

Coach Effectiveness and Transformational Leadership in Sport: The Effects of Gender and Athlete Experience

Ahmad Fikri Mohd Kassim^{1*}, Siti Hasmah Hassan²

¹ Faculty of Sports Science & Recreation, Universiti Teknologi MARA, 02600 Arau, Perlis, Malaysia

² Ministry of Youth and Sports, Malaysia

Authors' Email Address: ¹ahmadfikri@uitm.edu.my, ²sitihasmah.h.kbs@1govuc.gov.my

Received Date: 1 May 2020

Accepted Date: 3 June 2020

Published Date: 31 July 2020

ABSTRACT

Research has demonstrated the potential importance of transformational leadership and perceived effectiveness of sport coaches for athlete development. Furthermore, coach/athlete's gender and athletes' sport experiences may influence athletes' perceptions of their coach's effectiveness. Researchers to date have not investigated the potential impact of coach/athlete's gender and athlete sport experience on athletes' perceptions of their coach's transformational leadership or replicated the findings of Kavussanu et. al. (2008). Thus, this research explored the coaching efficacy model and transformational leadership theory as the guiding frameworks. Male (n = 150) and female (n = 147) athletes from team (football [n = 49], hockey [n = 53], rugby [n = 51]) and individual (badminton [n = 50], swimming [n = 45], gymnastics [n = 49]) sports completed the coaching effectiveness scale and the differentiated transformational leadership inventory. Multiple regression analyses revealed (a) athlete sport experience did not predict athletes' perceptions of coach effectiveness or transformational leadership, (b) female athletes perceived their coaches to be more effective on all dimensions of coach effectiveness and higher on all dimensions of transformational leadership than male athletes, and (c) coaches were perceived more effective in motivation effectiveness and higher on all dimensions of transformational leadership when they were of the opposite gender to athletes than when gender matched between coach and athlete. In conclusion, coach and athlete gender may have important implications for athletes' perceptions of transformational leadership and coach effectiveness in team and individual sports.

Keywords: Coaching Effectiveness, Transformational Leadership, Gender, Athlete Experience

INTRODUCTION

Perceptions of coaching effectiveness are important in determining the quality and success of athletes involved in sport. Granting to the coaching efficacy model (Feltz et al., 1999), coaching effectiveness influences various coaches, player, and team factors. According to Myers, Feltz, Maier, Wolfe, and Reckase (2006) athletes' evaluated their coach's effectiveness through coaching efficacy scale: instructional technique, motivation, game strategy, and character building. This model framework represents a belief of overall coaching ability and has been conceptualised as total coaching effectiveness

(TCE; Feltz et al., 1999). Thus, the dimensions of coaching effectiveness correspond to an important component of effective coaching (Boardley et al., 2008).

Coaching effectiveness is responsible for the enjoyment of their athletes, the motivation to compete, the development of character, and the advancement of their players' strong work ethics. Coaching effectiveness proposed to be multidimensional, consisting of motivation, game strategy, technique, and character-building (Mohd Kassim & Boardley, 2018). Past research stated that the model of coaching effectiveness has identified the association between the evaluations of their coach by athletes and performance at the athlete level outcomes (Boardley, Jackson, & Simmons, 2015). However, most findings limit the generalizability as they reported lack of diverse sampling and sample size were small. Researchers have also assessed athletes' perceptions of their coach's effectiveness based on the four dimensions of the coaching efficacy model. For example, Kavussanu et al. (2008) found years of experience had negatively predicted athletes' perceptions of their coach's effectiveness.

Transformational leadership, in particular, has been theoretically linked to positive developmental outcomes in a sport setting. Transformational leadership Theory (Bass & Avolio, 1994) has proven to be an appropriate guiding theory for research investigating coaching in sport (Arthur et al., 2011). According to Bass (1995), transformational leadership consists of the following four dimensions: idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. Transformational leadership also show potential associated with dimension of coaching effectiveness (Mohd Kassim & Boardley, 2018). For example, it is reasonable to expect athletes perceiving their coach's individual consideration would link with their coach's motivation effectiveness. Specifically, when a coach considers each athlete as an individual by displaying understanding, trust and addressing their needs; these will stimulate their psychological skills and states to perform at higher level. However, there is a lack of finding specifically on gender and experience in perceiving the effects.

Transformational leadership reveals important conclusions that showed strong relations between coaches and athletes (Tovell & Gravelle, 2009). Transformational leadership increase satisfaction of the athletes with results in sport commitment from the athlete (Saybani et al., 2013) and motivation in the task related with the intellectual stimulation, and individual consideration (Charbonneau et al., 2001). Thus, theory of Transformational leadership established exhibited in a sport setting as it applicable to athletes in team sport (Saybani et al., 2013) and their experience. Therefore, through the medium of coaching, coach extract vigorous action of their own behaviour and applied with alternative ways to engage with the athletes. The dimension of transformational leadership and coaching effectiveness is plausibility to strengthen athletes learning and development. According to Côté and Gilbert (2009), coaching leadership and effectiveness are processes of inspiring that is dependent upon and constituted by the interpersonal relationship between coach and athlete.

However, to date, researchers have not investigated the integrative abilities of dimensions of coaching effectiveness and transformational leadership. Thus, this study aimed to investigate the effectiveness and transformational leadership predictions from the perspective of individual and team sports athletes. Specifically, we investigated effects on gender and athletes experience.

RESEARCH METHODOLOGY

Participants

A total of two hundred and ninety-seven ($N=297$) athletes from six types of sports participated in this study. The half dozen types of sport were divided into two categories. Participants were recruited from three team sports: Football, Hockey and Rugby ($n= 153$) and four individual sports: Badminton, Swimming and Gymnastics & Trampoline ($n=144$). From the participants, 50.5 percent were male athletes ($n=150$) and 49.5 percent were female ($n=147$). Individual and team university athletes were recruited as the coach and athletes actively coached and trained. The typically experienced coaches and the athletes were of various standards (Local= 4, university= 161, regional= 64, national= 45, and international= 23).

Measures

Coaching effectiveness - The 24-item Coaching efficacy Scale (CES) by (Feltz et al., 1999) was used to measure athletes' perceptions of coaching effectiveness dimensions of coaching efficacy: motivation (7 items), game strategy (7 items), a technique (6 items), and character building (4 items). The items were used to identify the specificity ability in the CES. Athletes were informed that coaches were differed in their ability to positively affect and improve the learning and performance of their athletes and were asked to think about the effectiveness of their coach and rated their opinion and confidence for each item on a 10-point Likert Scale from 0 (not at all effective) to 10 (extremely effective). Examples of items are such as: "How effective is your coach in his/her ability to maintain confidence in his/her players" for motivation efficacy, "How effective is your coach in his/her ability to make critical decisions during competitions" for game strategy efficacy, "How effective is your coach in his/her ability to detect skill errors", for technique efficacy, and, "How effective is your coach in his/her ability to instil an attitude of good moral character" for character building efficacy.

Transformational leadership - The Differentiated Transformational Leadership Inventory (DTLI) was measured using the adapted version of the Differentiated Transformational Leadership Inventory (Callow et al., 2009). The adapted version of DTLI contains 31 items, form 7 subscales; individual consideration (IC), inspirational motivation (IM), intellectual stimulation (IS), idealised influenced/ fostering acceptance of group goals (II), high performance expectations (HPE), appropriate role model (ARM), and contingency reward (CR). Each item is rated on a 5-point Likert scale ranging from 1 (not at all) to 5 (all of the time). The athletes were asked to think about their experiences while playing sports and indicate about the coach engaged with these item questions. Examples items from the DTLI; "recognize that different athletes have different needs" for Individual considerations, "Talks in a way that makes me believed I can succeed" for inspirational motivation (IM), "shows performers how to look at difficulties from a new angle" for intellectual stimulation (IS), "Develops a strong team attitude and spirits among athletes" for idealised influenced (II), "Encourages athletes to be team players" for high performance expectations (HPE), "leads by example" for appropriate role model (ARM) and "Gives me special recognition when I do very good work" for contingency reward (CR).

Procedures

Once approval for the study was obtained from the ethics committee of the authors' institution, coaches from the relevant sports were contacted and provided with information about the study protocol. For coaches who agreed to permit access to the athletes they coached, a convenient time and date for data collection following a training session was scheduled. Prior to data collection, athletes were provided with an information sheet, informed participation was voluntary, they were free to withdraw at any point and information gathered would be confidential, before being provided with the opportunity to have any questions answered. Once this was done, athletes who volunteered to participate provided written informed consent before completing the questionnaire pack which took approximately 20 to 30 minutes.

RESULTS

The data were analysed using SPSS (version 25.0) producing descriptive statistic, alpha, mean, standard deviations, range, and scale range. Athletes perceived that their coach has engaged to highly in all sub-scale dimensions of Coaching effectiveness and transformational leadership. The Alpha coefficient for all scales indicated good to excellent (Nunnally, 1978). All the sub-scale, Coaching Effectiveness and Differentiated Transformational Leadership Inventory indicates good reliability ($\alpha = >. 7$ in.9). (Sources: Kline (1999).

Table 1: Descriptive statistics

Variable	Alpha (α)	M	SD	Range	Scale Range
Coaching Effectiveness					
CES - Motivation	.93	7.15	1.52	2.00-8.00	0-10
CES - Game Strategy	.88	7.28	1.38	2.86-7.14	0-10
CES - Technique	.89	7.42	1.43	.50-9.50	0-10
CES - Character Building	.85	7.49	1.39	2.75-7.25	0-10
Transformational Leadership					
Individual Consideration	.87	3.89	0.79	1.25-3.75	0-5
Inspirational Motivation	.86	4.04	0.74	1.00-4.00	0-5
Intellectual Stimulation	.90	3.83	0.93	.00-5.00	0-5
Idealised Influenced	.78	4.04	0.70	1.67-3.33	0-5
High Performance Expectation	.85	4.03	0.73	1.60-3.40	0-5
App. Role Model	.92	3.77	0.95	.00-5.00	0-5
Contingent Reward	.94	3.99	0.83	.00-5.00	0-5
Experienced	-	9.71	4.05	3mts – 18yrs	-
Age	-	19.98	1.39	17 to 28	-
Gender	-	.50	.50	0-1	0-1
Gender match mismatch	-	.35	.47	0-1	0-1

Data Analysis

Regression analyses revealed (a) athletes sport experience were not to perceive at all dimensions of coaching effectiveness, (b) gender match/mismatch was significant predicted motivation effectiveness, (c) gender was significant predicted all CE, except for game strategy (d) gender were a significant predicted of athletes' perceptions of total perceived CE. The amount of variance (η^2) in each criterion variable accounted for by each predictor can be seen in the table 2.

Table 2: Predictors of Perceived Coaching Effectiveness; Athletes (N=297)

	Variable	B	95% CI for b	β	t	η^2
1	Motivation Effectiveness					
	Sport experienced	-.00	-.04, .04	-.00	-.12	.03
	Gender match/mismatch	-.36	-.72, -.00	-.11	-1.92*	.03
	Gender	-.38	-.72, -.03	-.12	-2.14*	.00
2	Game Strategy					
	Sport experienced	-.00	-.04, .03	-.01	-.29	.02
	Gender match/mismatch	-.29	-.63, .04	-.10	-1.70	.02
	Gender	-.23	-.55, .08	-.08	-1.47	.00
3	Technique Effectiveness					
	Sport experienced	-.01	-.05, .02	-.04	-.73	.02
	Gender match/mismatch	-.19	-.54, .15	-.06	-1.08	.03
	Gender	-.39	-.72, -.07	-.13	-2.38*	.00
4	Character Building Effectiveness					
	Sport experienced	-.00	-.04, .03	-.00	-.11	.02
	Gender match/mismatch	-.19	-.52, .14	-.06	-1.12	.02
	Gender	-.41	-.73, -.09	-.14	-2.54*	.00
5	Total Perceived Coaching Effectiveness					
	Sport experienced	-.00	-.04, .03	-.02	-.35	.02
	Gender match/mismatch	-.26	-.57, .05	-.09	-1.63	.02
	Gender	-.35	-.65, -.05	-.13	-2.38*	.00

Note: * $p < .05$, ** $p < .01$, *** $p < .001$. Gender coded 0 for females and 1 for males. Gender match and mismatch between athletes and their coach coded 0 and 1 respectively. CI= Confidence Interval.

Contrary to Transformational leadership; (a) Sport experienced, Gender, and Gender match/mismatch were a significantly predicted High Performance Expectation, (b) Gender match/mismatch was a significant predictor of Inspirational Motivation, Fostering Acceptance of Group Goal, High Performance Expectation, and Contingent Reward, (c) Except sport experienced was not significantly predictor of total perceived coach of TL. The amount of variance (η^2) in each criterion variable accounted for by each predictor can be seen in the table 3.

Table 3: Predictors of Transformational Leadership; Athletes (N=297)

	Variable	B	95% CI for b	β	t	η^2
1	Individual consideration (IC)					
	Sport experienced	-.01	-.03, .00	-.07	-1.30	.00
	Gender match/mismatch	-.14	-.33, .04	-.08	-1.47	.00
	Gender	-.25	-.43, -.07	-.16	-2.83**	.00
2	Inspirational Motivation (IM)					
	Sport experienced	.00	-.01, .03	.05	.86	.00
	Gender match/mismatch	-.20	-.38, -.02	-.13	-2.28*	.00

	Gender	-0.06	-0.23, .10	-0.04	-0.80	.00
3	Intellectual Stimulation (IS)					
	Sport experienced	-0.03	-0.06, -.10	-0.16	-2.69**	.01
	Gender match/mismatch	-0.16	-.38, .06	-0.08	-1.40	.01
	Gender	-0.03	-.24, .18	-0.01	-.30	.00
4	Fostering Acceptance Of Group Goal (FAOGG)					
	Sport experienced	.01	-.00, .03	.07	1.26	.00
	Gender match/mismatch	-.25	-.42, -.08	-.17	-2.92**	.00
	Gender	-.17	-.33, -.01	-.12	-2.11*	.00
5	High performance Expectation (HPE)					
	Sport experienced	.02	.00, .04	.15	2.68**	.00
	Gender match/mismatch	-.28	-.46, -.11	-.18	-3.26***	.00
	Gender	-.16	-.32, .00	-.11	-1.94*	.00
6	Appropriate Role Model (ARM)					
	Sport experienced	-.03	-.06, -.00	-.14	-2.52*	.01
	Gender match/mismatch	-.13	-.36, .08	-0.06	-1.19	.01
	Gender	-.41	-.62, -.19	-.21	-3.77***	.00
7	Contingent Reward (CR)					
	Sport experienced	.00	-.02, .02	.00	.05	.01
	Gender match/mismatch	-.24	-.44, -.04	-.13	-2.36*	.01
	Gender	-.14	-.34, .04	-.08	-1.52	.00
8	Total Perceived Coach Transformational Leadership					
	Sport experienced	-.00	-.02, .01	-.03	-.55	.00
	Gender match/mismatch	-.20	-.35, -.14	-.15	-2.67**	.00
	Gender	-.17	-.32, -.03	-.14	-2.47*	.00

Note: * $p < .05$, ** $p < .01$, *** $p < .001$. Sex coded 0 for females and 1 for males. Sex match and mismatch between athletes and their coach coded 0 and 1 respectively. CI= Confidence Interval.

CONCLUSION

Sport coaching is important as it is the centre for the process of learning and development. It is fundamental for the coach to be aware of the confidence level in the athletes being coached and concerned towards new learning and challenges. Coaching also centred on unlocking athlete's potential to maximise their learning on performance. Model of coaching effectiveness stress on the significance of perceptions of athletes' through coaching efficacy scale (Myers, Feltz, Maier, Wolfe, and Reckase, 2006). Furthermore, the Transformational leadership theory has proven to guide the theory for the research investigating coaching in sport (Arthur et al., 2011), as well as it shows relevant to examines athletes' perception in sport coaches to strengthens the leader-follower relationship and stimulates athletes in enhancing learning. The current study extended this model and theory by investigating predictors of athletes' perceptions of coaching effectiveness and transformational leadership. Our finding suggests that differences in gender, compatibility in gender between coach and athletes, and experienced in sport may have implications for athlete's evaluations of their coach's effectiveness and transformational leadership. This research show potential needed to help us understand the specific environmental and/or individual-difference factors that lead to differing relationships between athlete experience, gender, gender mismatch, and athletes' perceptions towards coaching effectiveness transformational leadership.

For this current research, we have found several limitations that warrant further examination and offer further future directions. First, the limitations of the current research include the use of self-report data throughout the studies. Although fully validated measures were used throughout, it is still possible the

study findings were affected to some degree by issues such as social desirability (Gucciardi, Jalleh, & Donovan (2010), anchoring effects and time pressure (see Paulhus & Vazire, 2007), and self-serving bias that is common to perceptions research. The findings of the current research were based on self-reported subjective athlete perceptions of their coach and, as such, were potentially sensitive to responses. A second limitation of the work presented here relates to the timing of data collections, which could have influenced the scores obtained. Due to the athletes/teams having different training treatment and module of training input, the completion of answering the questionnaires could be various as it may influence athlete's mood, emotions, and conditions. Therefore, as well as making an initial contribution to this research area, we also suggest a possible future research direction. Future research could examine in more diverse and objectives approach. Observation or cross-sectional study could be used to investigate the purpose to assess the athlete's development on a coach's effectiveness or leadership. Additionally, future research could examine whether coach instructional leadership and other behaviours in practise setting are great to predict coach effectiveness and transformational leadership. This kind of research is potential to use the observational system as the measurement of coaching behaviour involves assessment such in real practice (Cushion & Jones, 2001).

REFERENCES

- Arthur, C. A., Woodman, T., Ong, C. W., Hardy, L., & Ntoumanis, N. (2011). The role of athlete narcissism in moderating the relationship between coaches' transformational leader behaviors and athlete motivation. *Journal of Sport & Exercise Psychology*, 33(1), 3–19.
- Avolio, B. J., & Bass, B. M. (1995). Individual consideration viewed at multiple levels of analysis: A multi-level framework for examining the diffusion of transformational leadership. *The Leadership Quarterly*, 6(2), 199–218. doi:10.1016/1048-9843(95)90035-7
- 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. *The Sport Psychologist*, 22, 269–287. Human Kinetics, Inc
- Boardley, I. D., Jackson, B., & Simmons, A. (2015). Changes in task self-efficacy and emotion across competitive performances in golf. *Journal of Sport and Exercise Psychology*, 37(4), 393-409.
- Charbonneau, D., Barling, J., & Kelloway, E. K. (2001). Transformational leadership and sports performance: The mediating role of intrinsic motivation 1. *Journal of applied social psychology*, 31(7), 1521-1534.
- Côté, J., & Gilbert, W. (2009). An integrative definition of coaching effectiveness and expertise. *International journal of sports science & coaching*, 4(3), 307-323.
- Cushion, C. J., & Jones, R. L. (2001). A systematic observation of professional top-level youth soccer coaches. *Journal of sport behavior*, 24(4), 354.
- Feltz, D. L., Chase, M. A., Moritz, S. E., & Sullivan, P. J. (1999). A Conceptual Model of Coaching Efficacy: Preliminary Investigation and Instrument Development. *Journal of Educational Psychology*, 91 (4), 765–776.
- Gucciardi, D. F., Jalleh, G., & Donovan, R. J. (2010). Does social desirability influence the relationship between doping attitudes and doping susceptibility in athletes? *Psychology of sport and exercise*, 11(6), 479-486.
- Kavussanu, M., Boardley, I. D., Jutkiewicz, N., Vincent, S., & Ring, C. (2008). Coaching efficacy and coaching effectiveness: Examining their predictors and comparing coaches' and athletes' reports. *The Sport Psychologist*, 22(4), 383-404.
- Kline, P. (1999). *The handbook of psychological testing* (2nd ed.). London: Routledge.

- Kassim, A. F. M., & Boardley, I. D. (2018). Athlete perceptions of coaching effectiveness and athlete-level outcomes in team and individual sports: a cross-cultural investigation. *The Sport Psychologist*, 32(3), 189-198.
- Myers, N. D., Feltz, D. L., Maier, K. S., Wolfe, E. W., & Reckase, M. D. (n.d.) (2006) Athletes' Evaluations of Their Head Coach's Coaching Competency. *Research Quarterly for Exercise and Sport*, 77:1, 111-121 37-41.
- Nunally, J.C., (1978). *Psychometric theory*. New York: McGraw-Hill.
- Paulhus, D. L., & Vazire, S. (2007). The self-report method. *Handbook of research methods in personality psychology*, 1, 224-239.
- Saybani, H., Yusof, A., Soon, C., Hassan, A., & Zardoshtian, S. (2013). Athletes' satisfaction as mediator of transformational leadership behaviors of coaches and football players' sport commitment relationship. *World Applied Sciences Journal*, 21(10), 1475-1483.
- Tovell, A., & Gravelle, F. (2009). The importance of transformational leadership in the quest for group cohesion: The case of a university level varsity football program. *International Journal of Sport Management Recreation & Tourism*, 3, 18-33.