

---

**Original Article**

---

# Winning or Not Winning: The influence on Coach-Athlete Relationships and Goal Achievement


RUI TROCADO MATA, ANTÓNIO RUI DA SILVA GOMES 

*University of Minho, School of Psychology, Portugal*

## ABSTRACT

Trocado, R. & Gomes, A.R. (2013). Winning or Not Winning: The influence on Coach-Athlete Relationships and Goal Achievement. *J. Hum. Sport Exerc.*, 8(4), pp. 986-995. This study analyses the relation between sports success and athletes' perception of coaches' leadership, athletes' satisfaction with coaches' leadership, coach-athlete compatibility, and goal achievement. Sixty-six athletes who qualified for the final Division I play-offs of a professional volleyball championship were grouped into winning ( $n = 21$ ) and non-winning teams ( $n = 45$ ). Leadership styles, satisfaction with leadership, coach-athlete compatibility, and goal achievement were evaluated. Analysis of variance with repeated-measures revealed that the winning teams evaluated their coaches' vision, inspiration, technical instruction, positive feedback, and active management more positively than non-winning teams and that their satisfaction with coaches' strategies increased over time. A multivariate analysis of variance (MANOVA) indicated that the winning teams' perceived achievement of personal and team goals was greater than that of the non-winning teams. Sports success was associated with athletes' positive evaluation of coaches' leadership, satisfaction with coaches' strategy, and higher perceived goal attainment. **Key words:** LEADERSHIP, COACHING, SATISFACTION, COMPATIBILITY, SPORTS PERFORMANCE.

---

 **Corresponding author.** Universidade do Minho, Escola de Psicologia, Campus de Gualtar, 4710-057 Braga, Portugal.

E-mail: [rgomes@psi.uminho.pt](mailto:rgomes@psi.uminho.pt)

Submitted for publication March 2013

Accepted for publication November 2013

JOURNAL OF HUMAN SPORT & EXERCISE ISSN 1988-5202

© Faculty of Education. University of Alicante

doi:10.4100/jhse.2013.84.09

## INTRODUCTION

Coaches influence athletes' sports experiences (Horn, 2008), such as athletes' enjoyment, satisfaction, self-esteem, perceived competence, and performance. Conceptual sports leadership literature claims that coaches' leadership is related to athletes' psychological responses and sports performance (Chelladurai, 2007; Côté et al., 1995; Feltz et al., 1999; Horn, 2008; Jowett, 2007). A common feature of these proposals is that effective coaches generally produce positive outcomes in athletes through their leadership behaviours (Boardley et al., 2008) by influencing either athletes' psychological responses (the psychological study of leadership) or athletic performance (the performance study of leadership). However, in the sports literature psychological studies of leadership are more frequent than performance studies of leadership (Chelladurai, 2007; Horn, 2008). One reason for this imbalance is the relative difficulty of using performance outcome indicators for research purposes. For example, Courneya & Chelladurai (1991) have noted that most measures of sports performance, such as the percentage of wins to losses or championship classification at the end of the season, might be confounded due to external variables that coaches cannot control, such as the opponents' winning potential, errors by officials, and individual decisions of team members. Because of these external factors, it cannot be assumed that coaches are completely responsible for a team's success (Mallett & Côté, 2006).

These difficulties may not only explain the less evidence about the impact of leaders on the athletes and teams' performance but also the scarce of findings about the possible influence of performance on the sport experiences of athletes and also on the way they evaluate their coaches. That is to say, not only research is limited on the influence of sport leadership on athletes' performance but it is also limited on the possible influence of performance on the athletes' reactions toward their coaches. This aspect is somewhat surprising because outside of sport contexts there is evidence that leaders have an impact on the organizational performance (Day & Lord, 1988; Joyce et al., 2003; McGahan & Porter, 1997; Thomas, 1988) and may contribute to the success and survival of the organizations (Kaiser et al., 2008). In this way, Collins (2001) posit the necessity of more research about the way followers perceive leaders that achieve more success and performance.

Given this need, this study analyzes whether achieving the best sport performance influence the way athletes evaluate their own performance and their coaches. More specifically, it focuses on how winning or losing an important event can shape athletes' perceptions of their coach, and their own goal achievement. Because research data regarding the characteristics of leaders of winning teams and organizations are scarce, it would be worthwhile to determine the extent to which sports success – winning competitions or achieving the best sport performance – is related to athletes' perception of their coaches' leadership. If winning is not an effective way to evaluate coaches' actions, then winning athletes should not evaluate their coaches' leadership differently than athletes who do not win their competitions, and winning should not affect athletes' psychological responses to their coaches' leadership.

The current study addressed this issue by analyzing the extent to which sports success (i.e., winning a competition) was related to athletes' evaluation of their coaches' leadership, their satisfaction with their coaches' leadership, their compatibility with their coach, and their achievement of personal and team goals. In this way, three hypotheses were tested.

Hypothesis 1: athletes of teams with sport success will evaluate their coaches' leadership styles more positively than athletes of teams without sport success. This evaluation was based on the Multidimensional Scale of Leadership in Sports (MSLS; Gomes & Resende, 2012), which evaluates a broad range of

leadership features that are organized into three domains: transformational leadership (coaches' influence on athletes' technical, personal, and psychological characteristics), transactional leadership (coaches' use of reinforcement and punishment to influence athletes' behaviours), and decision-making leadership (coaches' tendency to engage in active or passive decision-making). The MSLS integrates contemporary approaches to leadership that focus on the transformational and transactional impact of leaders as well as how they make and execute decisions (Bass, 1985). A key finding of this approach is that the effects of transformational leadership benefit followers' psychological responses and performance more than other forms of leadership (Bass & Riggio, 2006). Being so, in this study it was determined the extent to which sports success was related to how athletes evaluate their coaches in terms of transformational leadership, transactional leadership, and decision-making.

Hypothesis 2: athletes of teams with sport success will exhibit more satisfaction with their coaches' leadership and more coach-athlete compatibility than athletes of teams without sport success. The relation of these psychological dimensions to leadership was investigated because they are standard measures of coaches' influence on athletes' experiences. More specifically, there is evidence that coaches' actions positively affect athletes' satisfaction with training and instruction, positive feedback, and social support (Horn, 2008). In the case of coach-athlete compatibility, it can be defined as the congruence between athletes' and coaches' goals, personalities, and beliefs (Williams et al., 2003), and empirical evidence indicates that athletes who perceive their coaches as more compatible tend to evaluate their coaches' actions more favourably than athletes who regard their coaches as less compatible (Know & Williams, 1999). Thus, it would be worthwhile to analyze the extent to which these positive effects maintains when it is used as comparative criteria the sport success achieved by coaches and teams.

Hypothesis 3: athletes of teams with sport success will perceive greater personal and team goal achievement than athletes of teams without sport success. To test this hypothesis, athletes' perception of personal and team goals achievement was evaluated to determine the extent to which successful sport results were associated with a greater perceived goal attainment. In addition to the other hypothesized relationships between sports success and athletes' perception of their coaches' leadership (hypothesis 1) and their psychological responses toward their coaches (hypothesis 2), we hypothesized that sports success will be also related to athletes' perception of the achievement of personal and team goals. If the hypothesis is confirmed this means that sports success represent a valid indicator to analyze the athletes' perception of success in achieving personal and team goals, with obvious implications in the way they evaluate their coaches. Failure to confirm this hypothesis will indicate that using sport success to evaluate the differences in the leadership styles and in the psychological experiences of athletes may be questionable. That is to say, if there is no difference between successful and unsuccessful athletes in the perception of goal achievement, then athletes might use other information to assess the extent to which their personal and team goals were achieved, and this alternative source of information could be more relevant for evaluating coaches' behaviour than sports success.

## **MATERIAL AND METHODS**

### *Participants*

Study participants were athletes who participated in the Division I professional volleyball championship, which is the most important volleyball competition in Portugal. Two major volleyball competitions occurred during the season: the national championship, which included only Division I teams, and the Portuguese Cup, which included nonprofessional teams at other levels of competition. The six teams that qualified for the final play-offs of the national championship participated in the present study; this also included the team

that won the Portuguese Cup because this team also qualified for the national championship final play-offs. The six teams (66 male athletes) were divided into two groups: the two teams who won the two major competitions (winning teams) that represent the athletes of teams with sport success (21 athletes, comprising 31.8% of the sample) and the four non-winning teams that represent the athletes of teams without sport success (45 athletes, comprising 68.2% of the sample). Participants' ages ranged from 18 to 38 years old ( $M = 27.2$ ,  $SD = 5.04$ ) for the winning teams and from 17 to 34 years old ( $M = 25.02$ ,  $SD = 4.17$ ) for the non-winning teams. Not all of the athletes were born in Portugal, but all of them spoke and read Portuguese language.

### *Instruments*

Multidimensional Scale of Leadership in Sports (MSLS; Gomes & Resende, 2012). This 36-item instrument, which evaluates coaches' leadership behaviours, includes nine subscales, all of them with four items: (a) vision: coaches' tendency to establish a positive and challenging future for the athletes; (b) inspiration: coaches' encouragement of the athletes' will to work hard in order to achieve the formulated goals (or vision) and being succeed; (c) technical instruction: coaches' teaching methods and technical feedback to improve athletes' skills; (d) personal respect: coaches' tendency to treat athletes as persons and consider their feelings and needs in making decisions; (e) personal support: coaches' tendency to develop informal and supportive relationships with athletes and to assist athletes with personal problems; (f) positive feedback: coaches' reinforcement and recognition of athletes' good performance and effort; (g) negative feedback: coaches' behaviours that punish athletes' inadequate performance; (h) active management: coaches' promotion of athletes' involvement in important aspects of training and competition; and (i) passive management: coaches' avoidance or delay in bearing responsibility for decision-making when it is necessary to take critical decisions. In a previous study of futsal and soccer athletes (Gomes & Resende, 2012), confirmatory factor analysis demonstrated acceptable fit levels for the organisation of the leadership scales with second-order factors of transformational, transactional, and decision-making leadership; internal consistency was also acceptable (all  $\alpha > .70$ ). Responses to the items were based on a 5-item Likert scale ranging from one (Never) to five (Always). For each scale, higher values indicated that coaches engaged in the behaviour more frequently.

Athlete Satisfaction Questionnaire (ASQ; Riemer & Chelladurai, 1998; adapted by Gomes & Paiva, 2010). The present study employed four subscales to assess athletes' satisfaction with coaches' leadership: (a) ability utilisation: athletes' perception of the extent to which coaches used or maximised their skills and individual talents (five items); (b) strategy: athletes' perception of coaches' strategies and tactics during competition (6 items); (c) personal treatment: athletes' perception of coaches' personal treatment of each individual and that somehow affects the team indirectly (five items); and (d) training and instruction: athletes' perception of the coaches' training and instruction (three items). In an earlier study of handball athletes, Gomes, & Paiva (2010) observed acceptable internal consistency for all the scales (all  $\alpha > .70$ ), and a confirmatory factor analysis found acceptable levels of fit for the model of leadership with a second-order factor termed satisfaction with leadership and four correlated factors (Gomes & Resende, 2012). Responses to the items were based on a 7-item Likert scale ranging from one (Not at all satisfied) to seven (Extremely satisfied). For each subscale, higher values indicated greater satisfaction with the coaches' leadership style.

Coach-Athlete Compatibility Measure (CACM; Gomes & Paiva, 2010). This instrument was based on the work of Kenow & Williams (1999) and Williams et al. (2003), although the current study included five items rather than the one item originally proposed in these studies. This measure evaluated the overall compatibility between athletes and their coaches by determining the extent to which coaches' behaviours,

goals, and personality/temperament were consistent with (a) athletes' behaviours (one item), (b) athletes' goals (one item), (c) athletes' personalities/temperaments (two items), and (d) athletes' beliefs/ideas (one item). A study of handball athletes (Gomes & Paiva, 2010) found that the scale exhibited acceptable internal consistency ( $\alpha = .85$ ), and a confirmatory factor analysis found acceptable levels of fit for the model that grouped the five items on the basis of the dimension of coach-athlete compatibility (Gomes & Resende, 2012). Responses to the items were based on a 9-item Likert scale ranging from one (Not at all compatible) to nine (Highly compatible). Higher scores indicated greater compatibility between the coaches and athletes.

Performance Goal Incongruence Scale (PGIS). This measure was developed for this study being based on the work of Crocker & Graham (1995) and Pensgaard & Duda (2003). The scale evaluated the athletes' perceived achievement of personal (three items) and team (three items) goals. More specifically, athletes responded to the instrument thinking the extent to which they had achieved their desired levels of personal and team performance at the end of the season. Responses to the items were based on a 5-item Likert scale ranging from one (Disagree) to five (Agree). Higher scores indicated a greater perceived achievement of personal and team goals.

For most of the scales used in this study, the internal consistency values were greater than .70. However, coefficients above .60 were accepted for four of the MSLS scales (vision, personal support, negative feedback, and passive management) because these scales included only four items per scale (Cortina, 1993).

### *Procedure*

The current study followed the ethical procedures outlined in the Declaration of Helsinki and was approved by the internal review board of Research Center of Psychology (University of Minho), and conformed to both National and European regulations on conducting research with human participants and on the management of personal data. Coaches and athletes were informed about the study's goals and the Questionnaires' administration procedures. Athletes' participation was voluntary, and their data remained confidential. Data collection occurred on two occasions: in the middle of the season (before the play-off games) and at the end of the season (after the play-off games). Fifteen athletes did not participate in the second data collection event because they had returned to their original countries. Accounting for this attrition, the rate of participation in the study was 81.5%.

### *Data Collection and Psychological Measures*

Data were collected on two separate occasions: before the national championship play-offs and after the play-offs. Because the teams winning the national championship and the Portuguese Cup were not known prior to the play-offs, the sample was only divided into two groups after the play-offs. A minimum of three months elapsed between the two assessments. Prior to the play-offs, the athletes completed the MSLS, the ASQ, and the CACM. After the play-offs, athletes were re-administered these questionnaires and also completed the PGIS.

## **RESULTS**

### *Differences in Leadership, Satisfaction with Leadership and Coach-Athlete Compatibility*

Differences were assessed both before and after the play-offs using a 2 X 2 analysis of variance with repeated-measures with the MSLS, ASQ, and CACM as the dependent variables, time as the within-subjects factor, and group as the between-subjects factor. The multivariate tests identified four significant

leadership dimensions: inspiration, Wilks'  $\lambda = .90$ ,  $F(1, 49) = 5.58$ ,  $p < .05$ ,  $\eta^2 = .10$ ; technical instruction, Wilks'  $\lambda = .91$ ,  $F(1, 49) = 4.70$ ,  $p < .05$ ,  $\eta^2 = .09$ ; positive feedback, Wilks'  $\lambda = .83$ ,  $F(1, 49) = 10.05$ ,  $p < .01$ ,  $\eta^2 = .17$ ; and active management, Wilks'  $\lambda = .92$ ,  $F(1, 49) = 4.49$ ,  $p < .05$ ,  $\eta^2 = .08$ . It should also be noted marginally significant differences between groups for vision ( $p = .063$ ), Wilks'  $\lambda = .93$ ,  $F(1, 49) = 3.61$ ,  $p < .10$ ,  $\eta^2 = .07$ . Tests of within-subjects effects found that whereas the winning teams' perception of coaches' vision, inspiration, technical instruction, positive feedback, and active management increased after the play-offs, the non-winning teams' perception of these same variables decreased across the two time points (Table 1). With regard to satisfaction with leadership, the multivariate tests revealed significant values for satisfaction with strategy, Wilks'  $\lambda = .91$ ,  $F(1, 49) = 4.77$ ,  $p < .05$ ,  $\eta^2 = .09$ . Tests of within-subjects effects indicated that whereas the winning teams' satisfaction with coaching strategy increased after the play-offs, the non-winning teams' satisfaction with strategy decreased after the play-offs (Table 1). No differences were found between the two groups regarding coach-athlete compatibility.

#### *Differences in Goal Achievement*

A multivariate analysis of variance (MANOVA) was performed for the two PGIS scales to compare the athletes' perceptions of personal and team goals achievement for the two groups of teams. The two groups exhibited significant differences, Wilks'  $\lambda = .74$ ,  $F(2, 47) = 8.23$ ,  $p < .01$ ,  $\eta^2 = .26$ . Tests of between-subjects effects indicated that the winning teams' perception of the achievement of personal goals,  $F(1, 48) = 4.95$ ;  $p < .05$  and team goals,  $F(1, 48) = 13.24$ ;  $p < .001$  was higher when compared with the non-winning teams.

**Table 1.** Differences between the winning teams and non-winning teams before and after the playoffs

Variables	Before play-offs		After play-offs		df	F
	Winning teams	Non-winning teams	Winning teams	Non-winning teams		
	M (SD)	M (SD)	M (SD)	M (SD)		
<b>Transformational leadership</b>						
MSLS: Vision	3.49 (.58)	3.79 (.66)	3.63 (.66)	3.57 (.70)	(1,49)	3.61 <sup>+</sup>
MSLS: Inspiration	3.55 (.49)	3.96 (.77)	3.60 (.73)	3.59 (.68)	(1,49)	5.58*
MSLS: Technical instruction	3.26 (.57)	3.81 (.60)	3.33 (.67)	3.54 (.57)	(1,49)	4.70*
MSLS: Personal respect	3.79 (.67)	3.84 (.64)	3.73 (.73)	3.66 (.60)	(1,49)	n.s.
MSLS: Personal support	2.36 (.46)	2.60 (.66)	2.49 (.70)	2.49 (.55)	(1,49)	n.s.
<b>Transactional leadership</b>						
MSLS: Positive feedback	3.14 (.46)	3.42 (.71)	3.39 (.70)	3.21 (.69)	(1,49)	10.05**
MSLS: Negative feedback	2.22 (.71)	2.08 (.73)	2.77 (.58)	2.58 (.63)	(1,49)	n.s.
<b>Decision-making</b>						
MSLS: Active management	2.50 (.69)	2.52 (1.02)	2.83 (.67)	2.35 (.87)	(1,49)	4.49*
MSLS: Passive management	2.41 (.52)	2.28 (.80)	2.22 (.66)	2.36 (.55)	(1,49)	n.s.
<b>Satisfaction with leadership</b>						
ASQ: Ability utilization	4.78 (1.09)	4.90 (1.30)	4.53 (1.42)	4.75 (1.25)	(1,49)	n.s.
ASQ: Strategy	4.59 (1.17)	5.14 (.91)	4.79 (1.07)	4.79 (1.10)	(1,49)	4.77*
ASQ: Personal treatment	4.99 (1.26)	5.30 (1.11)	4.86 (1.44)	5.10 (1.12)	(1,49)	n.s.
ASQ: Training and instruction	4.39 (1.23)	5.28 (1.16)	4.57 (1.32)	5.04 (1.16)	(1,49)	n.s.
<b>Coach-athlete compatibility</b>						
CACM: Coach-athlete compatibility	6.24 (1.22)	6.52 (1.43)	5.97 (1.53)	6.21 (1.35)	(1,49)	n.s.

n.s. = not significant; <sup>+</sup>p < .10; \*p < .05; \*\*p < .01

## DISCUSSION

Lyle (2002) has criticized the claim that elite coaches' performance should be evaluated based on athletes' and teams' performance outcomes. However, understanding leaders' effects on organizational performance (Kaiser et al., 2008) and the characteristics of successful leaders (Collins, 2001) is important for organizational survival in competitive and complex markets. This is also true for sports because athletes and teams compete for the same objective, and success or failure is a daily concern for both athletes and coaches. Thus, the current study was designed to analyze whether achieving sports success influence the athletes' perceptions of coaches' actions as well as athletes' perceptions of personal and team goals achievement.

Regarding athletes' evaluation of coaches' leadership, the differences in the MSLS responses before and after the play-offs revealed that the winning teams evaluated more positively their coaches on five leadership dimensions and were more satisfied with their coaches' strategy compared to the non-winning teams. Three of these leadership behaviours were transformational (vision, inspiration, technical instruction), and the other two represented positive dimensions of transactional leadership (positive feedback) and decision making (active management). This leadership profile – particularly in regard to transformational leadership – has been positively associated with organizational commitment (Rai & Sinha, 2000), work satisfaction and motivation (Hetland & Sandal, 2003; Kovjanic et al., 2012), and performance (DeGroot et al., 2000; Dumdum et al., 2002). It should also be noted that these aspects of leadership are all related to task accomplishment because providing athletes with a challenging vision, technical instruction, encouraging athletes to work to achieve their goals, reinforcing athletes' efforts, and involving athletes in decision making might promote success in sports. Conversely, the winning and non-winning teams did not exhibit significant differences in regard to the more socially oriented leadership dimensions of personal respect and personal support. Because failure to win did not appear to compromise the personal relationship between coaches and athletes, it is not surprising that the two groups did not differ in coach-athlete compatibility, and winning or not winning did not reduce athletes' satisfaction with aspects of coaches' leadership, such as ability utilisation, personal treatment, and training and instruction. The only difference was that winning teams were more satisfied with coaches' strategy than non-winning teams, a factor that might explain their sport success at the end of the season. The study results indicated that winning positively influenced athletes' evaluation of their coaches, particularly in regard to factors related to transformational leadership and the successful management of sports tasks. It is important to note that research on other organizational contexts has found that these leadership behaviours positively affect group members' performance and attitudes toward work (Harter et al., 2002; Judge et al., 2004).

The same results were observed for athletes' perceptions of the achievement of personal and team goals. Winning teams evaluated more positively their personal and team goal achievement than non-winning teams. This is not surprising because by achieving the optimum sports outcome, athletes on the winning teams were more likely to realize their personal and team goals. In addition, compared to athletes on non-winning teams, athletes on winning teams perceived that their coaches displayed a more positive and task-oriented leadership profile, which could also increase the probability of achieving personal and team goals. In conclusion, winning athletes evaluated more positively their coaches' leadership, were more satisfied with their coaches' strategy, and had greater perceived goal attainment than non-winning athletes; however, winning was not related to other aspects of satisfaction with leadership or coach-athlete compatibility. Because no differences were found between the two groups regarding most of the dimensions of satisfaction with coaches' leadership and coach-athlete compatibility, future research should confirm the results of the current study by selecting additional psychological and performance measures



being also essential to include more teams and athletes in the sample. This effort seems very important because it is critical to improve knowledge about the behaviour of successful coaches in order to enhance athlete and team performance.

## REFERENCES

1. Bass, B.M. (1985). *Leadership and performance beyond expectations*. New York: The Free Press.
2. Bass, B.M. & Riggio R.E. (2006). *Transformational leadership (2nd ed.)*. Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
3. Boardley, I.D., Kavussanu, M. & Ring, C. (2008). Athletes' perceptions of coaching effectiveness and athlete-related outcomes in rugby union: An investigation based on the coaching efficacy model. *Sport Psychol*, 22, pp.269-287
4. Chelladurai, P. (2007). Leadership in sports. In Tenenbaum, G., & Eklund R.C. (Eds.), *Handbook of Sport Psychology (3rd ed.)*. Hoboken, New Jersey: John Wiley & Sons.
5. Collins, J. (2001). *Good to great*. New York: HarperCollins.
6. Cortina, J.M. (1993). What is coefficient alpha? An examination of theory and applications. *J Appl Psychol*, 78, pp.98-104
7. Cote, J, Salmela, J.H., Trudel, P., Baria, A. & Russell, S. (1995). The coaching model: A grounded assessment of expert gymnastic coaches knowledge. *J Sport Exercise Psy*, 17, pp.1-17.
8. Courneya, K.S. & Chelladurai, P. (1991). A model of performance measures in baseball. *J Sport Exercise Psy*, 13, pp.16-25
9. Crocker, P.R.E. & Graham, T.R. (1995). Coping by competitive athletes with performance stress: Gender differences and relationships with affect. *Sport Psychol*, 9, pp.325-338
10. Day, D.V. & Lord, R.G. (1988). Executive leadership and organizational performance: Suggestions for a new theory and methodology. *J Manage*, 14, pp.453-464
11. Degroot, T., Kicker, D.S. & Cross, C. (2000). A meta-analysis to review organisational outcomes related to charismatic leadership. *Can J Adm Sci*, 17(4), pp.356-371
12. Dumdum, U.R., Lowe, K.B. & Avolio, B.J. (2002). A meta-analysis of transformational and transactional leadership correlates of effectiveness and satisfaction: An update and extension. In Avolio, B.J., & Yammarino, F.J. (Eds.), *Transformational and charismatic leadership: The road ahead*. Oxford, U.K: JAI/Elsevier.
13. Feltz, D.L., Chase, M.A., Moritz, S.E. & Sullivan, P.J. (1999). A conceptual model of coaching efficacy: Preliminary investigation and instrument development. *J Educ Psychol*, 91, pp.765-776
14. Gomes, A.R. & Paiva, P. (2010). Liderança, compatibilidade treinador-atleta e satisfação no andebol: Percepção de atletas novatos e experientes [Leadership, coach-athlete compatibility and satisfaction in handball: Perceptions of novice and experienced athletes]. *PsicoUSF*, 15(2), pp.235-248
15. Gomes, A.R. & Resende, R. (2012). Assessing leadership styles of coaches and testing the augmentation effect in sport. Submitted for publication.
16. Harter, J.K., Schmidt, F.L. & Hayes, T.L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *J Appl Psychol*, 87, pp.268-279
17. Hetland, H. & Sandal, G. (2003). Transformational leadership in Norway: Outcomes and personality correlates. *European Journal of Work and Organizational Psychology*, 12(2), pp.147-170.
18. Horn, T.S. (2008). Coaching effectiveness in the sport domain. In Horn, T.S. (Ed.), *Advances in sport psychology (3rd ed.)*. Champaign, IL: Human Kinetics.

19. Jowett, S. (2007). Interdependence analysis and the 3+1 Cs in the coach-athlete relationship. In Jowett, S. & Lavallee, D. (Eds.), *Social psychology in sport*. Champaign, IL: Human Kinetics.
20. Joyce, W.F., Nohria, N., & Roberson B. (2003). *What really works*. New York: Harper Business.
21. Judge, T.A., Piccolo, R.F. & Ilies, R. (2004). The forgotten ones? The validity of consideration and initiating structure in leadership research. *J Appl Psychol*, 89, pp.36-51
22. Kaiser, R.B., Hogan, R. & Craig, S.B. (2008). Leadership and the fate of organizations. *Am Psychol*, 63, pp.96-110
23. Kenow, L.J. & Williams, J.M. (1999). Coach-athlete compatibility and athlete's perception and evaluative reactions to coaching behaviors. *Journal of Sport Behavior*, 22, pp.251-259
24. Kovjanic, S., Schuh, S.C., Jonas, K., Quaquebeke, N.V. & Van Dick, R. (2012). How do transformational leaders foster positive employee outcomes? A self-determination-based analysis of employees' needs as mediating links. *J Organ Behav*, 33(8), pp.1031-1052
25. Lyle, J. (2002). *Sports coaching concepts: A framework for coaches' behaviour*. London: Routledge.
26. Mallett, C. & Côté, J. (2006). Beyond winning and losing: Guidelines for evaluating high performance coaches. *Sport Psychol*, 20, pp.213-221
27. McGahan, A.M. & Porter, M.E. (1997). How much does industry matter, really? *Strategic Manage J*, 18, pp.15-30
28. Pensgaard, A.M. & Duda, J.L. (2003). Sydney 2000: The interplay between emotions, coping, and the performance of Olympic-level athletes. *Sport Psychol*, 17, pp.253-267
29. Rai, S. & Sinha, A.K. (2000). Transformational leadership, organizational commitment, and facilitating climate. *Psychological Studies*, 45(1-2), pp.33-42
30. Riemer, H.A. & Chelladurai, P. (1998). Development of the athlete satisfaction questionnaire (ASQ). *J Sport Exercise Psy*, 20, pp.127-156
31. Thomas, A. (1998). Does leadership make a difference to organizational performance? *Admin Sci Quart*, 33, pp.388-400
32. Williams, J.M., Jerome, G.J., Kenow, L.J., Rogers, T., Sartain, T.A. & Darland, G. (2003). Factor structure of the coaching behavior questionnaire and its relationships to athlete variables. *Sport Psychol*, 17, pp.16-34