A PRELIMINARY INVESTIGATION OF COACH BEHAVIOUR IN PROFESSIONAL RUGBY UNION

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ABSTRACT

The present study explored the behaviours and underlying philosophies of four professional coaches in rugby union. Four rugby union coaches were observed using the Rugby Union Coaching Observation Instrument at three 45 minute practice sessions throughout a season. Semi-structured interviews were also conducted after each observation to explore coaches' perceptions of the reasons underlying their behaviours. The use of instruction, praise and observation techniques were observed to be the most prevalent forms of coaching behaviours. These behaviours were employed to facilitate performance development, to develop effective coach-athlete relationships and to maintain a positive atmosphere. The implications of these findings for practice are considered. In particular, the need for coaches to reflect on their behaviours and their philosophy are highlighted.

Keywords: Coach-athlete relationships; Coaching; Interview; Observational analysis; Performance analysis.

INTRODUCTION

Rugby union within the United Kingdom has undergone significant changes associated with its professionalization over the past decade. To support the professionalization of rugby coaches, there is a need to conduct research to aid the development of models of coaching effectiveness. Consequently, there is a requirement for detailed investigations to find out what good coaches actually do (Cushion & Jones, 2001). Much anecdotal evidence (e.g., Fordyce, 2008) exists regarding coaching practices and behaviours within sports in the British Isles. However, few studies have actually researched the coaching process in rugby union. It is this gap in the literature which is to be addressed. Traditional approaches to assessing coaching have involved the categorizing of behaviour displayed during training or competition. Originally these behaviours were collated through questionnaires, which have since been developed into systematic observation techniques (Gilbert & Trudel, 1999). Brewer and Jones (2002) stated that the goal of observational research was to obtain a more holistic understanding of the

coaching environment. Systematic observation was argued by Potrac et al. (2000) to have contributed more to the understanding of the effectiveness of a coach than any other research approach. It has been used to describe the actual behaviours used by coaches, particularly those who are perceived to have been successful (e.g., Bloom, et al., 1999; Claxton, 1988; Cushion & Jones, 2001). This body of research has served to highlight the importance of specific coaching behaviours such as instruction and questioning.

In order to facilitate a more accurate impression of a coaching context, researchers have advocated the development of observation instruments, which are tailored to the characteristics of a given situation (Gilbert & Trudel, 1999). Brewer and Jones (2002) contributed to this need through developing the Rugby Union Coaches Observation Instrument (RUCOI). Brewer and Jones (2002) concluded that the RUCOI represents a more valid and sport specific instrument, which has the potential to help address the unique and contextual aspects of rugby union in a way which would not be possible using alternative instruments.

Research which relies solely on systematic observation has been criticized for being too simplistic (Abraham & Collins, 1998). Smith and Cushion (2006) argued that observation techniques should be supplemented by interviews. The combination of these methods hopes to consider the "what" and the "why" of the coaches' behaviour, in order for a greater understanding to develop. More recent studies have adhered to this recommendation for multi-method research (e.g., Brewer & Jones, 2002; Jones, Armour & Potrac, 2003; Jones, Armour & Potrac, 2004; Potrac et al., 2000; Potrac & Jones, 1999; Potrac, Jones & Armour, 2002).

These multi-method studies have added significantly to our understanding of the coaching process. Despite this significant progress, there remains great scope for further investigation. Although many studies have observed coaching behaviour, few have researched professional sports in general and professional coaches in rugby union in particular (e.g., Cushion & Jones, 2001; Miller, 1992).

The purpose of this study was to analyse the coaching behaviours of four professional English coaches in rugby union across various competitive levels within the practice environment. Periodic systematic observations throughout a season are combined with semi-structured interviews. Through this multi-method approach it was hoped that the qualitative findings would offer explanation and meaning to the quantitative research (Smith & Cushion, 2006). Coaches' feelings, thoughts and intentions are not all observable. From the interviews a greater understanding of what motivated the coaches' behaviour and what meaning was intended from these behaviours can be assessed. Added to this, the importance of examining in more depth the knowledge of expert coaches to provide insights for coach education is paramount (Cote, Salmela & Russell, 1995).

METHOD

Participants
The participants for this study were four male rugby coaches who all worked full time at a range of competitive levels within English rugby. The participants ranged in age from 29 to 45 (M = 36 years, SD = 4.64) years old and had all been involved in coaching rugby for over 10 years (M = 12.25 years, SD = 1.48). As a level of certification is not a prerequisite for coaching at any level within rugby union, the sample was not delineated by criterion qualifications or experience but by competitive level. A brief biography of each participant is outlined below. Participants have been labelled A-D in order to maintain their anonymity.

Coach A has 10 years' coaching experience at the highest level of professional rugby. He entered the coaching profession at the end of a successful professional playing career and coaches within the top English league. He holds national level coaching qualifications and strongly believes in creating an environment where players feel comfortable, supported and have the opportunity to develop individually as well as collectively. Coach A views the development of strong personal relationships with his players as an essential ingredient of effective coaching practice and judges his success according to his win-loss ratio.

Coach B coaches full time within the ages of 14 to 20 and has helped produce many younger players that have made the step up to senior professional rugby. Having coached professionally at academy level for five years, Coach B hopes to eventually progress to coaching at a more senior professional level. His main philosophy is to empower young players to develop an understanding for the game at the elite level. Coach B is also a qualified physical education teacher and a strict disciplinarian who pushes the players hard within their training environment to gain respect from their peers. Coach B believes that his principal role is to educate his players. As such, he strives to develop their technical and tactical abilities and understanding in a supportive working environment. His coaching sessions purely focused on skill development.

Coach C coaches at a semi-professional level two nights a week within the lower English rugby leagues. He highlights the importance of having an organised team with clear roles and responsibilities. Coach C strives to develop the players' technical skills, decision-making capabilities and general game understanding within his philosophy. To achieve this, the coach believes he must respect, value and support his players. Coach C's ultimate goal is to develop confident, secure players, who are able to think independently and express themselves creatively.

Coach D coaches at a school with players aged 16 to 18. He coaches them three times a week at a traditional rugby-playing school where the emphasis of success on the rugby field is important within the schools' culture. His main philosophies are developing players' core skills and helping them understand their roles within the successful team structure. Coach D judges his success upon both his win-loss ratio, but also upon the number of players he develops to play professional rugby after they leave the school.

Instrumentation

The present study used the Rugby Union Coaches Observation Instrument (RUCOI: Brewer & Jones, 2002). The RUCOI contains 23 different categories which relate to a range of different coaching behaviours including feedback (8), social (7), instructional (6), management (1) and uncodable (1). Examples of instructional behaviour include "use of first name" (e.g., use of first name when speaking directly to a player. "Get lower into contact Craig") or "concurrent instruction" (e.g., cues, reminders or instructions given during the actual performance of the drill, skill or play; "Now run left as the play develops. "Catch, secure, drive, pass" as play develops from a lineout). A pilot test was conducted in order to assess the reliability of the observer. Two training sessions of a rugby union coach, who was not one of the four participants, were filmed. Both authors coded the videos of these training sessions on two separate occasions over a two-week period as recommended by Van der Mars (1989). The 95% agreement rate between these codings exceeded the 85% value suggested by Siedentop (1991). This figure is calculated by comparing recorded behaviours to determine the overall percentage of behaviours which were coded in the same way. This provides some evidence of the validity of the observations.

Procedure

Approval for the study was obtained from the university's Ethical Advisory Committee prior to data collection, as was the informed consent of all participants. The four participants were observed three times during the rugby season (October, January and March). Each observation session lasted 45 minutes and took place on a typical training day, in keeping with existing systematic observational research (Cushion & Jones, 2001). The total time observed for each coach was 135 minutes. Prior to the sessions, the precise content of each coach's session was discussed. This informed the planning of the observation and enhanced the reliability of the process (Abrahams & Collins, 1998).

Using a touch screen Personal Digital Assistant (PDA), behavioural data was collected by the observer, standing on or near the practice area via a custom-built coding template that collates the Data via *SportsCode* analysis software. The software was designed as a user-friendly system to facilitate the collection and analysis of quantitative data. The PDA is configured to permit the recording of multiple and overlapping frequency behaviours (i.e., how many) and duration behaviours (i.e., how long) through touching the appropriate buttons. Sequential data is therefore recorded, grouped and filed as a time-based data record of discrete quantitative events. Participants requested that their coaching sessions were not filmed, hence live behavioural recording procedures were used. This method was deemed appropriate as live behaviour recording has been shown to be consistent with both audio and videotaped observational data (e.g., Lacey & Darst, 1984).

Data was recorded as event recording, thus each time an identifiable and predefined behaviour was observed, including any change in behaviour, a record was entered on the RUCOI coding template. Any behaviour lasting more than five seconds was recorded and marked again, but marked with a dash ("-") indicating that it was a continuation of a previous behaviour, rather than a new one (Cushion & Jones, 2001).

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In addition to this behavioural data, field notes were audio recorded by the observer to help explain and expand upon the data (Seagrave & Ciancio, 1990).

Each participant was interviewed on two different occasions. The first interview focused on collecting demographic information. The remaining interview was conducted directly after the final observation. A semi-structured approach was adopted based on the behaviours specified in the RUCOI. Participants were asked to consider if they had used each behaviour and to outline the rationale behind their behaviours. An overview of the actual behaviours used by the coach was then presented and discussed. Probes were employed to elucidate the thoughts underpinning these behaviours. All interviews were transcribed verbatim. A copy of the transcript was e-mailed to the coaches for them to check. These interviews ranged from 15-45 minutes.

Data Analysis
Each behaviour category was analysed to give a total number of behaviours and a percentage of the total behaviours observed. However, as demonstrated in other similar observation studies and noted by Lacy and Darst (1984), including the instances of "use of the first name" as an independent category, decreases the percentage of the other behaviours observed and therefore distorts their values. This use of first name category often accompanies other categorized behaviours. Thus, in this study when calculating the percentage of each behavioural category, the total of each category was divided by the total number of behaviours, excluding the use of the first name category. The number of behaviours accompanied by the use of a first name was then achieved by dividing the number of first name coded by the total number of behaviours. Data was also calculated at Rate per Minute (RPM). The RPM was calculated by dividing the total for each category by the total number of minutes observed. For further analysis of the event recording data, the frequency of data was examined to compare percentages of exhibited behaviours across the different participants.

In relation to the interview data, the authors read through the transcripts until they became familiar with the content. The authors then read through the transcripts to identify relevant quotes or meaning units which were deductively categorized into the behaviours contained in the RUCOI. Grounded theory procedures and techniques, as outlined by Strauss and Corbin (1998), were used to inductively analyse the interview data (Saury & Durand, 1998) within each behavioural category. Data was broken down into meaningful units, which were then grouped to highlight themes that depicted the thoughts underlying the observed behaviours.

RESULTS & DISCUSSION

This section analyses the results for the quantitative systematic observation data ("what") and the qualitative interpretive interview data ("why"). Thus, "what" and "why" data will be interwoven in an attempt to further understand the nature of coach behaviour (Cushion & Jones, 2001; Potrac et al., 2002). The results from the

quantitative study indicated that in 540 minutes of observation 5,618 behaviours were recorded. The frequency (RPM) and percentage breakdown for each behaviour are shown in Table 1.

Table 1: Total frequency, rate per minute and percentage of behaviours for all coaches, ranked in descending order of most frequently used behaviours

TOTAL - All Coaches

BEHAVIOUR	FREQUENCY	RPM	%
Use of name*	1,024	1.90	
Praise	767	1.42	16.70%
Conc. Instruction **	529	0.98	11.52%
Pre instruction **	449	0.83	9.77%
Observation	350	0.65	7.62%
Hustle	308	0.57	6.70%
Praise skill attempt **	234	0.43	5.09%
Conc. Praise **	233	0.43	5.07%
Conc. Correction **	223	0.41	4.85%
Technical explanation **	168	0.31	3.66%
Correction **	151	0.28	3.29%
Questioning **	148	0.27	3.22%
Conc. Scold **	147	0.27	3.20%
Conc. + feedback **	130	0.24	2.83%
Skill feedback **	128	0.24	2.79%
Scold (general)	121	0.22	2.63%
Assistants	105	0.19	2.29%
Management	101	0.19	2.20%
Scold (skill) **	94	0.17	2.05%
Positive demo **	90	0.17	1.96%
Humour	57	0.11	1.24%
Uncodable	43	0.08	0.94%
Negative demo **	18	0.03	0.39%
Total	5,618		100.00%
Total not including*	4,594		

* "Use of name" excluded from total to avoid skewing the results
** Categories included under "Instruction"

Table 2 provides an individual breakdown of the observed coaching behaviours for each coach who participated in the study. While it emphasizes a number of similarities, such as the high levels of instructional behaviours utilized, it also serves to highlight some interesting differences between the coaches. For example, Coach B demonstrated the most instances of hustle (8.15%) and scold (general) (5.75%) while demonstrating the least praise (14.86%). In comparison Coach A demonstrated the most observation and Coach D the most praise. Coach B's praise to scold ratio was approximately 2:1, while

the average for the other three coaches was approximately 7:1.The results are presented with reference to the most observed behaviours: instruction, praise and observation.

Table 2: The behaviours utilized by coaches A, B, C and D as recorded by the RUCOI

Coach comparison - total of all sessions

Behaviour	A	B	C	D
Use of name*	271	256	228	269
Pre instruction **	100	131	84	134
Technical explanation **	36	59	25	48
Conc. instruction **	129	151	106	143
Conc. + feedback **	31	22	45	32
Conc. praise **	41	41	78	73
Conc. correction **	55	77	49	42
Concurrent scold **	19	69	20	39
Skill feedback **	27	28	31	42
Praise at skill attempt **	46	55	59	74
Scold (skill) **	8	40	14	32
Correction **	27	53	28	43
Questioning **	32	39	36	41
Positive demo **	6	19	25	40
Negative demo **	1	4	6	7
Hustle	47	102	78	81
Praise	190	186	194	197
Scold (general)	7	72	10	32
Humour	3	14	21	19
Management	12	27	23	39
Assistants	19	16	42	28
Uncodable	3	12	18	10
Observation	128	35	95	92
Total	1,238	1,508	1,315	1,557
Total not including*	967	1,252	1,087	1,288

* "Use of name" excluded from total to avoid skewing the results
** Categories included under "Instruction"

Instruction

The behaviours related to "Instruction" accounted for nearly two-thirds of all coded behaviours (59%). The relatively high use of these behaviours supports the findings of previous research (Cushion & Jones, 2001; Potrac, Jones & Cushion, 2007). Within the RUCOI these instructional categories included the following; "pre instruction", "technical explanation", "concurrent instruction", "concurrent positive feedback", "concurrent praise", "concurrent correction", "concurrent scold", "positive skill feedback", "praise at skill attempt", "scold (skill)", "correction", "questioning", positive demonstration" and

"negative demonstration". The categories of "pre instruction" and "concurrent instruction" represented 21.29% of all the behaviours recorded, while the categories of concurrent correction and hustle represented 4.85% and 6.70% respectively.

Coaches explained that instructional behaviours were used to facilitate performance development amongst the players. Coach B commented and contrasted that when dealing with junior athletes "winning was important at the professional level, but not a must at age group level". Coach C, who coached at a senior level, commented that winning "meant everything" and was paramount for his players' success. Similarly, Coach A revealed that winning was "massive" within his coaching philosophy. This shows the difference in the views held by these coaches. Coach D in contrast, who coached at school level, believed that "focusing on performance will bring the necessary results", supporting the view that performance was of more importance than winning at junior levels.

Coaches A and C both emphasized that their own performance would be judged based on the success of their team. They also perceived that instructional behaviours were the most effective way of achieving success. Coakley (1994) suggested that the focus on outcomes sees professional coaches strive to control as many variables of the coaching process as possible, notably instruction. Coach B, who also used relatively high levels of instruction, discussed performance development in terms of the players' progression to senior teams rather than on the performance of the team. This illustrates how performance can be viewed based on different criteria by coaches.

The interviews also revealed that the coaches used instructional behaviours to develop a relationship with their players (Bloom, Crumpton & Anderson, 1999). For example, Coach C commented that important characteristics of effective coaching, such as "gaining respect" and "the ability to treat people differently", can be demonstrated through instructional behaviours. Coach B also explained "it is important for me to get to know my players personally and I can do this through giving them good instructions". Developing respect and the ability to adapt to an athlete's preferences have been highlighted as important strategies for maintaining the quality of a coach-athlete relationship (Rhind & Jowett, 2010). Coaches were observed using different behavioural instructions, tones of voice and general attitudes towards different players.

Coaches also described how instructional behaviours are used in line with a democratic philosophy. Coaches B, C and D thought of themselves as being democratic coaches, whereby they made the decisions based upon suggestions by the players. Coach B gave more instruction (62.94%) and asked the second most questions of all the coaches (3.12%). However, the majority of this instruction was observed to be preceded by a scold behaviour at skill (3.19%) or general scold (5.75%). Consequently, Coach B may have considered himself a democratic coach who involved his players in decision-making processes, however, the behavioural data collected indicates a more autocratic style. These findings may reflect the fact that Coach B's sessions were purely skill-based sessions involving the repetitive rehearsal of simple drills. Coakley (2002) noted that more democratic methods of coaching are rarely used, as coaches try not to be perceived as being influenced by others.

The methods of coaching used and the high levels of instructional behaviour recorded could also be explained as a result of a power struggle existing between player and coach (cf. French & Raven, 1959). As discussed by Potrac, Jones and Cushion (2007) the developing and demonstration of "informational power" was essential to a coach gaining the respect of their players. Added to this, one could argue that the power and control a professional coach has over many facets of his athletes' lifestyle and the high levels of instruction demonstrated are used in an attempt to maintain this power structure. Considering that a professional coach's success is often determined by their team's win to loss ratio, coaches' high levels of instruction and control could be used to maintain this power and success.

Praise

As with previous research (e.g., Potrac, Jones & Cushion, 2007), praise was also found to be a frequently used behaviour in this study. Aside from the combined instructional behaviours, praise was the single most frequently used behaviour (16.63%). The overall praise to scold ratio (5:1) was smaller than previously reported by Potrac, Jones and Cushion (2007). In addition, significant positive reinforcement can be noted from the increased positive modelling (1.96%) observed in comparison to negative modelling (0.39%). This frequent use of praise was considered important by Zourbanos, Hatzigeorgiadis and Theodorakis (2007) who highlighted the relationship between athlete self-talk and coaches' behaviours. A more supportive environment has also been linked to higher levels of self-esteem and team cohesion (Smith et al., 1983).

In this study, the frequencies of praise were greatest for coach D (197 occurrences). It could be argued that, at the youth level, the use of praise is paramount to instil confidence in young players. However, the use of continual praise, if not specific and meaningful for the players, may actually be detrimental (Cushion & Jones, 2001). Tharp and Gallimore (1976) believed that high-level performers became highly motivated toward specific goals rather than simply through the use of praise. With this in mind, analysis of Coach A shows that he used the highest proportion of praise (19.65%) with his full-time professional players. Coach A consistently praised his players in between high frequencies of observation (13.24%) and appeared to have his players focused upon the specific goal of the session.

When asked about his use of praise, Coach C explained that it helped to promote "enjoyment" and a "positive atmosphere" amongst the team. Results from previous studies (Cushion & Jones, 2001, p. 368) reported that youth coaches tried to "cultivate a positive environment for the players" in the hope of fostering enthusiasm, favourable attitudes and increased perceptions amongst the players and their abilities.

Coaches also reported that praise was used to facilitate performance development. This is evident by the levels of positive demonstrations (1.96%), positive skill feedback (2.79%) and praise at skill attempt (5.09%). These figures are equivalent or greater than those reported in related research (Cushion & Jones, 2001; Smith & Cushion, 2006).

Observation

Observation represented the second largest (excluding combined instruction) behaviour displayed by the coaches in this study. Miller (1992, p. 140) commented that it was important for players to have spells of a session where little is said and they can simply focus on their individual skills and not constantly "feel the tension of the coaches' comments". It is seen as good practice if a coach follows a pattern of intervention followed by observation, with instruction given when needed (Potrac, Jones & Cushion 2007).

Coach A, the only coach working in a full-time, professional environment, used observation the most frequently (13.24%); from watching Coach A in practice it was clear to see that his use of observation and silence was often a stronger behaviour than any instruction communicated to the players. Observation by the coaches often meant they were quietly satisfied with the players' performance and were analysing their actions, while allowing the players time to engage in their own sensory feedback. It could be argued that Coach A needed not to intervene or instruct his players as much as the other coaches. Additionally, it could be thought that Coach A was comfortable with his players, he had their respect, trust and understanding and therefore did not need to constantly communicate to them. Comments from Coach A further illustrate his style of coaching whereby "facilitating learning, monitoring and assessing" were identified as his main roles as a coach. Coach A was very comfortable with his coaching style and philosophy, and his pattern of appropriate intervention followed by observation was consistent with previous observations of successful coaches (e.g., Gallimore & Tharp, 2004).

A clear difference in the use of observation was revealed in the percentages shown across the two playing levels. Coaches A and C who coached at the senior level used observation more than twice as much as the coaches at the age group level. This may reflect the nature of the sessions and the types of tasks being undertaken by players at different competitive levels. Interestingly, the coaches did not discuss the use or importance of observation during the interviews until they were directly asked about this behaviour in the final interview. The coaches did not perceive it as a coaching strategy, more as simply taking a break and as a way of ensuring that they do not talk too much during a session.

CONCLUSIONS

Although significant differences were found in certain behaviours when compared across the levels, the quantitative data tended to echo those of previous research emphasizing the predominant use of instructional behaviours, the use of praise and the use of observation as a conscious coaching strategy (Cushion & Jones, 2001; Miller, 1992; Gallimore & Tharp, 2004). The qualitative data highlighted a number of explanations for the use of instruction and praise as well as a lack of awareness regarding the use of observation.

Potrac et al. (2000) have proposed that expert-coaching knowledge is domain or sport specific, i.e., the technique, tasks, mental skills and physical knowledge required to coach each sport necessitates the development of sport specific knowledge. Although more general concepts may be transferable between sports, the behavioural data and best-practice coaching knowledge associated with that sport may be different to other sports. The present study therefore contributes to this literature through adopting a sport specific approach which employed both systematic observation and interviews.

Implications for practice
The present study would advocate coaches reflecting on the actual behaviours they employ during training and the underlying rationale for the behaviours. Considering "what" they do and "why" they do it can provide coaches with a useful educational experience. All of the coaches in the present study commented on the benefit of reflecting on their training sessions and of having an opportunity to discuss their behaviour and philosophy in depth.

Players regularly receive feedback from their coaches on their performance, yet the coach rarely receives feedback regarding his/her own coaching effectiveness. If coaches can evaluate their own skills, then their ability to deliver accurate feedback to athletes may significantly improve. Within this study each of the four coaches were given feedback after the three sessions were complete. This feedback was not designed to critique the coaches, but seen as a gesture of gratitude, which would bring to their attention their specific coaching behaviours. The ability to report back to the coaches with statistics on their coaching behavioural performance is considered a very significant development for the future. Although the behavioural data produced may mean little on its own, the ability to be able to compare and contrast the coach's data to their previously analysed sessions and to other coaches was found to be beneficial.

The present study has implications for researchers conducting systematic observations within the sporting context. The PDA and software involved within this study represent a valuable coach analysis tool that can be easily administered at little expense. It removes the need for pen and paper recording with minimal training. It stores the data and facilitates analysis avoiding the potential time and labour-intensive process of data entry which may be associated with more traditional methods.

Limitations and future directions
Situational limitations that developed from data collection surrounded the outline and structure of the coaching sessions. One could not be certain that the coaching session being observed was a "typical" session produced by that coach. Factors which could affect the structure of the coaching session are which day of the training week it is and whether the session being observed is focusing on attack, defence or another aspect of play. Additionally, the significance of the training week could also affect the coaching behaviours demonstrated. If the session being analysed was during a more important week than usual in the coach's season (playoffs, preseason) then this would almost certainly influence the coaches' behaviours.

The fact that training sessions were not video taped ensures that the accuracy of the data relies on the live observations. As a result, the reliability and validity of the data cannot be assessed through having the data recorded by an independent researcher. Furthermore, there is the potential for the coaches' behaviours to be influence by the presence of the researcher. The coaches may not have acted in a way which reflects their typical coaching behaviours.

This study only focused upon four professional coaches and so the data cannot be generalized to all professional coaches working in rugby union. Indeed when considering this study, assessments of the coaches' behaviours can only be made in relation to other coaches in similar settings in rugby union. To develop a complete understanding of coaching behaviours remains a paramount area for future research (Potrac et al., 2000) as, without it, a fully accurate conceptual model for effective coaching cannot be theorized. Lastly, although initial evidence of the content validity of the RUCOI has been reported (Brewer & Jones, 2002), there remains a need to further demonstrate the validity of this measure.

There may be merit in exploring the antecedents of rugby union coaches' behaviour. This may include individual factors (e.g., age, qualifications, gender, experience), relational factors (e.g., age difference, gender composition and relationship length) and situational factors (e.g., organizational culture, competitive level and time of the season). Research is also required to investigate the consequences of these coaching behaviours. This relates to possible outcomes related to the player (e.g., performance, satisfaction, motivation, well-being) or the team (e.g., performance, group cohesion, role clarity).

In conclusion, these coaches were observed to use a range of behaviours with a focus on instruction, praise and observation. The rationale behind such behaviours varied across these coaches. This emphasizes the need for, and benefit of, combining systematic observation and interviews. Although two coaches may be perceived to enact the same instructional behaviour, an interview can reveal significantly different reasons underlying the behaviour. Through combining these approaches one can develop a more comprehensive understanding of the coaching process.

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