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Research article

The Value of Indirect Teaching Strategies in Enhancing Student-Coaches' Learning Engagement

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Abstract

This study aimed to examine the indirect teaching strategies adopted by a coach educator in terms of promoting student-coaches' engagement in a positive and active learning environment. The participants were an expert coach educator and seven student-coaches from an academic coaching setting. A mix method approach was used to collect data. Whilst video-recording and participant observations were used to collect data from the lessons, focus groups were adopted to recall the perceptions of student-coaches. The results showed that indirect teaching strategies (i.e., asking questions, showing signs of autonomy by monitoring the pace at which they completed tasks and actively engaging in the search for solutions to tasks) implemented by the coach educator promoted a supportive and challenging learning environment which, in turn, encouraged student-coaches to be more actively involved in the lessons. Additionally, the affective aspects of the relationship established with student-coaches (tone of voice, gestures, facial expressions, eye contact, physical contact and humor) led them to feel confident in exposing their doubts and opinions, and in learning in a more autonomous manner. Moreover, the practical lessons proved to be crucial in helping student-coaches to reach broader and deeper forms of understanding by allowing the application of theory to coaching practice. In conclusion, this study reinforces the value of indirect teaching strategies to stimulate an active learning environment. It further highlights the value of practical learning environments to better prepare neophyte coaches for dealing with the complex and dynamic nature of their professional reality.

Key words: Coaching, coach education, teaching approach, learning

Introduction

Over the past two decades, the education of coaching practitioners has become a topic of interest to many researchers (Jones et al., 2012; Mesquita et al., 2010; Mesquita et al., 2014; Nelson et al., 2013). Although coach education has been identified as a "key vehicle for raising the standard of coaching practice" (Nelson et al., 2013, p. 205), recent research has highlighted that its provision is often far from optimal and its impact is sometimes limited (Cushion et al., 2010; Mesquita et al., 2010; Nelson et al., 2013).

Traditionally, coach education programmes have been predominantly delivered within a classroom-based environment, centered around direct teaching, and often

distant from the realities of coaching practice, contributing to a considerable gap between theory and practice (Jones, 2007; Jones et al., 2011; Nelson et al., 2013). As a result, student-coaches often fail to transform the conveyed information into a personally meaningful experience (Chesterfield et al., 2010; Nelson et al., 2013; Partington and Cushion, 2011). Taking into account the intricate and complex nature of coaching, such coach education programmes stretch a narrow and shallow conceptualization of the coaching role, ill-equipping neophyte coaches to deal with their professional demands (Jones, 2006). Instead, coach education must aid coaches in being reflective and critical towards their own and others' work, questioning and challenging current practices, habits, routines, values and beliefs (Cushion, Ford and Williams, 2012).

Therefore, sport coaching courses should adjust their focus from direct teaching towards indirect teaching, in which students are encouraged to embark in active learning, a process that requires collaboration and personal understanding (Metzler, 2011). Direct teaching consists of teachers making all decisions about the knowledge 'transmitted' to students and closely overseeing their engagement in prescribed tasks. On the other hand, indirect teaching tends to "promote more student thinking and creative movement exploration by posing questions and problems to students rather than telling (or showing) students how to move in a certain way" (Metzler, 2000, p. 142).

Therefore, indirect teaching is closer to constructivist theories of learning (Morgan, 2007), where facilitators (e.g. teachers) challenge students to think in critical ways, make decisions and solve problems (Barrows, 1996), especially when realistic and problematic learning scenarios are adopted (Davids, Button and Bennet, 2008). Here, questioning has been considered one of the most powerful instructional strategies in eliciting cognitive efforts, problem solving, creativity, and critical thinking (Entwistle, 2000; Entwistle and Entwistle, 1991; Fenwick and Parsons, 2000; Hammerman et al., 1994; Knight et al., 1997; Otero and Graesser, 2001; Sachdeva, 1996; Thomas, 2000; Metzler, 2011). Nevertheless, as argued by Entwistle and Entwistle (1991), the type of questions set by a teacher affects the form of understanding developed by students. For instance, convergent (i.e. close-ended) questions require less knowledge and ability from the respondents

who are required to provide a straight forward (e.g. yes/no) response. On the other hand, divergent (open-ended e.g., how/what/why) questions (Ghaye, 2001) entail multiple answers to a single question and, therefore, require careful organization within a logical structure (Entwistle and Entwistle, 1991). Thus, these higher-order questions (i.e. divergent questions) (Metzler, 2011) allow the learner to make personal sense and meaning of information exposed to, making the linkage between new information and previous knowledge and experience. The instructional directness profile displayed by teachers includes key factors (e.g., the type of questioning adopted and the degree of autonomy in problem-solving conceded to students in lessons) that distinguish direct from indirect teaching approaches (Metzler, 2011).

In the same vein, affective teaching behaviors (e.g. teachers' facial expressions, gestures and humor) have been considered vital indirect teaching strategies (Jung and Choi, 2015; Theodoulides and Armour, 2001) in promoting student engagement in the learning process. Indeed, teachers leave permanent impressions on students, depending on the way they interact with them. This may be by using methods such as gestures, touch, tone of voice, among others possibilities. It is widely acknowledged that a positive affective connection between teacher and student is needed in order to enhance student motivation, confidence and, consequently, their ability to engage in problem solving (e.g. Jung and Choi, 2015; Noddings, 2003; Solmon, 1996; Vidoni and Ward, 2009).

To date, little research has concerned itself with the relevance of indirect teaching approaches in sports coaching (Jones et al., 2013; Potrac et al., 2002; Ronglan and Aggerholm, 2013). Moreover, the majority of studies have been descriptive in nature, whilst embracing the examination of coaches' behavioral profile (Cushion and Jones, 2001; Lacy and Darst, 1989; Lacy and Goldston, 1990; Mesquita et al., 2008; Potrac et al., 2002; 2007; Smith et al., 1977; Pereira et al., 2010). Despite its usefulness in identifying general patterns of coaching behaviors, such research has painted an unproblematic portrait of coaching activity and coach education (Jones et al., 2009; Mesquita et al., 2014). In line with recent literature, more interpretative research is required to gather an in-depth understanding of coach education and learning, where the real and realistic needs of students are better monitored, understood and evaluated (Jones et al., 2012; Mesquita et al., 2014).

In addition, the short formal coach education courses that characterize most programmes all over the world fail in the process of changing coach behavior and practice, given that the majority of knowledge is gained in the classroom, instead of experientially (Trudel and Gilbert, 2006). Indeed, the suitability of 'weekend education programs' is dubious if coach learning and development is to be augmented with coaching experience (Trudel and Gilbert, 2006). It seems necessary to further develop longitudinal research into coach education to better identify and understand the variety of learning experiences over a considerable period of time (Cushion et al., 2010). The advantage, here, is in offering

a more well-informed understanding of coaching experiences, identifying real needs that can support further development of a coach education curriculum.

The purpose of this study was twofold. Firstly, it aimed to examine the indirect teaching strategies used by a coach educator in terms of promoting student-coaches' engagement in a positive and active learning environment. Secondly, it aimed to explore how student coaches perceived the impact of these strategies on their learning engagement.

Methods

A single interpretative (e.g. Yin, 2009; Merriam, 2001) case study was employed to capture the indirect teaching strategies used by the coach educator in his sport coaching lessons. Cassell and Symon (2004) described the appropriateness of a case study in which the researcher attempted to "understand everyday practices and their meanings to those involved, which would not be revealed in brief contact" (p. 325). The use of a case study was considered especially suitable in this context as it enables a detailed contextual analysis of a particular individual (Flyvbjerg, 2006; Thomas, 2011; Yin, 2009).

Context and participants

The study took place at the Faculty of Sport of the University of Porto (FADEUP), which is acknowledged as a formal and academic coach education institution in Portugal (Mesquita, 2013). The module in question (i.e. Methodology I – volleyball) is part of the undergraduate programme. In this program, students are required to specialize in one of four available pathways in their second year of study. These are exercise and health, sport and special populations, sport management and sport training. In the sport training pathway, students select one of seven sports (athletics, gymnastic, swimming, basketball, handball, football and volleyball). Students then have their sport coaching lessons (unit of Methodology I) based on the particular sport chosen. In the following year (i.e. third year of study), student-coaches have an internship in a sport club setting (in the sport chosen in methodology I), which is part of the units Methodology II and III (Mesquita, 2009).

The aim of the module under investigation (Methodology I – volleyball) is to provide specific volleyball content knowledge as well as pedagogical and interpersonal skills that are developed within theoretical and practical lessons (Mesquita, 2009). Here, practical lessons were selected for analysis as both researchers and coaches acknowledge their potential in promoting "learning by doing", a learning method which helps to develop craft knowledge (Erickson et al., 2008; Mesquita et al., 2011; Nelson et al., 2013). Moreover, practice-based curricula should occupy a central place in coach education since they explicitly link theory and practice, a requisite for developing a conceptual understanding of the subject (Entwistle and Peterson, 2004). In addition, such learning contexts offer relevant content knowledge that can be easily transferred to the daily messy but real-life problems of coaching (Bowes and Jones, 2006;

Chesterfield et al., 2010; Guskey, 2002; Jones et al., 2012; Jung and Choi, 2015; Nelson et al., 2013).

Purposive and convenience sampling criteria (Patton, 2002) were used to select the coach educator and the seven student-coaches (three women and four men aged between 24 and 34 years old) examined in this study. The coach educator was selected because he is considered an “information-rich” case (Morse, 1994; Patton, 2002; Spradley, 1979) due to his specialist knowledge of the research issue under investigation as well as his capacity and willingness to participate in this project. He had been involved in coach education both in an academic (as a lecturer in FADEUP) and non-academic (as a coach educator for the Portuguese Volleyball Federation) setting for 10 years. As a coach educator, he is recognized by the Volleyball coaching community for giving students a central role in the learning process, which is characterized as student-focused and learning-oriented (Entwistle, 2000). It was therefore expected that the coach educator’s enthusiasm for teaching, and particularly for educating people, would produce meaningful material with which to inform theoretical coaching constructs, while also maintaining individual distinctiveness. In addition to this experience, he is also a successful volleyball coach (with 17 years of experience) holding the highest level of coaching certification in Portugal (level III) and a degree assigned by the International Volleyball Federation (FIVB).

Ethical approval for the research project was granted by the host university after consent was obtained from all participants. In addition, participants were informed about the purpose of the study, the scope of their involvement, and guaranteed anonymity during the process, including the recording and dissemination of results (through the use of pseudonyms). Moreover, the coach educator provided consent for his professional roles to be displayed in the study, acknowledging that this could increase the likelihood of him being identified. The participants were informed that they had the right to withdraw at any moment during the study.

Data collection

Since case study research relies on multiple sources of evidence (Yin, 2009), a mixed method approach was used in this study. This approach comprised a combination of quantitative and qualitative data in order to allow for a deep understanding of the coach educator’s instructional behaviors and student learning experiences. Data concerning the coach educator’s indirect teaching strategies were collected through participant observation, field notes and video/audio recording, while student-coaches’ perceptions were gathered through focus group interviews.

Participant observation is a form of subjective sociology (Hamersley and Atkinson, 1983) where researchers seek to understand the social world from the participants’ point of view. The main purpose of this method is to explore the “hows” and “whys” of human behavior in a particular context, through immersion and participation (Emerson, Fretz and Shaw, 2001). The field notes focus on “critical incidents” (Mesor, 1985) and

“serve the crucial role of connecting researchers and their subjects in the writing of an ethnographic report” (Wolfinger, 2002, p. 92). In this study, field notes were completed by the first author during and immediately after each lesson. Here, the intention was to notice and report the most sensitive nuances of on-going teaching and learning interplay, describing the indirect teaching strategies used by the coach educator.

In order to provide an accurate analysis of the behaviors and interactions between coach educator and student-coaches all lessons were video and audio recorded. For this purpose, a camera (Samsung digital-cam VP-D903iPAL) and a FM wireless microphone (Fonestar MSH-135) were used. The camera was placed in a strategic location and captured the coach educator’s and students’ behaviors as well as the on-going activity. The microphone was worn throughout the session and allowed for the direct insertion of verbal interventions into the video stream.

Focus group interviews allowed student-coaches to develop an interactive and reflexive dialogue about the indirect teaching strategies used by the coach educator, and their impact on student-coaches’ learning engagement. This method is particularly useful for generating insights that would be less accessible without the interaction dynamic produced in a group setting (Morgan, 1988). Interpretative focus group interviews were conducted as they have the potential to explore, examine and uncover the interactions, perceptions and subsequent actions of the participants (Purdy et al., 2009; Stake, 1995). The interviews were semi-structured in nature, resulting in the use of probes to clarify and elaborate on significant issues (Patton, 2002). The focus groups were facilitated by the first author. The design of the study was then organized according to a spiral-like logic, alternating the observation of practical lessons (participant and video recorded observations) and focus group interviews. All practical coaching lessons (10 lessons, each lasting 45 minutes) were video recorded and directly observed every week by the first author. The focus group interviews were completed after the third, fifth, seventh and tenth lessons, resulting in a total of 998 minutes of conversation.

Data analysis and validity

Quantitative data. Video and audio recordings were firstly checked to ensure familiarity with the material. This information was then examined in light of the purpose of the study to guarantee its significance and relevance (Moraes, 1999). The directness profile used by coach educator (Metzler, 2011) was quantitatively analyzed. As no single instrument completely suited the range of questions of this study, observational categories were selected from different instruments that met the criteria of content and construct validity. The categories of Pacing were adopted from Metzler (2011) and the categories regarding the Autonomy in Problem Solving and Type of Questioning were based on the study of Pereira et al. (2010).

In order to ensure the validity of this systematic observation tool, three experts assessed and acknowledged the accuracy and exhaustiveness of these

categories. The rate of agreement between their records achieved a consistency score of 98.3%. The observed categories of coaching directness profile and type of questioning are presented in Table 1.

Table 1. Coaching directness profile.

QUESTIONING
REFERENTIAL
<i>General Questioning</i> – The teacher asks questions about management, volitional or understanding issues without providing information about substantive learning contents.
<i>Specific Questioning</i> – The teacher asks specific questions about the substantive learning contents (technique, tactic, mixed).
FORM
<i>Individual Questioning</i> – The teacher asks questions to one student only.
<i>Class Questioning</i> – The teacher asks questions to all students.
<i>Group Questioning</i> – The teacher asks questions to two or three students.
PACING
<i>Teacher centered</i> – The teacher determines the beginning, the rhythm and the end of the task.
<i>Student centered</i> – The teacher determines the beginning of the task but the students control its rhythm and ending.
AUTONOMY IN PROBLEM SOLVING
<i>Partial Autonomy</i> – The teacher prescribes the answer but not the solution. The students have to find the solution by themselves.
<i>Full Autonomy</i> – The students choose the answer and solution. The students have to understand what is requested and create an answer according to the circumstances.
<i>No Autonomy</i> – The teacher prescribes the action and the solution.

Descriptive statistics were adopted to calculate the frequencies and percentages of each category. Inter and intra-observer agreement rates (Bellack et al., 1966) were used to determine the reliability of the observations. 30% of the lesson observations were analyzed (a higher value than the minimum, i.e. 10%, described in literature, Tabachnick and Fidell, 2006). Agreement rates varied between 97.5% and 100%.

Qualitative data. The data collected from participant observation, field notes and focus group interviews were transcribed verbatim and checked for accuracy by a second member of the investigation team. The transcripts were read several times and notes were placed in the margins to reflect thoughts and interpretations of the researchers (Smith and Osborn, 2003). Subsequently, qualitative data analysis was performed using thematic analysis. The analysis began by a coding phase (i.e., creating units that contained one idea or piece of information) undertaken until no more themes emerged from the data (Tesch, 1990). In this phase, researchers' notes were transformed into emergent themes by making associations between actual participant statements and researchers' interpretations (Smith and Osborn, 2003). The following phase (i.e., focusing phase) consisted of grouping units of information with similar meanings into more comprehensive themes, which allowed organization and interpretation of the unstructured data (Tesch, 1990). The content of these

themes was then re-examined carefully in order to search for commonalities and uniqueness according to the meanings by which they were categorized (Tesch, 1990).

The first author also maintained a reflective journal before and during the data collection and analysis stage that represented her thoughts, reasoning and actions throughout the duration of the study. This strategy was implemented in order to minimize researcher bias in terms of imposing personal views onto participants' personal experiences (Shaw, 2010; Smith and Osborn, 2003).

The credibility of the data was ensured through following two main strategies. First, the participants were asked to review their transcripts for verification, which allowed them the opportunity to add, delete, or rework any data that they felt did not accurately reflect their intended communications (Miles and Huberman, 1994). All participants agreed with the accuracy of their original communications. Second, two members of the research team were involved in a collaborative approach within the interpretational analysis, with regular meetings to discuss the emerging categorical organization system. This important process contributed to the trustworthiness of the data, ensuring interpretative validity while minimizing the risk of individual research bias (Silverman, 2000).

Results

Promoting student-coaches' engagement through questioning

The process started on a passive note – the learning behaviors assumed by student-coaches during the first lesson showed an agreement with nearly all judgments and stances assumed by the coach educator, thereby no doubts arose, there were no questions at all regarding the content they were being taught. As the study progressed, the coach educator created an environment where student-coaches recognized the need to critically analyze the information they were presented with.

Over time, the coach educator started encouraging the student-coaches to verbalize what they were thinking, especially from the second lesson onwards. To reach those goals, the coach educator used *Questioning* as the primary strategic pedagogical tool to promote a more active engagement of student-coaches with their own learning process. Table 2 displays the use of *Questioning* by the coach educator in the practical coaching lessons. Overall, the coach educator conveyed 935 units of *Questioning*, corresponding to a rate of 2.07 questions per minute.

The questioning assumed different characteristics according to the phase of the student-coaches' ongoing learning process. Accordingly, from the second to the fourth lesson, the coach educator questioned student-coaches repeatedly, and these questions assumed a general profile (i.e. General Questioning) in order to facilitate possible answers. The following interaction illustrates the coach educator's effort in actively engaging student-coaches:

Filipe [the coach educator]: Come here y'all, please.
 Ana, let me know what you think about the rotational system in defense. **Ana:** I think it is a good system.
Filipe: Why, Tiago? **Tiago:** ... Not sure! **Filipe:**

Ricardo, and you? Tell me some characteristics of this system. **Ricardo:** I think it's more appropriate to cover the zone behind the block. **Filipe:** What does that mean? For what type of teams or game style is that more appropriate? What do you think, David? **David:** Perhaps for teams with low-reaching blocks... **Filipe:** Did you hear that, Joana? Do you agree? (2nd lesson, video recording)

Table 2. Descriptive results of the coach educator directness profile.

Questioning		Frequency	Percentage
General	Individual	50	5.35%
	Group	267	28.56%
	Subgroup	20	2.14%
	Total	337	36.05%
Specific	Individual	209	22.35%
	Group	356	38.07%
	Subgroup	33	3.53%
	Total	598	63.95%
Total	Individual	259	27.70%
	Group	623	66.63%
	Subgroup	53	5.67%
	Total	935	100%
Pacing			
Teacher centred		3	6.82%
Student centred		41	93.18%
Autonomy			
Partial Autonomy		25	56.81%
Total Autonomy		17	38.64%
No Autonomy		2	4.55%
Total		44	100%

Between the second and fourth lessons, student-coaches proved to be increasingly more active, questioning and answering their colleagues and coach educator alike. Student-coaches showed them to be more enthusiastic for playing an active part in the debate, for having a say, knowing that others were listening to them. From this initial achievement, the coach educator moved to another stage, providing progressively more specific questions, more closely related with the practical, concrete demands of the game (*Specific Questioning*). Therefore, most questions (63.95%) were specific, i.e. subject-related. This was a regular tendency between the fifth and tenth lesson.

The coach educator's desire to involve all student-coaches in the discussion was evident from the greater use of *Class Questioning* (66.63%) in comparison with *Individual Questioning* (27.70%) and *Group Questioning* (5.67%). The relatively high application of *Individual Questioning* was a result of directly questioning the less participative student-coaches.

The following interaction happened in the third lesson and is illustrative of the coach educator's endeavor to question student-coaches about specific coaching topics, and to encourage all of them to actively engage in the debate:

Filipe: What can happen to the block if we put the middle-attacker closer to the setter? Let me know what you think, Ana. **Ana:** The position 2 will close here and if he is well marked it is not easy to set the ball. **Filipe:** So what can we try here? **António:** The setter must try setting a quick ball to the middle-player. **Joana:** Yes. The middle-blocker will have to decide whether to stay in the middle or move a bit towards the side. **Filipe:** What do others think about possible strategies to apply here by the middle-blocker? (3rd lesson, video recording)

In the focus group, student-coaches were aware of the effort demonstrated by their coach educator to prompt them to participate more actively in the lesson:

António: Every week we had to create a drill and present it to our colleagues. If something didn't work well, we would discuss it until we found a solution. This is good because we feel that we have an opinion... we contribute to finding out the best solution. **Ana:** Last lesson I tried getting a direct answer from him but he told me: 'Ana, do not expect me to give you the answer: you have to experience, to notice what happens when you try to solve the problem, and try as many times as necessary until you reach your own way'. **David:** He never gives up on us until we say something. If we do not answer, he asks again in another way. **Tiago:** Sometimes he gets to be annoying... I want to be quiet but he doesn't allow us to. But I know that he just want to get us more actively involved in the session, both physically and mentally. (1st focus group)

Enhancing the student-coaches' active role as learners

The *Pacing* and *Autonomy in Problem Solving* were two instructional dimensions that clearly showed the endeavor of the coach educator in giving student-coaches an active role as learners.

Table 2 shows the higher prevalence of student-coaches in controlling the rhythm of the task and its end (93.18%) as opposed to the task being controlled by the coach educator in all its extension (6.82%). The few moments when the coach educator controlled the tasks in their entirety (i.e., determining the beginning, the rhythm and the end of the tasks) were towards the last sessions (between the seventh and ninth lessons). This was a time when student-coaches were experiencing complex game situation 'problems', to which multiple solutions were possible. Student-coaches misunderstood the task and played the situation by themselves. This led to a lack of awareness, which was required for reaching the goal set by the coach educator. In this instance, the coach educator took control of the dysfunctional dynamic and stopped the session to ensure the achievement of the previously established goal. The following field notes provide evidence of this event:

Filipe joined the student-coaches and informed them that they would perform a different and more complex drill. He explained the goal of the task and they began playing. Student-coaches started playing but they were very confused and started criticizing each other because everything seemed to be going wrong. They tried applying different solutions, such as changing the starting points, controlling the ball trajectory (namely on the setter's action), but they were still not capable

of producing an effective course-action. At a certain point, Filipe stopped them, and used concrete examples to frame the strategies in a logical manner thereby showing them what was wrong (and why) in their line of action.

(Field note, 7th lesson)

Beyond that, the dimension of *Autonomy* in problem solving exhibited the highest values on *Partial Autonomy* (56.81%), followed by *Total Autonomy* (38.64%), with a residual expression of *Without Autonomy* (4.55%). Indeed, the coach educator often provided student-coaches with cues for helping them read a situation more effectively (i.e., to analyze and to interpret an event). As the student-coaches' skills developed, new concepts were applied and incorporated into the task. In addition, *Total Autonomy* was given to student-coaches once they understood the concepts and principles introduced, therefore adding meaning to the actions developed during the tasks (i.e., when they were already able to practice the task for themselves without losing quality). The reduced occurrence of the *No Autonomy* category was limited to drills and game scenarios when practiced for the first time. This happened particularly when the coach educator wanted the student-coaches to understand the logic and functionality of the novel situations.

The coach educator's effort to help student-coaches in searching for knowledge using their own strategies, and eventually aiding with selected cues, was duly noticed by student-coaches in the focus groups.

Tiago: Our coach educator is always trying to make us be more critical about what we think and do in practical lessons. **Ricardo:** Yes, it's true. He puts us in conflict with ourselves in order to make us think in a better way. **Sofia:** Yes... It is true. He always wants us to find a solution in advance. **António:** He always asks us about what we think that could work in a given situation and after that he watches us to ensure if we are applying what we suggested. If something is not working well he gives us some clues and obligates us to think and find out what (and why it) didn't work. **Tiago:** This process is hard for us because we must be very focused on it. But we understand the subject much better now and what I like the most is that we have the freedom to do things our way.

(3rd focus group).

The value of practical lessons through experiencing the concepts and their application in concrete drills and game situations promoted greater awareness of alternative solutions and possibilities of solving problems on our student-coaches.

Ana: Our coach educator does not like if we say the same things that he said; he likes us to push the boundaries to try and find different reasons to explain what is happening. **Sofia:** It's the idea of learning not because someone told me how to do things. **Joana:** To experiment in practice what he wants to teach us, for instance the commit block, and analyzing each time what works and not is what I like more! **Sofia:** I agree. To apply in concrete drills make us understand the concept he presented in the theoretical lesson and to see its meaning and functionality. **Tiago:** For me this is learning because I experienced it and understood why I made the decisions I made.

(4th focus group)

The pedagogical power of implicit aspects of verbal language

Throughout the lessons, the coach educator used language in different ways, including manipulation of volume, intonation, rhythm, paraphrasing, modeling intervention and silence or pauses. These were used to underpin distinct purposes. From participant-observation and video analyses of lessons, it was noticed how the coach educator communicated by changing volume and intonation in order to get the attention, the interest, and/or the engagement of student-coaches. Holding the attention of student-coaches was particularly important during the first lessons, a phase in which they were not yet fully captivated by the subject. As such, he changed his tone of voice every time he noticed that one or some student-coaches were not attentive; when he wanted to emphasize some key issues he pronounced the relevant words louder; when he wanted to show student-coaches a genuine interest for their answers or questions he paraphrased them to initiate the interaction. Moreover, in attempting to surprise them, to keep them vigilant and attentive, he exchanged his behaviors between talking suddenly and staying in silence, and also changing the rhythm of his speech. The following field notes are good examples:

[On the last part of the lesson] the student-coaches were showing signs of fatigue. They were looking around the sports hall, staring at the door, the lights and their colleagues. Filipe stopped talking and asked: 'What was I saying?' Ricardo was able to repeat the last words said, but Filipe guessed that he was not attentive. So, he carried on asking questions, this time adopting words used by student-coaches. In this process, he varied the rhythm of his communication, giving more emphasis towards the end of the sentence before asking more questions.

(Field note, 2nd lesson)

Filipe changed his strategy many times once student-coaches answered questions, to keep them cognitively engaged; sometimes he stayed in silence, staring at them, and suddenly he started speaking... other times he did not give them time to get distracted and started talking intensively.

(Field note, 5th lesson)

The useful and encouraging facial expressions and gestures

The coach educator used very expressive body language, performing gestures and facial expressions to promote the interaction with students and enhance the effectiveness of the instructional process. Furthermore, these visible actions by the coach educator were used to assist with explanations or to add emphasis to the conveyed messages, as well as to save energy (not having to speak as much). For example, hand gestures were used to explain the functionality and dynamics of tasks, therefore acting as codes and signals.

Filipe was explaining a new skill practice and advised the student-coaches to be focused on the other student-coaches' movements, since they had to change place at the same moment for the activity to work properly. Student-coaches started practicing and some of them were confused about the place they should occupy, and to where and with whom they should change

places. Filipe made some signals using his fingers, which represented zones of the court, and after that he signaled using his hands and arms, making movements representing the logic of the changes between them. Student-coaches restarted the practice and everything went accordingly.

(Field note, 6th lesson)

The use of facial expressions and body language also served the purpose of expressing emotions. In particular, it aimed at getting the attention of student-coaches, to encourage them when they had almost given up or were not engaged enough, to promote trust and belief in them. For instance, eye contact was always made when the coach educator wanted to pass on messages of confidence, commitment and responsibility.

David said to Filipe who failed to pass the ball to his setter effectively. Filipe came close to her, looked directly and fixedly in her eyes and said to her; "You can do it ... you will fight until the ball is in good conditions for your colleague to set the ball". David nodded affirmatively and showed more energy and engagement to pass the ball to her peer mate.

(Field note, 5th lesson)

Interesting, however, was the use of certain facial expressions, used to warn student-coaches when they were coming short of what was intended. When an undesirable behavior arose, the coach educator preferred to create a positive experience, instead of explicitly punishing the student-coaches. The following lesson episode portrays the use of such facial and bodily gestures by the coach educator to advise a student that he was waiting for her to initiate the explanation.

The lesson had begun ten minutes ago. Student-coaches were doing the warm-up and talking in small groups. Filipe made the signal for them to come closer to him. Sofia (a student-coach) was walking very slowly and lagged behind. He pulled a funny face for her (as if he was very tired and bored). She laughed and began running to join the group.

(Field note, 8th lesson)

During the focus groups, student-coaches expressed their perceptions about the liveliness of their coach educator when he communicated with them. They emphasized his mastery in using gestures to explain the practices. Moreover, they acknowledged the coach educator's successful use of facial expressions to show students that he was not happy and that they needed to work harder. This also extended to the support shown in difficult situations, to make students feel safe when taking risks. Here, an example was the direct and intense eye contact established, making student-coaches even more committed and engaged.

Sofia: Filipe always speaks with his body. **Ana:** Yes, it is true. He gives light and color to his words; we understand very well how important it is to explain the drills to players using specific gestures. This is something I have to learn more about. **António:** Indeed, he is capable of getting our full attention when he looks at us directly. **David:** I wouldn't dare look away because I feel he is right and I have to take the message home. **Ricardo:** Have you noticed how he speaks? Sometimes fast; other times slowly. **Tiago:**

He holds our attention more speaking like that.

(3rd focus group)

The use of touch to promote confidence and support

The coach educator used touch mostly as a vehicle to establish confidence and support in the student-coaches. This happened particularly when student-coaches failed to cope with the new subject challenges introduced by the coach educator (both in cognitive and motor actions). Here, touching happened predominantly to encourage the less engaged student-coaches to actively participate in the lesson by sharing their thoughts, beliefs and knowledge with others. Touching was also used as a way to encourage students to express their opinions without the fear of getting it 'wrong'. It was restricted to arms, shoulders or back, with other parts of the student-coaches' bodies never being touched. The following event illustrates the coach educator's supportive intentions when putting his hand on a student-coach's arm.

Joana, one of the less active students was a bit out of the circle formed by her colleagues when Filipe was explaining the next practice. Filipe started to slowly move towards her while still talking to the group. All student-coaches remained very attentive to his words. As Filipe got closer to Joana, he put his arm over her shoulders without looking at her. At this moment, the group spontaneously opened up the circle to allow Filipe, and Joana, who was beside him, to join the group. Joana smiled at Filipe. She seemed happy as if she realized that he was being attentive to her... she was important like the others.

(Field note, 2nd lesson)

The use of humor: a tool to enhance learning

The coach educator showed a great sense of humor, which he used as a tool to attain different goals. Humor was predominantly used to create and express solidarity, to create an identity within the group. This was often evident when the class was discussing different topics and some student-coaches showed some frustration because they did not understand something (e.g., they were not realizing how certain issues could work in the game). In such moments, the coach educator used humor to demonstrate that failing was common even amongst the best players. This showed solidarity and, at same time, provided student-coaches with the motivation to risk more, challenging them to move to a more demanding understanding.

Beyond that, the coach educator used humor to enforce the mutual trust in the class environment, as this is a good way to facilitate the confidence needed for managing uncertainty, something that is always present in competitive and training environments.

The following episode clearly illustrates this path:

Filipe: Ana, you have to set the ball. **Ana:** I am not sure I will make it. **Filipe:** José, can you tell your colleague that you trust her? Trust is the main feeling between lovers (and smiled). So, setter and attacker have to trust each other; if they don't, they cannot succeed, as communication is the base of the attack. Lack of habit...

(Video recording, 9th lesson)

The humor used by the coach educator was a particularly effective way to reduce the inherent

inequality of the relationship status between him and the student-coaches. This was necessary throughout the lessons because of the permanent debate installed by the coach educator, requiring student-coaches to state a position, a stance related with the subject under discussion. Hence, the coach educator used humor to encourage them to verbalize their thoughts, to endorse a more positive learning atmosphere, without fear of failing or being criticized. Within the focus groups, student-coaches expressed their feelings related with humor as a sign of caring:

Ana: Our coach educator challenges the way we think! And when we think we have already found a good solution, he creates a new problem again. **Sofia:** But we don't fear failing because he makes everything natural and when we are not performing well, he often jokes around after training. **David:** I think he wants us to be relaxed to say what we think and to deliver better ideas. **Antônio:** Even when he is hard on us, he makes us feel that he is still concerned about us. We feel that we are all important to him. **Ricardo:** Yes, I see what you say. He makes us feel important and makes us commit ourselves with what we say and do. **Joana:** We feel like when we play, the adrenaline increases and we just want to think about! **Tiago:** Yes! I feel that the desire of knowing more is greater than the fear of failing”.

(4th focus group)

Discussion

The purpose of this study was to examine the indirect teaching strategies used by a coach educator to promote positive and active engagement of student-coaches in their learning. It also aimed to explore how these strategies were perceived by student-coaches in terms of impacting their interest in and motivation for participating in the coaching activities.

Overall, this study reinforces the position that the way the subjects are taught and the place occupied by students in the learning process seem to be a critical concern in considering how best to stimulate students for learning (Entwistle and Entwistle, 1991; Entwistle and Peterson, 2004).

In this study, the directness profile used by the coach educator promoted a supportive and challenging learning environment which in turn encouraged student-coaches to be more actively involved in the lessons (i.e., asking questions, showing signs of autonomy for solving the tasks, monitoring the rhythm and determining the end of the tasks). Research in higher education has shown that active learners adopt a deeper learning approach (i.e., examining the logic of arguments, understanding, creating different solutions), which allows them to build a platform for doing their own thinking and to reach broader and deeper forms of understanding (Prosser and Millar, 1989; Marton and Saljo, 1976).

The complex and ambiguous nature of coaching contexts requires that neophyte coaches take ownership of their learning, which gives them the tools to act according to the specific requirements of each particular context (Jones et al., 2011). In this study, the frequent questions asked by the coach educator throughout all lessons

prompted student-coaches to focus on their own learning processes.

This process was not a straightforward one, since the question types changed throughout the unit in accordance to what seemed to be catalysts to actively engage students. In this respect, the coach educator moved from a general questioning profile to stimulate the attention of the student-coaches (i.e., asking them brief and minor content issues to maintain their attention), to a deeper and more specific questioning profile (why/how type questions) (Ghaye, 2001). This deeper profile required careful reorganization within a logical structure of the answers (Entwistle and Entwistle, 1991). Here, the coach educator kept student-coaches' attention and strengthened their cognitive engagement with the subject by allowing a more active participation in the debates installed in the lessons.

Besides the questioning, the autonomy conferred by the coach educator to student-coaches gave them more freedom to think and act according to their own understanding. This involved controlling the task dynamics and functionality, and allowing them to solve problems that arose from the practice scenarios they engaged with. In such a learning journey, the coach educator scaffolded student-coaches, mainly by giving them partial autonomy in task development, to assist them in reaching a deeper understanding and confidence. This practice is acknowledged as a critical tool for enhancing learning (McMahon, 2005; Maybin et al., 1992; Zhang and Watkins, 2001) and is often desired by coaches (Chesterfield et al., 2010; Nelson et al., 2013). For example, in a recent study aimed to empirically investigate UK coaches' perceptions of recommendations for the provision of coach education, participants disliked occasions when they were “lectured without time being given to discuss ideas” (p. 210), which fails to “challenge current thinking” (p. 208); moreover, participants expressed a wish for “personally relevant and practically usable content delivered through critical pedagogical approaches to encourage them to actively participate in the course” (Nelson et al. 2013, p. 216).

It could thus be argued that the coach educator rejected the notion of learning as transmission and internalization in favor of looking at learning as a cognitively and socially active construction (e.g., mainly through questioning and interaction) within a complex and culturally situated process (Kirk and Macdonald, 1998). Such a learning context promoted the awareness and the ability of student-coaches to consider and explore alternative solutions, and the possibility of solving the problems and self-regulating their own development. This echoes the tenets of student-centered approaches which embed a guided discovery process with tasks organized to enact cooperative work, problem solving, critical reflection and face-to-face interaction (Dyson et al., 2004).

The coach educator also denoted a high proficiency in using communicative skills to captivate student-coaches in their learning. Above all, he extensively used affective tools (for instance, using facial expressions and gestures to captivate their attention and

interest, using touch to make them to feel more confident, using humor to express solidarity, trust and proximity) to transform them in more attentive, confident and active learners. Indeed, from the expositions of their doubts and opinions without the fear of being criticized, student-coaches were capable of thinking and acting in a more autonomous manner, making them the principal actors of their own learning journeys. This reinforces the view that coach educators deliver not only subject content, but also their personality through the ways they interact with students and deal with the dilemmas that arise from the context (Jones et al., 2012; Jones and Turner, 2006).

In particular, indirect aspects of verbal language (e.g., tone of voice, intonation, silence, etc.) worked for the coach educator primarily in gaining student-coaches' attention and interest in the content they were being taught. Richmond and McCroskey (2004) emphasize the value of teachers' voice and intonations as powerful tools for making teachers credible to students, as a key tool for capturing their attention and gaining their confidence. In addition, the non-verbal communication (gestures and facial expressions) displayed by the coach educator occupied a central role in the lessons, with the main purpose of making the subject matter meaningful to the students. As echoed by Noddings (1984), a small act kindly performed may be more influential (and better accepted) than a major act grudgingly undertaken.

Additionally, the act of touching was noted in the interaction established between the coach educator and student-coaches. Here, it was evident that the coach educator was invested in using touch to create feelings of comprehension, comfort, warmth, commitment and even some complicity to increase the confidence of student-coaches. Given that touching is not a straightforward issue, in terms of moral and ethical concerns, it must be carefully analyzed within the coaching context. According to Jones et al. (2013) the climate of moral 'righteousness' installed in occidental society, and consequently in western European coaching cultures, does not allow coaches to express emotion and care through touching, in terms of openly hugging, touching and physically supporting their athletes. Further research is needed locating the 'politics of touch' in coaching in terms of identifying the constraints associated with it. This could offer new understanding that would help coaches deal with such intricate concerns, which occupy a central part of coach-athlete relationships.

Humor was omnipresent in the coach education lessons examined, although used in different forms and in order to reach various goals. According to Fine (1983), "humor reflects a contrast of meaning between two incompatible views of a scene" (p. 160). Such a perception of incongruity is personally and socially constructed and requires coaches to use humor appropriately as part of their own interactive strategies (Ronglan and Aggerholm, 2013). The coach educator used humor primarily to express solidarity with student-coaches, providing them with a "sense of belonging to a group" (Ronglan and Aggerholm, 2013, p. 224). As a result, students-coaches showed signs of increasing levels of trust, and therefore felt confident in actively engaging

in their own learning (i.e. sharing their understandings and doubts with others). Moreover, the coach educator used humor to reduce the inherent unequal role status between him and the student-coaches, strengthening internal cohesion. Here, he "laughed with" as opposed to "laughed at" student-coaches, expressing his desire to promote inclusiveness and avoiding exclusiveness; this stimulated them to interact, to share, in sum to be actively engaged with others in their learning experiences. However, humor is a "double-edged sword" (Rogerson-Revell, 2007, p. 24), and coach educators must be aware of the thin line that distinguishes between good and bad practice, a central issue that impacts the way student-coaches see and invest in their own learning.

Overall, the affective aspects adopted by this coach educator exposed a great degree of care for student-coaches as he demonstrated an impressive ability to listen and react to group interactions, giving a voice to the most passive students, and using humor, touch, gestures and voice to make all of them feel principal actors of their educational endeavor. Indeed, care is "a set of relational practices that foster recognition, realization and growth" (Jones et al., 2009, p. 13), which is expressed by words, gestures, touch, humor, among other things, and is not possible to provide merely through explicit and objective teaching behaviors (e.g., prescriptive instruction, demonstration, feedback). Therefore, caring should be at the heart of the educational process since it occurs within connections and relationships (Noddings, 2003). This is particularly important considering that "coaching is more than sequentially imparting knowledge through a particular pedagogy" (Jones, 2009, p. 377), in other words, teaching methods cannot substitute the person who teaches. Although not in the coach context setting, these findings corroborate with the work of Jones (2009), which emphasizes the importance of caring in nurturing the coach-athlete relationship from an auto-ethnographic perspective.

This study also reinforces the call for more practical lesson formats in coach education courses, in which "delivered content must relate to practical application" therefore "explicitly link[ing] theory and practice", a desire reported by coaches in Nelson et al.'s study (2013, p. 210). Indeed, the use of concrete coaching situations seemed to be vital for converting theoretical knowledge (i.e., game concepts) into personal understanding and practical coaching skills. Moreover, the application of these concepts in practical situations developed "reflection-in-action" (i.e., thinking what they are doing while they are doing it) (Schön, 1987, preface), a very important demand for practitioners, especially in situations of uncertainty, uniqueness, and conflict, common features of coaching contexts.

Naturally, the limitation of a single case study must be recognized with respect to how far researchers might broaden the findings to other coach educators and contexts. It must also be acknowledged that the approach used by this coach educator is only one way in which the student-centered active and collaborative goals struggled for can be reached (see Cassidy et al., 2004). Consequently, further challenges remain in terms of

exploring indirect teaching strategies used with larger groups of students, and by coach educators who do not possess a background in higher education.

Notwithstanding, we recognize the indirect teaching strategies of this coach educator as an example of “good practice” which can enhance student engagement in learning. Coach educators clearly benefit from conceiving their role as supportive facilitators, scaffolding student-coaches from realistic and challenging activities, as opposed to delivering practical coaching sessions in prescriptive ways (Chesterfield et al., 2010; Nelson et al., 2013). In this study, the critical pedagogy adopted by the coach educator through use of indirect teaching strategies endorsed creative engagement in learning. As a result, this approach distanced itself from the dominant reproductive pedagogies often present in authoritarian coaching cultures (Jones and Turner, 2006; Jones et al., 2013). Since autonomy and choice are important to professional development provision (Sandholtz, 2002), it seems that learning is more likely to happen when students take responsibility for their own learning. It is also important that learning activities are relevant to participants’ and coaches’ needs and interests.

Beyond that, this study answered the call to move research beyond perceptions and opinions, and progress to a position of providing “evidences in support of” certain approaches to the delivery of coach education (Lyle, 2007). Notwithstanding, we are still in an early phase of applying experimental designs in coach education. This is particularly the case when examining teaching methods of coach educators designed to guide provisions for the learning and development of neophyte coaches. Hence, more in-situ research is needed as a means of improving knowledge regarding coaches’ experiential learning (Culver and Trudel, 2006; Jones et al., 2012; Mesquita et al., 2014). Such an endeavor requires the application of more interpretative research and particularly ethnographic studies, which have the potential to provide sport coaches with a means for insightfully understanding themselves as coach educators (Jones et al., 2009).

Conclusion

This paper provides a thoughtful example of how a coach educator behaved towards their student-coaches in order to stimulate an active learning environment through the use of indirect teaching strategies throughout the coaching practical lessons. Firstly, the indirect teaching strategies used by this coach educator were expressed by the use of a student centered directness profile (mostly by using questioning, autonomy for solving problems and responsibility for pacing the rhyme and the end of the task) and affective issues (e.g., gestures, voice, humor or touch). Both were effective in promoting enthusiasm and confidence in student-coaches, leading them to be more actively engaged in their own learning and consequently thinking and acting into a more autonomous manner.

Secondly, the findings promote arguments for the already recognized necessity of changing the dominant teacher-led curriculum, installed in coach education, to a more student-led curriculum. Indeed, the indirect teaching strategies handled by this coach educator motivated

student-coaches to engage in activities, to have interest in monitoring their own understanding, to seek meaning for themselves, which can better equip neophyte coaches to deal with the intricate and problematic nature of their work; a well-known trace of coaching contexts.

Additionally, this study gives credence to the view that a more practical curriculum format in coach education is needed due to its potential for constructing “learning situations where theoretical and craft knowledge are put in addressing real-life problems” (Jones et al., 2011). This was evident in the capability of student-coaches for making an explicit nexus between concepts and their application to practice, increasing therefore the relevance of their learning experiences.

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Key points

- Both instructional and affective teaching indirect strategies used by the coach educator promoted a positive and challenging learning environment to student-coaches.
- The directness profile used by this coach educator (questioning, giving autonomy for problem solving and responsibility to regulate the learning tasks development) promoted the awareness and the ability of student-coaches to explore alternative solutions and self-regulate their own learning.
- Using humor, touch, gestures and tone of voice, the coach educator showed great care for student-coaches, which impacted positively on their enthusiasm, confidence and desire to be actively engaged in their own learning.

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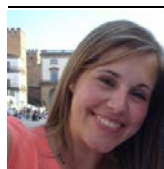
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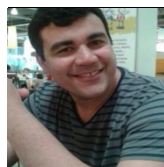
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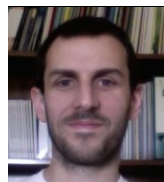
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