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# A comparison of authentic and transformational leadership in sport

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## Abstract

Transformational and authentic leadership are two models of leadership, which have some similarities and are relevant to sport. However, these leadership models are also distinct and consequently may predict athlete outcomes differently. Authentic leadership has received little attention in sport and so research is needed to examine how it is unique in terms of what it adds to dominant sport leadership models. The purpose of this study was to investigate whether authentic leadership (a) is empirically distinct from transformational leadership and (b) adds to transformational leadership by explaining unique variance in commitment and enjoyment. A total of 421 (227 female,  $M_{\text{age}} = 20.32$ ) team sport athletes took part in the study by completing a questionnaire. Authentic leadership was correlated to transformational leadership, suggesting transformational and authentic leadership show some convergent validity. However, Structural Equation Modeling (SEM) revealed that authentic leadership also shows discriminant validity to transformational leadership and has incremental predictive power above that of transformational leadership, in terms of predicting athletes' enjoyment and commitment. Our findings enhance our understanding of authentic leadership in sport and clearly show that it is distinct from transformational leadership. They also highlight the importance of authentic leadership and how it adds to transformational leadership in terms of predicting athletes' commitment and enjoyment.

## 1 | INTRODUCTION

Leadership is believed to be an important contextual factor in determining athletes' psychological development, well-being, and commitment (Vella et al., 2013). Therefore, research into leadership and its impact on athletes has become a key area of sport psychology literature (O'Boyle et al., 2015). This is because whether an athlete's

sport experience is positive or negative is largely determined by situational factors such as the characteristics of the coach and the type of leadership they show (Turnnidge & Côté, 2019; Vella et al., 2013). As such, coaches are highly influential to athletes and are able to promote lifelong participation in sport (Turnnidge & Côté, 2019). Thus, promoting good leadership in sport can address issues such as sport drop-out with age (Gould, 1987; Slater & Tiggemann, 2011).

The current study was conducted as part of a larger study, which also included measures of team climate, cohesion, and prosocial behaviors. Results of the other study will be reported in a separate manuscript. We pay a special thank you to the undergraduate students who helped with recruitment and data collection. This work was supported by the Economic and Social Research Council through a scholarship to the first author.

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Recently, the view of what makes an effective coach has moved away from authoritarian leaders to ones who focus on their athletes' development and building quality relationships with their athletes. This is because research has highlighted that supportive relationships with coaches bring positive developmental outcomes (e.g., Benson et al., 2006). In fact, coaching effectiveness is defined as the facilitation of positive developmental outcomes and interpersonal relationships (Côté & Gilbert, 2009; Vella et al., 2013). Several models of leadership which focus on developing interpersonal relationships with their athletes have been proposed (e.g., authentic, transformational, & ethical leadership). However, it is unclear how these leadership models differ and how they may impact on athlete outcomes within a sporting context. In this paper we will examine two contemporary models of leadership: transformational and authentic leadership. The latter is a more recently proposed form of leadership, which has received little attention in sport thus far but could add to dominant leadership theories in terms of explaining unique variance in athlete outcomes.

### 1.1 | Authentic versus transformational leadership

Transformational leadership has been the dominant model of leadership in sport over the recent decade (Stenling & Tafvelin, 2014). It is defined as transforming followers' values and motivating followers to achieve performance outcomes beyond their normal expectations or limits (Bass, 1985; Kark et al., 2003). Transformational leaders are also believed to be charismatic and inspire followers to become leaders themselves (Hopton et al., 2007). Transformational leaders are able to do this through showing four leader behaviors which influence their followers' values and performance (Bass & Riggio, 2006; Hopton et al., 2007). These four components are referred to as the "four Is" and are: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Avolio, 1999; Bass, 1985).

Idealized influence suggests transformational leaders act as role models by placing their followers' needs first, instilling pride, being devoted to their values, and showing high moral standards (Avolio, 1999; Hopton et al., 2007). Inspirational motivation refers to inspiring and motivating followers, by providing meaning, clear expectations, and demonstrating confidence in achieving goals. This results in athletes displaying greater self-efficacy and a shared vision (e.g., Bass, 1985; Hopton et al., 2007). Intellectual stimulation means listening and stimulating their followers to question assumptions and come up with new creative ways to solve problems, by providing intelligent and rational solutions (e.g., Bass, 1985; Hopton et al., 2007). Finally, individualized consideration relates to paying attention to their followers' achievement needs through creating supportive climates, providing learning opportunities, and serving as mentors (Walumbwa et al., 2008).

Authentic leadership is defined as "a pattern of leader behavior that draws upon and promotes both positive psychological capacities

and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development" (Walumbwa et al., 2008, p. 94). Authentic leaders are believed to be genuine and open through acting in ways consistent with their innermost values, and as such they are perceived as credible leaders (Avolio et al., 2004). Authentic leadership has a specific focus on leader-follower relationship, which makes it an appropriate model for sports environments as these are highly influenced by factors such as the relationship athletes have with their coach (O'Boyle et al., 2015). Furthermore, Walumbwa et al.'s (2008) definition suggests authentic leadership is a multidimensional construct made up of four components: self-awareness, relational transparency, balanced processing, and internalized moral perspective.

Self-awareness is defined as leaders being aware of their own strengths, weaknesses, values, and morals, which in turn regulate their behaviors (Ilies et al., 2005; Neider & Schriesheim, 2011; Walumbwa et al., 2008). Relational transparency refers to being open and showing one's true self to one's followers, which results in trusting open relationships between the leader and their followers (Kernis, 2003; Walumbwa et al., 2008). Balanced processing pertains to objectively processing all available information, including the perspective of one's followers, before coming to a decision (Walumbwa et al., 2008). Internalized moral perspective refers to having high moral standards; authentic leaders act in line with these values rather than external pressures, which results in ethical decision-making and consequently moral behaviors (Avolio & Gardner, 2005; Ilies et al., 2005). These four components reflect the core components of authentic leadership which are self-awareness and self-regulatory processes. Whilst, promoting follower development and creating authentic relationships are also important components of authentic leadership.

### 1.2 | Similarities and differences between the two leadership models

Transformational and authentic leadership share some conceptual overlap, with authentic leadership often being described as a subset of transformational leadership (Walumbwa et al., 2008). Specifically, transformational leadership suggests that these leaders serve as role models and display moral conduct. Authentic leaders are also believed to be role models by showing their true self to their followers and demonstrating moral behaviors in line with their values. Furthermore, both place their followers first and create supportive trusting relationships. This is because both transformational and authentic leaders are concerned with their followers' development, listen to their followers' perspectives, and build trusting relationships with them. Thus, both models suggest that the leaders care about their followers and are centered around the idea of developing leader-follower relationships. As such, it would be expected that the two models would show a degree of convergent validity.

Despite the conceptual overlap between authentic leadership and transformational leadership, the two leadership models also have distinct core components. Firstly, a core component of authentic leadership is the deeply rooted sense of self (i.e., self-awareness). Authentic leaders know where they stand on important issues and act in-line with their inner values despite situational factors. This deep sense of self is then displayed to their followers, through showing internalized moral perspective and self-regulation, which results in enduring relationships (Ilies et al., 2005; Walumbwa et al., 2008). Secondly, whilst transformational and authentic leaders both consider their followers' needs; authentic leaders' genuine nature suggests they remain true to their self and thus lead with purpose. However, they are also willing to take into account both their followers' perspective and core values, and therefore display high levels of self-regulation (Avolio & Gardner, 2005; Walumbwa et al., 2008).

Thirdly, both transformational and authentic leaders are concerned with their followers' development, but in different ways. Specifically, transformational leaders are concerned with developing their followers into leaders. Whilst authentic leaders instead promote authenticity amongst followers, develop enduring relationships with them, and influence them to become authentic (Gardner et al., 2005; Luthans & Avolio, 2003). Furthermore, the mechanisms through which the two models influence their followers' development are different. Authentic leaders influence their followers indirectly by being transparent when faced with problems, leading by example and showing dedication, which influences their followers' beliefs and values. By contrast, transformational leaders influence their followers by showing character, providing a powerful inspirational vision, providing intellectually stimulating ideas, and paying attention to followers' achievement needs. Lastly, a key distinguishing component of authenticity is an inherent moral component (Avolio & Gardner, 2005; Gardner et al., 2005). Whilst original theories of transformational leadership suggest that transformational leaders show ethical role modeling, more recently it has been suggested that transformational leaders do not always have to act ethically, and can instead be manipulative, if they consider this is for the greater good (Bass & Steidlmeier, 1999; Walumbwa et al., 2008). Staying true to moral values, regardless of situational challenges, however, is a key component of authentic leadership (Avolio & Gardner, 2005; Walumbwa et al., 2008). In sum, these core differences suggest that authentic leadership is conceptually distinct to transformational leadership, and so it is likely to show divergent validity.

To date, only one study, Walumbwa et al. (2008), has examined the construct validity of authentic leadership compared with transformational leadership. They did this by firstly demonstrating its convergent validity through showing its positive correlations with transformational leadership. Secondly, they demonstrated its discriminant and predictive validity via showing the incremental predictive power of authentic leadership in regard to commitment and satisfaction. These findings suggest that authentic leadership is a viable construct that can explain follower outcomes beyond that explained by other forms of leadership. However, Walumbwa et al. (2008) study was conducted on a business sample and so the

results cannot be generalized to other settings. Furthermore, in order to demonstrate construct validity, they suggest that the study needs to be recreated on a range of different contexts and consider variables which are important within these contexts. As such, we conducted a study within a sports environment and used sport-specific variables. This is because authentic leadership is believed to be a relevant model of leadership in sport, but its sport-specific research is in its early stages of development. Therefore, there is the need to investigate its construct validity in terms of what it adds to dominant leadership theories in sport, such as transformational leadership, in order to determine the unique benefits of authentic leadership in explaining athlete outcomes.

### 1.3 | Predicting athlete outcomes

As authentic and transformational leadership share some conceptual overlap it would be expected that authentic and transformational leadership will lead to similar outcomes in athletes. However, because authentic leadership has different core components to transformational leadership, it is suggested that it could explain different amounts of variance in athlete outcomes. Two outcomes that transformational and authentic leadership may influence are enjoyment and commitment. Enjoyment is defined as "a positive affective response to the sport experience that reflects generalized feelings such as pleasure, liking and fun" and can be considered an aspect of well-being (Scanlan et al., 1993, p. 6). Commitment is defined as a "psychological construct representing the desire and resolve to continue sport participation" (Scanlan et al., 1993, p. 6). Both commitment and enjoyment are important in sport, as they can influence whether an athlete will continue sport participation (Scanlan et al., 1993). Currently, there has been shown to be a 35% drop in sports participation with age, after the age of 12 (Gould, 1987; Slater & Tiggemann, 2011). Therefore, research into the predictors of these two psychological outcomes is vital.

Research into transformational leadership suggests it is likely to positively influence athletes' enjoyment and commitment via demonstrating individualized consideration and inspirational motivation. These components show followers that their leaders care for them and inspire them to show more effort during challenging situations (Hopton et al., 2007; Price & Weiss, 2013). Furthermore, through showing charisma, followers are likely to personally and socially identify with their leaders, which promotes higher commitment and enjoyment (Kark et al., 2003). This was supported by a study conducted on female athletes, which found that transformational leadership was positively related to athletes' soccer enjoyment (Price & Weiss, 2013). These findings were replicated in a second study which found that transformational leadership both directly and indirectly, via need satisfaction, predicted athletes' well-being, defined as being cheerful, enthusiastic, and optimistic (Stenling & Tafvelin, 2014). Other studies found a significant positive relationship between transformational leadership and commitment (Hallaj et al., 2011; Saybani et al., 2013).

Authentic leadership may also influence followers' enjoyment and commitment by creating trusting relationships and supportive team climates via social contagion, as a result of them showing the four components of authentic leadership (e.g., Ilies et al., 2005; Nelson et al., 2014). These trusting relationships can also indirectly influence athletes' commitment as followers identify with their leaders (Gardner et al., 2005; Walumbwa et al., 2008). Consequently, authentic leaders may make individuals feel they are part of the same team through athletes socially identifying with the team and leader (Fransen et al., 2020). Authentic leaders may do this through openly sharing their values with the team, thus promoting trust and social identification, which have been linked to followers' wellbeing (Steffens et al., 2017). Authentic leaders may also heighten followers' positive emotions through emotional contagion, which involves the spread of positive emotions from the leader to their followers (Ilies et al., 2005). This was supported by a recent study that found athletes' perceptions of authentic leadership were positively related to their enjoyment and commitment, and this relationship was mediated by trust (Bandura & Kavussanu, 2018).

Taken together, the research suggests that transformational and authentic leadership are likely to positively impact athletes' commitment and enjoyment. However, because authentic leadership is distinct from transformational leadership, it may have different value in predicting these outcomes beyond that of transformational leadership. Specifically, authentic leaders may promote higher commitment and positive emotions because of its core components such as relational transparency (i.e., self-regulation), which creates clear and open relationships built on trust and positive emotions (Avolio et al., 2004; Bandura & Kavussanu, 2018). Secondly, the core component of self-awareness suggests authentic leaders are likely to be perceived as more genuine and trustworthy, which will further result in greater commitment and positive emotions (Walumbwa et al., 2008). Lastly, the inherent core moral component is also expected to create greater commitment (Cianci et al., 2014). Therefore, authentic leadership could offer unique contributions to explaining commitment and enjoyment, in sport, compared with transformational leadership.

## 1.4 | The current investigation

In summary, transformational and authentic leadership have some conceptual overlap. However, authentic leadership incorporates different core components to transformational leadership, such as self-awareness, self-regulation, relational transparency, showing concern for their followers' development, developing strong relationships, and an inherent moral component. These core components suggest that authentic leadership may add to transformational leadership in terms of promoting positive outcomes for athletes (Walumbwa et al., 2008). Walumbwa et al. (2008) found evidence for this within a business setting; however, no such comparison has been made in sport or with sport-specific athlete outcomes.

We therefore plan to build on Walumbwa et al.'s. (2008) study by investigating the construct validity of authentic leadership within a sporting context. Specifically, we plan to examine how authentic and transformational leadership are distinct as well as whether authentic leadership predicts athletes' commitment and enjoyment beyond that of transformational leadership. We propose the following hypotheses: (a) authentic leadership is empirically distinct from transformational leadership (discriminant validity) (Avolio & Gardner, 2005; Houchin, 2011; Walumbwa et al., 2008); and (b) authentic leadership predicts commitment and enjoyment when controlling for transformational leadership (predictive validity; Avolio et al., 2004; Ilies et al., 2005; Walumbwa et al., 2008).

## 2 | METHOD

### 2.1 | Participants

A total of 421 athletes (227, 53.9% females), representing 28 teams, took part in the study. A power analysis indicated that for a small effect size, 84 participants would need to be recruited to reach 80% power in a model with four predictors, assuming a significance of 0.05. Participants came from a variety of team sports and competed in university leagues (1st to 4th teams), which competed at a regional or national level ( $n = 387$ ) or adult regional level teams, of an amateur level ( $n = 34$ ), from the West Midlands area of the UK. The sports included in the study are lacrosse ( $n = 95$ , 22.6%), hockey ( $n = 67$ , 15.9%), American football ( $n = 73$ , 17.3%), volleyball ( $n = 24$ , 5.7%), dodgeball ( $n = 38$ , 9%), football ( $n = 37$ , 8.8%), korfbal ( $n = 12$ , 2.9%), cheerleading ( $n = 53$ , 12.6%), and ultimate Frisbee ( $n = 22$ , 5.2%). The participants were aged 17 to 44 years ( $M_{\text{age}} = 20.32$ ,  $SD = 2.86$ ). The participants had 1 to 23 years of experience in their respective sports ( $M = 5.01$ ,  $SD = 4.86$ ), had played for their current team for 1 to over 4 years ( $M = 1.64$ ,  $SD = 0.82$ ) and had played under their current coach for one to over 4 years ( $M = 1.50$ ,  $SD = 0.80$ ). Most coaches were male (52.7%). At the time of data collection, all participants had played for their current coach for at least a year.

### 2.2 | Measures<sup>1</sup>

#### 2.2.1 | Authentic leadership

Athletes completed the Authentic Leadership Questionnaire (ALQ) developed by Walumbwa et al. (2008) in order to capture their perceptions of their leaders' level of authentic leadership. The ALQ measures the four components of authentic leadership using 16 items and four subscales. The self-awareness subscale consists of four items (e.g., "my coach accurately describes how others view his

<sup>1</sup>Asterisk symbolise \* $p < .05$ ; \*\* $p < .001$ .

or her capabilities"  $\alpha = 0.87$ ); balanced processing consists of three items (e.g., "my coach analyses relevant data before coming to a decision"  $\alpha = 0.75$ ); relational transparency is measured with five items (e.g., "my coach admits mistakes when they are made"  $\alpha = 0.77$ ); and internalized moral perspective is measured with four items (e.g., "my coach makes decisions based on his or her core values"  $\alpha = 0.84$ ). Participants rated their coach's level of authentic leadership on a 5-point scale with 1 corresponding to "not at all" and 5 corresponding to "frequently if not always." The Pearson correlations between the different subscales ranged from  $r = 0.67$  to  $r = 0.79$ . Thus, we computed the average score across the four subscales for authentic leadership, in line with previous studies (e.g., Houchin, 2011).

### 2.2.2 | Transformational leadership

Transformational leadership was measured using the four three-item subscales of the Multifactor Leadership Questionnaire (MLQ) developed by Bass and Avolio (1992). The wording of the questionnaire was changed so that "I" became "my coach," in order to measure athletes' perceptions of their coaches' behaviors. The subscales include idealized influence (e.g., "my coach makes others feel good to be around them"), inspirational motivation (e.g., "my coach helps others find meaning in their work"), individual consideration (e.g., "my coach gives personal attention to others who seem rejected"), and intellectual stimulation (e.g., "my coach provides others with new ways of looking at puzzling things"). Participants responded on a 5-point scale with zero corresponding to "not at all" to four corresponding to "frequently if not always." The scores of this scale showed high reliability as shown by Cronbach alphas of 0.92, and good construct validity (Muenjohn & Armstrong, 2008).

### 2.2.3 | Commitment and enjoyment

Commitment and enjoyment were measured using two subscales from the Sport Commitment Model developed by Scanlan et al. (1993). Participants were asked to think about their experiences in their team and circle the appropriate number. An example item from the commitment subscale is "how dedicated are you to continue playing for this team" ( $\alpha = 0.85$ ) and from the enjoyment scale "do you enjoy playing for this team" ( $\alpha = 0.94$ ). Athletes rated their levels of commitment and enjoyment using a five-point Likert scale with one corresponding to "not at all dedicated" or "not at all" and five "very dedicated" or "very much" for the commitment and enjoyment scales, respectively.

## 2.3 | Procedure

Firstly, ethical approval was obtained from the lead author's University's ethical review committee. Next, 28 coaches were contacted via email or by the phone, using purposeful sampling techniques. The coaches were told the purpose of the study, given a

sample questionnaire and agreed to take part in the study. A date and time for data collection was arranged once the coach agreed for their athletes to take part in the study. Each athlete was then told the purpose of the study, that data would be confidential and used for research purposes only, that they could withdraw their data at any point, and that their participation was voluntary. Participants were encouraged to answer the questions truthfully. Data collection took place at the start of the season, over 2 months, and the questionnaire was given to participants at the start or end of a practice session. The questionnaire took 10–15 min to complete and the researcher remained present at all times to answer any questions. Finally, the measures were counterbalanced to avoid order effects.

## 2.4 | Data analysis

We conducted preliminary analysis using the Statistical Program for Social Sciences (SPSS) v.25 and the main analysis using AMOS. We first conducted preliminary analysis to look for any missing data and to see if the data were normally distributed, followed by a reliability analysis, computed descriptive statistics, and correlations. We present results for the overall scores of authentic and transformational leadership as well as their sub-dimensions. Then, a measurement model was run which included the items measuring all variables in the model, to assess the relationships between the latent variables and the items that serve as each variable's indicators (i.e., the items that make up the authentic leadership, transformational leadership, enjoyment, and commitment variables), using SEM. Next, we inspected whether transformational and authentic leadership are distinct by examining if the average variance extracted value of authentic leadership was greater than the squared correlation of authentic leadership and transformational leadership (Netemeyer et al., 1990). We further tested for discriminant validity, using the items as indicators in a nested model, following the steps presented in Walumbwa et al. (2008). This involved freely estimating the correlation between authentic leadership and transformational leadership in the first model (i.e., the unconstrained model), setting the correlation as 1.00 in the second model (i.e., constrained model), and examining if the  $\chi^2$  value for the model with the unconstrained correlation is significantly lower than the  $\chi^2$  value for the model with the constrained correlation.

We further examined transformational and authentic leadership, in terms of their relation to the outcome variables, by comparing the correlation coefficients using Lee and Preacher's (2013) Z score calculator. We then employed SEM again, using a two-step approach. The first step involved running a nested model in order to account for the lack of independence in the data (i.e., as a result of athletes being nested within teams), which dropped the path from transformational leadership to enjoyment and commitment. The second step involved running a nested model, in which the path from authentic leadership to the outcome variables was fixed to zero. This determined whether authentic leadership positively predicted athletes' enjoyment and commitment, when controlling for transformational leadership.

### 3 | RESULTS

#### 3.1 | Preliminary analysis

The Shapiro-Wilk test and visual inspection of the Q-Q plots, histograms, and box plots showed that the data were normally distributed. Missing data were found to range from 0.1% to 0.4% of the individual items, thus a very small proportion of data was missing. A MCAR test revealed the data to be missing at random, as shown by supporting the null hypothesis that the data are missing completely at random. Therefore, we replaced missing data with the mean of each variable (Fox-Wasylyshyn & El-Masri, 2005; Tabachnick et al., 2001).

#### 3.2 | Cronbach alphas, descriptive statistics, and correlations

Table 1 gives the alpha coefficients, means, standard deviations, zero-order correlations of all the study measures and the items that make up each measure. All the internal consistencies for the different scale scores were high and above the commonly accepted 0.70 level (Mallery & George, 2003). Participants perceived their coach to have high levels of authentic and transformational leadership and also reported high levels of commitment and enjoyment. Authentic leadership and its sub-dimensions were strongly correlated to transformational leadership and moderately correlated to enjoyment and commitment, whilst transformational leadership and its sub-dimensions were weakly correlated to enjoyment and commitment.

#### 3.3 | Contrasting authentic and transformational leadership

The first purpose of the study was to examine whether authentic and transformational leadership were distinct from each other. Table 1 gives the correlations between the different components of authentic and transformational leadership. The four components of authentic leadership were moderately correlated to the components of transformational leadership. Authentic leadership and transformational leadership were highly correlated. However, authentic leadership was also found to be distinct from transformational leadership as the average variance extracted of authentic leadership was 0.76, in the model that included transformational leadership, which was greater than the squared correlation of 0.40 (Netemeyer et al., 1990; Walumbwa et al., 2008). We then further established discriminant validity by following the steps outlined in Walumbwa et al. (2008), which suggests that authentic and transformational leadership will demonstrate discriminant validity if the  $\chi^2$  value in the model with the unconstrained correlation between authentic and transformational leadership is significantly lower than the model with the constrained correlation between the two variables. The results demonstrated that the  $\chi^2$  value for the model with

the unconstrained correlation ( $\chi^2(349) = 1,305.16$ ) was significantly lower than the model with the constrained correlation ( $\chi^2(350) = 1,416.80$ ;  $\Delta\chi^2 = 111.64$ ,  $p < .001$ ), thus further enhancing our confidence in the discriminant validity between authentic and transformational leadership.

We then used Lee and Preacher's (2013) Z score calculator to see how the different leadership models related to the outcome variables, by comparing the correlation coefficients of the leadership models, presented in Table 1, and the outcome variables. This assesses the equality of two correlation coefficients with two correlations (i.e., the correlations between authentic leadership or transformational leadership and the outcome variables), from the same sample and sharing a common variable (the correlation between transformational and authentic leadership), in order to obtain a z score, via the Fisher's *r-z* transformation. The z score results are compared in a one-tailed and two-tailed fashion against the units normal distribution. The z score for authentic leadership compared against transformational leadership with regards to enjoyment was 5.42 (1-tailed  $p \leq .001$ , 2-tailed  $p \leq .001$ ) and commitment 2.67 (1-tailed  $p \leq .001$ , 2-tailed  $p \leq .001$ ).

#### 3.4 | Authentic leadership predicting athlete outcomes

From the zero-order correlations between authentic leadership and the outcome variables there is good initial evidence of predictive power. We first examined a measurement model with all the variables included in the study (i.e., authentic leadership, transformational leadership, enjoyment, and commitment) to assess the relationship between the latent variables and their indicators (i.e., the manifest items). We used a combination of fit indices to determine the degree of model fit for this measurement model, including the Chi-Square ( $\chi^2$ ), Comparative Fit Index (CFI), and the Root Mean Square Error of Approximation (RMSEA). A  $\chi^2$  with a probability value of below 0.05, a CFI value close to 0.90, and RMSEA less than 0.08 are suggested to indicate good fit (Hooper et al., 2008). The measurement model had good fit ( $\chi^2 = 1653.01$ ,  $df = 588$ , CFI = 0.90, RMSEA = 0.07). In order to determine whether authentic leadership adds to transformational leadership, in terms of predicting follower outcomes, we examined whether authentic leadership was positively related to followers' enjoyment and commitment, when controlling for transformational leadership. This was also done using SEM and observed variables. Authentic leadership predicted enjoyment ( $\beta = 0.29$ ,  $p < .001$ ) and commitment ( $\beta = 0.36$ ,  $p < .001$ ) when controlling for transformational leadership, as can be seen in Figure 1.

To determine the incremental predictive power of authentic leadership above and beyond that of transformational leadership, two nested models were run for each model. In the first nested model, the path from transformational leadership to enjoyment and commitment was fixed to zero, and in the second nested model the path from authentic leadership to these variables was fixed to zero. In the first sub model, dropping the path from transformational

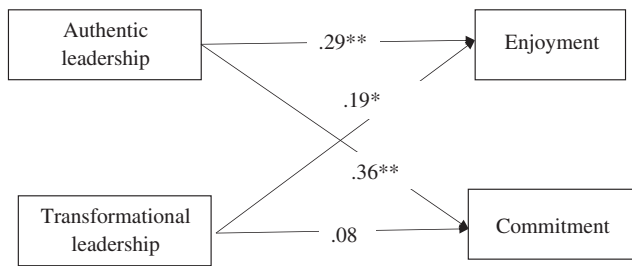
TABLE 1 Descriptive statistics, alpha coefficients, and zero-order correlations

Variable	M	SD	$\alpha$	1	2	3	4	5	6	7	8	9	10	11	12
1. Authentic leadership	4.16	0.61	0.94	-											
2. Self-Awareness	4.10	0.78	0.92	0.91*	-										
3. Relational transparency	4.23	0.61	0.84	0.89*	0.72*	-									
4. Internalized moral perspective	4.22	0.69	0.90	0.88*	0.72*	0.76*	-								
5. Balanced Processing	4.01	0.74	0.87	0.87*	0.79*	0.67*	0.70*	-							
6. Transformational leadership	3.14	0.60	0.91	0.66*	0.61*	0.58*	0.59*	0.57*	-						
7. Idealised influence	3.27	0.64	0.89	0.64*	0.59*	0.54*	0.58*	0.57*	0.88*	-					
8. Inspirational motivation	3.17	0.66	0.87	0.59*	0.53*	0.56*	0.53*	0.47*	0.89*	0.76*	-				
9. Intellectual stimulation	3.04	0.71	0.89	0.56*	0.51*	0.49*	0.49*	0.48*	0.90*	0.68*	0.75*	-			
10. Individualized consideration	3.07	0.72	0.81	0.56*	0.54*	0.47*	0.49*	0.51*	0.87*	0.68*	0.65*	0.71*	-		
11. Enjoyment	4.62	0.73	0.94	0.45*	0.38*	0.35*	0.40*	0.34*	0.25*	0.31*	0.31*	0.28*	0.32*	-	
12. Commitment	4.32	0.68	0.85	0.39*	0.36*	0.33*	0.39*	0.30*	0.29*	0.29*	0.27*	0.25*	0.25*	0.53*	-

Note: \* $p < .001$ .

Possible range of authentic leadership, enjoyment and commitment = 1–5, transformational leadership = 0–4.





**FIGURE 1** Authentic and transformational leadership predicting enjoyment and commitment. This figure illustrates the SEM results of authentic and transformational leadership predicting enjoyment and commitment, when controlling for either transformational or authentic leadership respectively. Values are standardized coefficients. \* $p < .05$ ; \*\* $p < .001$

leadership to enjoyment ( $\Delta\chi^2 = 3.81$ , ns;  $\Delta df = 1$ ) and commitment ( $\Delta\chi^2 = 0.77$ , ns;  $\Delta df = 1$ ) did not significantly degrade model fit, whereas dropping the path from authentic leadership to enjoyment ( $\Delta\chi^2 = 26.11$ ,  $p < .001$ ;  $\Delta df = 1$ ) and commitment ( $\Delta\chi^2 = 27.86$ ,  $p < .001$ ;  $\Delta df = 1$ ) did significantly degrade model fit. These results show that authentic leadership has incremental predictive power above that of transformational leadership in terms of predicting athletes' enjoyment and commitment.

## 4 | DISCUSSION

Over the past decade, an abundance of sport psychology studies have been conducted on numerous leadership approaches (Vella et al., 2013). To date, the majority of this literature has focused on transformational leadership theory, with very few studies having been conducted on authentic leadership. Therefore, we do not know what this approach to leadership adds to the dominant sport leadership theory, in terms of predicting athlete-related outcomes. Authentic leadership is often described as a subset of transformational leadership, meaning the two types of leadership show some conceptual overlap (e.g., Walumbwa et al., 2008). However, the two models also have several distinct components, thus the need to ascertain whether there is merit in investigating what authentic leadership adds to dominant leadership theories in sport. The present study sought to fill this gap in the literature by extending Walumbwa et al.'s (2008) study to a sporting setting and with sport-specific outcomes. We sought to demonstrate authentic leaderships construct validity by investigating whether authentic leadership is conceptually similar to or distinct from transformational leadership and if it predicts athletes' commitment and enjoyment above and beyond transformational leadership.

### 4.1 | Authentic leadership versus transformational leadership

The first purpose of the study was to investigate whether authentic leadership is distinct from transformational leadership. As expected

the results demonstrated that authentic leadership is correlated to transformational leadership, but not so highly correlated that it would indicate the different leadership scales are measuring the same construct (McCornack, 1956). The findings of the current study are in line with existing literature in organizational settings (e.g., Walumbwa et al., 2008) who reported similar correlations, but also extend the findings to sport literature. These results suggest that although the two leadership models share some conceptual overlap, they are distinct from each other and are therefore separate models of leadership in sport.

As expected, we also found authentic leadership to be distinct from transformational leadership, by demonstrating evidence for the divergent validity of authentic leadership. This is in line with Walumbwa et al. (2008) study; however, they reported a slightly lower average variance extracted value than that found in the current study. The slight difference in the values could be because we examined enjoyment, via the enjoyment scale developed by Scanlan et al. (1993), which measures enjoyment toward the team. Whereas Walumbwa et al. (2008) measured satisfaction toward their supervisor using a scale developed by Smith (1969). Despite this slight difference, both the values from this study and Walumbwa et al. (2008) nonetheless suggest the two models are empirically distinct, meaning that authentic leadership has a different focus to transformational leadership and vice versa. Therefore, the results suggest there is merit in investigating both models of leadership separately, within a sport context.

The second purpose of the study was to examine if authentic leadership had predictive power over transformational leadership in terms of athlete outcomes. We hypothesized that authentic leadership would predict athlete outcomes, whilst controlling for transformational leadership. The results supported this hypothesis by firstly showing that authentic leadership predicted participants' enjoyment and commitment when controlling for transformational leadership. The effect size from authentic leadership to enjoyment when controlling for transformational leadership ( $0.29^{**}$ )<sup>1</sup> was greater than the effect size between transformational leadership and enjoyment ( $0.19^*$ ), when controlling for authentic leadership. Furthermore, the effect size from authentic leadership to commitment ( $0.36^{**}$ ) was larger than the effect size from transformational leadership to commitment ( $0.08$ ), which was not significant. Whilst the effect sizes were small, the results provided important initial evidence for the strength of authentic leadership in terms of being a better predictor of these athlete outcomes compared with transformational leadership.

Secondly, using a nested model, we found that dropping the path from transformational leadership to commitment and enjoyment significantly degraded the model fit. These findings were in line with Walumbwa et al. (2008) study and provide evidence for the unique variance that authentic leadership provides in explaining athlete outcomes. However, our findings showed a smaller degradation in model fit than in Walumbwa et al.'s (2008) study. This could be because Walumbwa et al. (2008) measured organizational commitment and so the results cannot be directly compared. However, the scales do

contain similar items about dedication, quitting, and effort to stay with the team/organization. Therefore, the outcomes of the two studies are similar enough to extend the findings of Walumbwa et al. (2008) into a different context of sport with sport-specific variables.

The incremental validity that authentic leadership demonstrated in predicting athlete outcomes suggests that authentic leadership is a viable model of leadership in sport and adds to transformational leadership. Thus, authentic leadership is capable of predicting important athlete outcomes above and beyond that of previous leadership models. This predictive power of authentic leadership over transformational leadership in regard to follower commitment and enjoyment supports theories such as those proposed by Walumbwa et al. (2008). They suggested that authentic leaders show higher self-awareness, self-regulation, relational transparency, and internalized moral perspective, which increase followers' commitment and positive emotions, as the authentic leaders are seen to demonstrate greater integrity and trustworthiness. Gardner et al. (2005) further suggested that authentic leaders are capable of influencing followers' well-being through creating trusting relationships with their followers. Furthermore, Ilies et al. (2005) suggested that authentic leaders spread positive emotions to their followers through processes such as emotional contagion and creating supportive team climates. The relationship between authentic leadership and athletes' commitment and enjoyment when controlling for transformational leadership was also in-line with research from Bandura and Kavussanu (2018), who found that authentic leadership was positively correlated with athletes' enjoyment and commitment.

Taken together, our results and the supporting literature suggest that authentic leadership shows construct validity in a sport context, with sport-specific variables. Furthermore, the results suggest that the additional components that authentic leadership offers can result in unique contributions to explaining positive outcomes in followers, beyond that explained by other leadership theories. Thus, authentic leadership adds to transformational leadership. This is important because it shows that authentic leadership is legitimately found in sport contexts and is a unique model of leadership. Furthermore, it shows that it may explain positive outcomes in athletes, such as greater commitment and enjoyment, compared with transformational leadership. This is likely due to the different focus authentic leadership places on its core components such as self-awareness, an inherent moral component, and self-regulatory processes, which result in trusting relationships being developed between the leaders and their athletes. Therefore, authentic leadership is an appropriate model of leadership in sport and there is value in prompting coaches to show more authentic behaviors, rather than previous dominant leadership models, in order to promote happier and more committed athletes.

## 4.2 | Practical implications

Our study extends the current literature by highlighting the importance of authentic leadership through demonstrating how authentic

leadership is different from transformational leadership and what it adds to transformational leadership in terms of predicting athlete outcomes, to enhance our understanding of leadership in sport. The results of this study suggest that coaches should be encouraged to display the four dimensions of authentic leadership in their coaching practice, which were shown to be distinct to transformational leadership model, in order to promote greater commitment and well-being of athletes. This is vital given the drop-in sports participation after the age of 12 (Gould, 1987; Slater & Tiggemann, 2011). Therefore, by promoting authentic leadership to increase athletes' enjoyment and commitment, there is the potential to increase athletes' dedication to sport participation beyond adolescence.

## 4.3 | Limitations and future research directions

Despite some interesting findings, this study is not without limitations. First, the cross-sectional nature of the study does not allow a cause and effect relationship to be established. Furthermore, the long-term effects of authentic leadership are not known. Authentic leadership is believed to develop and change over time, which could not be captured by this study (Avolio et al., 2004). Secondly, this study focuses only on athlete-level variables; however, previous research has provided evidence for the link between both authentic and transformational leadership and team-level variables, such as team climate (e.g., Callow et al., 2009; Nelson et al., 2014). Finally, this study only included a sample of adult teams, at either a university or amateur regional level, and thus the impact of authentic leadership on different competition levels or youth teams is not known.

Future research should thus firstly use a longitudinal design in order to examine how the variables and relationships develop over time. Secondly, future research should make a comparison between authentic and transformational leadership in terms of their predictive power on team-level variables. Thirdly, future research should include a sample of amateur and professional teams, as well as youth teams, to examine the influence of authentic leadership amongst teams of various competitiveness levels and age groups. Furthermore, authentic leadership is believed to influence team identification, and this in turn may impact on athletes' commitment and enjoyment (Gardner et al., 2005). In this way, authentic leadership relates to the social identity approach to leadership which promotes team identity through creating a meaningful sense of "us" (Reicher & Haslam, 2011). Therefore, future research should make a comparison between authentic leadership and identity leadership, as well as examine how authentic leadership may predict team identification, and how this in turn may impact athletes' enjoyment and commitment. Finally, future research should also look at developing an intervention to teach coaches how to display the four dimensions of authentic leadership. Based on the findings of this study, and previous studies of authentic leadership in sport, such a coaching plan may help to promote positive outcomes in athletes and lead to more supportive sports environments (e.g., Avolio et al., 2004; Bandura & Kavussanu, 2018; Walumbwa et al., 2008).

## 5 | CONCLUSION

Our findings extend the current literature by identifying that authentic leadership, in coaches within a sport setting, is distinct from transformational leadership and has predictive power in terms of athletes' commitment and enjoyment when controlling for transformational leadership. Thus, evidence was found for the construct validity of authentic leadership in a sport setting. The study makes a significant contribution to the sport leadership literature by showing that authentic leadership is a viable model of leadership in sport and has demonstrated that when coaches show authentic leadership in the context of sport it can predict important positive athlete outcomes, whilst controlling for transformational leadership. Therefore, coaches should be encouraged to display authentic leadership behaviors within their coaching practices, which would be expected to result in happier and more dedicated athletes.

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## REFERENCES

- Avolio, B. J. (1999). *Full leadership development: Building the vital forces in organizations*. Sage.
- Avolio, B. J., & Gardner, W. L. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly*, *16*(3), 315–338. <https://doi.org/10.1016/j.leaqua.2005.03.001>
- Avolio, B. J., Gardner, W. L., Walumbwa, F. O., Luthans, F., & May, D. R. (2004). Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviors. *Leadership Quarterly*, *15*(6), 801–823. <https://doi.org/10.1016/j.leaqua.2004.09.003>
- Bandura, C. T., & Kavussanu, M. (2018). Authentic leadership in sport: Its relationship with athletes' enjoyment and commitment and the mediating role of autonomy and trust. *International Journal of Sports Science & Coaching*, *13*(6), 968–977. <https://doi.org/10.1177/1747954118768242>
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. Free Press.
- Bass, B. M., & Avolio, B. J. (1992). *Multifactor leadership questionnaire-short form*. 6th ed. Center for Leadership Studies.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*. Psychology press.
- Bass, B. M., & Steidlmeier, P. (1999). Ethics, character, and authentic transformational leadership behavior. *The Leadership Quarterly*, *10*(2), 181–217. [https://doi.org/10.1016/S1048-9843\(99\)00016-8](https://doi.org/10.1016/S1048-9843(99)00016-8)
- Benson, P. L., Scales, P. C., Hamilton, S. F., Sesma, A. Jr, Hong, K. L., & Roehlkertain, E. C. (2006). Positive youth development so far: Core hypotheses and their implications for policy and practice. *Search Institute Insights & Evidence*, *3*(1), 1–13.
- Callow, N., Smith, M. J., Hardy, L., Arthur, C. A., & Hardy, J. (2009). Measurement of transformational leadership and its relationship with team cohesion and performance level. *Journal of Applied Sport Psychology*, *21*(4), 395–412. <https://doi.org/10.1080/10413200903204754>
- Cianci, A. M., Hannah, S. T., Roberts, R. P., & Tsakumis, G. T. (2014). The effects of authentic leadership on followers' ethical decision-making in the face of temptation: An experimental study. *The Leadership Quarterly*, *25*(3), 581–594. <https://doi.org/10.1016/j.leaqua.2013.12.001>
- Côté, J., & Gilbert, W. (2009). An integrative definition of coaching effectiveness and Development and empirical tests. *The Leadership Quarterly*, *22*(6), 1146–1164.
- Fox-Wasylyshyn, S. M., & El-Masri, M. M. (2005). Handling missing data in self-report measures. *Research in Nursing & Health*, *28*(6), 488–495. <https://doi.org/10.1002/nur.20100>
- Fransen, K., Haslam, S. A., Steffens, N. K., Mallett, C. J., Peters, K., & Boen, F. (2020). Making 'us' better: High-quality athlete leadership relates to health and burnout in professional Australian football teams. *European Journal of Sport Science*, *20*(7), 953–963. <https://doi.org/10.1080/17461391.2019.1680736>
- Gardner, W. L., Avolio, B. J., Luthans, F., May, D. R., & Walumbwa, F. O. (2005). "Can you see the real me?" A self-based model of authentic leader and follower development. *The Leadership Quarterly*, *16*, 343–372.
- Gould, D. (1987). Understanding attrition in children's sport. In D. Gould, & M. R. Weiss (Eds.), *Advances in paediatric sciences: Behaviour issues* (pp. 61–85). Human Kinetics.
- Hallajy, M., Janani, H., & Fallah, Z. (2011). Modelling the effect of coaches' leadership styles on athletes' satisfaction and commitment in Iranian handball pro league. *World Applied Sciences Journal*, *14*(9), 1299–1305.
- Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural equation modelling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods*, *6*(1), 53–60.
- Hopton, C., Phelan, J., & Barling, J. (2007). Transformational leadership in sport. In M. R. Beauchamp, & M. Eys (Eds.), *Group dynamics in exercise and sport psychology* (pp. 63–80). Routledge.
- Houchin, G. (2011). *Authentic leadership in sports teams* (Unpublished masters dissertation). The University of Tennessee.
- Ilies, R., Morgeson, F. P., & Nahrgang, J. D. (2005). Authentic leadership and eudaemonic wellbeing: Understanding leader-follower outcomes. *The Leadership Quarterly*, *16*, 373–394. <https://doi.org/10.1016/j.leaqua.2005.03.002>
- Kark, R., Shamir, B., & Chen, G. (2003). The two faces of transformational leadership: Empowerment and dependency. *Journal of Applied Psychology*, *88*(2), 246–255. <https://doi.org/10.1037/0021-9010.88.2.246>
- Kernis, M. H. (2003). Toward a conceptualization of optimal self-esteem. *Psychological Inquiry*, *14*, 1–26.
- Lee, I. A., & Preacher, K. J. (2013). *Calculation for the test of the difference between two dependent correlations with one variable in common* [Computer software].
- Luthans, F., & Avolio, B. J. (2003). A positive development approach. In K. S. Cameron, & R. E. Dutton (Eds.), *Positive organizational scholarship* (pp. 241–258). Berrett-Koehler.
- Mallery, P., & George, D. (2003). *SPSS for Windows step by step: A simple guide and reference*. Allyn.
- McCornack, R. L. (1956). A criticism of studies comparing item-weighting methods. *Journal of Applied Psychology*, *40*(5), 343. <https://doi.org/10.1037/h0045635>
- Muenjohn, N., & Armstrong, A. (2008). Evaluating the structural validity of the multifactor leadership questionnaire (MLQ), capturing the leadership factors of transformational-transactional leadership. *Contemporary Management Research*, *4*(1), 3–14. <https://doi.org/10.7903/cmr.704>
- Neider, L. L., & Schriesheim, C. A. (2011). The authentic leadership inventory (ALI): Development and empirical tests. *The Leadership Quarterly*, *22*(6), 1146–1164. <https://doi.org/10.1016/j.leaqua.2011.09.008>
- Nelson, K., Boudrias, J. S., Brunet, L., Morin, D., De Civita, M., Savoie, A., & Alderson, M. (2014). Authentic leadership and psychological wellbeing at work of nurses: The mediating role of work climate at the individual level of analysis. *Burnout Research*, *1*(2), 90–101. <https://doi.org/10.1016/j.burn.2014.08.001>

- Netemeyer, R. G., Johnston, M. W., & Burton, S. (1990). Analysis of role conflict and role ambiguity in a structural equations framework. *Journal of Applied Psychology, 75*(2), 148–157. <https://doi.org/10.1037/0021-9010.75.2.148>
- O'Boyle, I., Murray, D., & Cummins, P. (2015). *Leadership in sport*. Routledge.
- Price, M. S., & Weiss, M. R. (2013). Relationships among coach leadership, peer leadership, and adolescent athletes' psychosocial and team outcomes: A test of transformational leadership theory. *Journal of Applied Sport Psychology, 25*(2), 265–279. <https://doi.org/10.1080/10413200.2012.725703>
- Reicher, S., & Haslam, S. A. (2011). After shock? Towards a social identity explanation of the Milgram 'obedience' studies. *British Journal of Social Psychology, 50*(1), 163–169. <https://doi.org/10.1111/j.2044-8309.2010.02015.x>
- 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.
- Scanlan, T. K., Carpenter, P. J., Schmidt, G. W., Simons, J. P., & Keeler, B. (1993). An introduction to the sport commitment model. *Journal of Sport & Exercise Psychology, 15*(1), 1–15. <https://doi.org/10.1123/jsep.15.1.1>
- Slater, A., & Tiggemann, M. (2011). Gender differences in adolescent sport participation, teasing, self-objectification and body image concerns. *Journal of Adolescence, 34*(3), 455–463. <https://doi.org/10.1016/j.adolescence.2010.06.007>
- Smith, P. C. (1969). *The measurement of satisfaction in work and retirement: A strategy for the study of attitudes*. Rand McNally.
- Steffens, N. K., Haslam, S. A., Schuh, S. C., Jetten, J., & van Dick, R. (2017). A meta-analytic review of social identification and health in organizational contexts. *Personality and Social Psychology Review, 21*(4), 303–335. <https://doi.org/10.1177/1088868316656701>
- Stenling, A., & Tafvelin, S. (2014). Transformational leadership and well-being in sports: The mediating role of need satisfaction. *Journal of Applied Sport Psychology, 26*(2), 182–196. <https://doi.org/10.1080/10413200.2013.819392>
- Tabachnick, B. G., Fidell, L. S., & Osterlind, S. J. (2001). *Using multivariate statistics*, 4th ed. Allyn and Bacon.
- Turnnidge, J. L., & Côté, J. (2019, June). Observing coaches' leadership behaviours in sport: The development of the coach leadership assessment system (CLAS). *Measurement in Physical Education and Exercise Science, 23*(1), 214–226.
- Vella, S. A., Oades, L. G., & Crowe, T. P. (2013). The relationship between coach leadership, the coach–athlete relationship, team success, and the positive developmental experiences of adolescent soccer players. *Physical Education and Sport Pedagogy, 18*(5), 549–561. <https://doi.org/10.1080/17408989.2012.726976>
- Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S., & Peterson, S. J. (2008). Authentic leadership: Development and validation of a theory-based measure. *Journal of Management, 34*(1), 89–126. <https://doi.org/10.1177/0149206307308913>

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