High School Rugby Players’ Perception of Coaching Effectiveness

Retief Broodryk, Pieter Hendrik van den Berg
North-West University, PhasRec, South Africa

The aims of this study were firstly to determine the players’ perceptions of their respective coaches’ coaching effectiveness and secondly, determine the difference between big and small schools of the players’ perceptions of their respective coaches’ coaching effectiveness. Four hundred and seventy six players from 22 schools were asked to fill in the adapted version of the CES (coaching efficacy scale) (Feltz, Chase, Moritz, & Sullivan, 1999). The CES consists of four subscales measuring motivation (seven items), game strategy (seven items), technique (six items) and character building (four items). Each item was rated in a 9-point Likert scale from 0 (“Not at all effective”) to 9 (“Extremely effective”). According to the descriptive statistics, players perceive their respective coaches to perform average and below average on the four tested constructs. There are also no practical significant differences between the perceptions of big and small schools players on the effectiveness of their respective coaches. The results of the study might determine and clarify whether volunteer coaches in high schools are effective according to their athletes’ perceptions and may also help schools to evaluate their coaches and implement programs to develop more effective coaches.

Keywords: coaching effectiveness, coaching efficacy, players’ perceptions, CES (coaching efficacy scale)

Introduction

The quality of coaches at school level has long been debated (Kowalski, Edginton, Lankford, Waldron, Roberts-Dobie, & Nielsen, 2007). There has been an increase in high school sport competitions and the importance of performance has been emphasized by media coverage of school sport competitions and the willingness of youth sports to progress to higher levels of achievement (Coakley, 2005; Bloemhof, 2008). This increase in school sport competitions have, however, led to a shortage of coaches which in turn led to teachers acting as voluntary coaches (Fung, 2003). Due to the fact that these coaches are considered to be influential individuals in the athletes’ lives, Horn (2002) warned that their efficiency should be monitored. Boardley, Kavussanu, and Ring (2008) concurred that the quality of the athletes’ experience will substantially be affected by the respective coaches’ behaviors. Athletes’ performances will also be improved by the presence of efficient coaching (Feltz, Hepler, & Roman, 2009). In contrast with the above statement, Vargas-Tonsing, Warners, and Feltz (2003) found that coaching efficacy can only be a predictor of team efficacy but not of individual efficacy. It is also important to note that Fung (2003) found no relationship between coaching experience and efficacy.

With the continuous increase in participation of youth sports and the importance of coaches efficiency,
there is a growing need to determine those individuals who are that volunteer to coach youth sport and whether they have the capabilities to be effective coaches (Feltz et al., 2009).

Coaching effectiveness has been defined by Kavussanu, Boardley, Jutkiewicz, Vincent, and Ring (2008) as the extent to which the coaches can implement their knowledge and skills to positively affect the learning and performances of their athletes. According to Feltz, Chase, Moritz, and Sullivan (1999), coaching efficacy can be defined as the extent to which coaches believe that they have the capacity to influence the learning and performances of their athletes.

Kavussanu et al. (2008) suggested that coaching effectiveness should be determined through athletes’ perceptions of their respective coaches’ efficacy, due to the fact that coaches are unable to evaluate objectively. The importance of athletes’ perceptions of their coaches’ capabilities to be effective for athlete-related outcomes has been recognized by Myers, Feltz, Maier, Wolfe, and Reckase (2006). According to Watson, Chemers, and Preiser (2001), athletes, who perceived their coach to be a confident leader, were more confident in themselves, indicating the importance of athletes’ perceptions. Horn (2002) stated that the influence of the coaches’ behaviors on the athletes’ performances will be in correlation to the athletes’ perception of the efficiency of the coach.

Several different methods are used to determine the perception of the athletes on the efficiency of coaches. Currently, the most commonly used method to determine the athletes perception of coaching effectiveness are the adapted CES (coaching efficiency scale) questionnaire developed by Feltz et al. (1999). This was developed to measure the following four constructs: motivation, game strategy, technique and character building.

In understanding the paucity and importance of efficient coaches, one must realize that schools compete with one another to get the services of quality coaches. Traditionally, the bigger schools usually can afford to pay their respective coaches more money due to a bigger income from their many learners, arguably supplying their players than with better coaches. According to the White Paper (SA (South Africa), 2008), big schools are classified as schools with a minimum capacity of 720 learners, while small and medium schools are classified as schools with a maximum capacity of 720 learners.

The above literature led the researchers to the following research questions: (1) What is the players perceptions of their respective coaches’ coaching effectiveness?; and (2) Is there a difference in the players’ perceptions on coaching effectiveness of their respective coaches between big and small schools?

The results of the study would determine and clarify the standard of coaching by volunteer coaches in high schools according to their athletes’ perceptions. The results will also indicate whether coaches from bigger schools are more effective than those in smaller schools. This would make it possible for schools to evaluate their coaches and implement programs to develop more effective coaching strategies.

**Materials and Methods**

**Subjects**

Four hundred and seventy six players from 20 teams of various schools who participated in the PUK (Potchefstroom University Campus) rugby festival 2009 took part in the study. All the participants are male between the ages of 15-19 years. A total of 431 questionnaires were correctly filled in and used for the study: small schools ($n = 250$) and big schools ($n = 181$).
Procedures

All players took part on a voluntary basis with the option to withdraw at any time. None of the teams’ respective coaches was presented during the collection of the data. The purpose of the questionnaire was thoroughly and repeatedly explained to the players. The anonymous nature of the study was also emphasized. All players had the freedom to ask any questions during the completion of the questionnaire and words which they did not understand were explained to them. Sufficient measures were taken to ensure that no language barriers would have had any effect on the outcome of the data. The players were then asked to fill in the adapted version of the CES which was developed by Feltz et al. (1999).

Questionnaire

The questionnaire tested the following four constructs: (1) motivation; (2) game strategy; (3) technique; and (4) character building, which has been proven reliable by Feltz et al. (1999). Following are the scales for the four constructs: below average (< 6.86); average (between 6.86 and 8.60); and above average (> 8.60). Malete and Sullivan (2009) described motivation efficacy as the coaches’ confidence in their abilities to influence the psychological skills and states of the athletes. Game strategy efficacy was defined by Sullivan, Gee, and Feltz (2006) as the coaches’ beliefs in their abilities to coach and lead their teams to a successful performance during competition. According to Myers, Vargas-Tonsing, and Feltz (2005), technique efficacy has been referred to as the coaches’ beliefs regarding their instructional and diagnostic skills, while character building efficacy concerns the coaches’ beliefs in their abilities to influence their athletes’ personal developments and positive attitudes towards sports. A 10-point Likert scale was used with anchors of 0 (“Not at all confident”) and 9 (“Extremely confident”) to plot the efficiency of the coaches, according to the mentioned constructs as their players perceived it to be.

Statistical Procedures

The statistical consultation service of the Northwest University determined the statistical methods and procedures for analysis of the research data. The statistical data processing package (StatSoft Inc., 2008) were used to process the data. Firstly, a power calculation was done to determine the validity of the sample size. The cronbach alpha was then used to determine the reliability of the questionnaire on this specific group. According to Cortina (1993), a value > 0.70 for cronbach alpha is considered as an adequate value for reliability. The descriptive statistics of each construct for each coach were then calculated. This was followed by an independent t-test which indicated the statistical significant differences of the four coaching efficiency constructs between big and small schools. The value \( p < 0.5 \) was not used to determine significant differences. Instead, practical significance was determined by means of Cohen ES (effect sizes): an ES of 0.8 or greater has been interpreted as “large”, an ES between 0.79 and 0.21 as “average” and an ES of 0.2 or less as “small”.

Results and Discussion

The results of the power calculation indicated a value of above 0.9 which according to Open Epi-Info. (2009) were considered to be very good. The cronbach alpha values were respectively: motivation = 0.91; game strategy = 0.86; technique = 0.87; and character building = 0.79. All values are to be considered high, because they are above 0.70 (Cortina, 1993). For each respective coach, the average score on each of the four constructs were determined by the results of all his respective players’ perceptions. The eight respective coaches’ results
from bigger schools on the four constructs are found in Figure 1. The 12 respective coaches’ results from smaller schools on the same four constructs are represented in Figure 2.

![Figure 1](image1.png)

*Figure 1. Descriptive statistics of players’ perceptions of coaching effectiveness in bigger schools.*

![Figure 2](image2.png)

*Figure 2. Descriptive statistics of players’ perceptions of coaching effectiveness in smaller schools.*

It can be seen that the coaches from the bigger schools tested average for all of the sub-scales (technique: 7.1, game strategy: 6.89 and character building: 6.98) except for motivation (5.84) which were below average
The smaller schools tested all average for all of the four subscales (motivation = 5.77; technique = 4.68; game strategy = 5.86; and character building = 5.39).

A similar study was done by Fung (2003) who found that high school coaches (combination of team sports) tested low (average below 6.86) in making decisions on strategy, analyzing other teams and motivating players and tested average (between 6.86 and 8.60) for developing players’ character. In contrast to this, Boardley et al. (2008) have done a similar study on adult rugby players between 18-35 years and the perception of those rugby players on their respective coaches indicated high effective levels for all four subscales with character building as the lowest on 6.85 and motivation the highest on 7.07. One explanation for the contrasting scores between the two studies could be that the coaches tested by Boardley et al. (2008) are more professional than the voluntarily coaches in high schools.

The results for big and small schools on the four constructs: motivation, game strategy, technique and character building are shown in Figure 3.

It is noteworthy to indicate that technique as sub-scale indicates a big difference between big and small schools. However, none of the categories indicated any practical significance (motivation $d = 0.016$, game strategy $d = 0.021$, technique $d = 0.001$ and character building $d = 0.075$). The possible explanations for these results are that the players have insufficient knowledge and experience of quality coaching. They would, therefore, have no frame of reference that could influence their perceptions. Another explanation is that all of the coaches took the responsibility to let their team take part in the rugby clinic which means that all of the players on the clinic were exposed to similar coaching which might have led to the absence of any practical significant difference.

**Conclusions**

Indications were found that volunteer coaching at high school levels might not be on standard, with most
coaches testing below average for the relevant efficiency constructs. There were also no practical significant differences found for coaching effectiveness between big and small schools, due to the absence of any influential frame of reference and the similar coaching they received during the clinic.

It is suggested that further research should be done on athletes from different schools the year after they were exposed to a professional coaching environment. Another suggestion is to include schools who did not partake in any form of rugby clinic or tour. The results of the study might be used by schools when they evaluate and compare their own coaches as well as to develop better coaching strategies.

Examinations

A shortcoming of the study might be that the group participants were not equally divided into big and small groups. The fact that most of these players were also never subjected to professional coaching might have prevented them from having a good reference point from which form their respective perceptions.

References


