Investigating community cricket coaches attempts to make net practice sessions more game-like

Abstract

In Australian sport there is strong advocacy for a more representative of the game approach to practice through use of a game-based approach (GBA) for coaching youth sport by the Australian Sports Commission. Cricket Australia (CA; National body) also suggests practicing by a GBA. This study applies Participatory Action Research (PAR) and an Appreciative Inquiry (AI) framing to create knowledge about coaching pedagogy change to make cricket net practice sessions more game-like. Using an AI approach, data was collected through interviews with the three coaches and reflexively analysed by the researchers to identify themes. Four enablers of change were identified to make net sessions more game-like: knowledge to create scenarios that reflect the game, knowledge needed to get participants to think/solve problems, knowledge needed to challenge the traditional way of net sessions and knowledge needed to know when to coach directly. Results showed an AI approach could be adopted to identify factors that community cricket coaches needed to make net sessions more game-like. If the enablers identified in this research are not addressed in cricket coaching courses, then it is unlikely that the goals of Cricket Australia will be met in community coaching environments. This research identifies the importance of aligning key knowledge and supporting community cricket coaches when implementing GBA's in net sessions which is essential in aligning community cricket coaching with goals set by CA.

Keywords: Game Sense; Community Coaching; The Spectrum; Appreciative Inquiry

Introduction

Cricket is a popular sport in many countries with a history of British colonisation, like Australia. Recently, it was one of five sports proposed for the 2028 Los Angeles Olympics. In Australia, in community cricket there are over 30,000 registered coaches (Playcricket, 2024). In 2022-2023 there were 627 693 total registered participants playing cricket in Australia and junior (9 years – 18 years) and entry level programs (entry level – 10 years) had 409 642 registered participants (Cricket.com.au, 2024). To prepare people to coach, Cricket Australia provides coach education courses for qualifications (levels) ranging from Community Cricket

level coach through to Level 3 High Performance coach – the highest level and accreditation and required for coaching State teams. However, in the Australian state where this study occurred there is no requirement 'level' to coach at a community level; that is, no qualification is required.

In much of CA's coaching literature (e.g., Coaching the Australian Way, 2022a; Australian Cricket Junior Coaching Principles, 2022b) there is an emphasis on playing games and players solving problems, which will be discussed in more detail in the following paragraphs. However, despite this emphasis, recent research suggested that "a traditional training environment in amateur [community] cricket often includes the use of enclosed netted spaces, where access to open fields may be restricted due to time and financial constraints" (Lascu et al., 2020, p. 1). This practice environment is not one requiring a player to practice in conditions representative of playing the game. Here, representative refers to a practice context where the coach replicates the playing demands of the competitive game environment. This is achieved by practice design intentionally presenting game-related problems to players for their development of game relevant perception-cognition-action ability (O'Connor et al., 2020).

This account of what has been described as a traditional training environment because it is historically common, suggests CA's emphasis on a game-based way of coaching (playing modified games and solving problems) and how coaches in community cricket are enacting their coaching sessions lacks congruence. We recognise lack of game representation in the way coaches set up players practice is not limited to cricket, and other sports have found moving coaches to using a game-based coaching approach (GBA) have proven difficult (Roberts, 2011; Kilic & Ince, 2023). One study found it took approximately a full season of a mentor working with a coach before the coach became comfortable with the planning format needed for a GBA (Pill, 2016a). Although players have been found to value a GBA (Light, 2004; Light & Evans, 2010), it may be that changing coaching to this style of coaching still seems to be foreign or an innovation among Australian coaches at all levels of sport (Pill, 2013; Karagiannis & Pill, 2017). Changing coaching behaviour is challenging due to the intricacies and a culture of a 'way of how things are done' (Stodter & Cushion, 2019). This 'way things are done' culture views coaches as knowledge holders and players as passive receivers, meaning any approach valuing construction of knowledge by the players

challenges the status quo (Cushion, 2013). Given CA's desire for a GBA to be used by coaches and the identified challenges of implementing a GBA, this study sought to discover enabling factors identified by three community cricket coaches who attempted to make net sessions more game-like. For the purpose of this study, game-like net sessions were a learning episode practiced in an enclosed netted environment where the players replicated (practiced) known movements and/or discover movement solution/s to a game-related problem set by the coach.

While research has analysed coaching styles of recreational coaches (Low et al., 2013) and the effects of a coaching approach (Lascu et al., 2020) no research exists on helping coaches implement a coaching style that coaching literature espouses. This study makes a unique contribution to the literature by investigating how community cricket coaches adapted to changing their coaching pedagogy. Specifically, the research used appreciative inquiry - a qualitative approach that is somewhat uncommon in sport pedagogy research (Clements et al., 2022) - to assist the change to make cricket net practice sessions more game-like. Additionally, while there is some research on the contextualised application of a GBA to cricket coaching (e.g., Vickery et al., 2014) and consideration of the form of practice coaches initiate within a net session (e.g., Vickery & Nichol, 2020) there is limited consideration of coaches adopting new the pedagogical principles of a GBA within the confines of a net session. Therefore, in addition to the contribution the study makes to the extant research literature it also potentially contributes a practical guide to transforming the common but un-representative cricket net practice into a more representative of the game practice session.

Game Based Approach and Cricket Australia Coaching Aims

There are numerous models or examples of GBA's, such as Teaching Games for Understanding (TGfU) (Bunker and Thorpe, 1982), Play Practice (Launder, 2001), Tactical Model (Metzler, 2011), Play with Purpose (Pill, 2007) and a Game Sense approach (GSA) (den Duyn, 1997). Whilst there are many names for similar models a common feature is an inquiry-based approach requiring the coach to modify instruction, content and tasks in response to the participants' learning to play games (Dania, 2023). GBA's challenge the

traditional directive teaching of sport-as-sport-technique (Kirk, 2010) which is usually coached with the routine of demonstrate-explain-practice (DEP: Tinning, 2010). However, some GBA's will still direct coaches to use DEP at times. In general, though, the emphasis of a GBA contrasts with what is often called a 'traditional' approach to coaching which is one focussed on coach direction and player replication of coach direction (Light, 2012). A 'traditional' approach has also been described as the process of internalising a fixed set of instructions or body of knowledge to be replicated later (Light & Dixon, 2007). Research (SueSee & Pill, 2023) suggests that the GBA is actually numerous instructional styles when viewed through the lens of the Spectrum of Teaching Styles (SoTS). The SoTS (Mosston, 1966) suggests every decision in coaching as teaching is a deliberate act based on a previous pedagogical decision. These decisions are made in three places: the pre-impact set, the impact set and the post-impact set. These three places form the anatomy of any style. The impact set involves making decisions about what is planned to be achieved. The impact set involves the implementation of the decisions that occur during the face-to-face interaction between player and coach, and the post-impact set involves the assessment decisions regarding the decisions that occurred during the face-to-face interaction by either the coach or player. Through the identification of who (coach or player) is making the decisions and where (in the coaching episode) the 11 styles emerge (SueSee & Pill, 2022).

While research on GBA's that put athletes at the centre of the learning has shown improvements in team performance and enhanced relationships (Pill, 2018b) some research has found implementing a GBA comes with challenges. For example, research has shown coaches are challenged to engage players in dialogue and movement performance through questioning (Turner, 2017) and the use of questioning strategies to stimulate learning were used infrequently (Preston et al., 2016) when coaching eight Olympians. Hewitt's work with tennis coaches highlighted incongruence between coaches' beliefs that they were delivering GBA coaching, but observations of their practice yielded mostly command and practice style coaching (Hewitt et al., 2016; Pill, 2016b). These factors (along with other challenges) need to be considered if sporting organisations wish specific coaching pedagogy to be used Like any coaching pedagogy, unless challenges are addressed, the implementation of a GBA is liable to face similar problems.

We contend that by CA not specifically naming a coaching approach and not providing coach training in the implementation of a specific approach may cause problems as some coaches struggle to be aware of their instructional or pedagogical practice and if it is aligning to their desired outcomes and how they think they are coaching (Hewitt, 2015; SueSee, 2020 ; SueSee et al., 2018; SueSee & Barker, 2018). Research (Pill et al, 2022, p. 144) has suggested "coaches may draw naive conclusions such as, 'I ask questions and play games; therefore, I am using a GBA as questions and games are a feature of GBA's' ". This occurs as merely playing games does not highlight the instructional behaviours specifically that more specific language provides (Pill et al, 2022). Therefore, the question that guided this project was : What were the enablers for the coaches to making cricket net sessions more game-like?

Methods

Theoretical perspective

As the research was trying to answer the question of how to make net sessions more game-like, the study was concerned with uncovering what the participants believed they would need to achieve this goal. Therefore, the researchers adopted a relativist ontology believing the participants conclusion about what was needed would be based on their thoughts, experiences and interpretations (Hiller, 2016) and not constructs based on fixed laws. Consistent with this position, the researchers assumed that knowledge can be generated from the point of view of the individual (the coach) who is directly involved in the phenomenon (cricket coaching net practice). With multiple participant coaches, their exists the potential for multiple interpretations of the reality of the phenomenon of cricket coaching net practice (Ugwu et al., 2021). Conforming with this view of knowledge, a constructionist epistemology positions this research as the researchers wished to uncover the "meaning that comes into existence in and out of human engagement with the realities in the world…." (Al-Abebnah, 2020, p. 79). This idea, that meaning is created through the interaction between individual and what they experience (Al-Abebnah, 2020), called for an interpretivist approach as the researchers wanted to understand the community coaches' experiences socially, relationally, culturally, and thoughts (over time) as they worked to

make net sessions more game-like. The experiences of the coaches would be socially constructed, subjective and may change over the course of the research and time in general (Al-Abebnah, 2020) as opposed to being objective. We therefore acknowledge that the researchers made meaning of the data from the natural setting of cricket net-coaching through their thinking informed by interactions with the participants (Ugwu et al., 2021). Adherence to an interpretivist perspective influenced the choice of theoretical framework and the qualitative methodology.

Theoretical framework

The chosen theoretical framework for this research was Participatory Action Research (PAR: Clements & Morgan, 2015) with Appreciative Inquiry (AI: Pill, 2013) to create knowledge and insight about the enablers (or what they believed they needed) for junior cricket coaches attempting to make net sessions more game-like. PAR is a characterised by partnerships with those influenced by research to effect systematic change within communities (Minkler & Wallerstein, 2003). In this case, PAR and AI may assist coaches choosing coaching styles that allow participants opportunities to solve problems and, which are representative of the game of cricket. PAR and AI are complementary theoretical and methodological approaches to research (Martyn et al., 2018). AI seeks to identify the functional aspects of activities, from the participant point of view, that can be reproduced using PAR to transform future actions. Pill (2013) argued that AI can be used for two purposes, "as an evaluative technique with the aim to identify good practice and to introduce and implement change" (p. 802). This paper is concerned more with the second aspect of AI, to help community coaches identify enablers that would allow them to make net sessions more game-like. The advantage of combining PAR and AI in the present study is that, although barriers were identified, the research focus was on the enablers of change.

Recruitment

The research project followed the ethical guidelines outlined by University of Southern Queensland and ethics approval code H21REA162. Recruitment and data collection began only after ethics approval was granted by researcher 1's university. To gain participants, an email was sent to a junior cricket club in a large city in Australia seeking participants for research titled "Making net sessions more game-like". Through this process,

nine people identified themselves as interested and three participants were purposively sampled to represent a range of characteristics (player abilities, reasons for coaching and a range of experience - in terms of years and coaching qualifications). Consent forms were emailed to the participants and a phone conversation or face to face meeting was arranged place to allow the participants to ask any questions before they signed the consent forms.

Participants

The three coaches purposively sampled represented novice, intermediate and experienced coaches and the age groups they coached included u/12 club team, u/16 representative team and u/17 club team respectively. Coach 1 had completed a Community Coaching qualification (Level 1), Coach 2 had a Representative Coaching qualification (Level 2) and Coach 3 had a High Performance (Level 3) qualification. All of these are qualifications were awarded through CA accredited coaching courses. A Junior or Community Cricket Course prepares the coach for junior coaching at a community or club level, while a Representative Coaching course is for representative teams. The term 'representative' here means a team that is selected to represent their region in a higher level of competition or that is part of a talent pathway competition. The High-Performance Coach accreditation is an invitation only course for aspiring high-performance coaches. The three coaches coached a range of player abilities, had a range of reasons for coaching (competitive, representative and social) and a range of experience (in terms of years and qualifications) with coaching. The participants self-identified as interested in this research project and were 'biased' towards making net sessions more game-like and working to improve their coaching.

Data collection

Appreciative interviews. Appreciative Inquiry (AI) interviews are based on AI and rooted in the positive discourse in social sciences. The interviews are usually one-on-one and involve a guided introspective inquiry in the search for the best in people and the relevant world around them (Schultze & Avital, 2011) to assist in change. An AI interview is an integral part of AI as it asks the participants to reflect on personal stories and look for strengths and possibilities to effect the change they desire (Ruschen, 2019). AI interviews have two parts: abstract conceptualization and active experimentation (Schultze & Avital, 2011; Ruschen, 2019). In an initial interview (the first D of the 5-D process) with each coach,

the researchers defined the focus of PAR and the participants discussed reasons for their interest in the project and what they hoped to get from it. The 5-D process uses a 5-step model (Define, Discovery, Dream, Design and Deliver-Destiny) to allow the participant coaches to clearly articulate what they wish to achieve and how they will get there. This process is outlined in Table 1.

Table 1. Semi-structured interview questions

Define
What is PAR?
What is your coaching philosophy?
Why did you volunteer for this project? What led you here?
Discovery
What 'works' for you?
Dream
What does your 'best' coaching look like?
What do the participants look like when this is occurring?
What do you believe the players need to learn?
Imagine with participants new possibilities and envisage a preferred future.
Design
What do you value in game-like learning?
What is the change you are seeking?
Why are you seeking this change?
Deliver-Destiny
What's the best future for your coaching game-like net sessions that you can imagine?
What will it take to get you there?
What are you hoping to achieve by the time we next chat?
What will it take to get you there?

The 5-D model is based on the 4-D model (Busche, 2011; Pill, 2013) as the participant coaches in this study had no formal training with a GBA compared to the participants in other research, who were being asked about their coaching practice using a GBA. All three participants suggested desires to learn more and try something different to traditional net sessions. One of the coaches did mention that 'people' talk about playing more games in cricket coaching but did not specifically mention CA coaching documents. As the three coaches contacted the researcher knowing the title of the research was 'Making net sessions more game-like' we argue they all had a positive view of coaching being at least more game-like as they would not have volunteered to be involved. Whilst terms such as

Participatory Action Research and AI were explained to the participants, they meant little. However, the processes were explained that the researchers were there to assist them in making the changes they desired. The researchers were not there to tell them what to do, but to collaborate with the coaches to find ways through discussion and questioning to make their net sessions more game-like.

In the first 1-hour semi-structured interviews (Table 1), participants were asked the first three questions (Define, Discover and Dream) from the using an AI approach discussing their experiences coaching. In the subsequent three 1-hour semi-structured interviews, Design and Deliver-Destiny were the focus of the interviews as the coaches attempted to create 'what should be' or the 'ideal' net session being more game-like'. This emphasis on Design and Delivery-Destiny questions reflected the participatory component in greater focus. The one-on-one interviews recorded the coach's beliefs about their coaching and were done after three coaching sessions were completed. The coaches were asked to describe their coaching philosophy in terms of what they were trying to achieve and how they would achieve these goals. The coaches were aware the title of the research project was "making net sessions more game-like" and identified as wanting to be involved in this project. The coaches were purposively sampled to reflect a degree of difference in terms of characteristics (coaching qualification, age group coaching and ability level of participants of each coach.

Observational research. Observation was used to provide the researchers with context for the AI interviews and inform the research question, "what were the enablers to making cricket net sessions more game-like?" The observations took place over a season of cricket (18 weeks) and occurred when the coaches were coaching their teams, making for an authentic context, which at times provided immediate feedback in terms of the effects of their coaching practice. The AI interviews allowed both the researchers and the coaches to identify enablers and barriers whilst attempting to make net sessions more game-like. Researcher 1 took field notes at the completion of the coaching sessions and referred to them at times during the AI interviews allowing the researchers to have a more intricate understanding of the factors raised by the participants.

Observations were undertaken to understand how the coaches behave in the natural setting of their coaching. It was anticipated this would provide insight into their coaching

behaviours that may differ from their self-reported accounts in the interviews (Smit & Onwuegbuzie, 2018). Combining observations and interviews was a strategy to enhance data credibility (Yin 2009) and richness alongside the capture of the contextual complexity within which the phenomena being studied was occurring (Elbardan et al., 2017). These two processes worked together synergistically with the observations allowing the researchers to see what was happening and the interviews providing meaning or the 'why' something was happening.

Data Analysis

The 5-D AI interview technique involves participants reflecting in a process known as reflexive interviewing. Reflexive interviewing must occur on at least two occasions "since the interviewers must reflect with the interviewee the interpretations that they built from the first meetings, giving the interviewee the opportunity to validate or refute such analyses" (Pessoa et al., 2019, p. 3). Clarification of responses and engagement by the interviewees was made possible through the researcher paraphrasing the answers back to the participants and checking through questions such as 'Is that what you mean' or 'Is this correct'? The process of numerous interviews is in line with member-reflection (Olmos-Vega et al, 2022) where in follow-up interviews with the participants they are allowed to respond to results so far recorded. The use of the AI framed semi-structured interviews enabled the researchers to collect data based on the participants lived coaching experiences of the past and the use of questions about their futures were used to encourage the participants to 'dream' or create ideas for 'making net sessions more game-like'. While appreciate inquiry does encourage the researcher to identify what possibilities can occur, barriers were also collected and not ignored or dismissed.

Author 1 and Author 2 reflexively analysed the propositions and statements identified in the course of the interviews and, through a process of inductive analysis, developed themes to be identified and recorded. This process enabled the construction of the main themes (Table 3) of the study. Repeated reflexive discussion occurred until both authors believed that the analytical themes were suitable interpretive constructs of the interviewee's responses throughout the interviews (Thomas & Harden, 2008). Omlos-Vega (2022) argue it is important to remember that the goal of reflexivity is "not to achieve an

accurate or impartial representation; this is neither possible nor desirable" (p. 242), instead, it needs to be acknowledged that reflexivity as rooted in a respect for and a valuing of subjectivity. We acknowledge that the researchers, and the participants are biased towards making net sessions more game-like and wanted to partake in the changing or trialling of new practice. The process of generating the themes in Table 3 is subjective and the removal of the subjectivity was not attempted during the analysis as the researcher's prior experiences, beliefs and assumptions are intertwined with the process and outcome of the analysis (Olmos-Vega, 2022).

During each of the 5-D interviews, the coaches and the researcher then co-constructed examples of making net sessions that were more game-like. More game-like meant that the players were required to use skills in game-like scenarios in the nets and situations that resembled real cricket situations and contained consequences for the skill performed. For example, placing 'fielders' (cones/markers, rubber disks, using tape to mark sections of the net) in certain directions within the net, bowlers bowling six ball overs and batters running when they hit a scoring shot (i.e. – not at the markers in the net). The concepts or beliefs about making net sessions more game-like and the destiny statements are outlined in Table 2.

Table 2. Propositions and statements collaboratively generated during interviews.

Participant	**Proposition**	**Design, Deliver-Destiny Statements**
1	*Create thinkers in net sessions through scenarios *How to fix technical problems when making net sessions more game-like *Managing equipment, space, weather, facilities *Engagement and improvement when used to other ways of coaching – 'just belt the ball' *Participants are used to a 'traditional' way of coaching in the nets	* How do I create scenarios in the nets which reflect the game to make the participant think (manage the fielders, read the batter, adjust strategies, consequences of their shots, understand where to hit the ball)? * How or when do I directly teach technique? *How do I improve my management of net space, equipment, participants etc? *How do I adjust/challenge/change the participants beliefs about what 'good'/'traditional' cricket net sessions are?

2	* Participants are used to a 'traditional' way of coaching in the nets and not used to thinking/questioning – 'I just hit the ball' *Create scenarios in the net which require thinking/problem solving *More preparation required *Participants lack consistency in repeatable action (bowl ball in same place) *	*How do I get young participants to think? *How do I get bowlers to think & execute? *How do I get consistency when game-like net sessions may lack volume?
3	*Managing equipment, space, weather, facilities *Training must reflect the game *Coach is 'out of the way' and lets the participant learn *Game-like net sessions will create thinking cricketers *Participants lack consistency in repeatable action (bowl ball in same place) *Space to create scenarios is sometimes a challenge	*How do I create consequences in the net so I get thinking batters and not sloggers? *How do I create a scenario in the net that reflects a scenario in a game? *How do I create constraints to get outcome I want?

Unlike similar research with physical education teachers (Pill, 2016a) the participants in this study were not overly familiar with a GBA beyond the concept of training using games. Participant 3 was a schoolteacher and a High Performance (Level 3) Cricket Coach and did seem to demonstrate a greater knowledge of game-based approaches during the interviews compared to the Participant 1 and 2. However, all three participants volunteered for this research project knowing the title was "Making net sessions more game-like". The coaches' interviews identified a range of factors they desired to assist them in making net sessions more game-like. Question 1 was designed to collect the coaches' philosophy and what they believed worked currently for them in a 'dream' session. This allowed a baseline to be collected of the coaching behaviour and to show what they valued regarding coaching.

Table 3. Analytical Themes

Analytical themes
Knowledge to create scenarios in nets that reflect the game Knowledge needed to get participants to think/solve problems Knowledge needed to challenge the 'traditional' way of net sessions Knowledge needed to address when to coach directly

Discussion

Our discussion is based around the four themes identified by the researchers after the 5-D interviews with the community coaches. The themes reflect the common concepts the coaches described when they attempted to make net sessions more game-like.

Knowledge to create scenarios in nets that reflect the game

Previous research (Lascu et al., 2020) has shown that coaches' attempts to correlate training with game performance, so that practice more closely resembles the requirements of the game of cricket, have proven difficult for cricket coaches and players spent most of their time in 'traditional' net sessions (Low et al., 2013) rather than game-like activities. The results of this research showed the participants in this study expressed beliefs that making scenarios in net sessions that reflect the game was a challenge at times. A specific example of this theme identified was the idea that players needed to understand or see the 'consequences' of their shots in the nets. This was reflected in participant coaches questioning of net sessions:

Participant Three:

'…if you don't have an environment where risk versus reward, it does not really match to what it is out in the middle…'.

Participant Two:

'… I don't know much around net play and gamifying netplay…….as opposed to just using it as a bowling tool or batting tool in isolation.'

Whilst not identical to the concept of creating scenarios that reflect the game, the idea that shot selection and bowling tactics in 'traditional' net sessions lack consequences (e.g. – getting out instead of staying batting) and need to be created to make net sessions more game-like was expressed. Traditionally, in a net session, a batter may execute an idealised example of a drive, however it may be argued that unless the drive scores runs by hitting it past or away from a fielder, then it is of little consequence or value in terms of runs scored. Research (Pill, 2018a, p. 43) has suggested a coaching approach that focuses "on predictability through player replication of a single and often idealised model of movement coordination response, frequently referred to as a 'technique', does not cater for the situational potential of the moments in the game". Therefore, judgements about the outcome or value of a shot can only be made with fielders or targets to avoid in a game-like environment. Without game context factors (consequences), comments about a batter performing a movement in a net session are reflecting the athlete's ability to perform a technique in an environment (devoid of game context), and thus not equalling skill movement. As GBA's are based around the tenet of practicing technique in the context of a game-like environment, providing coaches with support to improve this knowledge would be helpful. This is in line with research (Roberts, 2011) showing cricket coaches desired more support to implement Teaching Games for Understanding in the United Kingdom when attempting to implement player-centred coaching.

Knowledge needed to get participants to think/solve problems

Another theme identified by the researchers from the interviews was that participants wanted to know how to create net sessions that required players to think or solve problems. Other research (Roberts, 2011) found cricket coaches desired more support to implement Teaching Games for Understanding (i.e. - a way of teaching that places the learner as a

problem solver) when attempting to use player-centred coaching, and Harvey et al. (2015) indicated that coaches have difficulty with the purposeful application of questioning. Windschitl (2002) suggested these pedagogical dilemmas are associated with the delivery of constructivist principles which include adopting effective facilitation approaches, developing an in-depth understanding of the subject content and allowing learners to think for themselves. To create a learning episode or environment to get players to solve an unknown problem "… players must be placed in episodes where cognitive dissonance occurs and then guided or supported in their problem solving or search for the answer" (Pill et al., 2022, p. 72). Participant three noted this challenge of creating scenarios that challenged the players to think:

Participant Three

'…like the personal challenge of coming up with creative… you know game type situation, so I think that's a challenge for every coach', and

'…in terms of not just the physical setup but actually asking the questions and asking them to reflect on that. Am I asking closed questions now or I should be asking open question?'

Participant two referred also to the challenge for the players cognitively:

Participant Two

'…If you look at a normal net session it's probably fairly dull you know, the batter goes in they know they're just going to smash the ball around and the bowlers all kind of take turns to bowl, but no one really thinks about what they're doing…'.

A GSA provides a way for coaches to modify game strategies and concepts so there are opportunities to develop both skills and an understanding of the tactics of the game'

congruently and thereby help develop thinking players (ASC, 2023) and foster problem solving as CA coaching literature desires in their coaching. Other coaching styles that may assist coaches in addressing these concerns of creating scenarios to solve problems is the use of inquiry strategies that include Coaching by Guided Discovery (Style F), Coaching by Problem Solving (Convergent Discovery - Style G) and Coaching for Creativity (Divergent Discovery - Style H) from The Spectrum of Coaching Styles (Pill et al., 2022).

Knowledge needed to challenge the 'traditional' way of net sessions

The theme of challenging the 'traditional' way of net sessions or the expectations of the players on how they were being coached was a further theme identified. The participants spoke of the players having moments where there seemed to be push-back against the questioning used to support the participants solving problems with comments like "Why are you asking me so many questions", "I just want to get in the net and bash the ball" and "I just want to bowl" being asked across the time they were trialling trying to make net sessions more game-like. These challenges experienced by the participants in this study have been found before (Turner, 2017; Preston et al., 2016) and are potentially an example of what happens when athletes only experience a coaching style which requires them to reproduce movement and knowledge, provided by the coach, rather than the athlete being the source of knowledge or solutions at times. If behavioural expectations are new to the athlete or have not been explained to the athlete, then there is likely to be confusion experienced due to the unfamiliarity of the coaching environment or culture. Previous research (Roberts, 2011; Windschitl, 2002) has labelled these cultural dilemmas, as making net sessions more game-like require a constructivist approach and the role and behavioural expectations of both coach and learner changes when compared to a traditional net session.

The participant coaches all mentioned the feeling that the players they were coaching had a belief about what should be happening in a net session, and that thinking, solving problems, creating solutions and having specific goals about outcomes were not part of what they usually experienced. Comments from the participant coaches reflected this:

Participant One:

'*…so yeah it (the game-like net session) has its limitations…before you know it the batsman has completely forgotten about the targets…'* and

'…we did come to the conclusion one of the boys who would not treat it as seriously and would try and whack the crap out of the ball each time'.

Participant Two:

"*…I think it was it was challenging to all of them because they had to change how they normally approached it'.*

Participant Three:

'I'd say mentally, and they definitely tired quickly but the third session compared to second session to the first session, the concentration was definitely held for a lot longer in the third session'.

This situation or push-back highlights that the roles of both coach and player may need to be clearly defined or explained when not just trying to make net sessions more game-like, but coaching in general, if these roles are different to what is usually experienced by players and coaches.

Knowledge needed to address when to coach directly

The final theme identified by the researchers from the interviews was the participants all expressed views when net sessions are more game-like players either lacked the consistency of being able to bowl to execute a plan, or batters were unable to consistently hit the ball in the direction they needed or desired. Participant one believed that some players needed more direct coaching:

Participant One

'…obviously some kids are more focused on that and able to do that…. adjust to the conditions, but the majority can't you know… they need you to tell them…'.

Participant two valued the game-like net sessions but suggested a focus on technique directly would be required :

Participant Two

'*I think it's definitely a different way of doing it, but it doesn't mean you do it all the time…. it still pays to do net sessions and for technique and all those things'.*

The coaches' views were that direct instruction was needed to achieve volume to master a repeatable or consistent movement, which would then enable these game-like sessions to be more successful. Here, the term volume refers to a large amount of practice or repetition of the skill and the player attempting to replicate a perfect or demonstrated version of the movement, while the coach provides feedback about the performance. The Spectrum of Coaching Styles would define this coaching style as *Coaching by Task (Practice): Style B* (Pill et al., 2022). This dilemma may be explained as a versus perspective (Mosston & Ashworth, 2008) – i.e. – the belief one way of coaching is best, rather than viewing coaching styles as being valued for their utility. GBA's such as a Game Sense Approach do not rule out the

direct instruction of participants (Pill, 2018a) nor does it have a versus approach and favour one style. Research (Pill et al., 2022) has identified the valuing of one teaching or coaching style in physical education and coaching suggesting coaches should choose a coaching style for what it can achieve and defined this matching of objective and coaching style as quality coaching. For example, if a player needs volume in a closed environment with minimum distractions, then direct instruction should be chosen. Roberts (2011) found that English cricket coaches believed that using TGfU meant "skill and technical development were marginalised as the coaches perceived these elements to be forbidden" (p. 44). The way the coaches in this research viewed making net sessions more game-like as a versus approach (either a GBA or direct instruction) needs to be challenged in coaching courses and coaches need to be encouraged to choose coaching styles that align with the goal they are trying to achieve and the needs and abilities of the athlete. Participant one's comment reflected a versus approach when implementing their game-based net session:

Participant One

'… it's pretty hard when you're trying to work on kids techniques'.

The Spectrum of coaching styles may be useful as a model of coaching in such professional learning for coaches as its non-versus philosophy embraces all coaching styles for their utility (Pill et al., 2022). The Spectrum and a non-versus perspective could be helpful for coaches to be able to make decisions about when to use direct instruction and when to use game-like scenarios as it provides clarity for coaches and players about their coaching behaviours and decision-making, and provides a common language for players, coaches and practitioners to talk about coaching styles and the expected outcomes (Pill et al, 2022).

Conclusion

This paper used AI to identify enablers for youth community cricket coaches who attempted to make net sessions more game-like. Four themes were identified from AI interviews with the coaches. They were, knowledge to create scenarios in nets that reflect the game, knowledge needed to get participants to think/solve problems, knowledge needed to challenge the traditional way of net sessions and knowledge needed to know when to coach directly. These conclusions have similarities to other research involving coaches implementing GBA's (Pill, 2013; Low et al., 2013) and are not surprising given that elite coaches have expressed similar challenges with implementing GBA's. Based on the four themes (identified by the participants) as enablers to make net sessions more game-like, a simplistic conclusion may be to include this knowledge in future training course material. Whilst this may be part of a solution, the part which also supported the change was the coaches' willingness to be involved and spend time with another coach (the researchers) trying to construct coaching episodes to meet outcomes that reflected game-like aspects of cricket in a net session environment. This process could be embedded into cricket coaching courses where relationships could be purposely established between coaches to share knowledge and support to other coaches wishing to achieve identified goals for their participants. This mentoring or co-construction relationship was suggested by all three participants during the interviews suggesting a community of practice may have merit. Recent research suggested mentoring through guided experience rather than just filling up with knowledge to facilitate growth of knowledge (Lascu et al., 2024) in coach education. What is positive from this research for coach educators is that AI may offer a way to support coaches implementing GBA's and meet the outcomes of sporting organisations such as CA. The AI approach used in this research allowed youth community cricket coaches to voice the challenges they faced, find solutions to these, and implement the solutions enabling their

cricket net sessions to become more game-like. This is of importance as it is identified that open fields with pitches to provide more reality congruent cricket practice is an environment that most community clubs lack. Further research on the effects of the AI and PAR approach on a larger sample is necessary to establish the success and practicality of such an approach in the long term. Further research with cricket players is also necessary to establish the effects of the AI and PAR approach to making net sessions more game-like as the improvement of the players is the goal of all coaching. Specifically, exploring the specific application of pedagogy by coaches to implement a GBA approach to net coaching, including the manipulation of practice conditions to focus learning on specific technical and/or tactical outcomes and the development of batter and bowler 'game sense' as situational tactical awareness and accompanying decision-making. Research may also consider the comparative outcomes on player skill, engagement and motivation between the common net practice session lacking game representation and a net session representing game-form practice.

Disclosure Statement

The authors report there are no competing interests to declare.

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