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“You Know, Coaching, It Feels Like a Bit of a Magpie Game”: A Qualitative Investigation into Sources of Teacher-Coach Knowledge and the Subsequent Impact on Espoused Teacher-Coach Pedagogy

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Abstract: The sources of knowledge that sport coaches use have been widely researched however, their impact on espoused pedagogy in the teacher-coach context is comparatively underexplored. The purpose of this study was to explore how teacher-coaches view knowledge, develop their knowledge, and espouse pedagogical practice. Semi-structured interviews and thematic analysis were used to explore this area with eleven teacher-coaches. Results were consistent with previous work on coaches' and the perceived impact of formal coach education; however, certain aspects conflicted in the teacher-coach context. Teacher-coaches reported certain elements of their knowledge as fixed (such as technical models of skills) while acknowledging others such as pedagogical content as tentative. Similarly, although formal coach education was consistently regarded as low-impact due to prior teacher education, those teacher-coaches who had progressed furthest in this field displayed greater declarative nuance and adaptability. This suggests tacit benefits of formal coach education in the role of the theoretical underpinning of coaches' practice.

Keywords: sport coaching; teacher-coaches; pedagogy; coaching knowledge; coach education; coach learning



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1. Introduction

This research explores the role of teacher-coaches (those employed by a school to coach sport alongside teaching within the classroom) within the British school system, with a particular focus on independent schools in which sport is a regular and important aspect of the curriculum; that is, schools in which organised sport and physical activity are timetabled within the school day (as opposed to optional, extra-curricular time), requiring schools to employ teacher-coaches, who contribute to learning both in classroom and sports coaching settings. Although this can represent sound economic practice from a school, it is not without its challenges and is an under-researched concept, especially within Britain (Johnson et al., 2024). The limited study of teacher-coaches has largely focused on the conflict inherently present within the role (e.g., Mellor et al., 2021), predominantly in the American and Australian school systems. As such, a focus on knowledge development and subsequent pedagogical impact on British teacher-coaches is an area of novel research. The literature on the development of teacher-coach epistemology and knowledge is limited; therefore, the current study utilises research that has been produced on sport coaching to better understand the experience of teacher-coaches.

It has been established that knowledge is a key component of teacher-coaches' effectiveness (Côté & Gilbert, 2009; Cassidy et al., 2009; Lyle & Cushion, 2017). Teacher-coaches' knowledge can be identified and structured in several separate ways. This could be in terms of its nature: interpersonal knowledge of the people and groups around the teacher-coach, knowledge of oneself (intrapersonal), domain knowledge specific to a task, or content knowledge (professional) to be learned in a specific session (Côté & Gilbert, 2009). Alternatively, it could relate to a theoretical underpinning (declarative and procedural) or its availability for conscious scrutiny: abstract and unarticulated tacit knowledge or the more readily available, explicit version (Nash & Collins, 2006). Procedural knowledge (the steps required to complete a task) ought to be combined with declarative knowledge to explain the relationship between the steps and why these are so important (Côté & Gilbert, 2009). This could be characterised as combining the 'how' with the 'why' of coaching.

To be an expert coach means having elevated levels of procedural, declarative, and domain knowledge that is also both adaptable and strategically deployed (Schempp & McCullick, 2010). Knowledge is developed over a significant yet variable body of time (Baker & Young, 2014) by combining experience with reflective practice (Downham & Cushion, 2024) and acquiring and refining skills that enable the coach to get the best from the people they are coaching. There is (and ought to be) a clear relationship between teacher-coaches' knowledge and how they use it to help others learn (Benish et al., 2023). McCleery et al. (2022) report more expert teachers having the conceptual clarity to identify the learning needs of those they are teaching and tailor their pedagogical approaches rather than choosing an approach they perceive to be universally effective.

Fundamentally, coaching is an applied practice and, as such, it could be argued that knowledge that is not used to influence coach action, while useful in some instances, is lacking in its core purpose (Côté & Gilbert, 2009). Therefore, the link between knowledge and coach action will be a key area to explore through this research.

As such, teacher-coaches' interpersonal and intrapersonal knowledge (Côté & Gilbert, 2009) could be suggested to be more relevant than professional and declarative knowledge of the sport. It may be that being an expert teacher-coach is about the relationships (Jowett, 2017) that enable coaching to occur. Jones (2007) would go further to suggest that an awareness of the interpersonal micro-interactions that occur is crucial for effective learning. Having said that, players of all ages can be quick to make an implicit judgement on whether their coach has the content knowledge (Nash & Collins, 2006) to help them to improve over a sustained period (Côté & Gilbert, 2009), and, as Armour (2004) identifies, establishing this early on (and being able to follow through as the relationship continues) is a key facet of expert coaching.

The perspective of the teacher-coach on their role in the learning process is an important one if they are to reflect on their effectiveness. Schempp et al. (1998) report that less experienced and/or knowledgeable coaches attribute any lack of development to the limitations of players, whereas more competent coaches adopt the stance that they bear the responsibility. This difference may be down to an expert coaches' ability to use a more sophisticated knowledge base to recognise, analyse (Schempp et al., 1998), and 'diagnose' learner difficulties more accurately. It would seem helpful, therefore, to signpost the potential sources of knowledge that teacher-coaches could look to explore. McCleery et al. (2022) recognise that expert teachers typically display the ability to use a limited range of learning approaches that are then adapted to aid the learning context they encounter. Therefore, understanding how teacher-coaches in the study understand the nature and development of knowledge, i.e., their epistemology, was seen as important. This would allow us to consider how teacher-coaches' knowledge impacts their coaching actions, as clearly illustrated by Grecic and Collins (2013).

The process of establishing the sources of knowledge coaches use has been described as serendipitous, although the notion of coaches' knowledge being derived from either formal, informal, or nonformal sources (Nelson et al., 2006) has been widely accepted, at least as a starting point. More nuanced sources such as reflection or mentoring will also provide teacher-coaches with knowledge, albeit more so as they develop (Stoszowski & Collins, 2016) although these have been criticised for their lack of alignment with theory and inconsistency of delivery (McCleery et al., 2022). The degree to which coaches may choose to access these sources is not widely established (Erickson et al., 2008), although there would seem to be some variance in this according to their desired performance level (Benish et al., 2023).

It is clear that formal coach education is of significant value (Benish et al., 2023). A competency-based framework (as present in many current coach education courses) could be argued to have some relevance in ensuring a large workforce is not harming the players in their care (Lynn & Lyle, 2010), the minimum expectation of coaches. They will also undoubtedly provide opportunities for teacher-coaches from different settings to exchange ideas, reflections, or experiences. Stodter and Cushion (2017) highlight the tendency for coaches to do only what is required to pass a course without making long-term behavioural changes, limiting the development of declarative knowledge. This may stem from formal coach education being decontextualised and disconnected from teacher-coaches' experiences. This issue can be compounded by an insufficient understanding of the theoretical foundations underpinning coach education. For example, constraints or 'gamification' in session design (Price et al., 2024) may be implemented without the time or prior knowledge needed for teacher-coaches to develop a deeper understanding. As a result, teacher-coaches may fail to integrate new knowledge into their practice because they cannot see its practical benefits (Jones, 2007) or instead turn to informal learning sources. While Stoszowski and Collins (2016) note that coaches often prefer informal knowledge sources, they also highlight the value of formal settings and the benefits they offer. Consequently, exploring participants' experiences of coach education and other learning sources is crucial, particularly regarding their knowledge development.

The epistemology of a teacher-coach will clearly affect how they view their own knowledge and its development. In this sense, knowledge acquisition and development cannot be the same for everyone because it is inherently connected to individual characteristics such as prior knowledge, current capabilities, and future motivation. It may be that the teacher-coaches in this study fit into the category of 'developmental transition' (Grecic & Collins, 2013) in adopting certain mixed views around this nature of knowledge and that their own viewpoint is not yet fully refined. That being said, a coach's epistemology will impact their pedagogy (Crowther et al., 2022).

When considering the potential synergy between pedagogical action and the knowledge that may underpin it, Abraham and Collins (2011) highlight the consistent lack of pedagogical understanding in coaches. It may be that procedural understanding is used but that declarative understanding and greater adaptability of pedagogy is lacking. Stoszowski and Collins (2016) suggest that this gap may be closing, proposing that coaches do report the acquisition of pedagogical knowledge as being among their most popular and impactful experiences. Stone et al. (2021) report a challenge to coaches adopting what they term as 'contemporary' methods. More broadly, Denison (2010) points towards an anti-intellectual culture in coaching that slows the rate of change in coaches' practice.

Exploring 'contemporary' approaches into current coaching practice is worth exploring, however, at least to establish whether they reside within folk pedagogy (Taylor et al., 2023) or are well understood as theoretical constructs. Erickson et al. (2008) support the view that capturing such a complex process within a weekend course is low. For example,

the propagation of games-centred approaches (GCA) is widespread within coaching milieu but is often misunderstood (Cushion, 2013), in their application and perceived benefits (Harvey et al., 2018). As such, understanding teacher-coaches' perspective on pedagogical adaptation would seem an appropriate way to improve current coach behaviour. Therefore, the purpose of this project was to examine the sources of coaching knowledge for teacher-coaches (Mellor et al., 2021) and to explore their espoused pedagogical approaches. To achieve this, three research aims were established:

1. To explore how teacher-coaches view coaching knowledge. Do they follow a similar epistemological chain to coaches in the current literature, or does their teacher education affect this?
2. To explore how teacher-coaches develop their knowledge. Does this follow a similar pattern in terms of formal, informal, and non-formal knowledge development?
3. To explore teacher-coaches' espoused pedagogical practice. Does a more sophisticated view of knowledge increase espoused pedagogical adaptability?

2. Materials and Methods

2.1. Research Design

Embracing the epistemological chain outlined by Grecic and Collins (2013), this study adopts a constructivist–interpretivist research perspective (Poucher et al., 2020), enabling an in-depth exploration of the meanings that teacher-coaches attach to their experiences. This approach is underpinned by a relativist ontology (i.e., recognising that reality is not a singular, objective entity but is instead individually constructed within specific contexts) and a subjective epistemology (i.e., recognising that knowledge emerges through the dynamic and interactive processes between the researcher and the participant). This philosophical alignment (Poucher et al., 2020) ensures a nuanced understanding of how teacher-coaches' lived experiences are interpreted and understood.

Empirical phenomenology was used to understand and interpret the personal, lived experiences of the teacher-coaches, whilst also challenging some long-held or influencing beliefs about coaching (Allen-Collinson, 2016). On the basis that the knowledge on individual realities resides within the actors involved (Crowther et al., 2022), this pointed towards a data collection method such as interviews, which have the potential to collect the nuanced, personal, and contextual information required.

2.2. Participant Sampling

Eleven teacher-coaches were purposively sampled due to the specific sample criteria required (Lavrakas, 2008). The criteria for selection were as follows:

1. Aged 18 and older;
2. Currently coaching in a participation or performance setting;
3. Having been coaching for more than 3 years;
4. Having engaged in some form of formal coach education at least one year prior to interviews, so that they have had time to put the theory learned into practice.

The participant characteristics are detailed below (Table 1). A range of formal coach education qualification levels, genders, and sports coached was sought to broaden the scope of the research and provide insight into a range of contexts. Participants worked in a range of educational settings. By using convenience sampling to access the participants, it gave the lead researcher the ability to use their professional network. It is plausible that some element of researcher perception of comments meant that the meaning was not always the participant's own, but this was lessened by the prior professional relationships present, which meant that a level of shared understanding existed. This potential for bias was mitigated within the research by reflecting back participant comments during

each interview to explore meaning and check for clarity, and by sharing the transcripts with the participants post-event for their input and feedback. The lead researcher is a teacher-coach working within the British school system and conducted the interviews. He has a professional relationship with all the participants but did not hold any power differentials over them. The second researcher did not take part in the interviews but did review transcripts as part of the analysis process.

Table 1. Participant information.

Participant No.	Gender	Coach Education Level	Status	Main Sports Coached	Years Coaching	Coaching Setting
1	Male	Rugby Level 2	Teacher-Coach	Rugby union, athletics	15	School, adult club
2	Male	Cricket Level 2	Teacher-Coach	Cricket, football, rugby	4	School
3	Male	Rugby Level 3	Teacher-Coach	Rugby union, athletics, cricket	19	School, adult club, Talent pathway
4	Male	Rugby Level 3	Teacher-Coach	Rugby union, athletics, cricket	21	School, adult club
5	Male	Rugby Level 3	Teacher-Coach	Rugby union, hockey, cricket	14	School
6	Male	Hockey Level 1	Teacher-Coach	Hockey, tennis	7	School, youth camp
7	Female	Netball Level 1	Teacher-Coach	Netball, cricket	22	School
8	Male	Rugby Level 5	Teacher-Coach	Rugby union	28	University, School
9	Male	Rugby Level 4	Teacher-Coach	Rugby union, cricket	23	School, National Age Group
10	Male	Rugby Level 3, Cricket Level 3	Teacher-Coach	Rugby union, cricket	13	School, Talent pathway
11	Male	Cricket Level 4	Teacher-Coach	Cricket	21	School, Talent pathway

2.3. Data Collection

Following informed consent, individual semi-structured interviews (Smith & Sparks, 2016) were used to collect data. These were a mixture of face to face and online and were recorded and transcribed using Microsoft Teams. As discussed, interviews were most appropriate in this instance to understand the experiences of teacher-coaches and their development of pedagogy, as well as appreciating their perspective within context (Smith & Sparks, 2016). Without the flexibility of semi-structured interviews and the ability to get into depth with the participants, the capacity to uncover new and rich information related to this context would have been lessened (Braun et al., 2016). The interviews followed an initial open question, which then had associated questions, contextual examples, and prompts attached to uncover further depth or clarify understanding, as necessary. The interview design framework (Table 2) followed the conceptualisation of formal, informal, and nonformal knowledge sources by Nelson et al. (2006) to provide clarity for the teacher-coaches and differentiate these where appropriate. Given the researcher's prior professional relationship with the participants as a fellow teacher-coach, interviews enabled a greater level of detailed experiences and meanings to be explored and allowed for a degree of reciprocity (Collins et al., 2022). A pilot interview was conducted with an experienced teacher-coach who gave feedback on question direction and clarity. This confirmed a coherent flow of questioning but also allowed for some changes around question wording and secondary prompts. Interviews lasted between 34 and 137 min (mean 76 min) and were concluded when the participant felt they had nothing else to add.

Table 2. Examples of initial and secondary questions used within interviews.

	Initial Open Question	Secondary Probe If Participants Do Not Provide Detail	Specific Prompt/Reference to Stimulus If Purpose Not Achieved
Coaching knowledge	Where has your coaching knowledge been developed from? Where has ‘what you know’ you know about coaching come from?	Types of knowledge- content, declarative, procedural, interpersonal, intrapersonal	Examples of what these might look like and potential sources
	What role has coach education had in your knowledge development?	What were your experiences of coaching qualifications? How did they deliver or impart knowledge?	Coaching Quals
	How has informal coach interaction shaped your knowledge?	Do you have a mentor/critical friend/coaching buddy? How does that relationship work?	
	How has nonformal coach interaction shaped your knowledge?	What coaching books/conferences/seminars have you experienced recently?	
	Rank order of formal/informal/non formal?	Why- what has influenced this?	
Coaching Pedagogy	Which pedagogical methods would you see as your ‘default’?	If you were coaching your usual team, what would that session look like?	Spectrum of teaching styles, Sell/Tell/Ask/Delegate
	When and how might this change? What are you looking for?	Context- athlete, activity, outcome Aims- success criteria?	
	Are there pedagogical approaches you would rarely or never use?	If so, why? What are you using to decide this?	

Initial questions were focussed upon two primary areas of coach behaviour. The first focused on teacher-coaches’ reflections on their experiences of diverse sources of knowledge, primarily formal, informal, and non-formal knowledge sources (Nelson et al., 2006). Secondly, teacher-coaches’ use of and underpinning views around pedagogy were explored. Pedagogy as a concept was defined, using Taylor et al. (2023) and operationalised where necessary through practical examples and explanation. Teacher-coaches were encouraged to consider the pedagogical approaches they used most often as well as those they would choose to disregard, and reasons for these were explored. Finally, the teacher-coaches’ approach to session planning and design were sought, as were their views on and frameworks for reflective practice.

2.4. Data Analysis

Interview data were analysed using the 6-stage theming approach of (Braun et al., 2016). This was to pursue a ‘flexible’ thematic analysis (Braun et al., 2016) and analyse the processes that teacher-coaches’ have gone through, in acquiring coaching knowledge and influencing their pedagogy. The transcripts were read and re-read before initial codes were generated and context considered. Time was then taken to create the initial themes from the coding before these were reflected upon and redrawn. A combination of inductive and deductive approaches to theme identification and analysis was used. Certain aspects such as the tendency of less experienced coaches to adopt a more naïve and fixed stance in relation to coach knowledge are well established in the literature (Crowther et al., 2022; Grecic & Collins, 2013) and formed part of the deductive analysis process, whereas others were more inductive in nature, such as the ‘place for everything’ approach to pedagogy.

Braun et al. (2016) assert that the process of thematic analysis is not a passive one in which data emerge—they must be actively drawn out and derived. The first author's position as a teacher-coach in the context provided the connections with the participants and supported them in feeling comfortable sharing their experiences (Smith & Sparks, 2016). This position of 'shared experience' (Berger, 2015) supported our understanding and construction of meaning of the coach's views. To minimize unconscious bias, the first author engaged in repeated data interrogation and sought input through professional discussions with the second author. This collaborative approach promoted transparency and mitigated the risk of overlooking important points or imposing their beliefs on the data (Berger, 2015).

3. Reporting and Discussion of Results

Following analysis, a series of themes were identified and are presented under each of the research aims.

3.1. Teacher-Coaches' View of Knowledge

The teacher-coaches' views and knowledge reflected their epistemological positions and included themes of nature of knowledge and types of knowledge.

3.1.1. Nature of Knowledge

A key theme was the prominent view among the less experienced teacher-coaches of knowledge as a fixed aspect that resided with the coach and could be passed to participants, for example, by players needing to be taught the basics first before coaching, suggesting that the teacher-coaches' role would be to provide their knowledge on a gradual and linear basis, in line with a predetermined technical model. Coach 9 outlined this as follows: "You've got to teach skill before it can be coached. I would say to my co-coach, those three there. . . . need teaching the basics all the way up".

Those teacher-coaches with a naïve epistemology tended to see knowledge as simple and unchanging, whereas those who had engaged with further coach qualification (and in some cases experience) displayed a more sophisticated approach. At the more naïve end, if learning did not occur, this was seen as an issue with learner capability rather than the approach of the coach (Crowther et al., 2022). For example, the notion that younger athletes would require more time, less detailed information, and a more coach-led approach to learning was referred to by seven of the teacher-coaches.

The naïve epistemological view was also present across session design, in the sense that reaching a pre-planned outcome was the consistent feature for the less experienced teacher-coaches. Only one coach referred to a more fluid approach: "having a planned outcome can just create a ceiling for the session. . . if we don't get through everything, we've probably done a good session" (Coach 9). It may seem reasonable to propose that teacher-coaches, with the enhanced professional standards and formal education required to gain qualified teacher status (QTS), may develop a more sophisticated view of knowledge, teaching strategies, and openness to teacher–pupil sensemaking (Grecic & Collins, 2013), but this was not evident consistently. Coach 8 outlined the role their teaching background played in this: "I learned quickly that my (coaching) knowledge was not great. . . in terms of being able to adapt and coach a session, I could just about get away with it. I think the teaching helped".

Given the link between a coach's epistemology and their practices (Crowther et al., 2022), it may be that active consideration of the epistemological chain (Grecic & Collins, 2013) is important yet lacking in current teacher development settings. This presents a challenge (Stoszkowski & Collins, 2016): how to help teacher-coaches engage with the

literature at a level that allows for criticality but also accessibility, especially as we found no positive correlation between teacher-coaches experience and epistemological sophistication.

3.1.2. Types of Knowledge

Interpersonal knowledge was typically seen as more fixed than other forms. Those who described this as a strength referred to acquiring it innately: “I’m a chip off the old block, I’ve always been good at that stuff” (Coach 10-Level 3, 13 years’ experience); “I’m very sharp at working out what people are thinking, feeling and always have been” (Coach 9), or through non-sport avenues. Only one coach referred to this aspect being developed: “The Level 4 was big on understanding yourself;if you couldn’t understand who you were, you couldn’t understand how you could coach best” (Coach 11).

In some cases, teacher-coaches viewed their own process of procedural knowledge assimilation as tentative and subject to value judgements, but that this process ought not to apply when helping the players: “I know you are supposed to let them think and let them work it out, but I can just get there quicker” (Coach 1-Level 2, 15 years’ experience). The view of knowledge as fixed, with limited room for adaption or co-creation, will, clearly, limit a coach’s effectiveness. The nature of coaching as a fluid and constantly changing enterprise (Jones, 2007), whereby each party brings their own perspective, and psycho-social context, would surely demand that teacher-coaches are open to the variability of knowledge.

McCleery et al. (2022) point towards a movement within coach development away from a more rationalistic, traditional approach towards the idea of constructing coach learning to recognise its ongoing, contextualised, and personal nature. As such, it may be that teacher-coaches who engage with sport specific developmental opportunities are more likely to display greater degrees of sophistication around their epistemological position, and that without it, their teacher education may not adequately do so.

Overall, teacher education may develop some epistemological sophistication, but it was not the case that more experience or qualification necessarily aligned with a more sophisticated approach.

3.2. Means of Developing Knowledge

This theme can be separated into two sub-themes: low perceived impact of coach education and benefits of informal learning alongside formal learning.

3.2.1. Low Perceived Impact of Coach Education

It was clear here that there was disparity in the perceived benefit of coach education to knowledge development and pedagogical behaviour. The notion that coaches see formal education as less impactful than other sources is well reported (Erickson et al., 2008), but little research has shown that this reliance on informal knowledge sources may leave a theoretical gap for teacher-coaches (Stoszkowski & Collins, 2016). Typically, those teacher-coaches who had attained advanced coaching qualifications also recognised the value of those experiences, in terms of their ability to operationalise theory through practice. Coach 4 (Level 3) saw this as an underpinning framework to build upon: “if you go and watch people. . .where they are top of their game. That’s so valuable. I mean, they’re not teaching you how to coach. They’re showing you the level of detail. . . at the top end of the game”.

Several of the teacher-coaches referred to entry level coach education as having little value. This was largely because they either provided content knowledge of the sport or session design that the teacher-coach was already using. Coach 6 outlined this idea: “It was probably heavier in what you might do, which. . . I was confident on”.

This may be a limitation of the sample, given that all teacher-coaches involved had played their respective sports to a proficient level, were experienced teachers, and were

therefore entering coach education with a solid level of content knowledge and experience of pedagogical approaches. This has been suggested to be the case elsewhere in the literature (Webb & Leeder, 2022) and reflects the individual context each coach will arrive with.

These initial coaching qualifications were often referred to as ‘tick-box’ or a variant but also unavoidable for external validation. Two teacher-coaches referenced other coaches having achieved these qualifications as reason not to pursue them, because they did not rate those coaches’ ability. Coach 9 described this as follows:

I didn’t think it was worthwhile doing. I knew other people that done it and they didn’t resonate with me as being particularly good coaches. When I realized I had to do it (the Level 4), I learned quite a lot from it.

The level of qualification teacher-coaches had achieved provided a neat (albeit imperfect) division in terms of their conceptions of knowledge and conceptions of learning (Collins et al., 2012). While those who had not progressed beyond Level 2 showed strong tendencies towards dualism and reproducing, respectively, the teacher-coaches who had achieved Level 4 or 5 awards consistently showed the capacity to recognise the differing views of knowledge and learning possible. These teacher-coaches typically showed characteristics of the ‘Wolves’ identified by Collins et al. (2012) in their desire to keep improving. As Coach 9 stated:

He’s technically modelling it, and they’re all following him like a mirror. I . . . wouldn’t want to be one of those boys. . . it wouldn’t be my style. However, every kid is got their head . . . the hands in the right place, and they are. . . modelling it perfectly.

The most interesting were teacher-coaches who had progressed beyond entry level but not onto more advanced stages (they were typically at Level 3 in qualification level). These teacher-coaches varied in their epistemology, reflecting Erickson et al. (2008) in terms of which aspects of their knowledge were variable and which were seen as more fixed. For Coach 5, there was a clear view that content knowledge gained from coach ed. was stored and deployed as players needed it, whereas interpersonal knowledge was a much more multifaceted and ongoing process: “I’m more focused on the pupil in question-what are they like? What do I know about the pupil? How will they respond best to this”.

In contrast, Coach 10 saw his interpersonal knowledge of players as innate and consistently high, in contrast to domain knowledge, where he was happy to “ask questions I don’t know the answer to” with a view to co-creating knowledge with players. Coach 3 reported an active process of reflection around his intrapersonal knowledge: “since being in an unfamiliar environment, I have really thought about how best to be authentic and really tried to follow that”.

This apparently diverging perspective (from the same point of qualification) would demand a more individualised approach to these teacher-coaches’ further development, especially in terms of their respective context or areas of interest (T. M. Leeder et al., 2021). Interestingly, two teacher-coaches (1 and 5) reported choosing not to apply for advanced coaching courses, based on their prior experiences and a feeling that what they were delivering was good enough for their current setting. This is reflected by Erickson et al. (2008), who suggested that coaches who wished to stay at a developmental level of coaching prioritised interaction with others, over those who were ambitious to progress to a performance setting.

3.2.2. Benefits of Informal Within Formal

There was evidence of teacher-coaches looking to use non-formal coach education to fill knowledge gaps around what to coach, that their teacher education possibly had not addressed. Coach 2 (Level 2) saw this as follows: “I just think socially we open ourselves up a lot more. . . and we’re a lot more willing to share knowledge, especially someone. . . who is sort of relatively new into teaching”, whereas more experienced colleagues reported a more collaborative process: “One of the. . . bigger ones, is working with other coaches and observing and kind of coaching with other coaches and pinching. . . information” (Coach 10).

Therefore, it may be that teacher-coaches gain a specific benefit from this process, in terms of building upon an underpinning education level with sport-specific content knowledge. Those teacher-coaches who had progressed further into the formal coach qualification pathway (Levels 3, 4, 5) did share some of these views: “You can pass the course but still coach how you did before” (Coach 8), but they also highlighted some of the positive impact. These included the ability to create ‘informal within formal’ conversations with other coaches with cognitive or contextual diversity to themselves (“it’s the in the bar time that’s valuable”(Coach 10); “I like to pick someone’s brains over a cup of coffee” (Coach 8)) to exchange ideas or discuss concepts that had been introduced formally that day:

you might have someone who worked in a youth setting . . . and somebody might be coaching professionals, and I think that mix is magic. . . they’re not in the same world, but they each can learn off each other, which is brilliant. (Coach 11)

[Stoszkowski and Collins \(2016\)](#) make the case for formal coach education to include mentoring and the development of reflective practices, but only once coaches understand the relevant theoretical underpinnings of the processes involved. [McCleery et al. \(2022\)](#) support this approach when suggesting that mentoring can, whilst being effective at knowledge transfer, be too disconnected from theory and inconsistent in its delivery. [T. Leeder and Cushion \(2019\)](#) report a similar theme whereby coach mentoring within a national governing body (NGB) acts as a source of cultural reproduction, using pedagogical methods as symbolic capital for mentees to acquire. Coach 5 reported that

My Level 3 mentor, . . . he just asked questions that got me to the answer he wanted me to get. When I’ve mentored people since, I’ve tried to help them rather than reproduce what I do.

As such, teacher-coaches may be better at establishing themselves as a mentor away from the coach education process who is able to provide theoretical underpinning more effectively, a view echoed by Coach 8:

mentoring. . . you know I think it’s very much a case of building relationship with them you know beyond the course isn’t it, . . . showing an interest in their lives, their journeys.

High-quality mentors have been reported as a challenge to the coaching landscape ([Sawiuk et al., 2024](#)) despite the potential for reciprocal learning and development ([T. M. Leeder et al., 2022](#)), and this may explain the tendency for teacher-coaches to turn to less bespoke but more available sources.

[T. M. Leeder et al. \(2021\)](#) support this, suggesting that the social capital and dispositions of teacher-coaches will significantly impact learning environments, albeit in the nonformal setting. This further lends weight to the need for a more contextualised and individualised approach to coach learning, as well as opportunities for teacher-coaches to recreate the informal within formal away from a coach education setting.

It was evident that teacher-coaches felt their initial teacher training lessened the impact of formal coach education, but that informal knowledge development was seen as most impactful for sport specific development.

3.3. Pedagogical Practice

There were some clear themes here: pedagogical adaptability; a 'place for everything' approach; 'person before player'; and games-based practice.

3.3.1. Pedagogical Adaptability

Those with Level 4 or Level 5 qualifications showed a greater depth to their rationale for pedagogical variability. This was referenced in relation to the non-sport specific content of the course "learning about learning was the main takeaway-it was talked about specifically" (Coach 9), as well as from Coach 11: "during the Level 4 the bit everyone took most from was the non-cricket stuff". Notwithstanding the entry criteria for the study, a coach with an entry level qualification and three years of weekly coaching would have significantly different levels of intrapersonal, interpersonal, and pedagogical knowledge to an experienced teacher-coach, especially those engaging in a reflective cycle. None of the teacher-coaches reported following a specific theoretical approach to learning or espoused pedagogy. Recent research reflects a command style approach as the most used by experienced coaches, whereas guided discovery was seen as most valuable but not used as regularly (Demiral & Naziroglu, 2024). Whilst there were several references to practice that might qualify as folk pedagogy (Abraham & Collins, 2015), it was common for teacher-coaches to be able to identify reasons for their decision making. Coach 9 referenced this in relation to the environment he wanted to create:

we have sessions. . . Prep to Learn the focus is learning. . . and we can explore, . . . going to experiment. We've got Prep to Perform, which is more performance based. . . and then we've got Prep to Win.

Consistent with the findings of Abraham and Collins (2015), most of the teacher-coaches reported using heuristics to guide their planning, which is not without its limitations. For example, when thinking about session planning, the primary driver pre-session and intra-session was the perceived faults or weaknesses of the most recent competitive event or result. As Coach 6 outlined: "I know the group are normally driven by some kind of information. So, . . . we have done a lot of video this year. . . and be like this is an area that we definitely need to improve from Saturday".

This may be due to an isolation of planning, delivery, and reflection (Hall & Smith, 2006) but also reflects the position of coaches' reflective practice (Downham & Cushion, 2024).

For several of the teacher-coaches, underpinning principles such as player engagement, expression, or involvement gave them a pedagogical filter to guide their planning. This is unsurprising given the context and their role in a school setting. Coach 8 noted the following:

I think the modern-day coach has sort of moved away from knowledge . . . because we're in a knowledge-based society. What takes the time in planning is how you put it across. I'm spending more time now on. . . what am I trying to achieve in this game? Whereas in the old days it would have been rucking drill. . . off we go.

Perhaps inevitably, given the nature of teacher training, there was limited reference to individual needs or wants, with guiding principles being applied across a large group of players, making it likely that teacher-coaches were making decisions that served a particular sub-group (such as boys or girls) more. For example, Coach 4 stated the following:

But if you say... This is where you put your foot... your shoulder- boys 'cool'. Girls, 'but that that's not comfortable'. If you do it the other way around and then they must go and experience that, they need to almost prove it to themselves.

Similar differences were noted when comparing the experience and qualifications of the teacher-coaches encountering a new learning activity. Those with more experience and qualifications referred to a process of adapting and contextualising the activity, whereas the less experienced teacher-coaches tended to report adoption of the activity. For example, Coach 8 reported the following:

"even now I might go on to YouTube, I might adapt it but very rarely copy it... I know what works in this environment after six years", compared to Coach 2 "I take a lot of coaching ideas or drills... from social media... Primarily Instagram and TikTok".

Coach reflection post-event was limited, a pattern reported in the literature ([Downham & Cushion, 2024](#)), suggesting a limitation in critical thought and adaptation of practice, although all but one reported a process of reflection in action using a series of rapid decisions ([Nash & Collins, 2006](#)). Coach 7 outlined this process of adapting as follows: "Every lesson I'm... finding different ways to get through to... groups of different abilities. It's been a very much a trial-and-error approach".

This use of tacit knowledge and experience may in some cases represent expertise, whilst in others it may imply a reproduction of a small range of pedagogical behaviours.

3.3.2. A 'Place for Everything'

All the teacher-coaches reported there being a 'place for everything' pedagogically, except those actions or activities that might cause harm or offence. Coach 4 exemplified this: "There isn't anything I would actively not use".

It was apparent from those teacher-coaches with a Level 4 or 5 qualification that their selection of pedagogies was rooted in a detailed understanding of why they had made their selection and why they had not chosen another, a view supported by [McCleery et al. \(2022\)](#). For example, although Coach 11 (Level 4) recognised the benefits of questioning to check for understanding or promote player cognition, he also reported opting not to use it when working with participants with limited prior understanding, on the basis that players would be guessing. This is a viewpoint supported in the teacher education literature ([Kirschner & Hendrick, 2020](#)).

Questioning was referenced as a positive coach behaviour (Coach 4: "I would hope I use questioning a lot"), especially in revealing player knowledge, but less often as a means of developing knowledge. Using questioning primarily for checking if players could remember a specific answer pointed towards a viewpoint that the learning process was linear and one-way in nature and served only to pass on information, although there were exceptions from those with more advanced coaching qualifications:

I would limit telling, just to allow them, see the bigger picture, ... and trying to create more depth to their understanding. Bring them along. Ask them why they're doing it. (Coach 3-Level 3, 19 years' experience)

Coach 7 (Level 1, 22 years' experience) endorsed the role of questioning to develop problem-solving: "So getting them to recognise why I've stopped the game? Why have I done that? I want them to be thinking players... to know why they do what they do", implying that their underpinning teaching qualification may be the theoretical driver. Coach-to-coach questioning was recommended as a reactionary, deficit-based approach by Coach 4: "If I have a problem, I'll seek out solutions".

When asked about the factors that would affect choice of pedagogical approaches, age, stage, and competency level were regularly cited as decisive factors. As Coach 4 stated: “I think the older they are, the better the understanding. With younger children, you say. Oh, Great pass. How did you do that? Don’t know”. The concept of reduced information or complexity for younger or less able participants was a common thread and one partially supported by the literature through cognitive load theory (Taylor et al., 2023), although this was qualified with the need to create and sustain engagement in performers. The potential danger of de-contextualising practice and reducing engagement was rarely identified; therefore, a more detailed understanding of relevant learning theories (Taylor et al., 2023) may aid in this refinement and ought to form part of teacher-coach development in a formalised sense.

Although it may be that teacher-coaches do not require a detailed theoretical understanding of differing approaches (Ashford et al., 2022), it would seem inevitable that without some declarative knowledge (Abraham & Collins, 2011), they are limited in their adaptability and ultimately effectiveness.

3.3.3. Person Before Player

Unsurprisingly given the context, a ‘person before player’ approach was consistent across the teacher-coaches, with a holistic view of development. Coach 1 exemplified this as follows: “The number one thing from a teaching perspective is the holistic approach. Because a happy, healthy individual is going to be a high performing one”. Coach 7 described this as follows: “We need to create space for them to experiment, to get things wrong and learn”, whereas Coach 4 saw it as follows:

The sort of start session will be high energy, fun, rewarding things like supporting others in success. It will always be linked to a value, so the value I would have would be ‘support’ not like support the ball or support space. But. . .support the person.

Coach 8 drew on informal learning in this regard when recounting that this idea “was from a friend. He said “You can’t teach a forward defensive if you don’t know who the boy is””.

In the setting of the current study, it is likely that teacher-coaches will collaborate with athletes for several years and, as such, fostering a culture of co-creation and reciprocal learning would create a more positive experience and greater development for all parties (Gosai et al., 2023). Coach 2 outlined this viewpoint as follows: “It’s trying to create that level of autonomy. . .allowing them. . . to feel responsible for their learning”.

Only two teacher-coaches specifically referenced using longer-term and shorter-term development priorities simultaneously; however, given that they both had prominent levels of experience and qualification, this holistic perspective would seem beneficial for others to adopt.

3.3.4. Games-Based Practice

Given the current privileging of games-based approaches within coach education, it was expected that the teacher-coaches might lean towards designing practice with game play at the forefront. This proved to be the case, although the justification for this as a paradigm was mixed. Coach 3 outlined this as follows: “since being in that environment where drills were almost banned, I have thought and. . .used them more and games less”.

A small number of teacher-coaches provided a more theoretically informed rationale that drew upon notions of fidelity and transfer to competition, while others linked increased gameplay to increased player engagement, activity levels, and enjoyment, as supported by Wright and Forrest (2007). For example, Coach 4

noted the following: “Games. . . trying to take ownership as much as they can at the beginning, maybe a few directions, a theme. Whether that be two touch, something that it creates space”.

Games-based approaches were reported as preferential for transfer to performance, higher involvement, and enjoyment levels. Coach 4 exemplified this as follows: “I enjoyed games, so I coach through games”. This reflects the literature (Harvey et al., 2018; Renshaw et al., 2016; Price et al., 2024) suggesting that coaches often show confusion around the interchangeability of approaches such as Teaching Games for Understanding and the Constraints-Led Approach. This points to a need for greater accessibility to coaching theory for teacher-coaches.

Among the teacher-coaches, there was a ‘pick and mix’ approach to pedagogical techniques such as the use of constraints, scoring systems, or individual challenges such as ‘super-powers.’ Coach 4 outlined this as follows: “They absolutely love it. . . they’re talking, what level did you get to or which superpower? I had this superpower and. . . that’s been really impactful for me”.

Coach 8 (Level 5, 28 years’ experience) raised a perceived gap between how he saw teaching and coaching approaches: “One thing. . .has been a constant throughout my teaching, but . . .one. . . that I didn’t transfer across into the coaching, . . . what if I say to the guys what do you want to do tonight?”. This may be more of an espoused theory than a practical theory in use (Ford et al., 2010). Several teacher-coaches did reflect that they may not be as consistent in their actual use of coaching behaviour as their espoused theories suggested, reflecting previous work by Ashford et al. (2022).

Those with more formal coach education showed a great level of declarative understanding (Abraham & Collins, 2011) around how they might adapt these practices to fit their context, whereas less experienced teacher-coaches reported an adoptive approach, lifting observed sessions and repeating them. This was characterised by two teacher-coaches as “a magpie approach” (Coach 8) or “magpie game” (Coach 3). Demiral and Naziroglu (2024) report a significant reduction in coaches’ choice of more ‘learner-centred’ pedagogical approaches once they have been coaching eleven years or more, possibly *implying* a more nuanced consideration of practice design or simply a view that you can “get them there quicker” (Coach 1). This was supported in the study by Coach 8 (Level 5, 28 years’ experience): “I have tried to be more player led. We’ve had our most successful seasons the last two years and. . . There was a . . .decision to change from the player led environment we had three years ago to more coach led”. Overall, it was clear that teacher-coaches with a more sophisticated view of knowledge showed greater espoused pedagogical adaptability.

4. Limitations

While the sample provided valuable insights into teacher-coaches’ views on the place of knowledge and its development within their practice, our findings are limited by the sample size and representativeness. The sample size of eleven, although considered sufficient in the literature (Braun et al., 2016), was drawn from a specific context that, while giving validity to the development of teacher-coaches in this setting, would potentially limit extrapolation. The British school system, especially regarding the independent sector, is not necessarily generalisable to other nations, although significant similarities exist in parts of Australia, New Zealand, and the USA. Most participants coached team sports and were male; as such, voices from other groups are underrepresented. Therefore, widening the range and number of participants would be of benefit in future research to allow broader application of the findings. Such insights could be valuable in supporting further developments to coach education, for example, by developing informal learning opportunities within and around coach education settings.

This study considered teacher-coaches' espoused pedagogy, which is limited by considering the teacher-coaches' views; therefore, combining this with observation of these pedagogies on the field of play would add further insight into the findings. Finally, due to the existing relationships between the first researcher and the participants, there is the possibility of inferred meaning or contextual prior knowledge being used to make assumptions.

5. Conclusions and Implications

The research had three aims, formulated as questions:

1. To explore how teacher-coaches view coaching knowledge. Do they follow a similar epistemological chain to coaches in the current literature, or does their teacher education affect this?
2. To explore how teacher-coaches develop their knowledge. Does this follow a similar pattern in terms of formal, informal, and non-formal knowledge development?
3. To explore teacher-coaches' espoused pedagogical practice. Does a more sophisticated view of knowledge increase espoused pedagogical adaptability?

Aim 1: The notion of knowledge as a fixed entity, transferable from teacher-coach to performer without adaption, was consistently present amongst less qualified teacher-coaches, albeit with some variation between types of knowledge. This did not necessarily change according to experience level, but those teacher-coaches who had attained a higher level of coach qualification (Coaches 8–11) also recognised the interpersonal nature of their coaching and outlined the tentativeness of their knowledge and its co-creation. Teacher-coaches typically have a strong underpinning sense of learning theory, but this may be tacitly applied, and transfer to the coaching domain may not be inevitable. This would point to a need for teacher-coaches to be more aware of their views around knowledge creation at a more explicit and applied level, via more effective formal coach education and a more long-term mentoring process underpinned with appropriate theoretical understanding (McCleery et al., 2022). It was clear that teaching experience did not equate to a more sophisticated epistemology but gave underpinning foundations for coach development to build upon.

Aim 2: Preferred sources of coach knowledge followed previous research in suggesting that teacher-coaches prefer informal or non-formal sources; however, the extent of this varied. There were several reported reasons teacher-coaches did not develop their knowledge beyond their current level. External barriers rarely featured as a reason here, although access, time, and finances were mentioned in part. For those teacher-coaches who pursued higher levels of coach education, there were, however, significant reported benefits to formal coach education as a source of knowledge development. Further benefits included networking, sense-making around a central theme, and theoretical underpinning of learning design. Those teacher-coaches who had engaged with formal coach education showed greater pedagogical nuance and criticality, adapting rather than adopting observed practice. Therefore, it would seem prudent to see future development of 'informal within non-formal' teacher-coach learning opportunities. These would require space and time for the aspects shown to be beneficial but without the rigid structure of a competency-based framework to be adhered to. It would also seem appropriate for employers not to rely on the assumption that teaching experience transfers to the teacher-coach scenario.

Aim 3: The teacher-coach espoused choice of pedagogy was guided by principles developed over time alongside a tacit understanding of their context. This was particularly apparent in pedagogical adaptability, where a pre-determined outcome related to short-term performance tended to be the sole element explicitly considered. This is consistent with the literature (Hall & Smith, 2006; Denison, 2010) in relation to the wider social

influences on the linearity of coach adaptability and would be reinforced by current formal teacher education. As such, further support of teacher-coach planning in their initial teacher training, supported by the contemporary coaching literature, would prevent predetermined limits being placed on athlete learning. The place of pedagogical theory for session design or coach action was extremely limited in an explicit sense (Taylor et al., 2023), and blurring between approaches was common. This would point to a need for teacher-coaches to have access to more applied learning theory within non-formal development spaces where sensemaking can occur. The lack of active and intentional reflection on action by the teacher-coaches suggested an area for further exploration and development. To this end, making reflection in action a more applied aspect of formal teacher-coach education would begin to embed it as a coaching behaviour in widespread use.

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References

- Abraham, A., & Collins, D. (2011). Taking the next step: Ways forward for coaching science. *Quest*, 63(4), 366–384. [\[CrossRef\]](#)
- Abraham, A., & Collins, D. (2015, June 9–12). *Professional judgement and decision making in sport coaching: To jump or not to jump* [Paper presentation]. International Conference on Naturalistic Decision Making, Maclean, VA, USA.
- Allen-Collinson, J. (2016). Breathing in life: Phenomenological perspectives on sport and exercise. In B. Smith, & A. C. Sparkes (Eds.), *Routledge handbook of qualitative research in sport and exercise* (pp. 11–23). Routledge. [\[CrossRef\]](#)
- Armour, K. M. (2004). Coaching pedagogy. In K. M. Armour, R. L. Jones, & P. Potrac (Eds.), *Sports coaching cultures: From practice to theory* (pp. 94–115). Routledge. [\[CrossRef\]](#)
- Ashford, M., Cope, E., Abraham, A., & Poolton, J. (2022). Coaching player decision making in rugby union: Exploring coaches espoused theories and theories in use as an indicator of effective coaching practice. *Physical Education and Sport Pedagogy*, 1–22. [\[CrossRef\]](#)
- Baker, J., & Young, B. W. (2014). 20 years later: Deliberate practice and the development of expertise in sport. *International Review of Sport & Exercise Psychology*, 7(1), 135–157. [\[CrossRef\]](#)
- Benish, D., Langdon, J., & Culp, B. (2023). Previous experiences of novice coaches and their coach-created motivational climate: A collective case study. *Physical Education and Sport Pedagogy*, 28(5), 482–502. [\[CrossRef\]](#)
- Berger, R. (2015). Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. *Qualitative Research*, 15(2), 219–234. [\[CrossRef\]](#)
- Braun, V., Clarke, V., & Weate, P. (2016). Using thematic analysis in sport and exercise research. In B. Smith, & A. C. Sparkes (Eds.), *Routledge handbook of qualitative research in sport and exercise* (pp. 191–205). Routledge. [\[CrossRef\]](#)
- Cassidy, T., Jones, R. L., & Potrac, P. (2009). *Understanding sports coaching: The social, cultural and pedagogical foundations of coaching practice* (2nd ed.). Routledge.
- Collins, D., Abraham, A., & Collins, R. (2012). On Vampires and Wolves-exposing and exploring reasons for the differential impact of coach education. *International Journal of Sport Psychology*, 43(3), 255–272. [\[CrossRef\]](#)
- Collins, D., Taylor, J., Ashford, M., & Collins, L. (2022). It depends coaching—The most fundamental, simple and complex principle or a mere copout? *Sports Coaching Review*, 1–21. [\[CrossRef\]](#)

- Côté, J., & Gilbert, W. (2009). An integrative definition of coaching effectiveness and expertise. *International Journal of Sports Science & Coaching*, 4(3), 307–323. [\[CrossRef\]](#)
- Crowther, M., Collins, D., Collins, L., Grecic, D., & Carson, H. J. (2022). Investigating academy coaches' epistemological beliefs in red and white ball cricket. *Sports Coaching Review*, 1–23. [\[CrossRef\]](#)
- Cushion, C. J. (2013). Applying game centered approaches in coaching: A critical analysis of the 'dilemmas of practice' impacting change. *Sports Coaching Review*, 2(1), 61–76. [\[CrossRef\]](#)
- Demiral, S., & Naziroglu, M. (2024). Examination of experienced coaches and physical education teachers' teaching methods and their perceptions regarding these methods-2023. *Frontiers in Sports and Active Living*, 6, 1383361. [\[CrossRef\]](#) [\[PubMed\]](#)
- Denison, J. (2010). Planning, practice and performance: The discursive formation of coaches' knowledge. *Sport, Education and Society*, 15(4), 461–478. [\[CrossRef\]](#)
- Downham, L., & Cushion, C. (2024). Reflection and reflective practice in high-performance sport coaching: A heuristic device. *Physical Education and Sport Pedagogy*, 29(6), 601–620. [\[CrossRef\]](#)
- Erickson, K., Bruner, M. W., MacDonald, D. J., & Côté, J. (2008). Gaining insight into actual and preferred sources of coaching knowledge. *International Journal of Sports Science & Coaching*, 3(4), 527–538. [\[CrossRef\]](#)
- Ford, P. R., Yates, I., & Williams, A. M. (2010). An analysis of practice activities and instructional behaviours used by youth soccer coaches during practice: Exploring the link between science and application. *Journal of Sports Sciences*, 28(5), 483–495. [\[CrossRef\]](#)
- Gosai, J., Jowett, S., & Nascimento-Júnior, J. R. A. D. (2023). When leadership, relationships and psychological safety promote flourishing in sport and life. *Sports Coaching Review*, 12(2), 145–165. [\[CrossRef\]](#)
- Grecic, D., & Collins, D. (2013). The epistemological chain: Practical applications in sports. *Quest (National Association for Kinesiology in Higher Education)*, 65(2), 151–168. [\[CrossRef\]](#)
- Hall, T. J., & Smith, M. A. (2006). Teacher planning, instruction and reflection: What we know about teacher cognitive processes. *Quest (National Association for Kinesiology in Higher Education)*, 58(4), 424–442. [\[CrossRef\]](#)
- Harvey, S., Pill, S., & Almond, L. (2018). Old wine in new bottles: A response to claims that teaching games for understanding was not developed as a theoretically based pedagogical framework. *Physical Education and Sport Pedagogy*, 23(2), 166–180. [\[CrossRef\]](#)
- Johnson, M. G., Stylianou, M., & Mallett, C. J. (2024). Teacher-coaches in an Australian regional independent school: An exploratory case study. *International Sport Coaching Journal*, 11(3), 425–435. [\[CrossRef\]](#)
- Jones, R. (2007). Coaching redefined: An everyday pedagogical endeavour. *Sport, Education and Society*, 12(2), 159–173. [\[CrossRef\]](#)
- Jowett, S. (2017). Coaching effectiveness: The coach–athlete relationship at its heart. *Current Opinion in Psychology*, 16, 154–158. [\[CrossRef\]](#) [\[PubMed\]](#)
- Kirschner, P. A., & Hendrick, C. (2020). *How learning happens: Seminal works in educational psychology and what they mean in practice*. Routledge.
- Lavrakas, P. J. (2008). *Encyclopedia of survey research methods*. SAGE Publications.
- Leeder, T., & Cushion, C. (2019). The reproduction of 'coaching culture': A Bourdieusian analysis of a formalised coach mentoring programme. *Sports Coaching Review*, 9(3), 273–295. [\[CrossRef\]](#)
- Leeder, T. M., Russell, K., & Beaumont, L. C. (2022). Educative mentoring in sport coaching: A reciprocal learning process. *Cambridge Journal of Education*, 52(3), 309–326. [\[CrossRef\]](#)
- Leeder, T. M., Warburton, V. E., & Beaumont, L. C. (2021). Coaches' dispositions and non-formal learning situations: An analysis of the "coach talent programme". *Sport in Society*, 24(3), 356–372. [\[CrossRef\]](#)
- Lyle, J., & Cushion, C. (2017). *Sport Coaching Concepts: A framework for coaching practice*. Routledge. [\[CrossRef\]](#)
- Lynn, A., & Lyle, J. (2010). Coaching workforce development. In J. Lyle, & C. Cushion (Eds.), *Sport Coaching: Professionalisation and Practice* (pp. 194–204). Elsevier.
- McCleery, J., Hoffman, J. L., Tereschenko, I., & Pauketat, R. (2022). Ambitious coaching core practices: Borrowing from teacher education to inform coach development pedagogy. *International Sport Coaching Journal*, 9(1), 62–73. [\[CrossRef\]](#)
- Mellor, C., Gaudreault, K. L., & Jenkins, J. (2021). Preparing physical educators to manage teacher/coach role conflict. *Journal of Physical Education, Recreation & Dance*, 92(7), 39–43. [\[CrossRef\]](#)
- Nash, C., & Collins, D. (2006). Tacit knowledge in expert coaching: Science or art? *Quest (National Association for Kinesiology in Higher Education)*, 58(4), 465–477. [\[CrossRef\]](#)
- Nelson, L. J., Cushion, C. J., & Potrac, P. (2006). Formal, nonformal and informal coach learning: A holistic conceptualisation. *International Journal of Sports Science & Coaching*, 1(3), 247–259. [\[CrossRef\]](#)
- Poucher, Z. A., Tamminen, K. A., Caron, J. G., & Sweet, S. N. (2020). Thinking through and designing qualitative research studies: A focused mapping review of 30 years of qualitative research in sport psychology. *International Review of Sport and Exercise Psychology*, 13(1), 163–186. [\[CrossRef\]](#)
- Price, A., Beckey, A., & Collins, D. (2024). Developing a love for playing games: A clarification of why digital video games approach is not gamification. *Physical Education and Sport Pedagogy*, 29(6), 558–572. [\[CrossRef\]](#)

- Renshaw, I., Araújo, D., Button, C., Chow, J. Y., Davids, K., & Moy, B. (2016). Why the constraints-led approach is not teaching games for understanding: A clarification. *Physical Education and Sport Pedagogy*, 21(5), 459–480. [\[CrossRef\]](#)
- Sawiuk, R., Leeder, T. M., Lewis, C. J., & Groom, R. (2024). Planning, delivering, and evaluating formalised sport coach mentoring: Exploring the role of the Programme Director. *Sports Coaching Review*, 13(3), 342–361. [\[CrossRef\]](#)
- Schempp, P., & McCullick, B. (2010). Coaches' expertise. In J. Lyle, & C. Cushion (Eds.), *Sports coaching: Professionalisation and practice* (pp. 221–231). Churchill Livingstone Elsevier.
- Schempp, P., Tan, S., Manross, D., & Fincher, M. (1998). Differences in novice and competent teachers' knowledge. *Teachers and Teaching, Theory and Practice*, 4(1), 9–20. [\[CrossRef\]](#)
- Smith, B., & Sparks, A. (2016). Interviews: Qualitative interviewing in sport and exercise sciences. In B. Smith, & A. C. Sparks (Eds.), *Routledge handbook of qualitative research in sport and exercise* (pp. 103–123). Routledge.
- Stodter, A., & Cushion, C. J. (2017). What works in coach learning, how, and for whom? A grounded process of soccer coaches' professional learning. *Qualitative Research in Sport, Exercise and Health*, 9(3), 321–338. [\[CrossRef\]](#)
- Stone, J. A., Rothwell, M., Shuttleworth, R., & Davids, K. (2021). Exploring sports coaches' experiences of using a contemporary pedagogical approach to coaching: An international perspective. *Qualitative Research in Sport, Exercise and Health*, 13(4), 639–657. [\[CrossRef\]](#)
- Stoszkowski, J., & Collins, D. (2016). Sources, topics and use of knowledge by coaches. *Journal of Sports Sciences*, 34(9), 794–802. [\[CrossRef\]](#)
- Taylor, R. D., Taylor, J., Ashford, M., & Collins, R. (2023). Contemporary pedagogy? The use of theory in practice: An evidence-informed perspective. *Frontiers in Sports and Active Living*, 5, 1113564. [\[CrossRef\]](#) [\[PubMed\]](#)
- Webb, K., & Leeder, T. M. (2022). Dispositions and coaching theories: Understanding the impact of coach education on novice coaches' learning. *Sport, Education and Society*, 27(5), 618–631. [\[CrossRef\]](#)
- Wright, J., & Forrest, G. (2007). A social semiotic analysis of knowledge construction and games centred approaches to teaching. *Physical Education and Sport Pedagogy*, 12(3), 273–287. [\[CrossRef\]](#)

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