung, 2018).

All in all, it seems that leadership styles and favourability of conditions for leadership (i.e., characteristics of leaders, team members, and context) should be considered together with coaching philosophy in order to understand leadership efficacy. In this study, we adopted the Leadership Efficacy Model (Gomes, 2014, 2020) in order to explain the efficacy of sports coaches (cf. Figure 1). The model includes three prepositions in order to explain the leadership efficacy. The first one proposes that leadership' efficacy increases when there is congruence between leadership philosophy, leadership practice, and leadership criteria assumed by the leader (both at conceptual level – in terms of how leaders thinks these aspects – and at practical level – in terms of how leaders communicate these ideas to followers; i.e., congruence of leadership cycles). In other words, leadership efficacy increases when coaches assume linear relationship between the leadership philosophy (i.e., ideas and principles of coaching), leadership practice (i.e., actions directed to fulfil the ideas and principles of coaching), and leadership criteria (i.e., indicators to monitor the fulfilling of ideas and actions of leadership), and do this not only in the plan of cognitive thinking (conceptual cycle) but also in the daily work with team members (practical cycle).

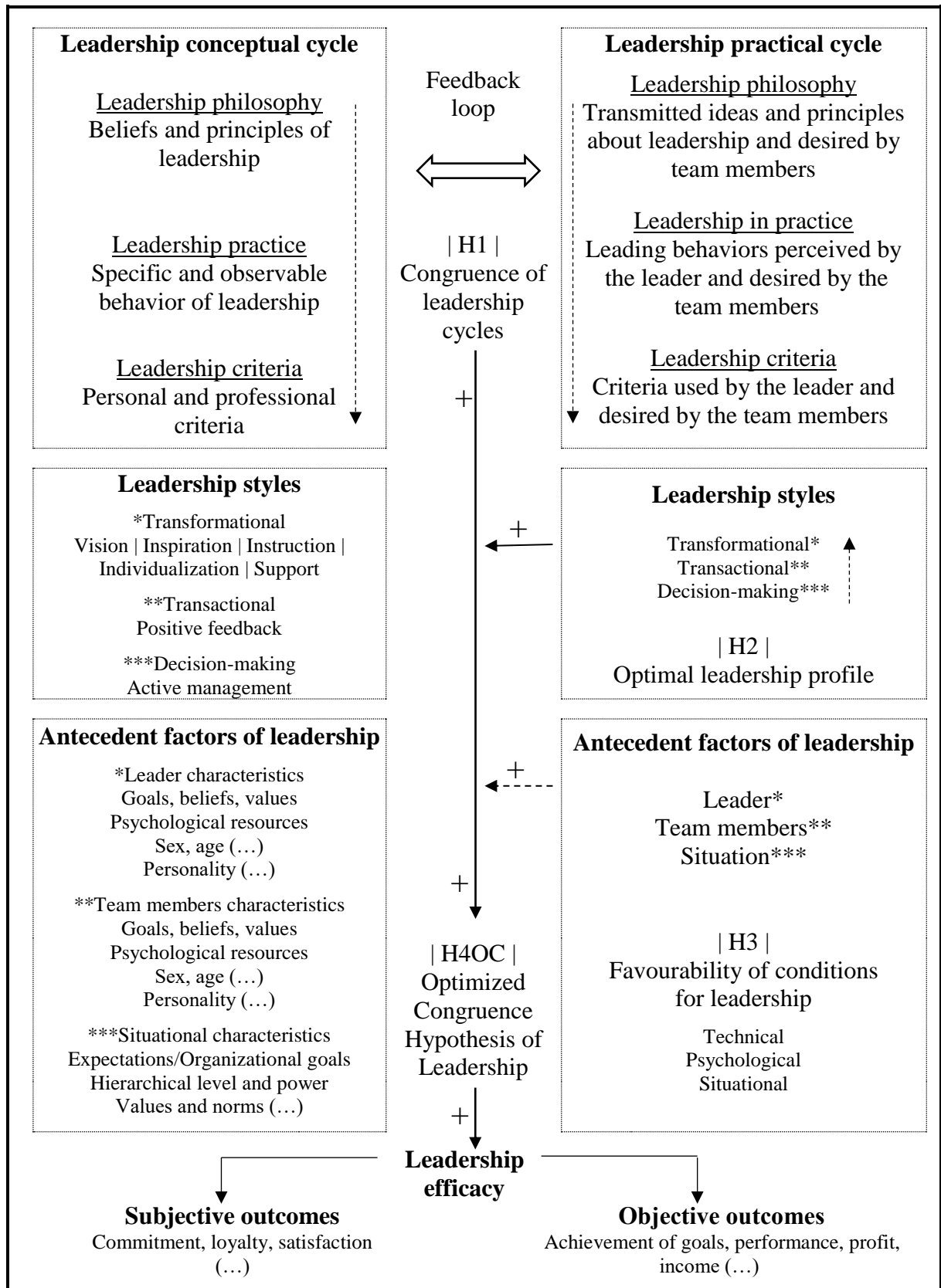


Figure 1. **Leadership Efficacy Model (Gomes, 2020) (Reprinted with permission).**
 H1, H2, and H3 were tested in the present study.

The conjunction of leadership cycles is the central aspect of the model but it is also proposed that leadership efficacy increases if the leaders use the optimal leadership profile when determining the cycles of leadership (e.g., higher frequencies of transformational behaviours followed by the use of positive feedback of transactional leadership and active management from decision making-leadership), and when antecedent factors of leadership are considered (e.g., favourability of conditions for leadership). Specifically, it is proposed in the Leadership Efficacy Model that leadership styles can increase the influence of leadership cycles on leadership efficacy. This influence of leadership styles results from the conjunction of nine leadership behaviours distributed by transformational leadership, transactional leadership, and decision-making leadership, resulting in the optimal leadership profile (Gomes, 2020). Specifically, in the transformational leadership domain it is proposed that the optimal profile is constituted by higher levels of vision (establishing an enthusiastic and optimistic vision of athletes' future), inspiration (promotion of success and continuous efforts of athletes), instruction (positively teaching technical sports skills), individualization (attending to the needs and personal and sport expectations of athletes), and support (attention given to athletes' well-being and to develop positive relationships with athletes). Transactional leadership includes the higher use of positive feedback (reinforcement of performance and efforts of athletes) and lower use of negative feedback (punishment of athletes' inadequate behaviours and bad performance). Decision making includes the higher use of active management behaviours (assuming the decisions in a more decentralized process) and lower use of passive management (avoidance or delay in assuming important decisions about athletes and team functioning). Therefore, the optimal leadership profile can maximize the relationship between cycles of leadership and leadership efficacy, acting as a moderator (Gomes, 2020).

Additionally, the antecedent factors of leadership refer to the personality of the leader, the characteristics of the team members, and the specific conditions provided by the organization where the leadership phenomenon occurs. Therefore, when both the leader and the team are orientated to the tasks to be done, then the technical favourability increases; when both the leader and the team are orientated to relationships, then the psychological favourability increases; and when material, human, and environmental conditions provided by the organization are in accordance with the leaders' needs, then the situational favourability increases. Therefore, antecedent factors of leadership can maximize (i.e., acting as facilitators) or minimize (i.e., acting inhibitors) the influence of leadership cycles on leadership efficacy, moderating this relationship (Gomes, 2020).

Considering these aspects, the model provides an understanding of the linear relation between philosophy, practice, and leadership criteria as well as an explanation for the influence of leadership styles and leadership antecedents factors on leadership efficacy. Specifically, it is expected that the congruence of leadership cycles increases leadership efficacy and that leadership styles and antecedent factors of leadership moderate this relationship by augmenting or reducing the influence of congruence of leadership cycles on leadership efficacy.

Current knowledge on leadership efficacy reinforced the importance of leadership philosophy of coaches (Cushion & Partington, 2016; Gomes et al., 2018; Gould et al.,

2017) but the understanding of how coaches translate into practice their ideas and principles of coaching and if leadership styles and antecedent factors of leadership play a role on the way coaches assume their leadership is still very scarce. This study is an attempt to fill this gap by putting together these three factors (leadership cycles, leadership styles, and antecedent factors of leadership) that tend to be analysed separately in literature (e.g., Oc, 2018; Rowold, 2006). In fact, Gomes and colleagues (2018) already tested the congruence of leadership cycles assumed by 10 elite coaches and investigated whether athletes' perceptions of coaches' leadership styles differed according to athletes' perceptions of goal achievement and sport performance. However, the test of the three components of the Leadership Efficacy Model in a single study is yet to be done and, to the best of our knowledge, this is the first time they are tested together. Thus, three hypotheses were established:

- H1. Congruence of Leadership Cycles.* Higher levels of leadership congruence between conceptual and practical cycles of leadership predict the leadership efficacy (measured in terms of athletes' perception of sports performance).
- H2. Optimal Leadership Profile.* The optimal leadership profile moderates the relationship between the leadership cycles congruency and athletes' perceptions of sports performance.
- H3. Favourability of Conditions for Leadership.* Leadership favourability moderates the relationship between the leadership cycles congruency and athletes' perceptions of sports performance.

Method

Participants

This study had a convenience sample, with the following criteria: football male athletes and coaches who competed in the U-17 or U-19 Portuguese national leagues (principal leagues of football). The study included 92 athletes, distributed by five teams, competing in U-17 (54%) and U-19 (46%) national leagues, all males, aged between 15 and 19 years old ($M = 16.91$; $SD = 1.12$). The athletes had between 1 and 14 years of practice ($M = 9.20$, $SD = 2.48$) and had between 1 and 5 years of work with the current coach ($M = 1.36$, $SD = 1.07$). Also, five male coaches of the five teams were included in this study; three coaches trained U-17 teams (60%), and two trained U-19 teams (40%). Their ages ranged from 25 to 50 years old ($M = 40.00$; $SD = 10.80$), and presented between 5 and 20 years of experience ($M = 9.80$, $SD = 6.14$).

Instruments

Leadership Efficacy Questionnaire (LEQ; Alves et al., 2021). The instrument evaluates the conceptual and practical cycles of leadership and was used to determine the *Leadership Cycles Congruence Index* (LCCI) and thus testing the first hypothesis of this study. The LEQ instrument evaluates three dimensions: (a) leadership philosophy: values, beliefs, assumptions, attitudes, principles, and priorities assumed by coaches which influence both practice and criteria of leadership (5 items, α in this study = .84); (b) leadership practice: specific behaviours assumed by coaches to fulfil their coaching philosophy (5 items, α in this study = .90); and (c) leadership criteria: personal and

professional indicators that help coaches monitor whether they are meeting the tenets of their philosophy and the practice of coaching (5 items, α in this study = .86). Scores of each dimension and section of the instrument were obtained by calculating the mean values for both athletes and their coaches. Items were presented in a five-point “Likert” scale (1 = *Never*; 5 = *Always*) and were answered twice: current coaches’ behaviours (i.e., actual behaviours assumed by the coaches) and preferred coaches’ behaviours (i.e., ideal behaviours that coaches should assume); the statements were presented as a matrix table, with “current” and “preferred” options presented side by side, so participants were asked to rank the frequency of each behaviour in terms of current and preferred at the same time. The confirmatory factorial analysis indicated acceptable psychometric properties of the instrument in our study (TLI = .92, CFI = .94, χ^2 /d.f. = 1.55, RMSEA = .078). The differences between preferred and actual coaches’ behaviours resulted in the LCCI calculated according these steps: (1) the average score of leadership philosophy, practice, and criteria items were calculated for both current and preferred behaviours; (2) the current leadership score was subtracted to the preferred leadership score, so that numbers closer to 0 indicate higher congruence between current and preferred leadership behaviours; and (3) negative numbers were mirrored in order to have only positive numbers in the final version of the variable. Based on this score, the median ($Md = 0.33$) was used to split participants into two groups: High Congruence (≤ 0.33) and Low Congruence (> 0.33).

Multidimensional Scale of Leadership in Sport (MSLS; Gomes et al, 2021). The instrument evaluates the leadership styles and was used to determine the *Optimal Profile of Leadership Index (OPLI)* and thus testing the second hypothesis of this study. The MSLS instrument evaluates athletes’ perception of coaches’ leadership behaviours and coaches’ perceptions of their own leadership behaviours, including 36 items divided for nine dimensions of coaches’ leadership: (a) vision: coaches’ ability to present an enthusiastic and optimistic vision of athletes’ future (4 items, α in this study = .91); (b) inspiration: coaches’ positive expectations and behaviours directed towards promoting the success and continuous efforts of athletes (4 items, α in this study = .83), (c) instruction: coaches’ actions focused on teaching positively technical sports skills (4 items, α in this study = .85); (d) individualization: coaches’ tendency to consider the needs and personal and sport expectations of athletes (4 items, α in this study = .79); (e) support: coaches’ personal concern regarding athletes’ well-being and interest in building positive relationships based on confidence (4 items, α in this study = .84), (f) positive feedback: coaches’ reinforcement and recognition of good performance and effort of athletes (4 items, α in this study = .83); (g) negative feedback: punishment behaviours of coaches intended to manage athletes’ inadequate behaviours and performance (4 items, α in this study = .82), (h) active management; coaches’ behaviours of power management, by assuming the decisions in a more decentralized process (involving team members) or in a more centralized process (assuming the decisions alone) (4 items, α in this study = .83); and (i) passive management: coaches’ avoidance or delay in taking responsibility for decision-making when it is necessary to solve important problems (4 items, α in this study = .77). Items were presented in a five-point “Likert” scale (1 = *Never*; 5 = *Always*) and scores of each dimension were obtained by calculating the mean values for both athletes

and their coaches. The confirmatory factorial analysis indicated acceptable psychometric properties of the instrument in our study for transformational leadership, including vision, inspiration, instruction, individualization, and support (TLI = .89, CFI = .91, χ^2/df = 1.62, RMSEA = .083), transactional leadership including positive feedback and negative feedback (TLI = .97, CFI = .97, χ^2/df = 1.32, RMSEA = .060) and decision making leadership including active management and passive management (TLI = .96, CFI = .97, χ^2/df = 1.35, RMSEA = .062). The MSLS was used in order to compute the OPLI indicating if the leadership behaviours were more positive (higher frequencies of vision, inspiration, instruction, individualization, support, positive feedback, and active management, and lower frequencies of negative feedback and passive management) or negative (lower frequencies of vision, inspiration, instruction, individualization, support, positive feedback, and active management, and higher frequencies of negative feedback and passive management). Thus, the OPLI was computed into a single score by averaging participants' responses on vision, instruction, individualization, support, positive feedback, active management, and by the average of the reversed subscales of negative feedback and passive management of MSLS (α = .74); based on this score, the median (Md = 3.79) was used to split participants were into two groups: High OPLI (> 3.79) and Low OPLI (\leq 3.79).

Leadership Antecedent Factors Questionnaire (LAFQ, Gomes, 2017). The instrument evaluates the leadership styles and was used to determine the *Leadership Favourability Index (LFI)* and thus testing the third hypothesis of this study. The LAFQ instrument evaluates the antecedent factors that might have an influence on leaders' actions among teams, including 15 items divided for five dimensions: (a) leaders' task orientation: indicates the leaders' interest in technical and productive aspects of work, having as central concern the accomplishment of the tasks, the achievement of goals, and the increase of performance (α in this study = .86); (b) leaders' people orientation: indicates the leaders' interest in the personal and human aspects of employees, namely, their needs, expectations, and values (α in this study = .79); (c) team members' technical maturity: indicates the level of competence and knowledge of team members about the established tasks and goals (α in this study = .73); (d) team members' psychological maturity: indicates the level of self-confidence and openness of team members to accept responsibility for carrying out the established tasks (α in this study = .69); (e) context: indicates contextual factors that can influence the leaders' actions (e.g., organizational conditions to carry out the tasks, leaders' autonomy to make decisions and to establish the team' goals) (α in this study = .53). For data analysis effects, the context dimension was excluded from the study, because it showed low reliability. Scores of each dimension of the instrument were obtained by calculating the mean values for both athletes and their coaches. Items were presented in a five-point "Likert" scale (1 = *Never*; 5 = *Always*) and were answered twice: current leadership favourability (i.e., current conditions that characterize each of the antecedent factors) and ideal leadership favourability (i.e., conditions that would be optimal in each of the antecedent factors); the statements were presented as a matrix table, with "current" and "ideal" options presented side by side, so participants were asked to rank the frequency of each aspect in terms of current and ideal at the same time. The confirmatory factorial analysis indicated acceptable psychometric

properties of the instrument in our study (TLI = .93, CFI = .95, $\chi^2/df = 1.40$, RMSEA = .066). The differences between ideal and current leadership favourability resulted in the LFI obtained by subtracting the current leadership favourability score to the ideal leadership favourability score; thus, values closer to 0 indicate higher congruence between the two scores and, therefore, higher favourability (i.e., higher favourability of conditions for leadership). Based on this score, the median ($Md = 0.40$) was used to split participants into two groups: higher leadership favourability ($\leq |0.40|$) and lower Leadership favourability ($> |0.40|$).

Sport Performance Perception Questionnaire (SPPQ, Gomes et al., 2020, previously designed as Performance Goal Incongruence Scale). This instrument was only applied in the sample of athletes, evaluating their perception of individual performance (5 items, e.g., “In the last game I achieved my goals”, α in this study = .88) and team performance (5 items but item 10 was removed to improve reliability resulting in 4 items, e.g., “In the last game my team performed as expected”, α in this study = .91). Scores of each dimension of the instrument were obtained by calculating the mean values. Items were presented in a five-point “Likert” scale (1 = *Completely disagree*; 5 = *Completely agree*). The confirmatory factorial analysis indicated acceptable psychometric properties of the instrument in our study (TLI = .97, CFI = .98, $\chi^2/df = 1.53$, RMSEA = .076).

Procedure

This study was approved by the Ethics Commission of the first-author’s institution (SECSH 008/2016). After the approval, football clubs were contacted in order to explain study’s goals and to collect data. Before the data collection, consent forms were handed to participants and, for underage participants, consent forms were collected from their legal tutors. Our research team directly collected data in the clubs’ facilities and athletes answer the evaluation protocol without the presence of the coach; however, in some cases athletes took the evaluation protocol to fulfil at home and it was arranged a day to deliver the protocols to our team. The evaluation protocol was collected three to four months after the beginning of the sport season, in order to give time that coaches and athletes met each other. In total, 95 questionnaires were distributed to athletes (97% return rate) and 5 to coaches (100% return rate).

Data analysis approach

First, descriptive statistics were analysed to check for the normality assumptions and to compare athletes and coaches’ perceptions regarding coaches’ leadership philosophy, practice and criteria, as well as the congruency amongst these dimensions. Then, inferential statistics were used to test the main hypotheses. Starting with the assumption that higher leadership congruence would predict athletes’ performance perception (H1), a linear regression was conducted. To test the moderating role of optimal leadership profile (OPLI; H2) and leadership favourability (LFI; H3), we first tested the assumption that athletes who perceived their coaches to score high in those dimensions, would also perceive their performance as higher when compared to those who perceived their coaches to score lower in OLP and LFI, conducting Independent-sample *t* tests. Then, the moderation was calculated using the SPSS PROCESS Macro.

Results

Preliminary Analysis

Parametric tests were used to perform all the analysis, as the data did not severely deviate from normal distribution ($sk \leq |1.59|$, $k \leq |3.29|$) (Kline, 2015). Table 1 shows the descriptive statistics for all measures of the study.

[INSERT TABLE 1]

Table 1

Means, standard deviations, and correlations for all measures of the study.

	1.	2.	3.	4.	5.
1. Leadership Cycles Congruence Index	0.48 (0.48)				
2. Optimal Profile of Leadership Index	-.62***	3.74 (0.55)			
3. Leadership Favourability Index	.64***	-.67***	0.45 (0.38)		
4. Perception of individual performance	-.10	.34**	-.25*	3.17 (0.98)	
5. Perception of team performance	-.29**	.29**	-.29**	.34**	3.16 (1.07)

*Note: * $p < .050$, ** $p < .010$, *** $p < .001$*

Leadership Cycles: Athletes and Coaches' Perceptions

The Leadership Cycles Congruence Index (LCCI) indicate the relation between current and preferred leadership of philosophy, practice, and criteria, from both perspectives of athletes and coaches. In this analysis LCCI was used without mirror the negative results in order to allow us to know if the leadership dimension should increase (values above 0), decrease (values below 0), or be maintained (values equal to 0). Table 2 shows that most athletes perceive that their coaches should be more explicit about their leadership philosophy, practice, and criteria. It is also observable that coaches have a similar perception about leadership practice and leadership criteria, but not about their leadership philosophy (only one coach considered that it should be more explicit).

Table 2

Leadership Cycles: Athletes and Coaches' Perceptions.

	Leadership philosophy		Leadership practice		Leadership criteria	
	Athletes <i>n</i> (%)	Coaches <i>n</i> (%)	Athletes <i>n</i> (%)	Coaches <i>n</i> (%)	Athletes <i>n</i> (%)	Coaches <i>n</i> (%)
Decrease	7 (8%)	1 (20%)	6 (7%)	0 (0%)	6 (7%)	0 (0%)
Maintain	36 (40%)	3 (60%)	22 (25%)	2 (40%)	32 (36%)	2 (40%)
Increase	45 (52%)	1 (20%)	60 (68%)	3 (60%)	50 (57%)	3 (60%)

Leadership Cycles Congruence Index: Athletes and Coaches' Perceptions

Based on the median of their LCCI score, athletes and coaches were divided into two groups (low congruency, $n = 48$; high congruency, $n = 41$). It is observable that, in three teams most athletes evaluate their coaches' leadership as "higher congruency" (teams 1, 4 and 5; see Table 2). In four teams, athletes and coaches had the same view of coaches' leadership congruency (teams 2, 3, 4 and 5; see Table 3).

Table 3

Athletes and coaches' evaluation about leadership congruency of each coach.

Teams	Athletes		Coaches	
	Lower congruency <i>n</i> (%)	Higher congruency <i>n</i> (%)	Lower congruency <i>n</i> (%)	Higher congruency <i>n</i> (%)
Team 1: U-17	2 (20%)	8 (80%)	1 (100%)	
Team 2: U-17	16 (100%)	0 (0%)	1 (100%)	
Team 3: U-17	16 (70%)	7 (30%)	1 (100%)	
Team 4: U-19	7 (37%)	12 (63%)		1 (100%)
Team 5: U-19	7 (33%)	14 (67%)		1 (100%)

Leadership Efficacy: The Leadership Cycles Congruency (H1)

A linear regression was conducted to test H1, which established that higher levels of leadership congruency (LCCI scores) would predict positive individual and team sports performance perceptions assumed by athletes. The results support H1 for perceptions of team performance [$R^2 = .07$, $F(1,87) = 7.84$, $p = .006$, $\beta = -.29$, $b = -0.65$, $t = -2.80$, $p = .006$]; therefore, the higher the leadership congruency, the higher the perception of team performance. This pattern of results did not occur for perceptions of individual performance [$R^2 = -.001$, $F(1,87) = 0.78$, $p = .379$].

Leadership Efficacy: The Moderation of Leadership Styles (H2)

This analysis takes into consideration the Optimal Profile of Leadership Index (OPLI) by dividing athletes into higher vs. lower perception of optimal leadership profile assumed by their coaches (based on the median-split). An independent-sample t -test showed that athletes who considered their coaches to display high optimal leadership profile evaluated their individual and team performance ($M_{\text{individual}} = 3.44$, $SD = 1.00$; $M_{\text{team}} = 3.41$, $SD = 0.95$) as significantly higher when compared to athletes who rated their coaches as having a low optimal leadership profile [$M_{\text{individual}} = 2.90$, $SD = 0.88$; $M_{\text{team}} = 2.91$, $SD = 1.13$; individual performance: $t(89) = 2.72$, $p = .008$, $g = 0.57$; team performance: $t(89) = 2.29$, $p = .025$, $g = 0.48$]. To test the moderator role of the optimal leadership profile on the relationship between congruency of leadership cycles (LCCI scores) and sports performance perceptions, a moderation analysis was conducted using SPSS PROCESS Macro (model 1, 10000 *bootstraps*) (Hayes, 2013). The results showed that the optimal leadership profile did not moderate the relationship between congruency of leadership cycles and athletes' perceptions of individual performance [$F(3,84) = 2.33$,

$R^2 = .08, p = .080$; interaction: $F(1,84) = 0.82, p = .367$]. The same result was found for perceptions of team performance [$F(3,84) = 3.25, R^2 = .11, p = .026$; interaction: $F(1,84) = 1.58, p = .212$]. Therefore, H2 was not supported although athletes included in the higher optimal leadership profile group evaluated their individual and team performance as higher than athletes included in the low optimal leadership profile group.

Leadership Efficacy: The Moderation of Leadership Favourability (H3)

This analysis takes into consideration the Leadership Favourability Index (LFI) by dividing athletes into higher vs. lower perceptions of leadership favourability (i.e., favourability of conditions for leadership), using the median-split. An independent-sample *t*-test showed that athletes included in the higher leadership favourability group perceived their individual performance ($M = 3.38, SD = 0.96$) as significantly higher when compared to athletes included in the lower leadership favourability group [$M = 2.85, SD = 0.95; t(86) = 2.55, p = .013, g = 0.55$]. No differences were found for athletes' perception of team performance based on leadership favourability [$t(86) = 1.10, p = .275$]. A similar analysis was conducted to test the moderator role of favourability of conditions for leadership on the relationship between congruence of leadership cycles and performance perceptions (PROCESS macro; model 1, 10000 *bootstraps*) (Hayes, 2017). The results showed that leadership favourability was not a moderator for either perceptions of individual performance [$F(3,82) = 2.59, R^2 = .09, p = .059$; interaction: $F(1,82) = 0.05, p = .826$] nor team performance [$F(3,82) = 3.07, R^2 = .10, p = .032$; interaction: $F(1,82) = 2.08, p = .153$]. Therefore, H3 was not supported although athletes included in the higher perception of leadership favourability evaluated their team performance as higher than athletes included in the lower leadership favourability group.

Discussion

The main aim of this study was to analyse the leadership efficacy of football coaches taking into consideration the Leadership Efficacy Model and the perspectives of athletes and their coaches. Taken together, the results showed that athletes and coaches have overall similar perceptions regarding coaches' behaviours and, specifically, that coaches should be more explicit about their leadership philosophy, practice, and criteria. The results also offer preliminary indications about the Leadership Efficacy Model as a framework to explain leadership efficacy. Taking into consideration this general conclusion, we should discuss in more detail four results obtained in our study.

First, the majority of athletes perceived that their coaches should be more explicit about their leadership philosophy, practice, and criteria. It is also observable that coaches have similar perceptions about leadership practice and leadership criteria, but not about their leadership philosophy. These results reinforce that, from the athletes' point of view, coaches may increase their efficacy if they make clearer their ideas and purposes (philosophy), then, if they adopt main courses of actions that are in accordance with their ideas, and, lastly, if they set indicators to monitor their ideas and actions. Interestingly, and as shown in Table 2, coaches are quite confident that they are explicit in explaining their leadership philosophy but not their leadership practice and criteria. This may occur because coaches have more information and education about how to set a "positive"

philosophy of leadership but much less information about how to make useful relationships of philosophy to practice and then to criteria leadership. In fact, there is abundant literature about the philosophy of leadership or philosophy of sports coaching (Gould et al., 2017; Jones et al., 2003; Martens, 2012) but there is much less evidence about how coaches turn into practice and criteria their ideas of leadership (Cushion & Partington, 2016; Gomes et al., 2018; Jacobs et al., 2016). In other words, literature is still scarce not only on how coaches communicate their philosophy to players, but more specifically how their daily practices reflect this philosophy and how they use criteria to monitor the implementation of philosophy and practice of leadership. Our results indicate that coaches can progress on how they transmit their ideas, values, and goals to athletes and, even more important, how they implement their leadership philosophy and practice in an acceptable way for athletes. Therefore, future research should explore this transmission and implementation further, and examine more thoroughly leadership cycles, because coaches may have been neglecting this issue in their daily work with athletes. In sum, it is important to explore effective strategies that help coaches to become more efficient in translating their leadership philosophy to actual behaviours in their daily practice.

Second, the main hypothesis of the Leadership Efficacy Model was partially supported because establishing a higher congruence in the leadership cycles (represented by the philosophy, practice, and criteria of leadership) did correspond to higher perception of team performance in athletes, but not in terms of individual performance. Thus, H1 was supported for team performance, but not for individual performance. The main implication of this finding is that coaches have advantages in assuming linear relationships between philosophy, practice, and criteria of leadership. Thus, it is important that coaches communicate directly to athlete how they intend to execute and monitor their ideas of coaching to their teams. Previous research has suggested that coaches seem more able to explicitly explain their leadership philosophy and practice than establishing specific indicators that help to monitor the implementation of their ideas and plans of leadership (i.e., criteria) (Gomes et al., 2018). The data from this study extends these findings by sustaining the need of coaches complete the leadership cycles of philosophy, practice, and criteria of leadership, due the increase impact produced on athletes' team performance. Also interesting is that these effects seem more evident on team performance than on individual performance. This result may suggest that coaches direct their leadership cycles to the team and they may not individualize the cycles for each athlete. Thus, our result confirms that the effects produced by leadership on performance may be different depending on whether they are considered at the individual or group level (DeGroot et al., 2000).

Third, regarding leadership styles of coaches, data indicated that athletes who perceive their coaches to display high optimal leadership profile perceived their individual and team performance as significantly higher when compared to athletes who rate their coaches as having a low optimal leadership profile. However, the moderation analysis did not confirm that optimal leadership profile interferes on the relationship between congruence of leadership cycles and athletes' perceptions of sports performance, thus, not confirming H2. Despite this lack of evidence, it should be reinforced that this

pattern of leadership based on transformational leadership, positive feedback (from transactional leadership), and active management (from decision making leadership) correspond to increases in athletes' perceptions of individual and team performance. Previous research has been demonstrated that athletes with higher performance tend to evaluate better their coaches (Gomes et al., 2020; Horn, 2008; Jowett, 2007; Rowold, 2006), and our data complements these indications by demonstrate that optimal leadership profile corresponds to better evaluations of sports performance.

Fourth, regarding the favourability of conditions for leadership, athletes who attributed high leadership favourability to their coaches, evaluated their individual performance as significantly higher when compared to athletes who attributed low leadership favourability; this pattern was found for individual performance but not for team performance. Once again, the analysis did not confirm that leadership favourability moderates the relationship between congruence of leadership cycles and athletes' perceptions of sports performance, thus not confirming H3. Despite this lack of evidence for H3, antecedents' factors of leadership should not be discharged from the understanding of factors contributing to leadership efficacy. In fact, several studies have found that aspects related to the personal characteristics of leaders (Carroll et al., 2019; DeRue et al., 2011; Ghaturvedi et al., 2012), team members (Bligh et al., 2007; Chen et al., 2007), and the context (Oc, 2018; Osborn & Marion, 2009) can indeed explain the impact produced by leadership. Our results offer evidence to the importance of leadership favourability on athletes' perception of individual performance, as reinforced by other research (DeGroot et al., 2000; Gomes et al., 2020) but not for team performance.

In sum, athletes' perceptions of individual and team performance followed different patterns: leadership congruency only predicted team performance and leadership favourability only predicted perceptions of individual performance. One can argue that part of the reason may lay on the nature of the sport because this study was conducted with football athletes, and therefore, the leader may pose a higher influence on the team sense of performance. Specifically, this result may suggest that coaches are directing their leadership cycles (philosophy, practice, and criteria) to the teams, with lower individualization of these cycles to each athlete. It is also important to note that optimal leadership profile and favourability of leadership conditions did not moderate the relation between congruence of leadership cycles and athletes' perceptions of sports performance, despite the fact they were related to increases of performance perception of athletes. One possible reason may relate to difficulties in the constitution of divergent groups to create the Optimal Profile of Leadership Index (OPLI) and the Leadership Favourability Index (LFI) because the distribution scores for lower and higher OPLI and LFI were biased to positive values of "high" and "very high" on both dimensions (ceiling effect). This means that groups of "lower" OPLI and LFI did not represent a suboptimal profile of leadership or unfavourable condition for leadership but were assumed to be "less positive" profile of leadership and favourability of conditions for leadership. Future research should confirm if this tendency of results distribution is maintained in OPLI and LFI scores, and test other possibilities of relationships between the congruence of leadership cycles and leadership efficacy, as is the case of mediation. Testing mediation may be an alternative when the moderator variable is correlated with both the predictor and the criterion

variable (Baron & Kenny, 1986), as it happened in this study because significant correlations were found among leadership cycles, optimal leadership profile, and favourability of conditions for leadership (see Table 1).

This study has some limitations, most notably the relative small sample that may have reduced the power of statistical tests (Field, 2018); this occurred because the recruitment process was more complex requiring that both the athletes and their respective coaches were available for the study. However, the sample had the advantage of uniformity in terms of sex, age, and competition level, which reduced the population available to our research. In order to increase the knowledge on leadership efficacy, it is important to conduct studies with different approaches, collecting leadership efficacy measures along the sport season in order to capture the dynamics of coach-athlete relationship. Moreover, the fact that different results were found for individual and team performance may suggest that the type of sport may need to be taken into account and, thus, exploring team *vs.* individual sports is an important factor for future research.

Nevertheless, this study provided promising empirical evidence for the Leadership Efficacy Model, showing that higher congruency between the conceptual and practical cycles of leadership is an important predictor of leadership efficacy. In simple words, the study offered interesting insights about factors that can explain the efficacy of coaches, both from the perspective of athletes and their coaches.

Practical implications

Taken together, the study results have many implications for coaches' practices. First of all, coaches should rethink how they communicate their central ideas, values and goals (leadership philosophy), in order to make them more explicit for athletes. They also need to explain better how they intend to implement this philosophy (leadership practice), as well as to establish objective and clear indicators that help athletes to understand if they are acting as expected toward the achieving of the leadership philosophy (leadership criteria).

Equally important, coaches should avoid establishing leadership cycles (i.e., ideas, behaviours, and indicators of leadership) exclusively for the team, as it influences also individual perceptions – therefore, coaches should explain how these leadership cycles can apply for each athlete. This study also sheds light on the importance and advantages of coaches assuming an optimal leadership profile when communicating to athletes, as this can increase athletes' perception of individual and team performance. The favourability of conditions for leadership should also be considered because the characteristics of leaders, athletes, and context can help coaches maximizing their actions, increasing their leadership efficacy, especially in aspects related to athletes' perceptions of individual performance. This means that leadership cycles and styles should be adapted according to the specificities of coaches, athletes, and context, as suggested by previous research (Cook et al., 2020; Oc, 2018; Sosik & Jung, 2018).

In sum, this study highlights the advantage that coaches may have in making clearer their leadership cycles, composed by philosophy, practice, and criteria. Previous research already reinforced the role of coaching philosophy on coaches' efficacy (Gomes et al., 2018; Gould et al., 2017), but these results extend these findings by indicating that the

whole cycle of leadership represents a useful approach to maximize the effects produced by coaches in athletes' perceptions of sports performance. In practical terms, coaches should begin the coaching process by establishing the leadership cycles, and then they can use the optimal leadership profile to implement the leadership cycles on a daily basis, investing in positive behaviours that reinforce the value of their ideas for athletes and teams. Finally, the leadership plans (composed by leadership cycles and styles) should attend to particularities of coaches and athletes (e.g., personality, beliefs, values, etc.) and contextual factors where leadership occurs.

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