



Coaching Efficacy, Player Perceptions of Coaches' Leadership Styles, and Team Performance in Premier League Soccer

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ABSTRACT

The coaching competency research has demonstrated the role of coaching efficacy and coaching behaviors on various athlete outcomes. However, athlete perceptions of these relationships and how they affect performance are less understood. **Purpose:** This study examined if coaching efficacy is predictive of player perceptions of coaches' leadership styles, team atmosphere, and team performance in a soccer season. **Method:** Fifteen male premier league soccer coaches ($M_{\text{age}} = 45.27$, $SD = 6.07$) and 226 players ($M_{\text{age}} = 25.66$, $SD = 3.96$) from Botswana participated in the study. All participants completed a background information questionnaire. Coaches completed the Coaching Efficacy Scale. Players rated their coaches' leadership styles using the Revised Leadership Scale for Sports as well as team atmosphere. Team performance was based on position in the league log and player ratings of the teams' performance. **Results:** Findings showed that coaches' self-ratings on technique efficacy predicted player perceptions of the coaches' use of all six leadership styles. Game strategy efficacy predicted higher team atmosphere and team performance. Motivation efficacy was not significantly associated with player perceptions of the coaches' use of any of the leadership styles, while character building efficacy was negatively associated with the various leadership styles. **Conclusion:** Findings provide support to previous research evidence linking higher coaching efficacy, leadership styles, and team outcomes. The study expands the emergent research within the coaching competency literature that examines player perceptions of coaches' behaviors and leadership styles.

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Previous investigations on coaching efficacy and coaching competency have placed significant emphasis on the impact of coaching leadership and coaching behaviors on various athlete outcomes (Horn, 2008; Kavussanu, Boardley, Jutkiewicz, Vincent, & Ring, 2008; Myers, Feltz, Maier, Wolfe, & Reckase, 2006; Szedlak, Smith, Day, & Greenlees, 2015). This represents a shift from an earlier focus on the development and testing of conceptual frameworks (Chelladurai, 1990; Feltz, Chase, Moritz, & Sullivan, 1999; Horn, 2008; Smoll & Smith, 1989) to more nuanced definitions of coaching effectiveness. In the process, the research has demonstrated a high level of consistency in the sources, structure, and predictive strength of the frameworks as well as of the global relevance of the frameworks (Hwang, Feltz, & Lee, 2013; Kao & Tsai, 2016; Kavussanu et al., 2008; Maletse, Chow, & Feltz, 2013). However, one major limitation of the research has been its bias toward coaches' self-evaluations and minimal attention to athletes' perceptions of the relationships. While this is changing, much still needs to be done to get a broader perspective that incorporates athletes' evaluations of coaches' leadership styles. Such a perspective matters when considered

within the context of natural bias in self-evaluations and the potential negative consequences of failing to take athletes' perspectives into account when coaching.

Evidence suggests a discrepancy exists between coaches' and athletes' perceptions of how coaches' behaviors affect athletes' motivation, emotional well-being, and performance (Kavussanu et al., 2008). In their study involving collegiate athletes and their coaches, Kavussanu and colleagues (2008) reported that on average, coaches' self-ratings on coaching efficacy were significantly higher than their athletes' ratings on all dimensions of coaching efficacy. Given the general understanding that leadership styles influence athletes' behaviors and sport outcomes and that this in turn may affect coaches' efficacy beliefs, understanding this relationship should offer valuable perspectives to the coaching efficacy and coaching effectiveness literature.

Context and coaching effectiveness

One of the most important elements of coaching effectiveness, stated by Horn (2008), is the role of context on

a coach's behavior. Some of the variables that could shape coaching contexts include coaches' and athletes' personal characteristics, attitudes, expectations, beliefs, and behaviors (Kavussanu et al., 2008; Szedlak et al., 2015). Other elements are team-management structures and support services provided by specialized professionals. Examples of professionals include strength and conditioning coaches, team psychologists, physical therapists, and sports nutritionists. These are part of an elite sport culture in some contexts but not in others. The differences created by the absence or presence of these support services are why context matters when applying models of coaching effectiveness. Overall, the role of context in shaping coach-athlete relationships and coaches' leadership styles is less understood. Examining the impact of the various contextual elements stated here is beyond the scope of this investigation. However, a study of the relationship between coaching efficacy and player perceptions of coaches' leadership styles in an elite sport context with limited social support is expected to add interesting perspectives. It is likely to broaden the global dimensions of this research while reducing the evidence gap in less studied contexts like Botswana.

Coaching efficacy and coaching leadership frameworks

The Mediational Model of Leadership (Smoll & Smith, 1989) and the Multidimensional Model of Leadership (MML; Chelladurai, 2001, 2007) are two of the most widely used coaching leadership models. Of the two, the MML seems to have wider use. With this model, coaching leadership would be viewed as a function of the capacity to balance the constantly changing dimensions in the coaching environment. Some of these dimensions are athlete attitudes, situational factors, and coach-athlete relationships. The model's dimensions (democratic behavior, positive feedback, training and instruction, situation consideration, social support, and autocratic behavior) have been supported in the research. It has also been found to incorporate critical elements of leadership in sport (Sullivan, Paquette, Holt, & Bloom, 2012; Szedlak et al., 2015). It is worth noting that investigators have used other leadership frameworks that also yielded interesting findings. For instance, Kao and Tsai (2016) found transformational leadership to be predictive of coaching competency and athlete satisfaction. They concluded that coaches who use transformational leadership are characterized by deep awareness of how they think, how they behave, and how they are perceived by their athletes. This would be in line with the finding by Hwang and

colleagues (2013) that higher emotional intelligence is predictive of highly effective coaching.

Previous evidence has demonstrated excellent fit of the various dimensions of the MML model with youth athletes in Botswana (Malete, Sullivan, & LaForge, 2013). Building on this evidence, the specific goal of this study was to extend the research to elite athletes' perceptions of their coaches' leadership styles. We considered it important to demonstrate the kinds of leadership styles preferred by elite athletes in this sport context and how these relate to coaches' efficacy beliefs and athlete outcomes. We wanted to examine these relationships in a sport culture with higher primacy for hierarchical relationships, social (group) membership, and group goals. Evidence from studies involving elite coaches from cultures with higher collectivist primacy such as Malaysia and Iran suggest that MML dimensions like training and instruction, democratic leadership, and social support are highly valued in these cultures (Hassani, Mohammadi, & Yektayar, 2013; Tojjari, Esmaeli, & Majedi, 2013). However, none of these studies examined player perceptions of leadership styles. Neither did they examine relationships with team atmosphere and team performance.

Studies that looked at athletes' perceptions of effective coaching behaviors and athlete outcomes also offer valuable insights to this line of research (e.g., Kavussanu et al., 2008; Szedlak et al., 2015). Szedlak and colleagues (2015) reported that athletes strongly associated coaches' intrapersonal knowledge, interpersonal skills, and instructional and technical knowledge with effective coaching. They did not view autocratic leadership as an effective coaching behavior. Similarly, Kavussanu and colleagues (2008) found coaching experience to be a predictor of technique coaching efficacy. Other studies suggest coaches' leadership behaviors and social climate could affect achievement and skill learning (Alfermann, Lee, & Wurth, 2005; Ntoumanis & Biddle, 1999). For instance, Alfermann and colleagues (2005) found motivational climate, especially perceived social support, to predict skills development. As to whether these translate to improved performance or team harmony remains tenuous. This is partly because team performance and team atmosphere are outcomes of highly complex dynamics in the competitive environment.

An important dynamic within leadership styles and team outcome relationships is the kind of social support available to coaches and their teams. Such support could be the size and quality of the technical team and athletes' access to professional services. Although research evidence shows social support plays a role on the use of various leadership styles in other social

contexts (Chan & Koo, 2011; Gumusluoglu & Ilsev, 2009), little is known about this relationship within the context of sport. For instance, family structure has been associated with parenting styles. In particular, single parents with limited social support have been reported to have a tendency to use more authoritarian methods than authoritative or permissive styles of parenting (Chan & Koo, 2011). The question is, in the sport context, do coaches who work alone and receive limited social support tend to use autocratic methods of leadership because of fear of losing control (and other factors)? Furthermore, do social norms play a role on the type of leadership styles used by coaches?

This study also uses the coaching efficacy model with an elite population of soccer coaches and athletes. Coaching efficacy is defined as perceptions or judgments about the degree of confidence coaches have about their capacity to affect the learning and performance of their athletes (Feltz et al., 1999). It is a multidimensional construct that consists of four interrelated factors of confidence in teaching technique, strategy, motivating, and building good character in athletes. Research has consistently shown that the four factors are influenced by sources of efficacy information, such as the extent of coaching experience/preparation, prior success, perceived skill of athletes, and social support (Kavussanu et al., 2008; Myers et al., 2006; Sullivan & Kent, 2003). As observed previously, these sources of the coaching efficacy model have been supported in Botswana (Malete, Sullivan, et al., 2013). Although the Botswana study was mostly with youth coaches and their athletes, it demonstrated the role of coaching education and coaching experience in efficacy beliefs. It also demonstrated the relationship between efficacy beliefs and leadership styles.

Botswana premier league soccer offers an excellent opportunity to test the hypothesized relationships because of its unique characteristics. The league is semiprofessional but with significant amateur sport management structures. It attracts the largest sponsorship of all sports in the country, making soccer the biggest spectator sport in the country. About 15% of the teams are privately sponsored and run like businesses. Coaches and players in these top-tier teams are employed full time and paid salaries that are competitive in the job market. The rest of the teams are owned by communities and run like social clubs. They rely heavily on ticket sales for their income, which is not adequate to pay competitive salaries and allowances to coaches and players. They are managed mostly by volunteers. Most teams in the league including well-funded ones do not have the support structures typically found in premier soccer leagues around

the world, including South Africa. There is limited access to trained physical trainers, athletic trainers, sport psychologists, and sport nutritionists. There is also high coach attrition and management turnover. These challenges make this context an interesting study sample for this topic.

Therefore, the purpose of this study is to examine if coaching efficacy beliefs are predictive of player perceptions of their coaches' leadership styles, team atmosphere, and team performance in premier league soccer in Botswana while controlling for coaching experience and coaching education. The following hypotheses were tested:

- (1) Coaching efficacy is predictive of player perceptions of their coaches' leadership styles while controlling for coaching experience and coaching education.
- (2) Coaching efficacy predicts player perceptions of team atmosphere and team performance while controlling for coaching education and coaching experience.

Method

Participants

A total of 226 Botswana premier league soccer players, aged 18–40 years old ($M = 25.66$; $SD = 3.96$), and their head coaches ($N = 15$), aged 36 to 54 years old ($M = 45.27$; $SD = 6.07$), participated in this study. The league comprises of a total of 16 teams. Only one team could not take part in the study, representing a 94% response rate. About 87% of the players were citizens of Botswana, while 13% were from Zimbabwe, Zambia, and South Africa. Close to 60% had been with their current coaches for at least 1 year. Eleven of the 15 coaches (73%) were citizens of Botswana, while 2 were nationals of Zambia and Zimbabwe respectively. All of the coaches had coaching licenses accredited by FIFA, and 68% had either a 3-year college diploma or a bachelor's degree. Their coaching experience ranged between 3 and 20 years. A majority (63%) had played football at the highest level, including national teams. A full summary of demographic information for the coaches and players is presented in Table 1.

Measures

Coaching efficacy

Coaching efficacy was assessed using the Coaching Efficacy Scale (CES, Feltz et al., 1999). The CES is

Table 1. Demographic characteristics of players and coaches.

Coaches variables (N = 26)		Frequency	Percentage
Coaching qualifications	B license	6	40
	C license	5	33.3
	Intermediate	4	26.7
	Junior secondary school	2	11.5
Academic qualifications	Senior secondary school	3	23.1
	3-year college	7	50.0
	Bachelor's degree	3	11.5
	Motswana	11	84.6
Nationality	Zambian	2	7.7
	Zimbabwean	2	7.7
	Premier league	10	66.7
Highest level you played soccer	National team	3	20
	Second division	1	4.2
	First division	2	8.3
	Full time	12	80
Terms of coaching contract	Part time	3	20
Age group	27–40	3	33.3
	41–57	10	66.7
	1–5	9	60
Premier league coaching experience in years	6–23	6	40
Player variables (N = 226)		Frequency	Percentage
Highest education qualification of the player (n = 214)	Primary school	3	1.4
	Junior secondary school	34	15.9
	Senior secondary school	107	50.0
	1–3 college certificate or diploma	47	22.0
	Bachelor's degree	23	10.7
Nationality (n = 220)	Motswana	195	88.6
	Zimbabwean	21	9.5
	South African	1	0.5
	Zambia	3	1.4
Age category (n = 222)	18–29 years	189	85.1
	30–40 years	33	14.9
	0–1	114	57.9
Length of period under the current coach (n = 197)	1.5–2 years	31	15.7
	2.5–5 years	28	14.2
	5.5–12 years	24	12.2
	0–1 year	48	21.9
Number of years playing in premier league (n = 219)	2–5 years	84	38.4
	6–17 years	87	39.7

a 24-item self-report measure of coaching competency, scored on a 0–9 point Likert scale (0 = *not at all confident* and 9 = *extremely confident*). The 24 items are anchored on a statement, “How confident are you to be able to ...,” followed by statements that fit 4 coaching efficacy dimensions. The dimensions are: Motivation Efficacy (ME, 7 items), Character Building Efficacy (CBE, 4 items), Game Strategy Efficacy (GSE, 7 items), and Technique Efficacy (TE, 6 items). The CES has been shown to have face and construct validity as well as strong internal reliability, even with samples from Botswana (Feltz et al., 1999; Maletle, Sullivan, et al., 2013; Myers, Vargas-Tonsing, & Feltz, 2005; Sullivan et al., 2012). The 4 subscales in the current study had strong internal consistency: .87 for TE, .88 for CBE, .89 for GSE, and .94 for ME.

Leadership style

Player perceptions of coaches' leadership styles were assessed using the Revised Leadership Scale for Sport (RLSS; Zhang, Jensen, & Mann, 1997). The RLSS has 6 subscales that represent sport leadership behavior through 60 items. The items are measured on a 5-point Likert-type scale (1 = *strongly disagree* and 5 = *strongly agree*). Items are preceded by the phrase, “In coaching, I ...,” followed by statements that denote the scale's 6 dimensions. To obtain player perceptions of their coaches' leadership styles, the opening statement was modified to read, “In coaching, my coach ...,” followed by statements that denote the 6 dimensions: Training and Instruction (10 items), Autocratic Behavior (8 items), Democratic Behavior (12 items), Social Support (8 items), Positive Feedback (12 items), and Situation Consideration (10 items).

The RLSS has been supported with respect to construct and face validity, internal consistency, and factor structure (Sullivan et al., 2012; Zhang et al., 1997). The reliabilities for the current study were also acceptable: .85 for Democratic Behavior, .90 for Positive Feedback, .83 for Training and Instruction, .75 for Situation Consideration, .65 for Social Support, and .70 for Autocratic Behavior. For purposes of our analyses, the RLSS items were reverse scored.

Team outcomes

Team outcomes refers to teams' position on the league log at the end of the season and player ratings of perceived team atmosphere and team and coach performance. Player perception of team atmosphere and team and coach performance were assessed with single 10-point Likert type statements. An example of the items reads like the following: “On a scale of 1–10, rate the performance of your team or your coach this season.” We used team position in the league log at the end of the season as an objective measure of overall team performance. To differentiate between high and low performing teams, we created a binary variable by assigning top 8 teams in the league log to group 1 and bottom 8 teams to group 2. Belonging to either group is a good indicator of overall performance. A top 8 position attracts higher prize money at the end of the league. It also increases chances of taking part in very elite and high paying local and international tournaments. The bottom half has many disincentives. It results in reduced income and increases the probability of being relegated to the lower division at the end of the season.

Background information questionnaire

In addition to the named questionnaires, coaches and players completed background information questionnaires that collected various demographic data such as coaching and playing experience, age, nationality, educational qualifications, and coaching education.

Procedure

Permission to conduct the study was obtained from the university institutional review board as well as the Research Ethics Committee of the Ministry of Youth Culture and Sport in Botswana. Further permission to involve teams was obtained from the Botswana Football Association and the respective management of the clubs. After permissions were obtained the principal investigator (PI) visited teams at their practice venues to explain the project objectives, recruit participants, and administer questionnaires. Participants were told that participation was voluntary and that the information provided would be kept confidential and anonymous. They were also told that they had the right to withdraw or decline to answer any questions. All participants provided signed informed consent prior to completing any of the questionnaires. The questionnaires were completed mainly in team meeting rooms. However, questionnaires were mailed with a cover letter and a self-addressed and stamped return envelopes to three of the teams that the PI could not visit. Participants required approximately 30 minutes to complete the questionnaires.

Data analyses

First, descriptive statistics such as means, standard deviations, and correlations among study variables were computed. Multiple regression was used to examine if coaching efficacy predicted player perceptions of coaches' leadership styles, team atmosphere, and team performance. The data were analyzed using SPSS (IBM SPSS Statistics Version 22).

Results

Descriptive statistics were generated to provide an overview of study variables. Overall, coaches rated themselves high on all of the four factors of the CES, especially CBE ($M = 8.21$, $SD = .78$) and TE ($M = 8.03$, $SD = .72$). The correlations among the four CES subscales were positive and moderately high to high (r s ranged between .71 and .94, $p < .001$). Except for autocratic behaviors, the correlations among leadership styles subscales were moderately high (r s ranged

between .65 and .79, $p < .001$). Team atmosphere was moderately associated with perceived team performance ($r = .73$, $p < .001$). No relationships were found between leadership styles and team performance or between leadership styles and team atmosphere. A summary of the descriptive statistics is presented in Table 2.

The first hypothesis stated that coaching efficacy is predictive of player perceptions of their coaches' leadership styles while controlling for coaching experience and coaching education. Multiple regression models were used to test this hypothesis with the four CES factors. Coaching experience and coaching education were simultaneously entered as predictors of each of the six RLSS factors. The rationale of this approach was the exploratory nature of this study. The goal of the study was to explore if each of the four CES subscales would predict player perceptions of their coaches' leadership styles. Running multiple regression models is justified and a common feature of exploratory studies like this one (Kelly & Maxwell, 2010).

A summary of the results for the first hypothesis is provided in Table 3. Coaching experience and coaching education were not significant predictors of any of the leadership styles ($p > .05$). A look at the collinearity diagnostics showed that the assumptions have been met. Except for ME, all the other three CES factors were significant predictors of democratic behaviors. The overall regression model explained about 9% of variance in democratic behaviors scores, $R^2 = .09$, $F(4,157) = 4.70$, $p < .001$. Coaches' higher self-ratings on TE ($\beta = .67$, $t(157) = 4.15$, $p < .001$) were associated with higher perceived use of democratic behaviors, while GSE ($\beta = .27$, $t(157) = -2.02$, $p = .05$) and CBE ($\beta = -.51$, $t(157) = -.25$, $p = .01$) were associated with lower use of democratic behaviors. Higher TE was also a significant predictor of higher use of the other leadership styles: positive feedback ($\beta = .51$, $t(160) = 3.27$, $p < .01$), training and instruction ($\beta = .71$, $t(163) = 4.31$, $p < .001$), situation consideration ($\beta = .55$, $t(163) = 3.47$, $p < .001$), social support ($\beta = .55$, $t(159) = 3.41$, $p < .001$), and autocratic behaviors ($\beta = .54$, $t(157) = 3.34$, $p < .001$). Conversely, higher CBE scores were predictive of lower training and instruction ($\beta = -.53$, $t(163) = -2.76$, $p = .01$), social support ($\beta = -.47$, $t(159) = -2.38$, $p = .02$), and autocratic behaviors ($\beta = -.60$, $t(157) = -2.97$, $p = .003$).

The second hypothesis stated that coaching efficacy predicts player perceptions of team atmosphere and team performance while controlling for coaching education and coaching experience. This was also tested using multiple regression analyses. The 4 CES subscales along with coaching experience and coaching education

Table 2. Descriptive statistics, bivariate correlations, and Cronbach's alphas of study variables.

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11
1. Motivation	7.90	.78											
2. Game strategy	7.67	.74	.94**										
3. Character building	8.12	.85	.91**	.91**									
4. Technique efficacy	7.92	.81	.71**	.87**	.89**								
5. Democratic behaviors	3.04	.67	.064	-.084	-.036	.049							
6. Positive feedback	3.74	.83	.16	.15	.19	.27	.67**						
7. Training and instruction	3.61	.86	.15	.09	.12	.22	.72**	.79**					
8. Situation consideration	3.53	.86	.19	.07	.09	.17	.72**	.73**	.79**				
9. Social support	3.31	.78	.13	.00	.02	.10	.73**	.65**	.67**	.69**			
10. Autocratic behaviors	3.13	.71	.12	-.16	-.10	-.06	.60**	.35	.39	.51**	.57**		
11. Team performance	5.62	2.17	.37	.39	.34	.27	-.07	.02	-.06	.04	-.02	-.17	
12. Team atmosphere	5.70	2.22	.20	.24	.25	.21	.07	.17	.10	.21	.09	-.08	.73**
Cronbach's alpha	—	—	.94	.89	.88	.87	.85	.90	.83	.75	.65	.70	—

** $p < .001$ **Table 3.** Coaching efficacy and player perceptions of coaches' leadership styles ($N = 226$).

CES factors	Democratic behaviors				Positive feedback				Training and instruction				Situation consideration				Social support				Autocratic behaviors			
	B	SE B	β		B	SE B	β		B	SE B	β		B	SE B	β		B	SE B	β		B	SE B	β	
Motivation	.37	.22	.40		.34	.27	.31		.35	.28	.30		.45	.28	.38		.25	.27	.23		.43	.24	.44	
Game strategy	-.55	.27	-.47 [†]		-.58	.34	-.40		-.36	.34	-.24		-.51	.34	-.34		-.20	.33	-.14		-.40	.29	-.32	
Character building	-.54	.21	-.51**		-.19	.25	-.15		-.73	.27	-.53**		-.43	.27	-.32		-.59	.25	-.47*		-.67	.23	-.60 ^{††}	
Technique efficacy	.65	.16	.67***		.61	.19	.51**		.89	.20	.71***		.67	.19	.55***		.63	.19	.55***		.55	.17	.54***	
Coaching experience	.22	.17	.16		.18	.21	.11		.29	.21	.17		.27	.21	.16		.19	.19	.12		-.02	.19	-.01	
Coaching education	.06	.06	.08		.01	.07	.01		.01	.08	.01		-.02	.08	-.02		.04	.07	.05		-.02	.06	-.03	
R^2			.09				.94				.12				.09				.06				.06	
F			4.70***				5.15***				6.43***				5.20***				3.55**				3.49**	

Note. B = unstandardized coefficient; SE B = standard error; β = standardized beta.*** $p = .001$; ** $p = .01$; * $p = .02$; [†] $p = .03$; ^{††} $p = .05$

were simultaneously entered into the models as predictors of players' perceptions of team atmosphere and team performance. A look at the collinearity diagnostics showed that the assumptions have been met. Once again coaching experience and coaching education were not significant predictors of team performance and team atmosphere ($p > .05$). Only GSE was a significant predictor of team atmosphere ($\beta = .52$, $t(177) = 2.29$, $p = .02$), but ME, CBE, and TE were not. The overall regression model explained about 6% of variance in team atmosphere, $R^2 = .06$, $F(4,177) = 2.69$, $p = .03$. Results for team performance also showed significant effects only for GSE ($\beta = .88$, $t(177) = 4.19$, $p < .001$) but no significant effects for ME, CBE, and TE. The overall regression model explained about 17% of the variance in team performance, $R^2 = .17$, $F(4,177) = 9.19$, $p < .001$. Therefore, higher GSE is predictive of team atmosphere and team performance while ME, CBE, and TE are not.

Related to team atmosphere and team performance, players were asked to rate the overall performance of their coaches on a scale of 1 (poor performance) to 10 (high performance). A regression analysis using the 4 CES factors showed that GSE ($\beta = .47$, $t(171) = 2.08$, $p = .04$) and CBE ($\beta = -.45$, $t(171) = -2.24$, $p = .03$) were significant predictors of players' perceptions of

their coaches' overall performance in the season while ME and TE were not. The overall regression model explained about 7% of variance in coaches' performance, $R^2 = .07$, $F(4,171) = 3.15$, $p = .02$. When asked to state the reasons for the performance ratings they gave their coaches, the top 5 reasons listed were: the coach creates good working relations (40.3%), the coach is still learning (15.9%), the coach is not good (7.5%), the coach is struggling (4.4%), and the coach creates an unfavorable working environment (4%). About 25% of the players did not respond to this item.

Discussion

Coaching efficacy and player perceptions of leadership styles

The first objective of this study was to find out if coaches' efficacy beliefs would be associated with player perceptions of their leadership styles. First, the lack of significant differences for coaching experience and coaching education is not surprising. The coaches were well trained and had very comparable education and coaching experiences for these to be differentiating factors. Our findings show that higher self-ratings on technique efficacy among this group of premier league

soccer coaches was associated with player perceptions of the coaches' use of all six leadership styles, including autocratic behaviors. This high value placed on technique efficacy, such that it cut across all leadership styles, is consistent with previous findings (Hassani et al., 2013; Sullivan & Kent, 2003; Szedlak et al., 2015; Tojjari et al., 2013). Szedlak and colleagues reported that although athletes in their study wanted their coaches to be caring and trustworthy, they placed even higher value on the coaches' instruction and technical knowledge. The positive relationship between technique efficacy and autocratic behaviors in our study was surprising. It may be that the athletes viewed their coaches' high technique or instructional efficacy to have a hint of autocratic behaviors. This could be an outcome of the coaches' instructional approaches. The negative association of game strategy efficacy with democratic behaviors was also surprising but plausible. It could be explained through the style of communication at this level. It could also be related to the extent to which athletes feel they get involved by their coaches in decision-making and the development of team strategies. This suggests that the style of communication in the teaching and instruction of techniques and strategies of the game could at times be interpreted as autocratic.

Curiously, motivation efficacy was not a significant predictor of any of the leadership styles. On the other hand, higher character building efficacy was likely to be associated with athletes' lower ratings of coaches' democratic behaviors, training and instruction, social support, and autocratic behaviors. This is contrary to previous findings on these relationships (Hwang et al., 2013; Malete, Sullivan, et al., 2013; Sullivan & Kent, 2003). In their study, Malete, Sullivan, LaForge, 2013; Sullivan and Kent (2003) found motivation and character building efficacy to be predictors of social support, training and instruction, positive feedback, and democratic behaviors but not autocratic behaviors. Our finding could be explained in two ways. First, it could be an indicator that, unlike technique and game strategy efficacy, the predictive strength of motivation and character building efficacy on leadership styles depends on myriad complex subjective factors and processes. Examples are player attitudes and mood states at a given point. The two factors could be more fluid than technique and game strategy.

Second, the finding could be explained in accordance with the view that at the elite level, it is not unusual for athletes to place higher value on coaches' technical, instructional, and game strategy competencies than on their interpersonal, social, and motivational skills (Kim & Cruz, 2016; Szedlak et al., 2015). Although the athletes in the Szedlak and colleagues

study wanted their coaches to be relatable, caring, and supportive, they consistently linked these attributes to effective instruction and technical knowledge. Similarly, Kim and Cruz (2016) reported that player perceptions of their coaches' training and instruction were the highest contributors to team cohesion and player satisfaction than other behaviors. Consistent with these findings, the evaluation of coaches' leadership styles by athletes in the current study may have been largely based on the coaches' capacity to develop techniques and strategies of the game and less on their motivation and character building. This is despite the fact that the coaches rated themselves equally high on these factors. These results provide further support to findings about the discrepancy between coaches' self-evaluations and their athletes' evaluations reported previously (Chelladurai & Saleh, 1980; Kavussanu et al., 2008; Vargas-Tonsing, Myers, & Feltz, 2004). In our case, coaches rated themselves high on motivation and character building efficacy, but these ratings either negatively predicted or were not predictive of athlete's ratings of the leadership styles that logically correspond to these CES factors. However, as expected, high character building was associated with lower perception of use of autocratic style of leadership.

Coaching efficacy, team atmosphere, and team performance

The second objective of our study was to find out if coaching efficacy predicts player perceptions of team atmosphere and team performance. Our results show that coaches' higher game strategy efficacy predicts higher team atmosphere and better team performance. However, there were no significant effects for the other CES factors. Although our hypothesis was partially supported, the results are consistent with what has been reported previously about the predictive strength of game strategy efficacy on performance and team environment/team atmosphere (Hassani et al., 2013; Szedlak et al., 2015; Tojjari et al., 2013). When training hours are short (on average 7.5 hours per week), as is the case with the Botswana premier soccer league, coaches are likely to emphasize strategies of the game at the expense of others aspects of coaching, such as social and emotional support. The time given to motivation and character building is likely to be contingent on some crises instead of being made a regular part of the training. Anecdotal evidence suggests that most teams invite sport psychologists to address some crises. Such services are not typically part of regular training or periodic performance improvement programs. This along with limited administrative support and limited

use of other professional services possibly explains the predictive strength of game strategy on team atmosphere and team performance. It also explains why game strategy efficacy predicted athletes' ratings of the overall performance of their teams and the coaches over the season.

Conclusion

Overall, athletes in this study perceived their coaches to use various leadership styles when teaching technique and skills of the game. The coaches' high self-evaluations on motivation efficacy were not significantly associated with player perceptions of the coaches' use of any of the leadership styles. The coaches' character building efficacy was negatively associated with various leadership styles. Higher game strategy was associated with better team performance and team atmosphere. The coaches in this study are all well trained and had decent educational backgrounds and coaching experiences. These findings should be viewed within a context in which there is limited use of professional services and sport administration is largely run by volunteers. Coaching in the premier soccer league in Botswana is a highly demanding but lonely process that depends largely on the efforts of one head coach and one assistant. This could skew coaching toward some aspects of the game, such as teaching skills, techniques, and strategies of the game at the expense of holistic development of athletes.

Although our study demonstrates that sport context matters, caution is advised when making arguments about its role in the development of leadership styles of coaches in Botswana. This is because this relationship was not directly studied. However, we expected higher primacy of hierarchical relationships, respect for authority, and social (group) membership that predominates in this context to accentuate some leadership styles over others. We also expected limited social support in the coaching environment to increase the use of autocratic coaching behaviors. Athletes did not perceive these from their coaches, which suggests this coaching context is in many ways similar to other contexts. However, more investigations into how culture and sport context shape leadership styles and coaching competency are needed.

The findings of this study have implications for coaching education programs. Coaching programs could include content and activities aimed at enhancing greater self-awareness and reflections about leadership behaviors and styles. Assessing how these behaviors are viewed by athletes and how they could affect the performance of teams and individual athletes remains key. Most of the soccer coaching courses in developing countries are run by FIFA. They tend to follow

a similar structure and content across contexts. There is need to incorporate more context specific knowledge to address unique challenges that coaches and athletes face. Coaching programs could infuse positive elements of a coaching culture and social relations.

Limitations and suggestions for future research

First, the study was delimited to an investigation of male premier league soccer coaches and their athletes. Therefore, caution is advised when extrapolating the findings to the general coaching environment in Botswana and elsewhere. We do not know if the findings would hold true for female coaches and individual sports. Second, the study used self-reporting questionnaires, which are susceptible to bias. The RLSS was designed for coaches and not athletes. Although the scale had acceptable internal consistency, it is plausible that a measure designed for athletes could have fared better in the assessment of athletes' perceptions of coaches' leadership styles. Nonetheless, this study provides much needed insight on player perception of coaches' leadership styles and some of the factors affecting success in sport. More investigations are still needed to have a better understanding of these relationships.

Future research could look into the development of athlete-specific tools. Examining congruence between this and player perceptions would add a valuable perspective to this line of research. Future studies may also use other designs such as time series and mixed methods to study these relationships. For instance, quasi-experimental or longitudinal designs that entail multiple observations of coaches and athletes at the beginning, halfway through, and at the end of the season using multiple sports would be interesting. These could be combined with interviews and focus groups. Examining gender differences should also broaden the scope of the research. Direct investigations of other dynamics such as cultural nuance could significantly advance the research.

What does this article add?

This study provides much needed insight on a less researched dimension in the coaching competency literature. That dimension is the relationship between efficacy beliefs and player perception of coaches' leadership styles and how these could affect team environment and team performance. The study offers additional support to previous findings about a discrepancy between coaches' self-evaluations of their coaching and leadership behaviors and their athletes' evaluations. The findings indicate why it is necessary to carry out more investigation on this topic. We

also learn that athletes are likely to place higher value on coaches' technique and game strategy efficacy in an elite sport context where there may be limited time to focus on motivation and character building activities. Consistent with this, coaches' higher game strategy efficacy predicts higher team atmosphere and better team performance. The article broadens the scope of the coaching competency literature by including a less studied elite sport context and indicating variations that may be taken for granted at this level.

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