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Stewart Vella

University of Wollongong, sav998@uow.edu.au

Lindsay G. Oades

University of Wollongong, loades@uow.edu.au

Trevor P. Crowe

University of Wollongong, tcrowe@uow.edu.au

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The Application of Coach Leadership
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by

Stewart A. Vella, Lindsay G. Oades Trevor P. Crowe

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The Application of Coach Leadership Models to Coaching Practice: Current State and Future Directions

Stewart A. Vella, Lindsay G. Oades Trevor P. Crowe

School of Psychology, University of Wollongong,
Northfields Avenue, N.S.W., Australia, 2522.
Email: stvella@uow.edu.au

ABSTRACT

The purpose of this concept/review article is to critically discuss the application of sports coaching leadership models to coaching practice. The focus of the discussion will be on the coherence and impact of the numerous models in the current literature, and the accumulated impact that they have on practitioners. This discussion will be framed in current conceptions of sports coaching and expected athlete outcomes. This article can serve an important role in the continuing dialogue about the essence of sports leadership; particularly in relation to how it is defined, how it is measured, and how the leadership literature can be applied in the field.

Key words: Coach-Athlete Relationship, Coaching Effectiveness, Leadership Theories

INTRODUCTION

While leadership is a complex and multifaceted construct and has often been defined according to one's theoretical position [1], virtually all definitions share the view that leadership involves a process of influence [2]. The integration of major leadership theories has served to highlight leadership not as an individual characteristic, but as dyadic, relational, strategic, and a complex social dynamic [3-4]. Similarly, sport coaching has been defined as a complex social process that is constituted and maintained by a set of reciprocal, interpersonal relationships and permeated by contextual constraints [5]. As coaching is often assumed to be synonymous with leadership, it is unsurprising that the scientific understanding of these processes is similar. Consequently, leadership has been argued to be the essential and indispensable element of coaching practice [6].

This makes the coherent application of coach leadership models to coaching practice an important and necessary endeavour. The purpose of this article is to critically review the current state of coach leadership literature, with a particular emphasis on the impact of coach leadership models on the coaching practitioner. It is hoped that this article can extend the dialogue on the definition, measurement and application of coach leadership in the field. This

article will: i) frame the current discussion by briefly reviewing the current understanding of the coaching process and the applicability of coaching models; ii) provide a short summary of the major models and frameworks used to study coach leadership; iii) provide discussion on the current definition of coach leadership and the interpretation of relevant constructs; iv) discuss the major issues facing the measurement of coach leadership in terms of its impact on athletes; v) examine the inadequacies of the current definition and provide recommendations for an alternate definition; and vi) provide recommendations for future research, and implications for coaching practice.

COACHING PROCESS AND APPLICATION OF MODELS

For some time, coaching scholars have searched for and proposed models of the coaching process. This includes models that are prescriptive, idealistic representations of the coaching process and models that are empirically grounded in research [7]. Models of the coaching process allow coaching practitioners to base their behaviours and objectives on definitive principles, rather than improvised on the basis of feelings, emotions, intuition, and experience [8]. Models of the coaching process can also be used to inform coach education programs, which are currently argued to be based on general guidelines, and are consequently neither informative nor influential [9]. Models also allow coaching scholars and educators to better understand how and why contextually-relevant, real-world decisions are made. Despite the use of many and varied theoretical positions [10], the coaching process lacks a sound conceptual basis and definitive set of principles [7]. This may have lead coaching practitioners to view coaching research as irrelevant, and removed from real-world coaching practice [11]. Coaches have suffered from a positivistic approach to modelling the coaching process, which has as its aim the reduction of a complex process into simple and causal components. The result has been models that are reduced in complexity and not representative of coaching practice [5]. The underestimation of the complexity of the coaching process has seen coaches struggle to practice according to these frameworks [8, 11].

Accordingly, it is fair to say that models of the coaching process have not been as influential as they could have been when it comes to coaching practice. Despite a similar understanding of both coaching and leadership as complex social processes, models of leadership developed for an organizational setting have had a substantial impact on the practice and training of organisational leadership practice in the real world [1]. The evidence presented above suggests that models of coach leadership may not hold the same applied value to coaching practitioners, despite coach leadership and coaching effectiveness models being formulated and tested in the sport setting. Despite facing the same problems of a complex and messy reality, models of organisational leadership are highly influential and applicable, and have been shown to consistently inform organisational leadership practice and education that leads to improved leadership effectiveness [1]. However, it must be noted that the theoretical models and frameworks reviewed below have not been generated as models for immediate use by coaching practitioners. Indeed, they have served their purpose well in enabling researchers to both identify relevant factors affecting coach behaviour, and test the impact of coach behaviour on athlete performance and development.

Therefore, it is suggested that while these models serve their intended purpose, they are confusing for coaching practitioners and coach educators who are trying to base their behaviour and programs on such models. Consequently, a more practitioner-oriented model is needed because such a model would be of more use to coaching practice. Some suggestions to increase the applicability of these models is to further highlight the reciprocal interaction between coach and athlete, and set this within a given coaching context [8, 12].

REVIEW OF THE CURRENT MODELS

LEADERSHIP MODELS

The multi-dimensional model of leadership [13] asserts that there are three states of leadership behaviour: the required coach behaviour, the athlete's preferred coach behaviour, and actual coach behaviour. Each of these states is influenced by three antecedent variables that represent the characteristics of the situation, the coach, and the athlete. The basic premise of the model is that athlete performance and satisfaction are positively related to the congruence between the three states of coaching behaviours. Alternatively, Smoll and Smith [14] propose a cognitive-mediational model of coach leadership. The basic assumption of this model is that in addition to the influence of situational factors, cognitive processes and individual difference variables will mediate the relationship between coach behaviour and athlete outcomes.

More recently, authors have favoured new models of leadership. Both Rowold [15] and Callow et al. [16] have tested the applicability of the transformational leadership model [17] to the sport coaching context with positive results, and have been supported by qualitative work [18]. Extending this, research has recently suggested that servant leadership may also be an appropriate model [19]. Servant leadership is defined by the core constructs of trust, humility and service to others. This research provides some understanding of what effective coach leaders do, but when considered together these results begin to blur what the most appropriate leadership model for coaching research may be. This is to also leave out studies that promote altruistic leadership [20] and transactional leadership [15, 21] as appropriate models. Considering the positive results obtained in each of these studies, one approach to such ambiguity may be to examine the factors that are common to all of these models of leadership.

RELATIONAL FRAMEWORKS

Coach-athlete relationship frameworks have also been used to study coach leadership. This has been based on the understanding of both leadership and coaching as social processes that are constituted and maintained by reciprocal, interpersonal relationships. These frameworks have supplemented the research undertaken using leadership frameworks by investigating the interpersonal constructs and processes that facilitate meaningful, satisfying and successful relationships. Jowett [22] has conceptualised the coach-athlete relationship in terms of four interpersonal constructs: closeness, commitment, complementarity and co-orientation. Further, Mageau and Vallerand [23] have added contextual, cognitive and personal orientation variables to a motivational model of the coach-athlete relationship. They propose that these factors influence coach behaviours which, in turn, affect an athlete's perception of competence, autonomy, relatedness, and intrinsic motivation.

COACHING EFFECTIVENESS MODELS

Horn [24] has proposed the working model of coaching effectiveness as an alternative to leadership and relationship models. This model proposes that there are three important determining factors for coach behaviours: the socio-cultural context, the organisational climate, and the coach's personal characteristics. The impact of these factors on coach behaviour is mediated by the coach's expectancies, values, beliefs and goals. Coach behaviour will influence an athlete's perceptions of their coach, which in turn impacts upon their self-perceptions and beliefs, and their motivation. Each of these influence the outcomes of athlete performance and behaviour.

Côté and Gilbert's [25] integrative definition of coaching effectiveness stipulates that an

effective coach engages in behaviours that are an application of integrated professional, interpersonal and intrapersonal knowledge. When applied, these knowledge bases bring about positive changes in the athlete outcomes of competence, confidence, connection and character. Coaches' knowledge and the associated athletes' outcomes differ by coaching context, and these differences have been expanded upon by Côté et al. [26]. For example, participation coaches for youth sports have a focus on health and physical activity competencies; in contrast to performance coaches whose focus is on competition performance competencies.

SUMMARY OF THE FRAMEWORKS

Models of coach leadership converge around five variables of primary interest:

- The coaching context, including player age, gender, goals, sport and competition level
- The coach's personal characteristics which include professional, intrapersonal and interpersonal knowledge, values, beliefs and goals
- Athlete outcomes which have been summarised as including the four broad areas of competence, confidence, connection and character [25]
- Athlete characteristics which include perceptions, beliefs and attitudes
- Coaching behaviours, which are the fundamental drivers of athlete outcomes

Omitted from models of coach leadership is the integration of the coach-athlete relationship. Given that coaching is understood as an inherently social process, constituted by the relationship between a coach and athlete, it seems implausible that a comprehensive model of coach leadership would omit such a construct. Admittedly, the personal and contextual variables of major interest have been consistently shown to be influential constructs that impinge upon coach behaviour and athlete outcomes. This omission is surprising, given that both coaching and leadership can be understood as complex, social processes that are constituted and maintained by a set of reciprocal, interpersonal relationships and permeated by contextual constraints, based on influence used to promote the development and performance of people [3-5, 7].

THE CURRENT DEFINITION OF COACH LEADERSHIP

One is hard pressed to find a pervasive definition of coach leadership in the literature. The most popular definition is that of coach leadership as a behavioural process that is used to increase athlete performance and satisfaction [27]. The direct result of such a definition is that coach behaviours have proceeded over the last two decades as the most popular construct of interest when examining the influence of the coach on the athlete. The pioneering work of Chelladurai [28] has been influential in shaping such research and the way that the field views coach leadership. Chelladurai must also be applauded for the integration of aspects of the transformational leadership model into his multidimensional model [28]. Moreover, recent studies have recommended various leadership styles as the most suitable for sports coaching, including transformational leadership [15-16], servant leadership [19] and altruistic leadership [20]. Notwithstanding this recent influx of relational additions to the literature, the definition of coach leadership as a purely behavioural process may only serve to slow the progress on the understanding of coach leadership as it unfolds in the reality of coaching practice.

Difficulty is faced by coaching researchers in recommending only coaching behaviours, because coaching practice is more about improvisation than it is about structured and

prescribed behaviours [11]. Coaching is a dynamic, complex and messy practice [7], and coaches have struggled to base their practice on positivistic frameworks that are unable to account for the improvisation that is necessary [11]. This is why models of coaching effectiveness have specified intra- and interpersonal awareness as the basis for effective coaching [25]. As coaching is a social and relational process, it stands to reason that leadership effectiveness will be more highly correlated with interpersonal skills than with a narrow range of prescribed behaviours. Interpersonal skills training for coaches has shown that these constructs are significantly and positively correlated with coach leadership [29].

The centrality of coaching behaviours to the definition of coach leadership is not under question. Given that coaching is characterised by structured improvisation, a coach consistently and rapidly assesses the situation, draws upon his knowledge, and makes appropriate behavioural changes [8, 11]. Research has shown that a coach will construct a mental model of how his or her coaching will take place, including knowledge of their own personal characteristics, athletes' personal characteristics, contextual factors, and sound professional knowledge [25, 30]. Resultant behaviours are a product of these constructs, a fact that should be reflected in the definition.

While coaching is arguably constituted most notably by the teaching of sport-specific skills, coach leadership is also constituted by the ability of the coach to establish and maintain positive interpersonal relationships. This ability is grounded firmly in both intrapersonal and interpersonal knowledge. Intrapersonal knowledge includes self-awareness and reflection, both of which have been shown to influence the development of coaching [31] and leadership [32], and both are behaviours that are worthy of more discussion in the coach leadership literature. It may be a worthwhile endeavour for coach leadership researchers to engage in more critical thinking surrounding what constructs are considered for research on coach behaviour. Appropriate interpersonal interactions in order to develop and maintain positive relationships are more than worthy subjects of empirical study given our understanding of coaching and leadership.

MEASUREMENT OF COACH LEADERSHIP

There are substantial problems associated with the measurement of real-world outcomes of coach leadership, especially for practitioners without the time and knowledge to incorporate empirically validated measures of desired outcomes. Lofty goals such as self-esteem and team cohesion may be 'fine in theory', but are criticised by coaches as being divorced from reality [33]. The attainment of goals such as increasing the self-esteem or life skills of athletes are argued to be unmeasurable in practice, leaving the realisation of such goals to be measured only through the relative success of the athletes for whom the coaches are responsible [10].

Coach leadership is defined as a behavioural process that is used to increase athlete performance and satisfaction [27]. Problems arise with this definition due to the broad nature of the specified outcomes. While in theory the outcomes of performance and satisfaction are terms loosely used to encompass the totality of athlete outcomes, it is the attempt to capture the totality of athlete experience which has led to insufficient definition and has confused the measurement of coach leadership. The measurement of leadership in terms of athlete outcomes is an essential step in establishing the reliability of future coach leadership research. The first goal of coach leadership researchers should be to clarify a set of clearly articulated outcomes that are relevant over various coaching contexts. Côté et al. must be applauded for their work in this area [25-26]; and due to this body of work, discussion in this article will focus on broader issues.

PERFORMANCE OUTCOMES

Interpretation of the performance outcome has led to inconsistency in the literature, with the predomination of three separate interpretations. Firstly, performance has been equated to achievement. These studies have used measures of team and athlete success, such as win/loss record [19], or qualification for a major tournament [16] as outcome variables. This interpretation of the performance outcome is problematic, because effective coach leadership is not necessarily correlated with athlete success: "Indeed, the goal of outright 'success', however so defined, is logically unobtainable for most, if not all, coaches" [11, p. 120].

Secondly, performance is equated to learning. This interpretation attempts to measure the impact of the coach by assessing perceived or observable performance relative to a baseline measure. Accordingly, this outcome assesses an improvement in performance skills, rather than a measure of performance skills themselves. Upon this assumption, performance does not reflect overt and observable behaviours, but instead reflects a hypothesised improvement in performance skills that has occurred as a result of the coach's influence. Studies that interpret the performance outcome in this way have used measures of self-rated improvement [34], or perceived competence [35-36] as outcome variables. However, given that athlete perceptions are only mediating variables between coach behaviour and athlete outcomes [23], this understanding of the performance outcome is a valuable tool, yet an insufficient outcome measure, in coach leadership research.

Given the problems associated with the two previous understandings of performance, perhaps most potential lies with the understanding of performance as akin to competence. Interpretations of the performance outcome as competence based have resulted in measures such as observer ratings of technical and tactical skills [37], and game statistics [38]. The benefit of a competence-based understanding is that objective outcome measures can be used that are more within a coach's direct control than outright success.

SATISFACTION OUTCOMES

Satisfaction is a broad term that is used to describe the totality of an athlete's emotional or psychological outcomes. Most notably, this construct has come to represent an athlete's satisfaction with their sporting experience, which has often been measured using the Athlete Satisfaction Questionnaire [27]. Numerous researchers have used this measure as an indication of the effectiveness of coach leadership [eg. 19, 39-41]. However, satisfaction is only one of a number of important and well-defined outcomes present in the literature. Among many others, researchers have used measures of team cohesion [16, 42], motivational climate [43-44], self-esteem [45], emotional mood state [46], and positive and negative affect [47] as outcome measures of coach leadership.

The question now becomes which of these measures, if any, is most highly correlated with coach leadership and provides a valid measure of leadership effectiveness? Further, what effect does the coaching context have on the measures to be used? Côté and Gilbert [25] have articulated that effective coach leadership will entail the facilitation of four core outcomes: competence, confidence, connection and character. The next step is to agree on measures that can be used to accurately gauge these outcomes, with the aim of providing a reliable measure of coach leadership. The Youth Experience Scale [48] has been used with promise in coach leadership research [35], but further work is needed to validate such measures, particularly in non-youth and performance contexts. Further exploration is also needed as the constructs of competence, confidence, connection and character do not seem to encompass a large part of coach leadership, including the facilitation of positive emotions such as fun, happiness, joy, motivation, and satisfaction. Recent research has suggested that coaches also desire such

positive emotions as a result of their coaching, in addition to the facilitation of team-related outcomes such as team cohesion, psychological capacities such as resilience and perseverance, and life skills such as communication, team work and goal setting [49]. This is consistent with previous research arguing that facilitation of cohesion and positive affect is the foundation of coach leadership [42], and life skills as the outcome of successful coaching [50]. More work is needed to validate these outcomes in practice.

A NEW DEFINITION OF COACH LEADERSHIP AND ITS ASSUMPTIONS

The accepted definition of coach leadership is a behavioural process that is used to influence athlete performance and satisfaction [27]. In this article, it has been argued that this definition may be insufficient in a number of ways. Firstly, coach leadership is not purely a behavioural process, but is also a process of interpersonal influence that includes interpersonal variables relating to the coach-athlete relationship. The definition of coach leadership must be consistent with the understanding of the coaching process and leadership, both of which are inherently social processes. The fundamental assumption of both coaching and leadership is that they are constituted and maintained by interpersonal relationships. However, according to the current understanding of the coach-athlete relationship as including the four interpersonal constructs of closeness, commitment, complementarity and co-orientation [22], it has no direct bearing on athlete outcomes. Instead, these constructs are proposed as meaningful and significant facilitators of these outcomes. For example, the construct of closeness between coach and athlete may never itself increase an athlete's competence, but the effectiveness of coaching behaviours designed to increase athlete competence is heavily dependent upon the degree of closeness between coach and athlete. The practical implication is that a high-quality coach-athlete relationship is more likely to facilitate increases in desired athlete outcomes than a poor coach-athlete relationship, all else being equal. Consequently, the coach-athlete relationship is a tool that coaches can use to increase the effectiveness of leadership behaviours and should be included in the definition. This is especially so given that both coaching and leadership are constituted by such a relationship.

Secondly, the outcomes of performance and satisfaction have been argued as an insufficient representation of athlete outcomes. The outcomes of competence, confidence, connection and character have been argued to be more representative of the range of athlete outcomes. Therefore, coach leadership may be more accurately defined as: a process of interpersonal influence that is dependent upon the relationship between coach and athlete, and is used to facilitate the athlete outcomes of competence, confidence, connection and character.

This definition does not allow for the fact that coach leadership behaviours are a derivative of a wide range of variables, including a coach's personal characteristics, athlete characteristics, and the coaching context. However, this can be overcome by placing coach leadership within the overall picture of coaching effectiveness. According to the definition of coaching effectiveness provided by Côté and Gilbert [25], effective coaching encompasses the entire process that results in measurable athlete outcomes in specific contexts. Coach leadership is one component of effective coaching that may best be accounted for by the 'interpersonal knowledge' component of the definition provided by Côté and Gilbert [25].

Accordingly, this understanding of coach leadership is underpinned by four assumptions:

- Coach leadership is a process of influence that is dependent upon, and constituted by, the interpersonal relationship between coach and athlete.

- The coach-athlete relationship has no direct influence on athlete outcomes, but acts as a form of mediating variable between coach behaviour and athlete outcomes.
- In line with the definition of effective coaching, coach leadership behaviours are used to bring about the athlete outcomes of competence, confidence, connection and character.
- In line with the definition of effective coaching, coach leadership behaviours are determined by the coaching context, the coach's personal characteristics and athlete characteristics.

Consistent with the understanding of both leadership and the coaching process, these assumptions reflect that coach leadership is constituted and maintained by reciprocal, interpersonal relationships that occur within a complex coaching context.

CONCLUSION

This article has provided discussion on the definition of coach leadership, its measurement and its application. Current definitions do not reflect the understanding of either the coaching process or leadership. Inclusion of the coach-athlete relationship in the definition of coach leadership would bring some real-life applicability and understanding. The following variables should also be included in any definition of leadership: coaching context, coach knowledge and characteristics, and athlete characteristics. Of critical importance are the skills and behaviours necessary to establish and maintain positive interpersonal relationships, including self-awareness, behaviour management and interpersonal awareness.

A fruitful avenue for future research may be to commence testing theories of leadership that incorporate self-awareness and self-management constructs. For example, the theory of authentic leadership [51] incorporates such constructs, and has been proposed as the future of leadership theory-building by experts in the field [1].

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