An examination of 'explicitation techniques' to enhance decision-making in Korfball: an Action Research study

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DECLARATIONS

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Abstract

This thesis develops the use of 'explicitation techniques' as a pedagogical tool for coaches to enhance players' awareness and decisions. Recent research has highlighted a new appreciation for the use of phenomenological methods in sports coaching (e.g. Mouchet, Morgan & Thomas, 2018). Furthermore, Mouchet's research (2005; 2008) has highlighted the use of explicitation interviews to enhance rugby players' understandings of previous decisions. Through extended questioning, the interviewer attempts to invoke an 'evocative state' of the interviewee where they re-live a previous experience in order to access information stored in the subconscious. By utilising an Action Research approach over twelve weeks, the aim of the study was to develop the use of these techniques within my own coaching practice in order to enhance my players' game awareness and develop their in-game decision-making. The study used a group of five experienced Korfball players who engaged with the explicitation informed interviews as part of their regular training sessions, they then discussed their experiences in Focus Groups at the end of each Action Research cycle. The results extend the existing research into 'explicitation interviews' by developing the applied utility of explicitation techniques through short interviews during coaching practice. The results show that through engagement with these interviews the participants developed their game awareness whilst playing and believed that further engagement in the explicitation techniques would be beneficial for themselves and other players.



1.0 Introduction

Current research within sports coaching has highlighted the importance of players' decision-making, specifically within team games, in order to improve their performance and more specifically, their in-game awareness (see Raab, Bar-Eli, Plessner & Araújo, 2019). Baker, Côté, and Abernethy (2003) highlighted that "a key characteristic underlying expert performance in team ball sports is decision-making, that is, the ability to perceive essential information from the playing environment, correctly interpret this information, and then select the appropriate response." (p. 14). Furthermore, Baker et al. (2003) also argued that expert players 'train' their decision-making through various methods (e.g. video analysis and post-game discussions with coaches). Therefore, coaches should facilitate this learning in training. Consequently, there have been many studies within sports to attempt to understand players' decision-making in varying sports environments (e.g. González-Víllora, García-López, & Contreras-Jordán, 2015; Passos, Araújo, Davids, & Shuttleworth, 2008; Nimmerichter, Weber, Wirth, & Haller, 2016).

One area specifically researched within decision-making in team sports is the evolving elements of game play, such as awareness of players' teammates movements and other options of play. For example, research by Furley, Memmert and Heller (2010) highlighted the notion of 'inattentional blindness' where players may not be able to identify the best 'option of play' in games due to the multiple choices of play available. Furthermore, Furley *et al.* (2010) emphasised that this 'inattentional blindness' can be reduced through the stimulus of coaches providing feedback from the side-line to highlight options of play. However, this creates players who are reliant on coaches' input. Improving players' game awareness then, can improve their decision-making within games

and reduce their reliance on the coach to select the best 'option of play'. This development can, and should be, enhanced by coaching through focusing on decision-making skills in games (Light, Harvey & Mouchet, 2014).

My study is based on the notion that players' decision-making in sports is complex, ever evolving, and that the social nature of sports gives the decisions meaning (Gréhaigne, Godbout & Bouthier, 2001). This is consistent with a view of the team sports environment known as 'ecological dynamics', which proposes "how individual players and sports teams can be modelled as complex social systems, which are inherently nondeterministic (not completely predictable)" (Davids, Araújo, Correia, & Vilar, 2013, p. 155). This research (Davids, et al., 2013) is an example of a holistic view of a coaching environment that encompasses the social realities of team sports; the social aspect is inherent within the players' decisions. Light, Harvey and Mouchet (2014) argued that "decisionmaking is dependent on the actions and movement of other players (both teammates and opponents) as the game ebbs and flows with the whole team functioning as one entity" (p. 263). Therefore, decisions made in team sports are social in nature as they are based on the actions of other teammates as well as the evolving game. Furthermore, my study is grounded in the notion that players' previous experiences influence their future decision-making, as proposed by Mouchet (2005; 2008). Having a greater awareness of their previous in-game experiences then, would seem to be a key area to develop to improve players' decision-making.

Previous research (Maurel, 2009; Mouchet, 2005; 2008; Vermersch, 2008) has examined the use of explicitation interviews which aim to gather the subjective lived experience of a participant around a specific moment

of decisions. The interviewer aims to ground the participant into an 'evocative state' where they are re-living the moment as they talk through it in order to access information from their direct consciousness (Mouchet, 2005). Mouchet (2005) highlights that there is information about experiences stored in the direct consciousness that individuals can't access, however explicitation interviews aid participants to access this information). This approach is grounded in phenomenology where the focus is to access the 'lived experience' of an event (Mouchet, Morgan & Thomas, 2018). In gathering the subjective lived experience, participants are able to re-live their own thoughts, feelings and visual cues that led to a specific decision or event. It is subjective as it is specifically focused on how the participant experienced it themselves, not from the viewpoint of someone else (Mouchet, Morgan & Thomas, 2018). When used to examine decision-making, explicitation interviews allow the interviewer to access previously unattainable information (in the direct consciousness) that led to a specific decision, to understand it better. This information can then be used to generate new knowledge of past decisions in order to develop the player's future performance. It is important to mention that as the explicitation interviews are focused on the participant's subjective lived experience, the interview itself should not be informed or judged by the researcher whilst it is taking place (Mouchet, 2008).

Previous literature (e.g. Varela, 1996; Van Manen, 2016) has discussed the use of explicitation interviews as a data collection method to examine participants' experiences or decisions. Within sports coaching research, several scholars (e.g. Mouchet, 2005; 2008; Mouchet, Morgan & Thomas, 2019; Morgan, Mouchet & Thomas, 2020) have discussed the use of explicitation interviews to examine the subjective lived experience of rugby players' in-game decisions. For example, Mouchet (2008) used

explicitation interviews with individual rugby players post-game to discuss a decision they had made during the game. At the beginning of these interviews, a video clip was played of the decision to refresh the memory of the event before the questioning begins (Mouchet, 2008). The initial questions aimed to create 'sensorial anchorage' to ground the participant into a state of evocation; once this state had been reached, the interviewer prompted the participants to provide further detailed information about the event. These prompts and questions aimed to uncover details from the 'pre-reflective conscious' which would otherwise have been unknown to the participant (Maurel, 2009). The research showed that through engaging with explicitation interviews, the participants were able to access in-depth details around a specific decision that they made. It was argued that this led to an increase in their game awareness and understanding of decisions made (Maurel, 2009).

Although previous research into explicitation interviews has shown that the techniques enable the participant to access in-depth information about a decision that they made post event, it has not yet been utilised during coaching sessions. The ability to more closely examine decisions made by players during actual coaching sessions, could be beneficial to coaches and players, in order to help further develop players' learning (Mouchet, Morgan & Thomas, 2018). Previous literature such as Assessment for Learning (AfL) has highlighted the use of questioning to gauge a player or learner's level of understanding (Brown, 2005). This use of questioning has been shown to be beneficial for coaches in various sporting environments (see Harvey & Light, 2015). My study aims to build on the use of questioning by developing players' appreciation and understanding of their decision-making processes through the use of explicitation techniques. This research is, therefore, a novel attempt at

using a phenomenologically grounded pedagogical tool to aid coaches in gathering the subjective lived experience of players during coaching sessions, and the players in developing their in-game awareness. The specific benefit to coaches of using a psychophenomenological pedagogical tool is that it provides a more in-depth understanding of players' subjective lived experiences of their decisions. Using explicitation inspired questioning gains access to information about a decision or experience that is stored in the reflective subconscious and is, therefore, potentially inaccessible through other questioning techniques (Mouchet, 2012). It is anticipated that this will aid the coaches by allowing them to access players' pre-reflective content about their in-action decisions and 'see' new things that would previously not have been accessible if the athlete had not been 'taken-back- to the moment.

Whilst it is proposed that post-game explicitation interviews could be beneficial, it is problematic for coaches to find the time to use the techniques post event, as they have been previously laid out (Mouchet, 2008). For example, if coaching a team sport, the coach could have numerous players to run 30-40 minute-long individual interviews with each week. Instead, it is presented in my study that, through development, the explicitation techniques could potentially be used by a coach, or assistant coach, during actual coaching sessions.

Therefore, this study aims to develop the utility of explicitation techniques by asking the question "Could they be used within a training environment?". Through an Action Research approach (McNiff, 2013), it focuses on the use of explicitation interviews in an applied coaching context in order to examine the utility, benefits, challenges and limitations of using them. The study followed three cycles of data collection, each

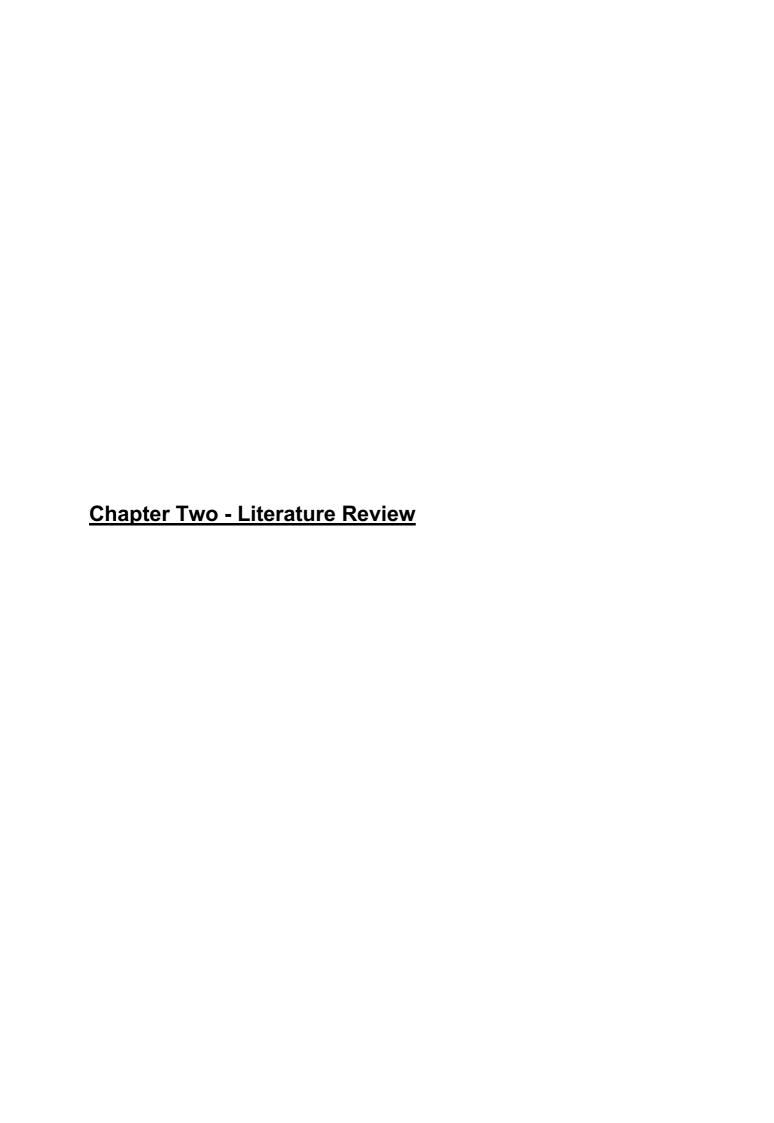
aimed at developing the use of the techniques so that they were more beneficial and more accessible for coaches.

Aim and Objectives The study aims to explore and develop the use of explicitation techniques through interviews within personal coaching practice. Specifically, the objectives are;

- To explore the utility of explicitation style questioning within sport coaching practice.
- To develop and adapt the pedagogical strategies to successfully implement explicitation techniques within coaching sessions
- To improve players' game awareness within game-based situations in training sessions.

The main rationale for this project lies in developing both coach and athletes' introspective awareness and reflective consciousness (Mouchet et al., 2018) through a 'touch of explicitation' leading to better informed and insightful future practice (Mouchet, 2018).

This thesis will, firstly, present an overview of the current literature in the areas of decision-making, use of questioning in sports coaching, phenomenology/psycho-phenomenology and finally explicitation interviews. It will then justify and explain the methodology and methods used to conduct the study, before presenting and discussing the findings. Finally, the implications for future research and coaches' practice will be considered.



2.0 Literature Review

2.1 Introduction

This literature review will present an overview and critique of relevant literature. To frame the study, it will start with a critique of various perspectives of decision-making within sports, and then present research on the current use of questioning in sports coaching. Following that, it will provide a background to the use of phenomenology and psychophenomenology within research in general, before justifying the use of explicitation interviews in different domains. Finally, it will discuss the existing research into using explicitation techniques within sports coaching environments; my study aims to both develop previous understandings of explicitation interviews, and present a novel method of using explicitation techniques.

2.2 Decision-Making in Sport

Macquet highlighted how games players learned to adapt their tactics following similar experiences in a session (2009), and demonstrated the importance of experience and knowledge for their future development. Whilst Macquet's (2009) model shows insight into the complex decision-making process, it does not encompass the social nature of decisions, by considering how social history and nature give meaning to them (Gréhaigne, Godbout & Bouthier, 2001). Furthermore, Light *et al.* (2014) proposed three levels of decisions; macro, meso and micro. They defined these concepts by stating that tactics or game strategy are devised at the macro level, whilst decisions at the meso level are to achieve the previously decided strategy (Light et al., 2014). Finally, they suggested that the micro level decisions are those which are emergent in the game situation. Whilst this decision making research and theory is not being

directly applied in my study, it is beneficial to demonstrate a general understanding and awareness of decision-making in sport; without an understanding of decisions, coaches cannot fully help their players develop (see Morgan, Mouchet & Thomas, 2020).

Another proposed framework for decision-making is that of 'ecological dynamics' which highlights the important of the performer-environment relationship (Davids, Araújo, Vilar, Renshaw & Pinder, 2013). In their research, Davids et al. proposed "how decision making and the coordination of action in sport are adapted to changing task constraints provided by critical information" (2013, p. 22). The critical information they refer to is the changing game environment e.g. locations of teammates or defenders. In order to use this framework to guide an applied coaching setting, coaches must create a learning environment that allows players to practice decisions in scenarios that require the processing of this critical information, as found in game-scenarios. As such, my study is informed by such an approach by using explicitation techniques to enhance players' learning of decision-making through extended questioning. Previous research in sports coaching and teaching has highlighted the use of various pedagogical tools that can be used to improve players' decisionmaking and understanding, such as questioning.

2.3 Use of Questioning in Coaching

This section will highlight that there has been an increase in the appreciation of questioning as a pedagogical coaching tool to develop players' understanding. Current research in sports coaching and education indicates that there is a high level of importance placed on the questioning used by coaches and teachers within sports coaching and Physical Education (PE) in order to help further develop the learning of

participants off- and on-pitch (e.g. Kagan, 2005; Kracl, 2012; Light, Harvey & Mouchet, 2014). The use of effective questioning has been highlighted as important as it is "for developing problem solving ability and critical thinking" (Harvey & Light, 2015). Research into Assessment for Learning (AfL) (Brown, 2005), suggests that questions are one of the pedagogical tools that can be utilised to gauge a learners' current level of understanding to help them develop. However, whilst researchers and practitioners agree on the importance of questions used, researchers have argued that, in most sport and PE situations, only 'surface-level questions' are used (Kracl, 2012). Questions are classified as surface-level if the player already knows the answer and does not need to independently formulate a response (Kracl, 2012). Consequently, as they already know the appropriate response, the questions are not beneficial for the players' learning due to them not requiring a higher-level of thought or meta-cognition to verbalize their own answers (Kracl, 2012).

In order to help develop teachers' (in this case coaches') use of questions, Siedentop and Tannehill (2000) devised four separate types of questions; recall, convergent, divergent and value questions. Recall questions simply require a response from memory whilst convergent questions require the individual to analyse the situation and apply known information around an area (e.g. tactics) from previous experiences to solve it (Siedentop & Tannehill, 2000). However, whilst in convergent questioning there is a correct answer, divergent questions necessitate athletes to synthesise a solution to a new problem. Finally, value questions ask for the athlete's 'choice, attitude and opinion' (Pearson and Webb, 2008). Whilst this research is beneficial for practitioners to better understand the questions that they use, my study hypothesises that using explicitation questioning techniques can better enhance players' understanding of their decision-

making. Furthermore, my study aims to provide more practical examples of how coaches can utilise these explicitation techniques within their own practice, thus making it more approachable and relatable.

The work of Pearson and Webb emphasised the importance of coaches' questioning within team games (2008). According to these scholars, this is a fundamental aspect of a team games coaching approach and athletes are reliant on the effective use of questioning to aid their learning (Pearson & Webb, 2008). They also cite Griffin and Butler's questioning protocols (2005), which are also frequently used to aid practitioners using such approaches with their athletes. More important however, is the appropriate application of these questions, and Pearson and Webb's paper also provides frameworks to help develop questioning as part of a games approach (see Pearson & Webb, 2008). However, I propose that these frameworks are too simplistic in nature and cannot simply be applied in sports due to the differing nature of each sporting environment. It is a reductionist view that proposes a 'one size fits all approach' which may not be applicable or appropriate for each coach to use in practice due to the complex nature of coaching (Cassidy, Jones & Potrac, 2008).

Similar research focusing on the use of questioning by Harvey and Light (2015) highlighted various types and levels of questioning used by a PE teacher. Although Harvey and Light's work was specifically focused on questions used alongside a 'games-based approach' (GBA), they highlighted various methods for their effective use in practice. They presented suggestions for coaches as to how and when to use questioning within a GBA under three themes; planning, implementing and reviewing (Harvey & Light, 2015). The questioning methods, used by a teacher working with 12-year olds, compared two levels of questioning;

'skinny' and 'fat' (Harvey & Light, 2015). Whilst 'skinny' questions only need a 'yes/no' answer, 'fat' questions help to 'develop higher order thinking' related to the activity they are undertaking (Kagan, 2005). This is because the questions required the athlete to formulate a response based on their understanding and awareness of their actions (Harvey & Light, 2015). Furthermore, research by Harvey and Light (2015) highlighted the use of 'high' and 'low-level consensus' questions. High-level consensus questions relate to group questions where the majority of the group will respond with the same, or similar, response. Whereas low-level consensus questions will have a variety of responses, which at times can highlight different levels of understanding at a given time (Harvey and Light, 2015). Their research suggested how this use of questioning methods during sessions can 'scaffold' the athletes' learning within a dialectical process between the athlete and the game-related environment in which they are making decisions (Harvey & Light, 2015). However, whilst this use of questioning has been shown to aid coaches' by showing their players' level of understanding, they acknowledge that the questions used could be better framed as an opportunity to further develop players' and coaches' understanding of decision-making. Basic questions on information recall or formulating strategy should provide an opportunity for coaches to help create new knowledge and understanding, specifically of players' previous decisions. In order to examine this, a phenomenological approach is being applied in the current study in order to examine the subjectivity of players' past decisions to aid further development of questioning as a pedagogical tool for coaches.

2.4 Phenomenological Background

As this study is grounded within the philosophy of phenomenology and utilises techniques grounded in this area, this section aims to provide a background to the development of phenomenological thought. Many researchers (e.g. Benoist, 2003; Maggs-Rapport, 2000) would agree that Husserl, a philosopher, originally presented the idea known as 'phenomenology'. Phenomenology is seen as both 'a philosophy and a methodological approach', with the aim of gaining subjective knowledge of the 'lived experience' (Mouchet, Morgan & Thomas, 2018). Specifically, it gives researchers, and also coaches in this study, the opportunity to gather 'rich' and detailed accounts of performers' experiences of decisionmaking. More recently, research by Mouchet et al. (2018) proposed the benefits for gathering such data and how it can offer a more useful insight within the field of sports coaching. Here, Mouchet et al. (2018) address the issue that whilst phenomenology has been previously highlighted by other researchers as a potentially useful research area (see Allen-Collinson, 2009), it has not been utilised enough in sports coaching. Furthermore, Starks and Brown-Trinidad (2007) highlighted that phenomenology is also aimed at understanding the taken-for-granted elements of an environment. Van Manen (2016) further justifies the use of phenomenology by explaining that these subjective views of lived experience can offer readers a "more direct contact to the world." (Van Manen, 2016, p.9). Furthermore, as explained by Mouchet *el al.*, (2018) phenomenology in sport can provide a "powerful framework for rich analysis of sporting embodiment that evocatively portrays the multitextured experiences of the lived sporting body (corporeal, emotional and so on) in context..." (p. 3). This 'lived experience' is a central pillar of phenomenology – understanding the subjective experience of others in the social situation in which it occurs. Van Manen explains this is "the

starting point and end point of phenomenological research" (2016, p. 36), through which the researcher can appreciate the 'lived experience' of a participant in context more thoroughly. Through this presentation of the 'lived experience' the researcher's duty lies in ensuring the data shows the value of the reflection and the meaning makings of these experiences (Van Manen, 2016). Whilst other methods in qualitative research aim to understand participants' thoughts and feelings within a given context or situation, a phenomenological approach allows access to "not only what can be directly verbalized but also what can become conscious through an act of reflection" (Mouchet, Morgan & Thomas, 2019, p. 970). This act of reflection as facilitated through a guided explicitation interview, which will be discussed further on in this review, allows participants to access information that may be inaccessible using a different approach.

Whilst there has been an increase in the use of phenomenology as a methodological approach, some researchers (e.g. Nahmias, Morris & Nadelhoffer, 2004) have remained sceptical regarding its use in empirical studies. Specifically, Bourdieu critiqued the use of phenomenology by explaining that he believed it failed to appreciate the internalisation of external forces acting on an individual (see Bourdieu, 1977; 1990). Whilst broad phenomenology may not be an appropriate methodology in some areas, it has become an accepted approach in many fields of research. Finally, works, Bourdieu (2000)acknowledged in later that phenomenology;

...has the virtue of recalling what is most particularly ignored or repressed, especially in universes in which people tend to think of themselves as free of conformisms and beliefs, namely the relation of often insurmountable submission which binds all social agents whether they like it or not, to the social world of which they are, for the better or worse, the products...(p. 173)

In the field of Neurobiological research, neurophenomenology has been specifically applied for the study of 'the science of consciousness' (Lutz & Thompson, 2003). Whilst also not being used in this study due to the different context, it presents an interesting rationale for the inclusion of phenomenological approaches in research designs; to gather data on elements that may not be accessible by other methods. For example, research by Varela, into the application of phenomenological methods, highlighted that 'disciplined first-person' accounts should be an integral element of the validation of [any] neurobiological proposal." (Varela, 1996, original emphasis). Here Varela explains how important it is to incorporate these methods within any neurobiological research design, whether it is a quantitative or qualitative study (Varela, 1996). Additionally, Lutz et al. (2002) highlighted how this more subjective first-person data could provide insight into previously unknown areas such as the variability in **EEG** application readings. For example, in а study neurophenomenology to examine participants' experiences of preictal seizure symptoms (Petitmengin, Baulec & Navarro, 2006). This used neurophenomenological first-person data collection which allowed participants access to pre-reflective information in the build-up to a seizure combined with the use of EEGs. This 'pre-reflective' state is 'an experience, which is lived without being fully aware of itself' (Petitmengin, 2009, p. 9), through which the interviewer draws information about the event. Whilst this research is not related to sports coaching, it shows the wider application of explicitation interviews in research and the extent of the information gathered from the 'pre-reflective state' of participants (see Petitmengin et al., 2006).

As a development from more traditional views of phenomenology, psychophenomenology is seen as the 'empirical psychology of subjectivity' (Vermersch, 2012). Specifically, psycho-phenomenology was developed for 'introspection and eliciting personal accounts' (Tosey & Mathison, 2010, p. 7). Husserl believed that a 'phenomenological approach' could unearth the aspects of preconceptions surrounding a mental phenomenon which in turn could play a part in an empirical study (Jennings, 1986). The subjective lived experience is the most helpful source of information for understanding a participant's experience and being able to use this to understand behaviours and actions (Mouchet, et al., 2018). In this regard, "psycho-phenomenology is the interpretation of a philosophical approach with a psychological and empirical purpose" (Mouchet, et al., 2018, p. 9-10).

Within sports coaching research, psycho-phenomenology has been used within several studies. For example, Gouju et al. (2007) examined the subjective lived experience of hurdle racers specifically focusing on their practices in competitions. It examined how they could feel the presence of the other people competing, and the resultant effects on their performance. Mouchet, is a prominent and leading researcher in the field of psycho-phenomenology, and explicitation interviews who has solely authored, and co-authored several papers in this field. His research focuses mainly on the in-game decision-making of elite rugby players, as well as rugby coaches. For example, and as reviewed in more detail later in this review, Mouchet, et al. (2014) examined the subjective lived experience of elite level rugby players' decisions within matches. Another paper, (Mouchet & Maso, 2017) examined the subjectivity of coaches' team-talks during half-time periods of rugby games allowing a new insight into the messages given during this time, and the lived experience of a coach in this situation. Specifically, Mouchet's research used a psychophenomenology approach in order to gather 'rich details' of the subjective

lived experience of participants' decision-making, through utilising explicitation interviews (Mouchet, 2005). The research by Mouchet (e.g. 2005; 2008) into the use of 'explicitation interviews' in sports coaching is the theoretical basis of my study, and these will now be explained and critiqued in more detail.

2.5 Explicitation Interviews

Pierre Vermersch originally highlighted the use of 'explicitation interviews' as a method of assisting verbalisation (2008). Explicitation interviews are "a form of guided retrospective introspection" (Maurel, 2009, p. 59), and involve a long period of questioning an individual in order for them to reach an 'evocative' state. This evocative state, also known as an embodied speech position, is where one is "in touch with one's experiences, on a sensory level" (Mouchet & Maso, 2017, p. 63). Through guidance by the interviewer, the aim for the evocative state is for the interviewee to re-live a moment or experience so as to be able to completely describe their exact behaviours in a given moment. As explained by Cahour, Salembier and Zouinar, (2016) the interview attempts to revive "a past experience in order to obtain a vivid evocation" (p. 268). This is achieved through use of detailed descriptive questioning which allows the interviewee to delve into aspects of a decision or event which took place within a 'pre-reflective' state. Vermersch's main reasoning for using these interviews is that a large part of the knowledge applied by the subject in his/her action occurs within the subconscious (2008). Therefore, the interview is aimed at bringing actions which occurred in the 'pre-reflective' (subconscious) state into more conscious knowing, thus allowing the participants access to this information (Maurel, 2009). As previously explained, the information from the 'pre-reflective' state (consciousness in action) is less readily accessible for individuals, and accessing this information can provide

learners, and coaches with important information. Further justification for using this approach is explained by Vermersch (2018);

In all activities that require tasks to carry out (school exercises, professional activities, remediation, practice analysis), the explicitation interview is important to analyse the causes of errors or dysfunctioning, or what constitutes success and expertise. It is important to know the course of the task execution because only knowing the final end is not sufficient to diagnose the nature and the cause of a difficulty or of an outstanding achievement. (p. 6)

This information about 'task execution' can then be used to inform the coach and participants' future development as players by highlighting their playing awareness in decision-making. Furthermore, this information remains subconscious and unexplored, the coaches cannot use it to aid the athlete/learner in their further improvement.

It is important here to explain the concept of 'pre-reflective', as it is this notion that is the basis for using explicitation interviews. This study aligns with Mouchet's work around subjectivity and decision-making (2005, 2008). Mouchet suggested two levels of decision-making; 'consciousness in action' and 'reflective consciousness' (Mouchet, 2008). Whilst 'consciousness in action' is 'in-moment' or 'at-action', 'reflective consciousness' refers to the knowledge, judgements or explanations regarding the process (Light, et al., 2012). This 'consciousness in action' then, is where the pre-reflective decisions are made, and it is this information that an explicitation interview aims to access. As it is 'pre-reflective' it is posed that this information would not be readily available to an individual, therefore the interview guides the individual through the process of re-living their experience in order to access it.

One key aspect of the explicitation interview is that it focuses on describing the exact events in rich detail, and not focusing on 'why' it happened (Maurel, 2009). Petitmengin (2006) explained that the main

difficulty in a person accessing this subjective information themselves is that "we are entirely absorbed by the objective, the results to be achieved" (p.232). Whilst this is important, it results in individuals being unaware, or less aware, of how they are attempting to reach these objectives, or how they undertook the task. Here, they merely focus on the outcome, or if the task was completed (Petitmengin, 2006). The following section centres on previous research that has attempted to use explicitation interviews within sport.

2.5.1 Explicitation Interviews in Sports

Although explicitation interviews have been used previously in other disciplines (e.g. Information Behaviour; Urquhart et al., 2003), they have only recently been used in the field of sports coaching. One of the first empirical papers on the use of explicitation interviews in sports coaching is Mouchet's study of in-game decision-making of elite rugby players (2005). This study aimed to highlight the benefits of using this style of interviews with athletes in order to gain better understanding of the decision-making process within games. This research was pivotal in providing a more in-depth view of decisions, compared to previously more simplistic models, as it provided examples of the use of participant perspectives when discussing decision-making. For example, previous researchers (e.g. Klein, 1997) have tried to show the 'process' of decisionmaking in models, however Mouchet's (2005) new use of explicitation interviews provided 'richer' information of participants' experiences. This application of explicitation interviews examining decision-making in sports allowed an insight into the participants' perspectives in complex and evolving game situations. Furthermore, it provided interesting suggestions that coaches can use to improve their understanding of the subjectivity of decisions made in-games to plan interventions for future coaching/training

sessions (Mouchet, 2005). Although very helpful for coaches, the paper did not provide explicit methods through which they could apply this within their own coaching sessions. Nevertheless, the research showed development by using a novel methodology applied within sports coaching research.

Building on this work, Mouchet, Harvey and Light (2014) expanded the use of explicitation interviews within sports to focus on coaches' decisionmaking. The research utilised data from many sources including coach interviews, video analysis of behaviours and the match, and explicitation interviews (Mouchet et al., 2014). This provided an in-depth insight into the coaches' behaviours, and the subjectivity of their decisions, which they argued would be beneficial for development of coaching practice and for future coach education programmes (Mouchet et al., 2014). The study was conducted post-event with both players and coaches, and argues that the pre-reflective information can allow players and coaches to become more informed of their past decisions (Mouchet, Harvey & Light, 2014). More recent research by Mouchet and Maso (2018) built on earlier work into the use of explicitation interviews to develop sports coaches' practice and education. Their paper presented a 'spiral training approach' (Figure 1) which could help coaches use appropriate theory and previous experience to ensure continuing development of practice (Mouchet & Maso, 2018). It specifically focused on the development of the coaches' presentation of half-time talks in Rugby Union games in France. Through engaging in explicitation interviews as one of the methods for data collection, the coaches were able to re-live previous coaching experiences in order to better understand their practice and thus inform their future practice and development (Mouchet & Maso, 2018). The authors highlighted that "explicitation of the lived experience can be, at the same

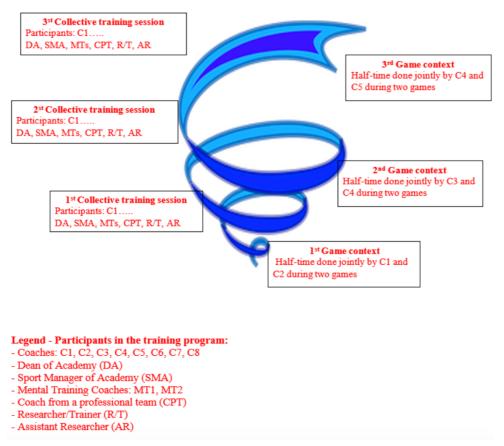
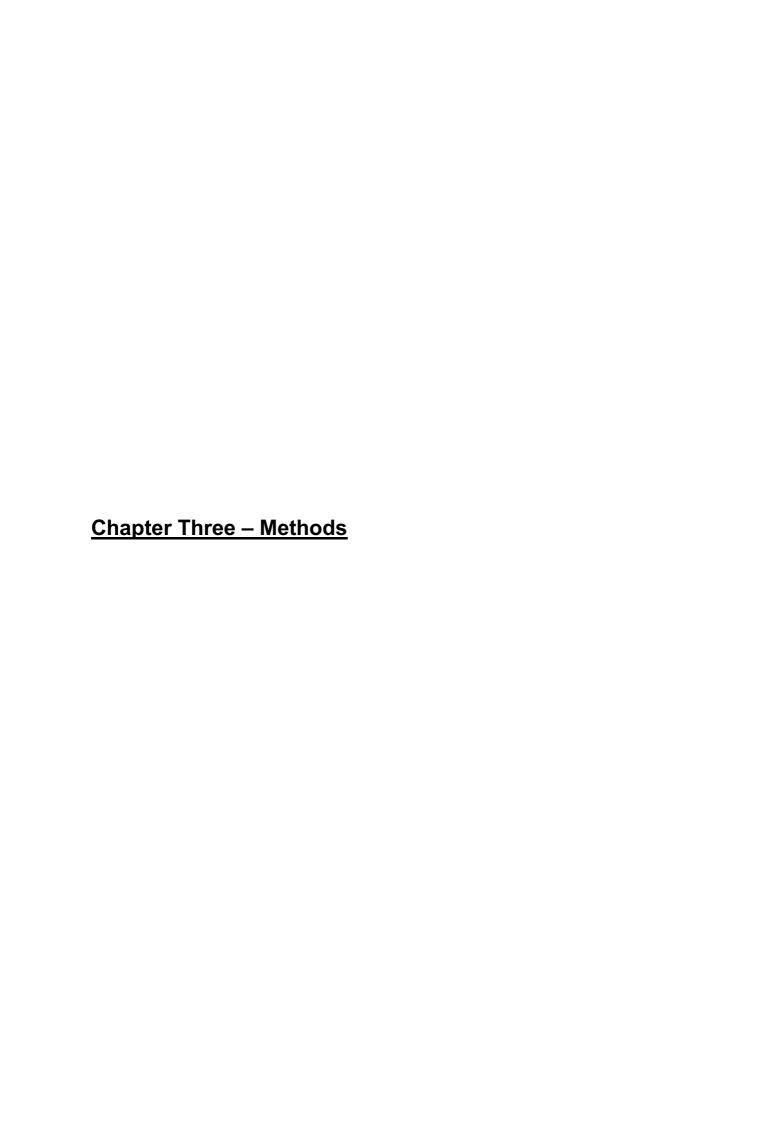


Figure 1. Spiral training approach (Mouchet and Maso, 2018)

time, a useful method for research and a resource for training" (Mouchet & Maso, 2018, p. 75).

Although Mouchet's work has been proven to improve players' game understanding and used to inform future decisions, this research was undertaken in a professional sports environment (Mouchet, 2014). As such, the coaches and other staff have more time with the players than in a non-professional set-up, making a 45-minute individual interview a viable option. However, in non-professional environments a coach may not have sufficient time or resources for this to take place. Therefore, applying similar explicitation techniques within a training environment, becomes a much more accessible tool for coaches to use in order to develop their players' in-game understanding. To date, no research exists

examining this approach in relation to developing athletes' critical awareness of game situations within an unfolding training environment. Utilising such pedagogical techniques with a 'touch of explicitation' (Mouchet, 2018), within practice sessions, builds upon and extends previous research in the areas of questioning within sports coaching to develop players' in-action understanding (Pearson & Webb, 2008).



3.0 Methods

This section will firstly discuss my chosen research paradigm, epistemology, methodology and action research approach and then provide an overview of the context, design and methods used in this study. Data analysis and a section on assuring quality in action research will then follow. Finally, the ethical implications whilst conducting the study will be considered.

3.1 Research Paradigm, Epistemology and Methodology

This section aims to provide clarification on the research paradigm, epistemology and methodology of this study. When talking of paradigms, Lincoln (2010) highlighted the importance of stating these in the methods section: "They matter because they tell us something important about researcher standpoint...They tell us something about what the researcher thinks counts as knowledge, and who can deliver the most valuable slice of this knowledge." (p.7).

3.1.1 Research Paradigm

My study sits within the participatory enquiry paradigm, as explained by Heron and Reason (1997); first I will provide a background to my own studies and practices which has led me to this paradigm and then I will define this paradigm.

When considering further studies after my MSc in Sports Coaching and Pedagogy, I believed the most meaningful aspects of this course had been the applied nature of modules. I was not only engaging in reading and seminars about coaching theories, I was implementing them within my practice and disseminating them. My priority was not only using these

theories to better understand my coaching practice, but also using them to inform my development to becoming a better coach. Initially when reading around theories, I naively thought that if I applied each one it would make me a better coach. However, through using them in practice, I became more critically aware of each theory and how each one could shape my practice by using, or not using them. Therefore, I applied for the Taught Doctorate in Sports Coaching as I still wanted to better my coaching practice through engaging with theories and discussions, as well as disseminating my own practice. I placed more importance on the knowledge I gained by engaging with theories within my own practice, rather than reading about the theories and placing value on them outside of a practical environment. When it came to writing my thesis, I wanted to produce a piece of research that I believed was not only beneficial to my own practice, but could be used by other coaches to aid their practice too. Therefore, I wanted my study to be applied within coaching, and for it to produce not only recommendations for researchers, but practical ideas for other coaches to use within their own practice.

The participatory inquiry paradigm was developed by Heron and Reason (1997) as both a response and development on Guba and Lincoln's (1994) paper that highlighted the contrasting paradigms of inquiry. Their justification for a 'new' paradigm was that:

"the constructivist paradigm, as they articulate it, is unclear about the relationship between constructed realities and the original givenness of the cosmos, and that a worldview based on participation and participative realities is more helpful and satisfying."

This paradigm is aligned with the notion that perception is a based on participation in the world around us in itself; Merleau-Ponty (1964) explains that knowing an object is engaging with it through both holding it

and feeling its softness, thus being an objective view. However, this interaction with the object is still subjective, as explained by Heron (1996) "it is only known through the form the mind gives it" (p. 11). It is from this basis then that Heron and Reason (1994) argue that the participatory inquiry is subjective-objective;

"what can be known about the given cosmos is that it is always known as a subjectively articulated world, whose objectivity is relative to how it is shaped by the knower" (p. 5).

However, Heron and Reason (1997) also explain how this is also informed by intersubjectivity, the 'knower' is informed by previous interactions with the world around them, that has shaped their 'knowing' of the world. In relation to this project, using a Collaborative Action Research approach allowed an appreciation of the lived experiences of the participants and these informed the developments of the study (McNiff, 2016). By utilising various forms of data collection, it allowed for me to engage fully with the participants to gather their own experiences of the explicitation informed interviews and to question my own experiences too. This combined approach allowed for the development of the project, not simply from an outsider's perspective but based on the experiences of those involved.

3.1.2 Ontology and Epistemology

Coghlan (2019) contends that Action Research follows an objectivist (realist) ontology and a subjectivist (relativist) epistemology. This is consistent with a critical realist perspective (Bhaskar, 2016). As explained by Bhaskar, critical realism allows for the combination of a realist ontology and epistemological interpretivism. Whilst a decoupling of ontology and epistemology can appear contradictory, Fleetwood (2005, p.1) contends that "an entity can exist independently of our knowledge of it". Therefore, as highlighted by Bhaskar (2016), claims to truth are examined through

discussions and understanding of the world around it. Furthermore, Clark et al. (2007, p.525) argue that we should attempt to "find the truth as a goal which avoids judgemental relativism (all beliefs are of equal truth value) while retaining the view that human knowledge is socially produced." This links well with intersubjectivity, as referred to earlier in the participatory enquiry paradigm (Heron & Reason, 1997). Consistent with this ontological and epistemological positioning, the Action Research approach adopted in this thesis focuses specifically on developing practice, thereby requiring an intersubjective agreement of reality to make a claim to improving a social situation (Coghlan, 2019).

Specifically, my research is aimed at the development of explicitation informed interviews in order to improve players' game awareness and verbalisation. I struggled initially with how an interpretivist ontology would allow me to show a development of practice when there was no 'agreed reality' to start with. As such, there was a need for an intersubjective agreement of the nature of players' decisions in order to have a starting point for the research within the environment. Furthermore, I had an appreciation of causality; that the intervention I was using with my players would improve their verbalisation of past experiences and show a development of their game awareness (Wiltshire, 2018). However, whilst this view of reality and causality is realist, I believed that the knowledge gained in the study would be subjective as it is based on my own, and individual players', experiences. Therefore, a critical realist approach allowed for this decoupling of ontology and epistemology in a way that enabled me to show the development of using the explicitation informed interviews in my coaching practice and the intersubjectively agreed impact of this on the players' game awareness.

As presented by Heron and Reason (1997), and consistent with Coghlan (2019), the epistemological stance of the participatory inquiry paradigm is that of critical subjectivity, and their paper presents four ways of knowing; experiential, presentational, propositional and practical. Experiential knowledge is derived from "direct encounter" (p. 6); this knowledge comes from participating and engaging with the entity being studied. Presentational knowledge is grounded in the experiential knowledge, from engaging with an experience shaped by thoughts and feelings, to a point the 'knower' resonates with it. Propositional knowledge then, is the understandings statements. terms and created based the understandings of our previous experiences. Finally, practical knowledge is "knowing how to do something, demonstrated in a skill or competence (Heron & Reason, 1997, p.6). It combines the three previous forms of knowledge and knowing, and shows the theoretical comprehension of these forms of knowledge.

These forms of knowing, allow the understanding, and importance of action, within forming new knowledge, however it also shows the importance that action cannot be without thought. In line with this epistemology, my methodology is that of Collaborative Action Research (CAR).

3.1.3 Methodology

Due to this paradigmatic and epistemological stance, the study uses a qualitative approach through CAR, allowing meaning to be created through the interactions between myself and the participants. As explained by Guba and Lincoln (1994) "the variable and personal (intramental) nature of social constructions suggest that individual constructions can be elicited and refined only through interactions

between and among investigator and respondents." (p. 111). As such, a CAR approach allowed me to work in collaboration with participants in order to create new meaning and further understanding of theory and practice. This provides the fundamental basis for this project; theory cannot be created or understood without practice, but practice is constantly understood through theory. An Action Research approach allows consideration of the dialectical relationship between theory and practice (Carr, 2006).

3.2 Action Research Approach

According to McNiff (2016), Action Research involves "finding ways to improve your practice...The knowledge you create is the knowledge of your practice" (p. 7). Lewin (1946), one of the first recognised Action Researchers, noted that if all workers in an organisation worked collaboratively towards development then their organisation would thrive. Habermas (1972; 1987) explained how Action Research projects are normally as a result of one of three interests; technical, practical or emancipatory. McNiff (2013) explains these three terms; 'practical' projects arise from identifying a problem or area for development; whereas 'technical' projects are inspired by a theory and its application in practice. Finally, 'emancipatory' projects are developed by removing ourselves from dominating forces, practices and assumptions that control our thoughts and actions (McNiff, 2013). This study adopted elements all three approaches; applying the theory of explicitation interviewing techniques in sports coaching practice, addressing the practical implications and problems of using the technique and finally, embracing a new pedagogical tool to improve my coaching practice (McNiff, 2013).

Action research is a progressive cyclical process, starting from the current action or intervention, then developing this through reflection and planning. McNiff's (2016) model of Action Research Cycles shows how the study moves through a cyclical process involving four main stages; plan, act, observe and reflect. These form the micro-cycles that make up each main cycle of the research project, each having a specific focus to show a clear development (McNiff, 2016).

3.2.1 Design of Study

The initial design of the study followed a similar process (shown in Fig 2) to the model proposed by McNiff (2016) and was formed of three main cycles; the first cycle lasted four weeks, the second lasted three weeks, and third cycles lasted four weeks. In each week of the data collection, either one or two coaching sessions were used to run the explicitation interviews with the participants. The interviews took place within weekly training sessions, and at the end of each cycle a Focus Group was held with players to discuss their experiences in relation to the interviews. The full data collection period lasted for eleven weeks. Following the completion of data collection, I then started the data analysis phase, which lasted a further twelve weeks.

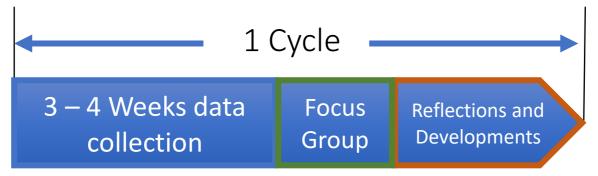


Figure 2. Design of each cycle in the study.

3.3 The Coaching Context

This study was conducted in a Korfball club, where I already had access to participants as an assistant coach and had built a strong working relationship there, which allowed the facilitation of data collection. Korfball is a mixed-gender sport that has similarities with basketball, netball and handball (see Crum, 1988; Bottenburg, 2003). The club approximately 20-30 active members and training was split into two sessions each week; one night aimed at beginners, and the other, a squad training night for the top two teams in the club. Two sessions were run each week, and data collection occurred either in one, or both sessions because some sessions were cancelled due to venue unavailability. At the time, the club had three competitive teams; one regional standard team, one local league team and a student team that trained with the club as a partnership to boost playing members. The training context was primarily run by Phil (pseudonym) the head coach of the club, with me acting as an assistant coach. Initially, to facilitate data collection, discussions with Phil culminated in him agreeing to lead all the sessions allowing me to focus on running the explicitation informed interviews. However, as is the reality of coaching, this became difficult on occasions, as I had to run several sessions on my own, acting as the lead coach whilst still running data collection, when Phil was unable to attend sessions due to extenuating work commitments. These issues are discussed further within the results and discussion sections.

3.4 Participants

Miles and Huberman (1994) suggested that sampling in qualitative research can use either of two approaches; tight or loose. This study used a tight approach, adopting restrictive selection procedures for the recruitment of participants. This was to ensure that the data collected was both relevant and meaningful to the specified aims and objectives at the

start of the project. After discussions with the gatekeeper (Phil), a sample criterion was then decided for participant selection; that the players were a starting first or second team player when the season started. This was decided, as it was perceived that these participants would already have a developed understanding of the sport, as opposed to beginners. With this criteria in mind, five key players were selected, (m = 2, f = 3) between the ages of 21-26 years, all of whom had been playing for longer than two years. Although all members of the club were involved within the actual coaching sessions, these five participants were selected to use the interviews with, and to complete reflective logs after each session in an attempt to document their development of understanding over the weeks of the study.

Previous studies within Action Research also highlight the researcher as a participant within their studies (McNiff, 2016). As highlighted earlier, this study utilised a CAR approach in order to the develop the use of the explicitation techniques; therefore changes were made by me but informed by the opinions of the participants. Through this collaborative approach, I was actively involved in the development of the study alongside my other participants.

3.5 Data Collection

The study adopted several methods of data collection in order to ensure that potential assumptions made by the researcher could also be checked with those of the participants (McNiff, 2016). Furthermore, as highlighted by McNiff (2016), it is important in CAR that both the researcher's and participants' perceptions and opinions lead the development of the project. As such, it was important to utilise a variety of methods that allowed for the collection of data around the experiences of the

participants and my own as the researcher/assistant coach (McNiff, 2016). The methods used involved a combination of researcher field notes, analytic memos, player reflective logs, focus groups and explicitation informed interview transcripts.

3.5.1 Researcher Fieldnotes

My fieldnotes were used as one of the key methods of data collection, collected from observations of players, and my feelings of running the interviews. These fieldnotes were compiled on my phone during each session and added to a data collection document on my computer after each session. An example of these fieldnotes (combined with the analytic memos) is shown in Appendix C. Within other research methodologies (e.g. ethnography) fieldnotes are frequently used and can provide a "reconstruction of events" (Van Maanen, 1988, p. 223-4). Wolfinger (2002) describes two strategies which could be employed when writing fieldnotes. The first of the two strategies adopted for the observation fieldnotes was; salience hierarchy, whereby the observer records whichever aspects are "most noteworthy, the most interesting or the most telling," (Wolfinger, 2002, p. 89). The second strategy; comprehensive notetaking, involves the researcher devising a series of questions and using them to "comprehensively describe everything that happened" (Wolfinger, 2002, p.90). For this study, the researcher used a mixture of both salience hierarchy and comprehensive notetaking; a list of themes emanating from the individual interviews was then used to inform the focus group discussions and individual interviews described below. In order to achieve comprehensive notetaking, I covered the topics of; my own feelings about how the session was running, how I felt the interviews had run and how the participant were engaging with the session.

3.5.2 Analytic Memos

Further notes were written, in the form of analytic memos, following each coaching session, and again after transcribing the explicitation interviews with participants in order to highlight the positive developments and areas to be improved for the next interviews. These memos took place within 24 hours of the completion of each session. They differed to the fieldnotes as they formed my 'initial sense making', and are defined by Clarke as "sites of conversation with ourselves about our data" (2005, p. 202). In my study, the process of compiling analytic notes about the utility of techniques in practice, and after transcribing the interviews, allowed an initial analysis to inform the development of the study. Although I was writing short fieldnotes whilst coaching, it was difficult to accurately assess from these notes whether my own use of the techniques, or application of the techniques was developing. Therefore, taking time after the session for me to reflect on how the interviews ran gave me more insight into the utility of the techniques. Additionally, the later analytic memos written after transcribing the interviews allowed the opportunity to examine the questions and prompts used, as well as the participants' responses, thus highlighting positive areas where progress had been made, in addition to showing elements that still needed to be further improved.

3.5.3 Player Reflective Logs

As discussed, this study used players' reflective logs as a separate method of data collection in order to gain their individual understanding of events that happened. Furthermore, it was hoped that these reflective logs would be able to show player development throughout the weeks through this engagement with extended guided reflections.

The reflective logs used (shown in Appendix D) were an adaptation of the framework used by Richards, Mascarenhas and Collins (2009). This framework, initially developed by Richards *et al.* (2009), was chosen as a method allowing players' to reflect on critical moments from games. Furthermore, it allows various methods of reflection from the players, e.g. through drawing a diagram of the court or by writing a description of events.

This reflective log framework was provided to the players at the beginning of the study prior to data collection and discussed with them, so that they would understand what the logs were being used for. The five players were required to complete these reflective logs within 72 hours after their weekly session and then send them to me via email. These were then used as discussion points in the following session in order to discuss the players' understanding as revealed through their reflections. This also allowed for a continuation of learning between each session by providing the participants with an opportunity for individual study and reflection.

Whilst it was planned for the logs to be used throughout the study, they stopped being used after Focus Group One as the participants believed that they were too time consuming to complete each week and did not find them beneficial to their learning.

3.5.4 Focus Groups

Whilst there have been many ways to try and define Focus Groups, this study follows the work of Morgan (1996) who defined them as "a research technique that collects data through group interaction on a topic determined by the researcher" (p. 130). This definition is broken down into three main concepts; it is a method for data collection, the data is

dependent on participant interaction and the researcher is a central element in order to facilitate the group discussions (Morgan, 1996). The justification for using Focus Groups instead of group interviews was that they involve more interactive discussion between participants instead of the researcher directing questions at each participant (Kitzinger, 1995). As the study used a CAR approach, the discussion of opinions allowed for participants to explain their understandings within the group (McNiff, 2016). These discussions allowed the opportunity for the participants to guide the developments of the study by voicing their opinions and discussing how and why they came to their understandings (Kitzinger, 1995). The Focus Groups were audio-recorded and then transcribed verbatim by me. Interviewees were given the opportunity to view the transcript as a form of 'member-checking' (Creswell & Miller, 2000). Whilst no participants ever challenged the transcripts, it has been recently highlighted that member checking isn't a beneficial method for ensuring validity due to the potentially different interpretations of the researcher and the participant's understandings (Birt, Scott, Cavers, Campbell, & Walter, 2016).

3.5.5 Explicitation Informed Interviews

As previously highlight, the interviews are based on previous use of explicitation interviews (e.g. Mouchet, 2005; 2007), and were grounded in psychophenomenology. They required a 'touch of explicitation' (Mouchet, 2018) as they were informed by previous applications of explicitation interviews, but as they were much shorter in length a 'full' explicitation interview was not possible. Instead, the explicitation informed interviews aimed to get the participants to relive a decision that they had recently made in a game environment, using similar techniques as previous research but in a much shorter time-frame.

Within the weekly sessions I conducted explicitation informed interviews with each participant I was able to within that session; sometimes not all were present, or it was not possible due to time constraints. The interviews themselves lasted around three to four minutes and were conducted by myself throughout the study. Each explicitation interview was audio recorded, and then transcribed verbatim following each session. The transcripts were then used to guide my own learning in using the explicitation techniques in order to inform future interviews, and also to show development and progression of the techniques over the duration of the study. As initially the interviews were a new technique to me, I wanted to show my progression in using the techniques; for instance initially I struggled to question participants in the present tense. However, reviewing each transcript after the session allowed me to highlight these areas that needed to be improved upon each week to allow continuous development. Furthermore, it was important to present excerpts from the interviews within the results section, in order to show the application and development of the techniques in practice over the duration of the study. The interview structure (see Fig. 4 in section 4.2) will be discussed in further detail within the results and discussion sections, specifically section 4.2.

3.6 Data Analysis

I used thematic data analysis as the main method for unravelling the multiple sources of data, as described by Braun & Clarke (2006) as a six-stage process (see Table 1). Thematic analysis is a method that

Phase	Description of the process		
Familiarizing yourself with your data:	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.		
2. Generating initial codes:	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.		
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.		
4. Reviewing themes:	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.		
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.		
6. Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.		

Table 1. Braun & Clarke's (2006) Six stages of thematic analysis

"minimally organises and describes your data set in (rich) detail. However frequently it goes further than this, and interprets various aspects of the research topic" (Braun & Clarke, 2006, p. 79). Therefore, it allowed me to interpret my data in a way that showed the context in which the study was conducted, and present it in a way that is approachable for coaches in an applied nature.

The initial phase of data analysis began during the data collection phase, as is common with Action Research (McNiff, 2016), so as to inform the development of the project during each cycle. Each explicitation informed interview was transcribed and analysed, and notes were made in my reflections to inform how the interviews had generally progressed, regressed or stayed the same. The analysis at this stage involved initial coding and line-by-line scrutiny, but only for initial sense-making (Braun & Clarke, 2006), which informed my future actions. These points were then

used to inform discussions in the Focus Groups at the end of each cycle to ensure participants' views on each theme were considered.

Once data collection had concluded, I started step one of the thematic analysis and spent a period of time re-'familiarising myself with the data' (Braun & Clarke, 2006). This was necessary due to the lengthy and absorbing process of data collection; multiple sources of data had been used throughout the study. Then step two, of creating initial codes of analysis began with inductive coding; "a process of coding the data without trying to fit it into a pre-existing coding frame, or the researcher's analytic preconceptions" (Braun & Clarke, 2006, p. 83). Although, it should be mentioned that whilst the data was inductively coded, it is impossible for a researcher to separate their theoretical, epistemological and ontological views from coding (Braun & Clarke, 2006). In order to limit any biases the first stage of analysis produced a broad range of individual codes emerging from patterns in the data from all sources mentioned above. The codes analysed each specific source of data, but were named broadly, and were loosely based on their relationship to the aim and objectives of the study; an example of an initial code was 'methods to help participants within the interviews' however this was later amended to 'Pedagogical Strategies and Adaptations'. Step three of analysis followed deductive coding to ensure that all the data was coded in relation to the previously known theory of explicitation interviews (e.g. Mouchet, 2005). Any data that did not fit the previous themes was coded to ensure there were no gaps, and in order to add to existing knowledge (Braun & Clarke, 2006).

Then by following step four, themes or 'central organising concepts' were created (e.g. 'utility within sessions') that aimed to summarise the shared meaning of the respective data and highlight the key areas of interest in

the study (Braun & Clarke, 2019). These were then processed and amalgamated to form a thematic 'map' of analysis which allowed the organisation of coded data into higher and lower order themes. Then, once this map had been created, step five was followed and a table (Table 2) was created showing each higher, and lower, order theme and their definitions. Finally, step six involved the initial stages of writing the results and discussion section to show the data.

Higher Order The	r Lower Order Theme	Definition		
Utility within sessions		How the sessions were designed and adapted to develop the use of explicitation techniques, and the challenges encountered by the coach		
	Coaching challenges	The challenges encountered by the coach in implementing the explicitation informed interviews – future recommendations for other coaches		
Pedagogical strategies and adaptations		Pedagogical strategies and adaptations to enhance the explicitation informed interviews		
	Evocative State	How different pedagogical prompts were used to develop participants' ability to reach an evocative state during the interview.		
	Brain Dump	The evolution and impact of an initial 'brain dump' during the interviews		
	Eyes Closed	The evolution and impact of players closing their eyes during the interviews		
	Judgement (player & coach/researcher)	The challenges and impact of both coach and players making (and not making) judgements during the interviews		
Player Development		The impact of the explicitation interviews on player development		
	Increasing self- assurance in decisions	Development of players' confidence in sharing positive decisions from engaging within the interviews		
	Development of Players' Verbalisation	Development of the players' abiltity to verbalise their thoughts during interviews to provide more insight into their 'in game' decisions		
	Development of Players' Understanding of Previous Decisions	Development of participants' understanding of decisions that enabled them to verbalise decisions in both attack and defence situations		

Table 2. Definition of themes created

3.7 Judging Quality in Action Research

When reviewing the literature around 'quality' in qualitative research and especially in Action Research, it is apparent that whilst there have been calls for set criteria to judge quality of studies, they have yet to be universally agreed upon (Dixon-Woods, Shaw, Agarwal & Smith, 2004). Although this becomes problematic for aspiring qualitative researchers, it is relatively clear to see why this is the case; there is an acceptance that participants' views are important but must be interpreted by the researcher. This interpretation, therefore, cannot simply be reduced to such criteria of 'reliability, validity and trustworthiness' as applied in judging quantitative studies (Mays & Pope, 2000). Instead, this study follows suggestions laid out by Elliott (2007) when discussing quality in Action Research and will provide prompts for discussion about choices made when conducting this study. Furthermore, it will discuss the importance of critical friends in aiding the discussion of researcher interpretations, and finally it will analyse the importance of researcher reflexivity.

When discussing compiling criterion for quality in Action Research, Elliott (2007) highlights the paradox that exists;

To reduce the number of views of what quality is in pursuit of a composite score that all evaluators might agree with. The more judgements of quality are reduced to a single measure, the greater the distancing from quality-as-experienced. This may secure agreement in the judgements of evaluators but does so at the expense of quality-as-experienced. (2007, p. 231).

The notion of 'quality-as-experienced' is defined as the experiences of the researcher from a practical perspective and also participants' actions and words (Elliott, 2007). Whilst compiling succinct criterion for quality in Action Research may be beneficial for evaluators, Elliott's view states that

this would limit the use of the actual 'lived and embodied' knowledge used in the research. However, he also states that "criterial thinking needs to be rooted in narratives of experience. When it is so rooted, the number of quality criteria will tend to increase since quality-as-experienced is always 'multifaceted, contested, and never fully representable" (Elliott, 2007, p. 231). Therefore, Elliott proposes a series of prompts that were used reflexively to judge Action Research studies. In light of Elliott's paper (2007), the prompts used to judge the quality of this AR study were as follows;

- 1. It used various data collection methods to ensure data was collected from various sources; participants and the researcher (data triangulation).
- 2. It provides both practical and theoretical insight, for both coaches and researchers, into both the triumphs and challenges faced in applying this technique in practice.
- 3. It was a self-reflexive process involving researcher reflections and critical friends to better understand the findings of using the techniques in practice.
- 4. It demonstrated the researcher's open-mindedness by listening to the suggestions of participants during Focus Groups in line with the collaborative approach to inform future practice which led to the development of the interviews.
- 6. Whilst the study was set in a specific context of Korfball, the results and discussion present clear implications for it to be beneficial to sports coaches and researchers in other sporting environments.

3.7.1 Researcher Reflexivity

As highlighted, the knowledge created in this paper is based on my interpretation and triangulation through other data sources from

participants. Therefore, it is important in qualitative research for the researcher to consider 'the role of self in the creation of knowledge' (Berger, 2015). This is especially true in participatory Action Research where the researcher takes such an active role in the development of the study. Reflexivity can be defined as understanding and appreciating that the researcher is an instrument within the data collection and as such will influence the data collection (Alvesson and Skoldburg, 2000). Specifically for this project, I was an active assistant coach in the environment, and to aid the reflexivity, the reflective researcher narratives were used as a data collection method and aimed to show a part of my internal dialogue (Padgett, 2008). Further steps taken to aid reflexivity included discussing emerging themes during the data collection phase with participants during Focus Groups as a form of member-checking and triangulation.

A further key method used to aid my reflexivity was the formulation of a peer support network of 'critical friends' (McNiff, 2016). This group was formulated of the research supervisors, who aided in discussions around themes during and after data collection, providing external views and challenged my assumptions (McNiff, 2016). These ensured any assumptions made were critically analysed by peers outside of the project, thus allowing external insight which could inform and develop my understandings of the proposed findings (McNiff, 2016).

3.8 Ethics in Action Research

This section will highlight the key ethical considerations within this Action Research study; negotiating and ensuring access, protecting participants and researcher reflexivity.

3.8.1 Negotiating and Ensuring Access

Prior to contacting the gatekeeper and potential participants, ethical approval for the study was gained from the university's ethics committee. After approval was gained, conversations began with the gatekeeper to the environment, and once participants had been chosen, I spoke to them to explain the study, asked if they were interested in participating and supplied them with both a participant information form (Appendix A) and a consent form (Appendix B). Both of these forms had been approved as part of the ethics committee, and the participants were given the opportunity to contact me with any questions or concerns during the study.

My position within the environment, and within the study, was also considered before commencing data collection. As highlighted by Carr & Kemmis (1986) Action Researchers aim to become an 'insider' within the environment they are researching, as they cannot affect change or have the same 'power' as an 'outsider'. However, as I conducted the researcher within an environment I was already situated within, I needed to consider the power I had and the two conflicting roles of both assistant coach and researcher. Previous research by Katz and Kahn (1978) highlights the notion of 'role conflict'; when a person has two, or more roles; acting in accord to one role may cause dissonance with the other role. It should be highlighted that whilst I was in a position of power over players as an assistant coach, I was not involved in squad selection or game management during the season, this was conducted by the head coach and squad captain.

3.8.2 Protecting Participants

The participants in this study were all informed through the information form that confidentiality and anonymity would be observed where possible. As such, all participants were supplied with pseudonyms (Phil, Elena, Maggie, Jackie, Logan and Greg), furthermore, any other players mentioned in transcripts within the environment were also given pseudonyms. All participants were provided with a participant information form (Appendix A) and a consent form (Appendix B) and were aware of the data being collected and anonymised through pseudonyms. All people involved in the environment were aware that the research was taking place and were given the option to opt out of the study and not be included at any point of the research. Furthermore, emphasis was placed on the fact that the study primarily aimed to improve my own coaching practice and use of the explicitation techniques. Although the broader social impact of the study aimed to improve and develop the players' game awareness, it was primarily focussed on the utility of the explicitation techniques and how they could facilitate this development.

Whilst my research study was applied within my coaching practice, ethically I had to ensure that the participants were not negatively affected within training sessions. As a researcher my main priority was to run the interviews and develop them over the study, however I also had a duty as the assistant coach to ensure that their normal training session were not being adversely affected. The main strategy put in place to ensure this was only removing participants from a session for an interview when they were not actively involved with that practice (i.e., they had been substituted). Whilst I made arrangements with Phil to ensure that each player was substituted to allow me to run interviews, I only did this when it would not negatively affect their training session. For example, the week before one of the biggest games of the season, I left the substitute rotations to Phil's decision as the head coach.

Whilst the aim of the study was to see if the use of the interviews would be positive for player development, it was unclear at the start of the study if this would be the case. In order to ensure that the participants were comfortable in engaging with them each week, I asked at Focus Groups if the participants thought they were negatively affecting their training. Although no participants believed that it did I reminded participants during the study that they could withdraw at any point and any data relating to them would be destroyed.

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4.0 Results and Discussion

This section will present the results based on the data analysis (see Fig 3) and provide a discussion around the key findings. It will cover; the utility of the explicitation techniques within coaching practice, the pedagogical strategies and adaptations required when using the techniques, and finally player development as a consequence of engaging with these techniques. The aim of this section is to explore the application of explicitation interviewing techniques and the everyday realities that either facilitate or inhibit their use, and to provide practical examples for coaches to transfer to their own practice.

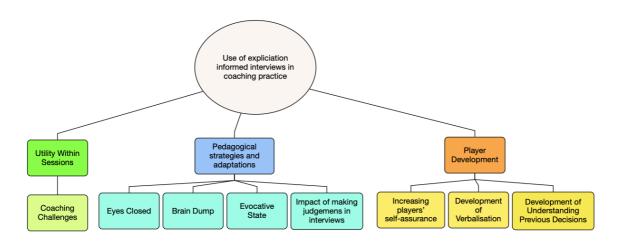


Figure 3. Higher and lower order themes map.

4.1 Utility within sessions

This section focuses on how the sessions were designed and adapted to develop the utility of explicitation techniques within my coaching practice. It will highlight the key considerations for coaches when using the techniques in practice by presenting the results, followed by a discussion of each higher order theme.

4.1.1 Coaching Challenges

At the start of data collection phase, I planned to use the explicitation techniques in my role as assistant coach in the environment, by withdrawing players from the main session and working with them individually, while the rest of the session continued. This was to ensure I could fully concentrate on using the explicitation techniques without disrupting the overall session, which was being led by Phil, the head coach. However, I found it difficult not being able to fully control the sessions, as I wanted to make changes to some of the activities in order to better facilitate the interviews and data collection. In preliminary discussions with Phil as to how the sessions should run to facilitate the explicitation informed interviews, we decided that the techniques would be used in game-based scenarios only and not during isolated technical drills. This was so that the interviews could focus on game based episodes and in-game decisions. However, the game based approach was a change to Phil's usual coaching approach. Whilst he is a very experienced coach, he uses many technique-based drills that build up towards a fullgame at the end of the session. However, the technical parts of the session did not fit the criteria for the interviews, as the players were not actively making in-game decisions. As I didn't want to disrupt the session too much, I had to decide when I would run interviews, and subsequently left it until the game at the end of the session, whilst deciding to speak to Phil about this after the session.

When we did eventually get to the game phase of the first session it was still difficult to find the right time to withdraw the players from the game for the interviews. This took a high degree of coordination with Phil, as the head coach leading the games, and this took time to work out. The following excerpt shows some of my frustrations in the first session when

I was waiting for the right time to withdraw Maggie from the main session to conduct the explicitation informed interview:

Maggie was the substitute in the next rotation for the game so I took her to one side to try and practice using the questions, as I could not just sit there anymore. I planned a few bits in my head to ask her, then called her over and recorded a 3min interview to try and get into the use of the explicitation techniques. (Researcher Reflections, Cycle One, During Session One)

This interview with Maggie was positive as it allowed me to use the explicitation techniques and showed Phil what would be happening for each interview, and he was happy for this to continue. However, in the third session, due to Phil being late from work, I had to lead the session myself whilst still trying to conduct the interviews and data collection. Having only run data collection in two sessions prior to this, I still had not practiced using the techniques much, and also felt the additional pressure of being lead coach, as the following reflection shows:

I want to chat to someone now but the newer people are struggling this evening and need a bit more guidance. Annoying, as I normally leave people to it a bit more but they constantly stop game play to ask questions meaning I'm not free to wander more...I can see the other section playing too and there's been a few situations that I've seen that I'd want to question Maggie on but not had the opportunity yet. (Researcher Reflections, Cycle One, During Session Three)

Whilst it was difficult to find the opportunity to withdraw players and run the interviews, being the lead coach gave me the chance to adapt the session in order to provide more game-based scenarios. To resolve the problem, I set up a scenario for each group, then after observing and questioning/providing feedback I rotated a side-line player with a participant. Then I conducted the interview on the side-line with that player, leaving the groups still engaged in their game-scenario. Following this, on my return to coaching the main session activity, I questioned the others on how they found it in my absence. It was nothing close to ideal as I had left twenty players whilst running an explicitation interview, but even in Phil's absence I needed to continue running the interviews and

find a way to try and make them work. This also gave me a good insight into how difficult it is to conduct these explicitation interviews when coaching alone. I found it tough to maintain focus on running the interview as I was constantly glancing over at the rest of group to see how they were playing, and as a result was distracted from reacting and questioning, therefore affecting the interviews' flow.

In the next few sessions I was back to assistant coach and Phil was running the main coaching sessions again; I was now free to run the explicitation interviews, but the difficulty at that time was that I did not have the agency to change or adapt the session if I needed to, as Phil was in charge. However, through on-going communications with Phil both during and post session, I managed to develop a system of in-session management for him to adapt the session if necessary where I could speak to him more openly during sessions, so that I could conduct the interviews:

Just spoken to Phil before we started the game at the end of the session and asked for Logan to be subbed so I have the chance to run an interview...but this session is especially difficult as we have one of the biggest games of the season this weekend, a loss will end our season pretty much...everyone is tense, the players and us coaches... (Researcher Reflections, During Session One, Cycle Two)

This co-coaching relationship developed further as the sessions progressed, as we both became more aware of how we needed to interact within the session for me to run the interviews. Additionally, Phil began to notice when interviews weren't being run, and this led to discussions as to how he could adapt the sessions to facilitate my data collection without me approaching him first:

... I was annoyed that I couldn't run any interviews again, more time wasted just observing, but Phil actually noticed this and checked to see if it was working and now has changed how it's running so I can get to speak to some people

after the next section of 4v4s ... (Researcher Reflections, Cycle Two, During Session Two)

Whilst for the majority of the study I managed to ensure that I was the assistant coach at the sessions to focused on the interviews and data collection, for the first session of Cycle Three, Phil was unable to be there again, leaving me as the lead coach. However, after several weeks I had more experience running the interviews and I was able to coach what I considered to be a good session and still run data collection interviews as shown in the following excerpt:

I started with a constraints-led warm up that I saw someone else run at the weekend (in another coach's training session), and then went into games for everyone and added rules to change the aim— the numbers worked for two games of 4v4 (mono [two Korf] Korfball). I managed to put the two teams with the Focus Group participants as the ones with subs and then rotated them on and off to run the mini interviews without interfering with the practice but I still left the rest of the group unsupervised...I'm really pleased by how this session went, and I'm surprised by the fact I got over coaching the whole session so last minute and made sure that I structured the session...it was exhausting though and wouldn't work every week, definitely not sustainable and only if it really had to be run that way... (Researcher Reflections, During and After Session One, Cycle Three)

Whilst this session was good as a 'one-off' for both the majority of the players and for data collection, it became obvious to me that a single coach cannot effectively use explicitation techniques with individual players in addition to coaching the whole session. Whilst I had been able to run the session, it was tiring to ensure that I was facilitating a good learning environment as well as concentrating on running the interviews. It seemed it was possible for short periods of time, but it also felt detrimental to the learning of the rest of the group when the focus was turned to an individual player.

4.1.2 Discussion

An initial struggle with this study was to try to ensure that the explicitation interviews and data collection could take place within the sessions. Whilst, as the researcher my main priority was to conduct the interviews and complete the data collection (the conflict with my role as the assistant coach is discussed later in this section), Phil (the head coach) had the overall responsibility to ensure the quality of the coaching sessions and player development. However, this research aimed to develop the participants' decision-making and once Phil had realised that this aim was aligned with his own, he was more open to adjusting the sessions to facilitate the interviews and data collection.

Whilst the discussions to aid the data collection had begun before the start of the study, further dialogue and collaboration between myself and Phil was required to make the data collection more efficient, whilst not diminishing the opportunities to coach the players. As explained by Benhabib, "understanding and misunderstanding, agreement as well as disagreement are intertwined and always at work' (1992, p. 198) in collaborative situations. Further, Jacobs (2010) explains that this dialogue between the stakeholders involved in the Action Research project demonstrates important developments and generates new ideas in that research area. Here, through engaging in discussions with Phil, ideas and strategies to apply the techniques in practice were generated. These discussions allowed the ideas to be further developed and also developed a healthy working relationship between myself and Phil.

The second issue was the complexity and the ever-changing nature of coaching (Cassidy, Jones & Potrac, 2008), which required dealing with the adaptations of being lead coach on occasions, as well as collaborating

with Phil to ensure the interviews could happen. Whilst plans had been put in place for me to focus on the interviews and data collection whilst acting as an assistant coach, due to changing situations, such as Phil working late, I was also required to run several sessions as lead coach. As Cassidy, Jones and Potrac (2008) argue, these are the 'messy realities' inherent within coaching practice and cannot be avoided, therefore change and adaptation is constantly required. Furthermore, Cook (2009) argues how the 'mess' in Action Research can be beneficial and is an inherent aspect in an Action Research process. However, in this situation I struggled with the shifting nature of my role in the environment and had to juggle my responsibilities to the players as the coach, whilst also being weighed down by data collection and functioning as an Action Researcher. Harris (2010) discussed similar issues of having to juggle separate roles in research as being a 'participant researcher' learning when to engage, and when not to, which often proved difficult. Whilst Harris (2010) was a participant in her role as facilitator in her study, she was also the researcher, and therefore had to balance her levels of interaction. Furthermore, Coghlan and Shani (2005) highlight the issue of roles, specifically in Action Research and that it '...brings about the challenge of balance and interdependence between researchers and organizational members ...' (p. 533).

In both managing the relationship with Phil, and dealing with the complexities as coach and researcher, the main issue was the responsibilities of both roles. As the coach, there is the responsibility to the players to provide them with an engaging session that helped them to develop as players and neglecting this would have been unethical. However, to do the study justice, I also had to run the interviews and data collection, at the same time as being responsible for the coaching session

in hand. Previous research by Katz and Kahn (1978) has discussed the concept of "role conflict" where "the simultaneous occurrence of two or more role expectations is such that compliance with one would make compliance with the other more difficult" (p. 204). They define the role expectations as how the behaviour of a person in a role is then evaluated based on the perceptions and incentives of others (Katz & Kahn, 1978). Whilst there was initial "role conflict" between the role of coach and researcher, through effective communication with Phil, the roles were shared until I, as both researcher and practitioner, could concurrently coach whilst also intervening for data collection purposes.

After documenting the struggles between myself and Phil, as well as highlighting the potential difficulties of using the techniques as the sole coach, it is proposed that the techniques can only be effectively used as part of a multiple coach environment. Whilst the results show that the techniques can be used by single coach in a session as a 'one-off', it was not sustainable as a weekly method of running the session. Furthermore, ethically, the coach should prioritise the learning of all, or as many of the players as possible, in sessions; not by leaving the group whilst focusing on an individual interview with one player. If this technique is to be used, it is recommended that two or more coaches are present in the session, meaning if one coach is running an individual interview, the other can still focus of the development of the other players. Whilst it is proposed that it is unethical for a single coach to use this technique alone, it is also highlighted that it is not beneficial for the players or sustainable for the coach. Running a session for players that is actively engaging is challenging enough for coaches, without the added pressure of the difficulties encompassing explicitation techniques as well.

Another area for discussion that has not been mentioned thus far is the difference in length between the inventions in my study compared to the duration of 'full' explicitation interviews in post-event situations (see Maurel, 2009). Whilst, given that the aim was to utilise the techniques within a coaching session, this was expected, there was a marked difference in duration between the previous research that utilised post-event explicitation interviews and my own interviews. In previous research (e.g. Mouchet, 2005; Maurel, 2009) the explicitation interviews lasted around 40-60 minutes each, however in my study, the interviews only lasted around three to four minutes. This was to ensure that the study did not impacted too much on the participants' availability to participate in the rest of the 'practical' training session. However, my results showed that this shorter interview was still beneficial to participants, as the later section on player development will reveal.

4.2 Pedagogical strategies and adaptations

This section discusses how the explicitation techniques were developed over the course of the study in order to ensure they developed to become more effective pedagogical tools to aid player development. It will cover four main topics: the participants in evocative state, and methods used to facilitate this; the participants closing their eyes during the interviews; the use of a brain dump at the start of interviews; and the influence of players and coaches providing judgement during the interviews.

To frame this section, Figure 4 shows an overview of the structure used for the interviews used with players in the coaching sessions. This diagram was created following the development of the interviews within sessions to show the structure used within my own explicitation informed interviews within the sessions.

Prior to interview, the participant chooses a recent decision made in that session; participants should close eyes to aid memory.

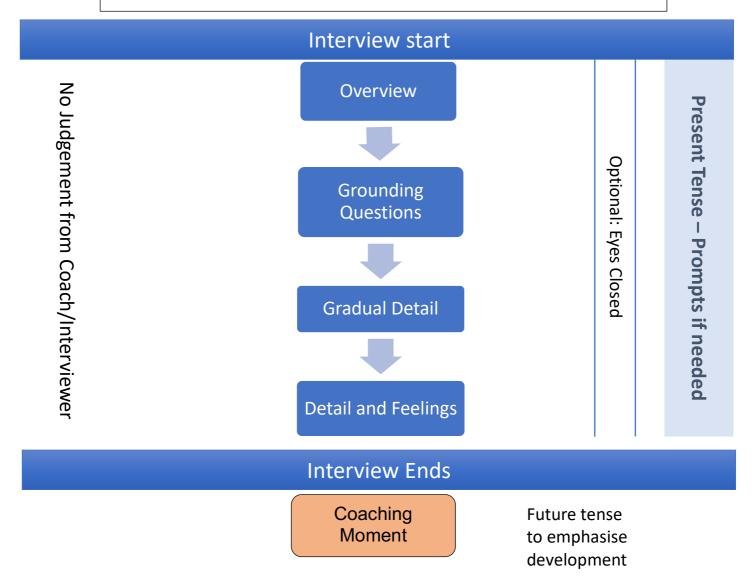


Figure 4. Structure of explicitation informed interviews.

4.2.1 Evocative State

An aim of explicitation interviews was for participants to share their subjective lived experience of an event. This was achieved by attempting

to get the participants to reach an 'evocative state', in order to gain access to information stored regarding a particular moment (Vermersch, 2008). This section reveals how different pedagogical prompts (e.g. visual cues and questions) were used to develop participants' ability to reach and maintain an evocative state during the interviews. As detailed in previous research by Mouchet *et al.* (2018) an evocative state uses "the passive memory and the recalling of details from a lived experience, to re-live his/her actions in a past situation, and to gather what was in pre-reflective consciousness" (p.12).

Several different types of questions were used within the interviews to attempt to get the participants into a state of evocation. These were initially coded as; open, closed, grounding, thoughts/feelings, clarification, using their words and tense. These codes were derived from types of questions used in other qualitative interviews, as well as coding based on understanding of questions used specifically within explicitation interviews. For example, open and closed questions (see Pate, 2012) have been researched in qualitative interviews, however the other types of questions used were specifically based on previous research in explicitation interviews (see Vermersch, 2008). Each question was coded based on the qualities found in the questions, as judged by the researcher in the data analysis. Several were coded as more than one type of question, for example, all of the questions that were coded as open or closed were also coded as an additional type, e.g. "OK, so tell me where you are on the pitch?" was coded as 'closed' and 'grounding'. This is because whilst it was a closed question, it was also used to put the participant back into the lived moment.

Initially, interviews began with grounding questions, which aimed to root the participant back into the moment. Specifically, the first question in most interviews was "Where are you standing on court at the moment?". This was classified as a grounding question as it aimed to focus the participant, so they could see themselves back where they were when the decision was made. These grounding techniques, known as "developing a sensorial anchorage" have been used in previous research into explicitation interviews (see Mouchet, et al., 2018). Whilst some participants (namely Logan and Greg) provided a very detailed answer as to where they were, along with information as to the location and actions of their teammates, some participants needed a further, follow-up question to gain more information after a shorter answer was provided, e.g., "Who can you see? Do you have the ball?".

Once the participants were 'grounded' within the moment, more detailed questions were aimed at the events that occurred before the decision, such as, "What is going on? What are you thinking of doing?". These questions were not asking "why?", but were worded to gain understanding of the participants' thoughts whilst they were playing in that moment to highlight anything that led to the decision. These were then built upon by clarification questions such as, "You say you're holding the ball and waiting?", using the participant's own words and not leading them further by providing suggestions.

As previously mentioned, another type of question code was a 'tense' question. These were questions that were aimed at ensuring the participant stayed, or moved back into the present tense. Examples of these included "You are in a feed..." after the participant had started in the past tense. Another example is from a transcript with Maggie: "Dave

had the ball in front." Me – "So Dave is holding the ball?". This was an important focus, at the beginning of the study when participants were not used to discussing moments in the present tense. However, as the study progressed, the participants required less of these 'tense' questions that specifically prompted them to move into the present. It should be noted that it was aimed for all prompts to be provided in the present tense throughout interviews to aid the participants in achieving an evocative state; reliving that specific moment.

After early analysis of the interview transcripts, it became apparent that several questions used could be construed as leading, e.g. "So Mitch is defending you...is he quite close or...". Therefore a later development in the study aimed at reducing the amount of such leading questions. These leading questions were defined by Baxter et al. (2013) as "questions which imply a 'correct' response or introduce inaccurate details" (p. 89). Therefore, this would not have been a representation of their subjective lived experience of that particular moment. These leading questions were initially deemed necessary due to the researcher not knowing which specific moment the participant had chosen, due to not using an initial video prompt as used in previous (post-game) research using explicitation interviews (see Mouchet, 2015). Despite the grounding questions providing brief details, it sometimes left me wondering what would happen next in the scenario the participant was describing. This then made it difficult for me to formulate the next question or prompt, as a result I initially used 'leading questions'. For example, as mentioned earlier, in an interview with Greg, he specified that Mitch was defending him, the prompt then used was "So Mitch is defending you...is he quite close or..." instead of simply repeating the words he used, extra information was added that Greg had not used ("is he quite close or .. "). Although it was intended as a

normal prompting question, it could have led his answer. Therefore, upon reflection, I decided that the question asked could have been, "How is he defending you?". Later in the process, through further development, questions were mainly based on participants' words that did not lead them any further, for example: "*Mitch is under the post...*" This allowed the continuation of their thought process without disrupting them or leading them to another thought or option.

Finally, when the moment of the decision had been reached within the evocation, detailed questions were used to access more detail as to the participant's thoughts and feelings at that specific moment: "So, you're taking the shot, how are you feeling as you're taking it?". These questions were intended to gather the finer details when the participant was truly within the moment in an evocative state. This specific example of gathering thoughts and feelings when taking a shot is valuable to a coach, as, if the shot misses, players need to ensure the team can still retain possession from the rebound. Therefore, understanding how confident the participant was is a good gauge of how they select each shot; if they were not confident in taking the shot, I advised them that this was a bad shot selection, as this could result in losing possession of the ball.

The main difficulty in devising such questions was the reactiveness required to keep the interview flowing so as not to break the participants' train of thought. The following excerpt from my reflections show some of the difficulties I faced:

...there's just so much to think about...having to react to what they're saying, especially when I'm not initially sure what moment they're talking about... making sure they're staying in the present tense, ensuring that the questions do not lead and just prompt the participants... (Researcher Reflections, After Session Three).

However, it was difficult to find a solution to instantly develop this reactivity needed in order to effectively run the interviews with participants. Instead, it became a longer development over the duration of the study through engaging with more explicitation interviews.

4.2.2 Brain Dump

Initially, grounding questions were used to start the interviews, however, after analysis of my reflections and transcripts during the first cycle of data collection, it became apparent that one of the participants could provide more information from just one question, compared to the other participants:

Greg's interviews always ran differently than the others – he seems to give lots of detail to begin with.... other participants only seem to give a tiny overview of the moment and then need lots of questioning... (Researcher Reflections, Cycle One, After Session Three)

For example, in one of Greg's transcripts, after being questioned as to where he is on court during the particular moment, he continued to give more detail without prompts:

G – I'm standing at the top for a restart, the other teams scored...

(Me – Yeah)

G – Sarah...and Olivia...Olivia has run straight round into a feed, it's not a very good one, it's a little bit far out so I look to the side to see if there's someone to pass to...

(Me - Yeah)

G – Sarah is not moving too much, but Phoebe is not defending properly either, so Sarah actually has a nice path...she moves back behind Phoebe...so it's a nice pass over the top and I pop it over to her...

(Me – Yeah)

G-She goes for the shot, then decides not to, then Phoebe drops back off her, so she takes the shot for the second time and it sails just under the post, but it's a good move and I'm happy with it. (Greg, Explicitation Transcript, Cycle One, Session Three)

In contrast to Greg's level of awareness at this stage of the study, Maggie required a lot more prompting to draw more detail around the moment we were discussing:

Me – So what are you seeing, what are you looking at in front of you?

M – Dave had the ball in front.

Me – So Dave's holding the ball?

M – Yeah, he's sort-of unsure if he should throw it to me in the feed or not...

Me – Okay.

M – I was quite far out, umm...

Me – So you can see he's hesitating slightly?

M – Yeah.

Me – Who else is attacking with you at the moment? Dave has the ball in front of you and?

M – Yeah, Dave had the ball in front and Charlotte was round behind the post, and Mitch was one of the other sides.

Me - Can you hear any of them moving at this moment?

M - No

Me – You can't hear them trying to make a move to come around or anything?

M – Not really... (Maggie, Explicitation Transcript, Cycle One, Session One)

After examination of the transcripts, I noticed that Greg's level of responses showed a higher level of awareness and it was also apparent that Logan began his interviews in the same manner. After asking Logan where he is on court, he started to explain the whole moment of the decision:

L – So Ryan is under the post and rebounding me by cutting the post, but because we were so close to the post, I assumed I would still get the ball wherever it bounced unless it went directly off the front, in which case even with a good collect [a rebound position in Korfball] it would be hard to collect. So I considered that was good enough, and my team weren't currently looking around the post area, but were working it well between them, so I assumed there was a shot coming up soon, so if I left this now there would be a shot, so it would be better to remain where I am.

Me - Yeah

L – The shot went up, it bounced slightly off the front, I probably could have at least got a hand to it, but I did not, and I did not even try for it because Kyle was standing there. I probably should have gone for it because in attack you should pretty much always jump in those scenarios, because the worst-case scenario is a restart. (Logan, Explicitation Transcript, Cycle One, Session Four)

This excerpt shows how much detail that Logan was able to provide straight away without prompts. However, it should be highlighted that he was answering in the past tense instead of the present tense which will be discussed in a later section of this chapter.

When questioned in the Focus Group, Greg explained to the group why he found it easier to start the interview with this 'overview' or 'splurge' as he refers to it:

I find a lot easier to sit back think about it, like just go and splurge. I think it's easier to splurge in the present tense...but I find your questions really helpful, like if you just sit me down so you won't go, I sort of flounder like yeah. (Greg, Focus Group One)

Logan also agreed with Greg in the focus group however didn't provide any further information or opinions. The other participants found it interesting to discuss the idea of a 'brain dump' within the Focus Group, and how Greg and Logan had found it easier using this to provide more detail and information within the interviews. Therefore, after further discussion with my critical friends as well as reviewing transcripts from Cycle One and the Researcher Reflections, I encouraged all participants to start the interview in this manner.

I think it'll be interesting to see people start by splurging or the brain dump method...could be quite helpful to people but not sure if I'd use it myself, will have to see how the others feel when they try this...good to see that they're willing to provide ideas and engage with developing it more though... (Researcher Reflections, Cycle Two, Before Session One)

I also wanted to see if it was just Greg who could provide so much information from just one question, or the others just giving simple responses and not going further. For example, when asked where he was standing on the court, he'd give more information as to other peoples' locations and other aspects of gameplay, whereas other participants would just give a simple explanation of which part of the court they were on. Following this decision, the data collected in subsequent explicitation interviews showed varying levels of 'playing awareness' when the participants started each interview. Where some participants could provide information about a decision straight away in a 'splurge', others required more prompts to keep them talking and 'in the moment'. For

example, Jackie, who initially could not give much information, was able to provide an overview of the whole decision in the present tense:

Okay, so I'm standing about 4ft away from the post and leuan runs into feed, looking like he's going to cut the feed, but I pass it back in and then receive the ball back from leuan, and then it goes in. And everyone else is free around me, and it was a risky pass to make back into leuan, but I chose to do it anyway, just as an impulse pass. (Jackie, Explicitation Transcript, Cycle Two, Session Two).

This was not as a result of me giving her any extra strategies to adopt, but because she had been encouraged to start the interview with as much detail as possible, she was able to give that information straight away without extra prompts. Whilst Jackie was able to provide that information without any interjection required from me, Maggie struggled and paused, so I kept repeating her words to keep her in the moment so she was able to continue and provide more information:

M – So I'm to the right of the post. I just received the ball from Lizzie from the back.

Me – Yeah.

M – Mitch is under the post with a good collect.

Me – So you can see that Mitch is under the post.

M-Yeah. And then I receive the ball and Lucy is running at me trying to defend. I seem to hesitate. Do not take the shot. And then she's defending me, so I'd sort of missed the opportunity. And then I pass it umm back out to Lizzie." (Maggie, Explicitation Transcript, Cycle Two, Session Three)

Despite struggling without prompts, Maggie could provide information about the decision, and was able to gradually provide more information after prolonged usage of the interviews.

Following the culmination of Cycle Two, the participants were asked to discuss how they'd found using the 'brain dumps', as this had been encouraged for all participants during that Cycle. Although after practice all participants had been able to provide more detail each time they'd used

the 'brain dump', some of the participants were still not convinced of the value of it, e.g.,:

Personally, I haven't seen a difference really for me it's just getting what happened out. Either by asking the question sometimes you ask questions that I haven't thought about explaining which is quite helpful for me... (Maggie, Focus Group Two)

Through discussing the participants' experiences of using the 'brain dump' to start each interview, it was clear that whilst several participants found it more helpful, others did not like the change in structure. Therefore, it was made optional for participants to start the interview with a 'brain dump' in order to allow for personal preference; I felt it had been beneficial to the participants to see how much they could recall without prompting, but I wanted to give them the option of what was more comfortable. However, despite their indifference in the Focus Group and their preference for prompts, both Maggie and Jackie used a version of the 'brain dump' in subsequent explicitation interviews:

M-I am sort of back right of the post. I've got quite a lot of space from my defender who is Grace.

Me – Yeah

 $M-And\ I$ can see that the other side of the post, so quite far, was my other team members. So, there was Logan, I can't remember his name and Jackie were there and I made this decision to shoot. (Maggie, Explicitation Transcript, Cycle Three, Session Four)

Here, Maggie provided an overview of the decision which allowed me to see the context and her initial awareness. When questioned on this in the final interview, she justified why she'd used it, but still highlighted the importance of the prompts to assist the process.

Personally, I quite liked the idea of brain dump, but I find I do not quite get as much information out during that as I do with like trigger questions. And yeah, personally I prefer having the questions. (Maggie, Final Interview)

When Logan was questioned about these 'brain dumps' in the final interview, he explained why he preferred to start the interviews that way and not with shorter questions and prompts.

I probably prefer the brain dump, I think the brain dumps got easier regardless because we kind of knew what you wanted.

(Me - Yeah.)

Which helped, as in general, it's much easier to give that kind of data and then preen it afterwards anyway. (Logan, Final Interview)

However, when Elena was questioned about it, she reiterated that she still found it more helpful to use prompts from the start as she believed it made the interaction more 'meaningful':

I think I always chose the questions. Just to help. You just sort of guided what I needed to think about.

(Me – Yes?)

Yeah. Otherwise I feel like I would have just like blurted, and not really focussed very much. Yeah, so it helped. (Elena, Final Interview)

Finally, Greg said that:

I found the questions really helpful at the start, just in prompting me when I still did not really know what was expected of me.

(Me – Yeah)

It's quite intimidating just talking... just going off on your own and saying things...the prompts really helped, but by the time we got to the end I did not really need them. (Greg, Final Interview)

From this, it is interesting to see the progressive development Greg experienced from using these interviews; through weekly engagements he was able to recall more information without the prompts. Whilst it was interesting to see how the participants had different preferences as to how to start each interview, coping with this as the researcher was difficult:

...personally, it makes it easier when the participants start with a brain dump as it gives me a better idea of the situation they're talking about...it gives a better grounding for the participants and me...if it's not helpful for them then they should have the choice, but it's easier for me with the brain dump... (Researcher Reflections, Cycle Three, After Session Three).

As suggested, I felt it was important that the participants could choose which method was more beneficial for them, so they would feel more comfortable in the interview. If they needed the prompts to stimulate their memory then I provided them, but it was also beneficial for some participants to provide an overview of the situation first if they could to show their level of awareness. As highlighted in the extract above, the brain dump gave me a better insight to the situation they were talking about, but when participants chose not to start with this I had to reactively prompt them instead.

4.2.3 Eyes Closed

Another development in aiding the participants into an evocative state, arising from Greg's experience, was that he kept his eyes closed when he was trying to remember the moment that he had chosen to discuss in each interview. At the time, I thought it to be insignificant and a consequence of his tiredness that week, however, in a subsequent session, Logan did the same thing. Therefore, we discussed this in Focus Group One as an option for others, to try to see if it was beneficial for the explicitation interview process. As Logan suggested: "It probably makes sense to get them to close their eyes and visualize it? Yeah. That way you can walk yourself through what you're doing" (Logan, Focus Group One)

After agreement from the other participants, for the second cycle of data collection, all participants were asked to close their eyes for the first section of the interview where they tried to remember the specific situation they were choosing. Following the completion of data collection in Cycle Two, during the second Focus Group, the participants were again asked to discuss the notion of keeping their eyes closed based on their experiences. Another participant also felt like it was beneficial at this point,

as it helped ground them in the moment and limited any external visual distractions.

For me. I feel. Like it helps to bring back the memory straight to my brain quite naturally. Like if I'm doing revision or in an exam if I do not remember something then I close my eyes and try to think back to it. It's all like a natural way of trying to get a memory back into my mind. I find it quite helpful. (Maggie, Focus Group Two)

Yeah it helped me...it ties in with other things I do and makes it easier to imagine things. (Logan, Focus Group Two)

Although I had initially asked the participants to close their eyes, unintentionally participants kept their eyes closed for the entire interview, and instead of disturbing them within the interviews, I decided to leave it until Focus Group Two to discuss this. Therefore, during the Focus Group, I asked the participants why they had chosen to keep their eyes closed throughout:

I thought I had to keep them closed from then on because I thought your eye contact or facial expressions could influence my thoughts. (Jackie, Focus Group Two)

I thought when you said eyes closed it meant the whole thing. (Greg, Focus Group Two)

In order to ensure that the research developments were informed by both me and the participants, as highlighted in collaborative Action Research studies (see McNiff, 2013), we made it optional for participants to close their eyes at any point of the interview. At the end of the final data collection cycle, this change was then discussed with the participants in order to gain an insight into their experiences:

I naturally went to keep my eyes closed...because that's the way I visualize things, I think. I remember you saying you can keep your eyes open or whatever...I think I just naturally visualize things with my eyes closed and that helps me focus on thinking about what I've done. (Elena, Final Interview)

...I think it helps me see? Weirdly enough I was reading another study that closing your eyes is good for you to kind of relax and align your thoughts anyway... I'll keep doing it, not just in that study but other things...It just helps

clear your head you know I guess it shuts out any distractions that you can see... it helps me imagine or play back what I think happened... (Logan, Final Interview)

The participants all agreed that closing their eyes to briefly recap the memory was beneficial, and some still kept them closed for the entire interview. Each participant had their interview separately from the main session, either on the side-line whilst others were still playing or in the entrance to the hall therefore; they were also unable to see what other participants had chosen to do.

In addition to closing their eyes, some participants also used gestures to help them re-live the moments. Logan was the first to start using gestures to explain more things as he was talking, as noted in the researcher reflections:

What's interesting is how Logan uses so many gestures, pointing in the direction he can 'see' people in front of him and almost 'holding the ball' as he's talking through it. He doesn't make any eye contact with me, he's somewhere else...I started to mimic his gestures but it was not helpful as Logan had his eyes closed..." (Researcher Reflections, Cycle Two, During Session One).

Additionally, Jackie started using more gestures in the interviews too:

...she gave me a fair amount of detail; she could see more than most people and I could see her gesturing/moving to show me exactly how it was all happening...I mimicked these where possible, although for sections she had closed her eyes... (Researcher Reflections, Cycle Two, During Session Two).

I then raised this in the next Focus Group to try and see how the participants felt whilst they were in the moment. In Logan's own words: "I think that's just an easier way to explain that position." (Focus Group Two).

4.2.4 Impact of making judgements within the interviews

This section discusses the impact of me and the participants making judgements about the in-practice decisions, within the explicitation interviews. As highlighted by Vermersch, making judgements "opens another space of speech, and has other goals, than the experience of action" (2018, p. 33). Therefore, the provision of judgement by the participant, or interviewer, strays from the main goal of explicitation; gathering information on the actions of the participant. Furthermore, judgement can only take place in the past tense; it is only possible to judge something once it has happened, and therefore this strays from the 'evocative state' where the interviewee is re-living the experience.

In the preliminary stage of data collection, it was apparent that there were instances where I was providing feedback as a the coach within the interview:

...I did find it difficult to not judge when she'd moved – I think that she should have made the decision to clear out earlier, but she has made the right decision... (Researcher Reflections, Cycle One, After Session One)

...I wanted to change his perception as he blamed his bad pass and I think he actually made the right decision; the other player was responsible for a 'bad outcome'?... (Researcher Reflections, Cycle One, After Session Three)

Those excerpts highlighted that bias had been present in the initial interviews, I knew from engaging in previous literature that I needed to limit this judgement (e.g. Mouchet, 2005). However, as a coach, as well as a researcher, I struggled not to use the interviews as learning experiences for the players. This is shown in the following excerpts from interviews with Logan:

Me – Yeah, so you said that you should have noticed that Kyle had dropped off, and that you could've moved. Instead of you doing that, who else was attacking with you? Say it was Greg, wait it was Mike, so if Kyle was dropping off then what does that mean?

L – That Mike's a free player?

Me – Yeah.

L – So he should receive the ball?

Me – Yes! (Logan, Explicitation Transcript, Cycle One, Session Four)

L - Even though it would not have been a good collect, so it might have been better to move off there.

Me - So, thinking about the player that you were looking at, and what you know of Phil, bearing in mind he made contact with you, what does that tell you about it.

L - That he knows whether to take that shot or not, so I should have trusted that he was there, and he would not have taken it anyway. (Logan, Explicitation Transcript, Cycle Two, Session One)

Within the first two cycles, I had focused on other areas of development within the interviews, however following the culmination of Cycle Two, it was apparent from the data that my own biases about the players' decisions were still overtly present. Prior to the first data collection session in cycle three, I revisited Vermersch's research (2018) which outlined the importance of setting a 'pre-interview contract' and decided to include this within the in-session interviews:

I ensured that before the interview I explained the difference between coach/researcher role in the interviews – this seemed to help as it set the scene more... when I spoke to Greg...he kept to the present tense and there were no judgements provided by myself – I ignored it if he gave any opinions and just carried on... (Researcher Reflections, Cycle Three, After Session One)

In this session, no participants seemed to notice the change in the amount of feedback or judgement provided, but they were still wanting to provide their own self-critique. In the following transcripts it was apparent that most coach/researcher judgements had been removed from the interviews, showing a development from previous sessions. During this stage of the study, no participants commented on this change, however. Due to my other role in the environment, as a coach, it seemed like a negative and unhelpful change revealing conflict between my roles as researcher and coach:

It seems like I'm now not doing my job as a coach by not providing as much feedback, I wanted to help them develop...maybe they do not need my opinions here; but I still think I should be doing more... (Researcher Reflections, Cycle Three, After Session Two)

I was still confused as to the impact of changes made when including or reducing the communication of coach/researcher judgement within the interviews, and I was conflicted in my differing opinions from both my researcher and coach perspectives. I therefore gained the perspectives of the participants in the final interviews in order to understand their experience of it, to help me:

M - I did not find that there were many coaching comments throughout it...I haven't found that you're always watching during (the plays) anyway, so I personally do not find that, for what I say, you're even going to know about the situation or not. (Final Interview, Maggie)

Me - ... How would you like to use it... would you put feedback in it, or at the end of it?

E - I would put it at the end of it.

Me - Yeah?

E - Almost do what we were doing in the interviews...maybe ask the question, ... "what you would have done and what did you do wrong? What would you do differently? And then if necessary, then give the feedback. (Final Interview, Elena)

...Sometimes I do doubt myself that I've done the right thing, sometimes I have done the wrong thing...feedback at the end would get your opinion of it...I think it helps like getting to recognise the situation and someone confirming for them if they did this right or not... (Final Interview, Jackie)

As highlighted, whilst coach judgement had been removed from the interviews themselves, the participants still wanted clarification around the decision they'd made following the interview. Whilst removing the coach judgement was a necessary development, it was also important to ensure that the participants were not providing judgement of their actions during the interviews too.

From analysing initial transcripts, it became apparent that the participants were also providing judgements on the decisions they were discussing within the interviews. For example, the following excerpt shows how Greg was feeling whilst in the moment,

So I'm just waiting for them to realise it's not working...Umm and I get lucky... (I'm a) Little bit frustrated that nothing's happening how I want it to happen, but it is what it is... (Greg, Explicitation Transcript, Cycle One, Session Three).

It is clear that he was struggling to make his attacking teammates work together to build a shot, and he was negative as to the experience but he is only providing thoughts and feelings in the moment, and not retrospectively providing a judgement. This is a positive example of the participants explaining how they are feeling in the specific situation. However, in the following excerpt Logan is judging the decision he made:

He moves slightly later than expected therefore it was a bad pass... I think it was the right pass to make, however, I made assumptions before I made the pass which led to the ball not being received by the player (Logan, Explicitation Transcript, Cycle One, Session Two)

Initially he calls the pass 'bad' but then corrects this and tries to justify why it was the right idea. Whilst this was a more direct form of judgement by using negative language, another element of judgement that was noticed was participants' offering alternatives:

I do not have a good collect. So, in terms of actually what happened, I could have positioned myself better or just given up the position, knowing that I was being rebounded, and talked to the team. (Logan, Explicitation Transcript, Cycle One, Session Four)

Whilst initially, Logan had started talking in the present tense, he then stops to discuss alternative ideas of what he potentially 'should have' or 'could have' done in that moment instead. When the idea of participants communicating judgement was brought up in Focus Group One, Logan independently discussed the first of the previous examples with the group "...so, I passed the ball and it went over their heads...I should have

realized that and given a different pass. Yes. It's not an important decision (but) we lost the attack." (Logan, Focus Group One). As other participants had not provided so much judgement, after this Focus Group, nothing was specifically mentioned for the next cycle of data collection. Once data collection had started in Cycle Two, it became apparent that Logan as well as other participants were still providing judgements: "Even though it would not have been a good collect, so it might have been better to move off there, so it was my fault (that his team lost the ball)" (Logan, Session Five). Here, not only has Logan provided judgement on the position he was in on court, but he has blamed himself for his team losing the ball. In a different manner, in another example, Maggie is explaining that she 'should have' done something different "...I should have shot but I sort of...by the time I had not, I thought, it's too late now" (Session Seven). Whilst this is also providing judgement on the decision that she made, it also shows a lack of confidence, which she raised herself during the following Focus Group: "I'm not as experienced as other people on the court so naturally I just think that I am the one that's done it wrong." Whereas other participants provided alternative reasons as to why they provided more judgements, or were negative about their performance during the interviews:

I think for us two (Jackie and Greg) we'd struggle, because we're quite emotional in a match...we're very self-critical... I think we're... modest people as well. So, if we did something good I know I would not give myself much credit for it. And I think if I did and it went into that situation of... not making a judgment. If I was really proud of something, I probably would not say anything. I tend to lack that confidence, and I am very self-critical, so I think I'd find it hard not to be self-critical or to separate what's happening from why I made that decision. So, when you added questions in it helped a lot because I was not giving you much, because I did not really know what the right answer was not that there was a right answer, but I did not know that. (Jackie, Focus Group Two)

When questioned if they could try to remove their judgements from the interviews, Logan was certain that this would not be possible:

That's going to be a lot harder, because I will naturally do that regardless of whether we do an interview...You're going to inevitably pick something where you've got annoyed or you felt like oh I shouldn't have done that because it's in your memory a lot clearer than just a normal point in the game...I tend to pick things that I think could have gone better because the whole point of analysing plays is to improve...(Logan, Focus Group Two)

After this discussion, I raised the point that he could still pick whatever moment he wanted to talk about in the interviews, but as highlighted in the literature, the aim in explicitation techniques/interviews is to not pass communication of the actual judgement. Either through direct judgement, labelling it with positive or negative words, or indirect by focusing on alternative options instead of discussing what happened. In Cycle Three however, by limiting the communication of my judgement, this in turn seemed to limit the participants in providing their own judgement within the interviews too, as there were no further occurrences.

4.2.5 Discussion

The importance of the prompts and questions provided to aid participants is in-keeping with previous research, such as Mouchet, *et al.* (2018), that highlighted the importance of varying questions to probe different answers and continue the participants' evocation. They highlighted various techniques such as; "developing a sensorial anchorage...using sensorial questions...using the interviewee's own language..." (2018, p.14). All of these prompts were prominent in the findings in terms of eliciting responses and guiding the participants into a state of evocation. Furthermore, in relation to the use of questioning, the participants highlighted the importance of not using judgement questions such as 'why', but using questions beginning with 'how' or 'what' to gain more detail of the actions and the moment in question. Although it was an initial struggle to avoid using these 'judgement' questions, as they are normally

prominent in my coaching practice, by the end of the study, their use was at a minimum.

The questions used also show a development on previous literature such as that presented in 'Assessment for Learning' (see Brown, 2005), which highlights the use of questioning and other pedagogical tools to provide the teacher (or coach) with information as to the learners' current level of understanding. By using these interviews, I was able to understand more about the players' awareness that led to their decisions and highlight areas for development. Whilst previous work in explicitation interviews highlight the use of questions for sensorial anchorage (e.g. Vermersch, 2008), they have not shown an indication of starting an interview with a 'brain dump'. Instead, they have used video clips, for example, Mouchet (2005) used a video clip prior to the start of the explicitation Interview, which allowed him to refresh the memory of the player's decisions and also provided an overview for the interviewer. Therefore, it would appear that the use of these 'brain dumps' (or free narratives) were not used at the start of the interviews in the previous research (e.g. Mouchet, 2005; Mouchet, 2008), but they are present in other fields of academic research. Namely, they are used in witness interviews conducted in police investigative operations, which aim to gather as much detail from the witness without leading or influencing them (see Colwell, Hiscock, & Memon, 2002). Colwell et al. discussed the use of 'structured interviews' when conducting witness interviews which include; a free narrative of the whole event, questioning moving from open-ended to more detailed closed-questions, and finally another account of the entire event (2002). This fits more closely with the structure that each interview loosely followed by the end of Cycle Three, with the exception of finishing with another account of the entire event. As the results highlighted, the use of these 'free narratives' or 'brain dumps' were also beneficial to me in conducting the interviews, although participants did have the choice to start. However, as the results highlighted, some participants needed to use more prompts to begin each interview, and gradually build up their ability to recall more information from the start of the interviews. Whilst the use of 'brain dumps' can be helpful for the coach, players should be prompted in order to develop their ability to recall as required.

Additionally, the style of structured interviews is aligned with views of various psychologists e.g. Wertheimer (1938) who hold the notion of gestalt; the whole is more important than the sum of the parts. By starting each interview with a 'brain dump' or 'free narrative', the interviewer gains an overview of the situation and the context, this in turn allows them the opportunity to gauge questions to be used to probe for more information. This notion of gestalt fits with the previous literature in explicitation interviews; gathering the subjective lived experience of participants involves appreciating the whole context of the decision. Whilst the details are still important as they show the participants' awareness and recall in evocation, the context provides a better understanding of the whole picture. Despite the shortened period of time in which the interviews took place, it was still important to gather information on the context of the decision as well as the specific details.

Research in the area of memory-recall (see Perfect, et al., 2008) has highlighted the benefits of closing one's eyes to aid memory-recall to improve correct answers and decrease incorrect answers. Furthermore, Glenbery, Schroeder and Robertson (1998) highlighted the increase in gaze aversion in interviews when participants had to answer more difficult questions. This was a development on previous research by Beattie

(1981) who suggested that the arousal which occurred during eye contact in interviews made it more difficult for the participant to continue their train of thought. However, this finding is in contrast to the previously existing work in explicitation interviews by Mouchet and Vermersch. Both researchers have previously stated how mimicking the participants' gestures is an important element to ensure they stay in an evocative state (Vermersch, 1990; Mouchet, 2005). Despite this, the findings from this study suggest that some participants did not need this visual stimulus to stay in evocation, as their eyes remained closed. It should be noted, that in previous research by (Mouchet, et al., 2018) the "loss of eye-contact suggests the participant(s) is recalling a particular situation and consequently, moving away from present state to an evocation of the situation." (p. 7). Therefore, maintaining eye contact may not be necessary once the participants are in the state of evocation. Previous research has also suggested that this loss of eye contact could be gazeaversion, or the participants closing their eyes (Vermersch, 2008). However, it is notable that gaze aversion is only one of the signs that a person is in a state of evocation, others include speed of speech, and linguistic markers (e.g. specific, descriptive and concrete vocabulary) (Vermersch, 2018). Finally, when discussing the notion of the 'evocative state', it is important to highlight once more the difference in duration between the interviews I ran in this study, and the explicitation interviews in previous research (e.g. Vermersch, 2008). Whilst previous interviews lasted around 40-60 minutes in duration, the interviews in my study lasted a mere 3-4minutes. It is proposed, therefore, that whilst the interviews in the study proved beneficial, in this short space of time a 'true' evocative state is unreachable. Instead, engaging in the weekly interviews still allowed participants to develop their understanding of decisions through 'moments' of evocation. The prompts and questions allowed participants

to access information from the 'pre-reflective consciousness' thus improving their awareness of previous decisions. Players can still re-live their previous decisions through the prompts and questions provided by the coach, thus gaining a higher awareness, but not at the same level as an explicitation interview.

The use of mimicking gestures in this study by the participants to keep them in a state of evocation is in keeping with previous research (Mouchet, et al., 2018). It should be noted that in addition to keeping their eye closed during the interviews, some of the participants also used gestures to show their movements whilst describing them. Although it was not possible for them to see me mimicking these gestures, as suggested by Mouchet, *et al.* (2018), the participants still found this useful in re-living the moments.

Finally, whilst coaches providing feedback is an important part of any coaching interaction, Mouchet's work (e.g. 2005) highlights how in explicitation interviews the interviewer should not include any personal bias. The results from my study agree that player and coach/researcher judgement should be limited within the interviews in order to aid players' verbalisation of their decisions. The removal of judgement is essential as the interview is concerned with gathering the 'subjective lived experience' of the player; his or her own version of an experience that has not been led by the interviewer or anyone else. Furthermore, as previously highlighted the aim is for the participant to re-live the moment, in a state of evocation, and talk through the moment in the present tense, whilst judgement can only be passed retrospectively. Whilst my study's findings agree that judgements should be removed from the interview themselves this presented challenges, as coaches will naturally provide judgement in

the form of feedback to their players, and players will also tend to judge their own performances. However, the findings revealed that the participants believed that mine, and their own, judgements could be reduced during the interviews. Consequently, instead of making judgements during the interviews, I allowed an opportunity at the end for the participants to ask for guidance on the decision, and only provided this information if requested. The providing of feedback or judgements after the interviews is a development on the previous research in explicitation interviews; the reason for this is the situation of the interviews I ran. Whilst Mouchet's previous research (e.g. 2005) involved researchers running explicitation interviews outside of a coaching environment. The interviews I ran, however, were within the players' normal training sessions, and as one of their coaches they expected my judgement, in the form of feedback, to aid their development (Lagestad, Sæther, & Ulvik, 2017). Whilst judgement should be limited within the interviews in order to gain the players' subjective lived experience, the players may not be able to learn from this information on its' own. They require a more knowledgeable other, in this case myself as the coach, to aid them in learning from this experience in order to develop their understanding (see Koepke, 2017). As shown in the results, coach judgement was a necessary inclusion outside of the interviews conducted in order to aid the participants' understanding. A development, therefore, was to add a 'coaching moment' following the interviews' conclusion in order to give feedback to players on that specific decision (see Fig. 4).

4.3 Player Development

This section will examine the impact of the explicitation interviews on player development, and will cover three subthemes; the players' increased self-assurance in decisions, the development of players' abilities of verbalisation, and the development of players' understanding of decisions.

4.3.1 Increasing Self-Assurance in Decisions

After analysing the interview transcripts during Cycle One, I started to notice the types of decision that the participants had chosen to discuss in the interviews. I had given them the choice to discuss a decision they had made from any point in the session, and in some instances it took a while for participants to pick, or even remember, any decision made within that game. Although this could be a result of their level of awareness of their decisions, most could not think of any specific decisions they made during the session in any given phase of play that they had just participated in. Furthermore, in the first few weeks of the study the participants were, all except one, choosing to talk about decisions that lead to a negative outcome, the main one being the loss of possession. Whilst I have previously highlighted that provision of judgement during interviews should be avoided, the judgement of choosing a decision with a 'negative outcome' happened prior to the start of the interview. Additionally, the previous section highlights that judgement will inevitably be a part of coaching practice, however, the aim is to reduce the judgement within an explicitation interview, not outside of it.

These following excerpts show Logan and Greg choosing to discuss experiences that had not gone well, and using negative language:

Logan $-\ldots$ I passed it a little bit over, and it did not go to Henry's hands... He moves slightly later than expected therefore it was a bad pass... (Explicitation Transcript, Cycle One, Session Two)

Greg – ...I do not think quickly enough umm in the moment, so I'm just waiting for them to realise it's not working when the ball (the game play or passing) isn't working... (Explicitation Transcript, Cycle One, Session Three)

Whilst it was mentioned in Focus Group One that participants were only picking negative experiences, it was not openly discussed, as there were other changes being made to the interviews and I did not want to change too much too soon.

In Cycle Two of data collection, there was only one instance where a decision with a positive outcome was chosen to discuss in an interview, therefore I raised it for discussion in the Focus Group at the end of that cycle:

Logan - I tend to pick things that I think I could have done better because the whole point of analysing plays is to improve.

Me - ... Do you not think you could improve from positive things?

Logan - I think you can and it's definitely a good thing to bring up positive things. I do not disagree with that all...if it's gone well I think, "Awesome, do that again," but I do not think it's good for analysis...

Jackie - ...I think that would be hard because every korfball game is very different. So you have a different defender or different experience... I mean you could learn from something you've done positively and you can try to do it again, but every korfball game is different..... (Focus Group Two)

Whilst I agreed with Jackie that analysing plays with a positive outcome in order to try to replicate them in another game would be beneficial, I was more concerned with highlighting positive play in order to increase game awareness and confidence. I thought it could be a beneficial activity for participants to understand the thoughts and actions that led to a positive outcome, as well as accept accountability for them. Whilst participants had previously explained what they had done in a situation that had a negative outcome, they should also take credit for decisions that led to a positive outcome too in order to build self-assurance. Therefore, I suggested that participants could try and use more positive experiences in future interviews, to see if it could be beneficial for them.

The following week, in Session 8, in all of the interviews, participants chose positive experiences from the session to discuss. Although it was difficult to tell at this stage if it was a change of their game understanding, it was positive to see the participants' openness to the idea.

Greg - Some nice passes are made in between my team and then I drop off to the back and Kelly throws me an over ball. I catch it and put it in for a drop off (a type of shot). (Explicitation Transcript, Cycle Three, Session One)

Elena - She passes me a long ball...when I receive the ball, I was actually quite far away from the post, so I was not sure if it was outside my range, but I shot it and it went in... (Explicitation Transcript, Cycle Three, Session One)

Initially I assumed that this change may only have been because it was suggested during Focus Group Two in the previous week, however, over half of the interviews in Cycle Three then discussed positive decisions. This showed that the participants had accepted the change, as they were given the choice to discuss any decision they wanted to. More noticeably, Jackie, who had openly admitted that she struggled to accept credit for positive decisions, also chose several positive experiences in Cycle Three, e.g.:

Jackie - I am moving away from everyone here. It's really hectic. And I get space and Phil passes me the ball. I fake taking a shot because a really tall man is marking me, and he overcommits and nearly lands on me...Phil passes me the ball behind his back...and I take it and shoot... (Explicitation Transcript, Cycle Three, Session Three)

In her final interview, Jackie explained how the interviews would help to increase her confidence in her decisions further too, e.g.,;

Yeah it definitely ... to make me think about it next time and maybe have more faith in myself...I think it helps like getting to recognise the situation and then someone confirming them... (Jackie, Final Interview)

Additionally to Jackie, Greg admitted that the study had made him more aware of his normally 'negative mindset' that he thought he should change;

... I guess what I'm actually saying afterwards is so negative, I suppose it has been a lot of the time, and this has helped me look at myself and think that I probably could do a change of mindset... (Greg, Final Interview)

4.3.2 Development of Players' Verbalisation

One of the anticipated benefits of participating in the study was the aim to increase the participants' game awareness whilst playing, as well as their ability to reflect off court in the interviews in order to improve reflexivity to learn from previous experiences. This was shown through the increasing level of detail provided within the interviews and the participants' decreasing need for prompts to ascertain further information from the decisions discussed in the interviews. As their ability to recall improved, it shows a higher level of understanding of the game situation they were in, and shows more awareness of it.

The initial interviews in the first cycle showed that the participants needed a higher level of researcher facilitation in interviews through prompts to reach a state of evocation, to provide further detail. It is also proposed that this showed the participants' initial lack of ability to recall or verbalise a decision:

Me - Did you receive the ball in the feed position when you were there?

M-No

Me – Ohh okay, so you were just holding the position.

M – yeah

Me – So who was defending you at the time

M – umm, Kelly

Me – And was she quite close to you all the way round?

M - Yeah

Me – Yeah okay, so what do you reckon, was she in front defending, was she that close to stop you getting the feed position?

M – Yeah I'd say so.

(Maggie, Explicitation Transcript, Cycle One, Session One)

As seen in this excerpt, Maggie required a lot of questions from the start in order to gain more information from her, showing a lower level of recall and awareness of the moment in question. Compared to other participants, she was less willing or able to provide information, and she was reliant on questions to aid her verbalisation of the event, and could not continue without these.

As discussed in the earlier section on the 'brain dump', some participants found it easier to start talking in the moment and providing more detail than others. For example, Maggie initially struggled to provide information without further prompting from me, however she showed the most development throughout the study, and by Cycle Three she could provide much more detail in the interview thus showing her improved level of recall. She could then be questioned more to access more detailed information, instead of spending more time getting her grounded into an evocative state. Once in an evocative state, she could provide much more information and showed a much higher level of verbalisation through providing more information and not relying on prompts. The following excerpt shows the detail provided by Maggie after only one question in her final interview;

Me – So, where are you?

M- I am sort of back right of the post. I've got quite a lot of space from my defender who is Grace and I can see that on the other side of the post, so quite far away, were my other team members. So, there was Logan, I can't remember his name and Jackie were there and I made this decision to shoot.

(Me - Yeah.)

M - But there was not anyone in there who collected it so it got turned over quite quickly.

(Maggie, Explicitation Transcript, Cycle Three, Session Three)

By Cycle Three, most participants were able to provide a higher level of detail thus showing an increased ability to verbalize their understanding of previous decisions, however Elena still struggled. Due to extenuating circumstances, she had missed several weeks of the data collection and therefore had engaged with the interviews less than other participants. The following excerpt shows her higher reliance on prompts compared to others at this stage of the study due to a lower game awareness and lower recall ability;

Me - OK so tell me where you are on the pitch?

E - Sort of behind the goal to the righthand side.

Me - And who else is on your team at the moment?

E - Jackie and some guy who's new I do not know, two guys who are new who I do not know.

Me - OK. And do you have the ball?

E - No.

Me - Who has the ball?

E - I think Jackie...

Me - So Jackie has the ball and where is she?

E - She was past halfway. On the other side.

Me - Yeah. And what are you thinking when you're looking at her with the ball.

E - I'm thinking that I would like a long pass to shoot from behind the goal.

(Elena, Explicitation Transcript, Cycle Three, Session One)

Elena had also noticed this development herself, and mentioned it within the Final Interview:

The study has helped me realize who there is around me apart from directly or where I want them to be... It makes me more aware of the whole of it...I can talk about things and remember them immediately... (Elena, Final Interview)

Elena also mentioned that she could see how it could be beneficial for her over a more extended period of time:

I think what it does is it makes you think about what you're doing... I do not know if it's changed how I think when I'm playing, but I think over time if we kept doing it (then) I think it would..." (Elena, Final Interview).

In the final interview, Maggie was able to describe her own developments as a result of using these interviews in training sessions.

...I was in the moment, but I was not as aware of who was around me and what was going on whereas now when I'm in the moment I'm like 'right make a conscious effort to look at more for the gameplay and to see who's there for passes' the study has helped me realise that, because before, I would not have even known that I do not bother realising who there is around...apart from directly in front or where I want them to be. (Maggie, Final Interview)

4.3.3 Development of Participant's Understanding of In-Game Decisions

I initially focused on participants' decision-making in attacking situations, because previous research in explicitation interviews had focused on attack (Mouchet, 2005). However, after we had used the techniques in attacking situations, I wanted to see if they could also be utilised for defensive situations to develop players' understanding of decisions made there too. Additionally, I wanted to see how adaptable the techniques were and if players could also discuss these decisions too; attacking is only one half of the game, and defensive decisions are also as important. When I first suggested this to the participants, they all decided that this would not be beneficial or possible, e.g.:

Logan: So, I would not want to do defence because a lot of how I defend is based on A) the people we're playing against and B) the entire team (their defensive strategy) ...

Greg: I think defence is almost entirely reactive. There's very few moments in the game when I'm defending when I will actively [make a decision in defence]...maybe if I'm going for an interception or trying to cut a feed, but most of defence is reacting to what your attacker is doing. (Focus Group One)

These opinions highlighted the beliefs of the group about decision-making in defensive situations. As explained by Logan, the team had predetermined strategies for defence which influenced their decisions. Further, the team often decided on a set system of defence to play against

a particular opposition based on that team's normal style of attack, which influenced the way each player behaved. Also, Greg viewed defence as merely reactive with limited "active decisions". Following this feedback, I suggested that reactions could still be decisions even if they were subconsciously made, a concept named as 'intuition' within psychology research (see Collins, Collins & Carson, 2016). However, the participants were still adamant that defensive decisions could not be used within the interviews. In-line with collaborative Action Research, I therefore focused on other areas to improve upon in the following sessions. I still wanted to raise this point again later in the research study to see if over-time, these opinions would change, however, at the time, I was doubtful that this would happen. Following the initial discussion with participants in Focus Group One they were adamant that the interviews could not be used within defensive situations. The participants provided justification for this opinion; that defence was a predetermined team strategy but the tactical side was much more reactive, and they argued these defensive decisions were subconsciously made (see Mouchet et al., 2018).

After Cycle Two of the data collection, I considered raising the subject of using defensive situations again, but due to the amount of other changes being made in the study, and the players' initial negative response to the idea, I refrained. However, in the first session of Cycle Three, Maggie chose a defensive situation within an interview without being prompted to do so:

...she'd had a lot of shots in previously from far away and I had to decide whether I was going to go in and fully commit to defending or see if she was going to dummy me and go past for a close running shot. There were people that were quite near the post, not necessarily in an assist position but that could have quickly moved into an assisting position from a rebound position. She then went to put a shot up and I decided to commit and got the defended call and we got possession. [In korfball you are not allowed to shoot if the defender is

between you and the post and within arm's reach] (Maggie, Explicitation Transcript, Cycle Three, Week One)

At that moment of the explicitation informed interview, the interaction felt no different to when she was talking about an attacking situation; to the point that I did not realise she had spoken about defence until I started that week's transcriptions. Although this was an unplanned development, I found that she had included a high level of detail around the decision, it should be noted that this she was talking in the past tense highlighting this challenge discussed earlier. Previously, I thought it would be beneficial in defensive situations despite how negatively the participants viewed the idea. Therefore, it was encouraging to see this natural development from a participant. I chose not to mention it to the other participants at this stage, as I wanted to see if any others would do this as well. Subsequently, another participant, Elena, used a defensive moment in a session a few weeks later:

I'm about three meters away from the post, two defenders in front of it to the left looking at the post...I'm defending Jackie.

(Me - What is happening?)

I'm a proper distance from her, about a meter. She's receiving the ball. And I kind of know that she's going to go for a runner, but I overcommit anyway. She runs past me and there's too many people around the Korf so I can't really do anything about it, and Kelly tries to go in for the switch, but it's all gone a bit wrong. (Elena, Explicitation Transcript, Cycle Three, Week Four)

In this interview, I was aware that she was talking about defending so I let her continue to see what evolved out of the interview. Again, I reviewed the transcripts following the session, and there was a high level of detail, showing Elena's awareness of the decisions she'd made in the moment. Following the completion of data collection in Cycle Three, I was intrigued to know if the participants' perceptions towards using the techniques with defensive decisions had changed, so it was discussed within the Final Individual Interviews:

Yeah, I think you could do it. I have changed my mind. I actually do think it would be very helpful. Now I'm thinking about it and how everybody else was piping up after me and agreeing with me...it would be very beneficial probably to most people. (Greg, Final Interview)

I think it's just as valuable using it in defence because it's as important a part of the game as attacking is. (Elena, Final Interview)

These excerpts from the final interviews show a clear change of opinion from the first Focus Group, regarding the utility of explicitation techniques in defence as well as attack. Whilst it was a clear development that the participants' opinions had changed, the biggest change was that Greg now agreed that the techniques could also be used for defensive situations. He admitted that he had been the first to say that it could not be used in defence, and that the other participants had then agreed with him. This was a clear development in his and their collective understanding of in-game decision-making that impacted upon the utility of the explicitation interviews as it showed they now agreed through using the explicitation informed interviews that they could also discuss decisions made in defence. Once the participants had engaged in the weekly interviews, they gained more understanding of their decisions and through an increased ability in verbalisation they concluded that defensive situations could also be used in the interviews. Through weekly engagement within the interviews they had developed their understanding of their own decisions, and were able to freely discuss both decisions made in attack and defence. Although this development occurred late in the study, the participants believed that this would be beneficial to use with defensive decisions in the further interviews and would be a useful avenue for future research.

4.3.4 Discussion

The results showed the increase of players' self-assurance through discussing decisions that led to a positive outcome, which is a development on previous work into explicitation interviews (e.g. Mouchet, 2005; 2008). As previous research by Mouchet (2005; 2008) had not been applied within coaching session, my study shows development by using explicitation techniques within my coaching practice, and a benefit highlighted was increase in self-confidence. Research in sports psychology has previously highlighted the benefits of positive mental imagery to aid confidence in sporting performance (e.g., Simonsmeier & Buecker, 2017). Through engaging in weekly interviews, and with encouragement, the participants grew in confidence to share positive decisions they had made by re-living previous positive decisions. In the excerpt from Greg, it was clear that the engagement with the interviews had a positive impact on his mindset around his own playing by highlighting his previous negativity.

Previous research has shown that through extended interviews, participants were able recall much more in-depth information from their ingame decisions (e.g. Mouchet, 2005; 2008). In my research, the explicitation informed interviews did not last as long as the explicitation interviews in previous studies; they were one-off events post-play which lasted around three minutes. However, as shown in my results, through weekly interviews, participants were able to build their game awareness over an extended period. As previously highlighted, through 'moments' of evocation participants were able to develop their understanding of previous decisions. Specifically, for example, Maggie highlighted that engaging with the techniques allowed her to become more 'aware' of her own teammates, and how people were playing around her. Whilst

previous research had only focussed on one-off individual explicitation interviews, my results show that through multiple use of the techniques with the same participants, they can be used effectively to develop players within a training environment. Whilst not directly related, these findings have some similarity to the notion of experiential learning theory (Kolb, 1984) "the process whereby knowledge is created through the transformation of experience" (p. 41). The application of explicitation techniques on multiple occasions, allowed participants a more in-depth view of their previous decisions, thus developing their understanding and creating new knowledge of their experiences.

Based on the findings of this study, it is proposed that the use of explicitation techniques can aid the development players' in-game decision-making through improving their awareness. The criteria for data collection stated that the interviews should be used with game-like scenarios, similar to the criteria used in research by Light, Harvey & Mouchet (2014). Their research focused on the use of a game sense approach and highlighted that, following a specific practice, the coach would use questioning that would stimulate critical reflection, which would aid the verbalisation of their understanding (Light, Harvey & Mouchet, 2014). Whilst my research did not specifically use a game-sense approach, it builds on this area by highlighting that explicitation techniques can be used in this way to aid the verbalisation of player's understanding and stimulate further development.

Furthermore, the results around players' awareness of other teammates fit with previous research undertaken within sports coaching. Most notably is the concept of "inattentional blindness" presented by Furley, Memmert and Heller (2010) who, in their basketball study, explained that: "it is often

not possible for a player to consider all the possibilities in complex situations," (2010, p. 1328). This notion of "inattentional blindness" is a development on the notion of "change blindness", where attention must be focused on the object in order for the 'change' to be noticed. Additional research by Memmert, Simons, and Grimme (2009), highlighted that when a player suddenly and unexpectedly becomes free, they may not be passed the ball due to the lack of awareness, or attention payed to them by their teammates. In one extreme case, during a study in basketball (Simons & Chabris, 1999) researchers used a woman with an umbrella to walk across court during the experiment, and she went unnoticed due to the players "inattentional blindness" towards the unexpected object. Furley et al. (2010) also presented the case that in basketball, this blindness can be avoided by prompts such as verbal calls from the coach on the side-line, but this can lead to players becoming reliant on these cues. However, the results presented here in my study showed that through the explicitation interviews, players can develop greater awareness of other teammates.



5.0 Final Conclusions

5.1 Introduction

The purpose of this chapter is to summarise the key findings of the study, as well as present implications for future research and the limitations of the study. Additionally, it will provide the key implications for coaches' practice when applying these techniques and, highlight new areas for further development when using them.

The study aimed to explore and develop the use of explicitation techniques through interviews within personal coaching practice. Specifically, the objectives were;

- To explore the utility of explicitation style questioning within sport coaching practice.
- To develop and adapt the pedagogical strategies to successfully implement explicitation techniques within coaching sessions
- To improve players' game awareness within game-based situations in training sessions.

By addressing these objectives, this study adds new knowledge and understanding to existing literature in explicitation interviews and presents a novel way in which explicitation techniques can be applied in sport coaching practice. Whilst previous research (see Allen-Collinson, 2009) has detailed how a phenomenological approach could be beneficial within coaching research, my study advances this field by providing a novel phenomenological coaching approach within an applied sports coaching environment. Furthermore, the study provides insight for future coaching practice by giving practical examples of a phenomenological pedagogical

tool to gather deeper insight into players' game awareness. The results show developments in both the methods for applying the techniques in practice, and in players' game awareness as a result of these techniques. The value to players in developing the detail of their personal accounts of game situations is to guide them to different accounts and hopefully to different actions in the future. The explicitation interview data, therefore, has a retrospective-prospective nature. Furthermore, coaches can use the previously inaccessible pre-reflective information about player awareness and decisions to 'see' new things and inform their coaching practice.

In addition to developing the use of psychophenomenological approaches in coaching, this thesis provides further insight into the use of Action Research for coaches to develop their own practice. An important personal aspiration of this thesis was to provide findings and ideas that were transferrable for other coaches; to also inform other's practice within their own unique coaching contexts. Through using explicitation informed questioning, there is the potential for coaches to gain greater insight into their players' understandings of previous decisions that would previously have been inaccessible due to this information being stored in the reflective subconcious. This further information can allow coaches a more in-depth understanding about the decisions players make to inform future actions. Furthermore, this information from the reflective subconcious can be used by coaches to show areas of weakness in the players' game awareness which can be developed further in future practices.

5.2 Summary of Findings

5.2.1 Utility of Explicitation Informed Interviews

The results suggest that the successful and effective implementation of explicitation techniques in practice requires a collaborative team approach between coaches. Here, for best effect, the findings suggest that one coach should run the session and actively coach the rest of the players whilst the individual explicitation interviews are held by another coach. Furthermore, the results showed the importance of ensuring that coaches are working together in a planned and coordinated way, in order to successfully include the techniques within their training sessions. It is proposed that it is unethical and unproductive for a single coach to focus on the development of one player by running an interview with them; this is prioritising their learning over the rest of the group. Through further development of my understanding and confidence in using the explicitation techniques, I was able to use them whilst coaching on my own, however this should only be considered as a 'one-off' and is not a sustainable approach. It proved difficult to facilitate the session whilst also ensuring that the interviews were meaningful and beneficial for the participants and simultaneously attempting to coach twenty other players.

Through a collaborative approach coaches should also work together to ensure that the sessions encourage the development of decision-making opportunities. Indeed, in this study the techniques were only used with game-based practices in sessions, thus ensuring that all decisions were developed within a game context. These allowed opportunities for players to make 'in-game' decisions which were then discussed in the interviews. Whilst initially this proved difficult when working with Phil (due to differing coaching approaches), through conversations that developed Phil's appreciation of the explicitation techniques, this became easier. Once the

session goals of both coaches were aligned, working together enabled an approach that proved more efficient for the use of the techniques. The players' in-game experiences were then used as an opportunity to develop their game understanding through interviews using explicitation techniques.

It is important to highlight the necessity of coaches' understanding of the explicitation techniques in order to improve the quality of the interviews. Understanding of the questions and prompts used in previous studies can inform their own practice, thus aiding the efficiency of the interviews. As such, it is anticipated that this study will provide coaches with an understanding of the application of explicitation informed interviews in order to inform future practice. As documented in the results/discussion section, my own engagement with previous research in explicitation interviews was key to my understanding of the interviews in practice. Through engaging in the findings of my study and literature (e.g. Maurel, 2009; Mouchet et al., 2018) that provides specific examples of interview transcripts, it is proposed that coaches can build a better understanding of how the interviews should run in practice. By reading about previous applications of 'explicitation interviews' (Maurel, 2009) it enabled me to prepare for using the interviews and to develop an understanding of the questioning required to aid the participants within the interviews. Furthermore, by engaging in a reflective log it allowed me to develop my use of the explicitation techniques and it is suggested that other coaches to do the same in their practice, by highlighting areas that are effective, as well as aspects to improve upon.

Initially the participants did not believe that the techniques could be used by reflecting on defensive decisions, as they viewed those decisions as

more reactive, or based on predetermined defensive strategies. Despite sharing my opinion that defensive situations could still be discussed in interviews, it took time for the participants to alter their view on this. However, through prolonged engagement with the techniques in sessions the participants changed their minds, and subsequently also used defensive situations in the interviews. When this was discussed in the final individual interviews, the participants all agreed that the techniques and interviews could be used for future defensive decisions. Therefore, players should be encouraged to choose decisions from any point within a game (e.g. both attack and defence) in order to aid their development of game understanding. This could potentially be achieved through earlier education of the benefits of reflecting on defensive as well as attacking situations with participants. As highlighted, in this study the participants were not informed of this from the start to avoid influencing their experiences, however this can be done when using the techniques in future coaching.

5.2.2 Pedagogical strategies and adaptations

The results in this study build on previous research (Mouchet, *et al*, 2018) by agreeing with the importance of using questions for sensorial anchorage to start each interview with the participants. The use of questions such as "Where are you standing now?" and "Who can you see?" allowed the participants to ground themselves in the moment before they began to verbalise the full event or decision. This grounding in the moment is beneficial as it places the participant back in the experience which is a key aspect to maintaining an 'evocative state' (Mouchet & Maso, 2017). However, an interesting finding from this study, linked to

the initial grounding questions, showed that some participants found it easier to begin the interview with a 'brain dump' or 'free narrative' as used in other interview styles such as in interviews by police with witnesses (Colwell, Hiscock & Memon, 2002). This use of a 'brain dump' was beneficial for some participants as it reminded themselves of the situation, as these interviews did not use a video-clip reminder for the participant and researcher at the start of the interview, as used in previous research of this nature (see Mouchet, 2005). It should also be noted that the use of video-clips prior to the start of the interview by Mouchet (2005) allowed the interviewer and interviewee an overview of the moment, thus limiting confusion. Whilst some participants in my study found the 'brain dump' useful, it is suggested that coaches should allow their players the opportunity to try using, and not using, them to assess which is most beneficial for each individual. This is important as some participants found it helpful to give all the information at once to remind themselves, however, some participants felt that it was too difficult to talk through the whole moment and found it easier to be prompted by the interviewer.

Additionally, the results from this research show that using techniques inspired by explicitation within coaching sessions builds on previous research into pedagogical techniques, such as Assessment for Learning (Brown, 2005). These techniques include questioning, which allow the coach an insight into the understanding of their players to guide their future development (Brown, 2005).

The findings of this study also show that some participants found it helpful to keep their eyes closed throughout the whole explicitation interview. This is in line with research outside of explicitation interviews by Perfect *et al.* (2008) who stated that it was beneficial for the participants to close their

eyes in order to limit visual distractions whilst trying to recall information. However, my findings suggest that this should be a choice for the participants to see which approach is most beneficial for each individual.

5.2.3 Player Development

The results of this study show that through weekly engagement in the explicitation interviews, the participants were better able to develop their awareness of previous in-play decisions. As identified by Maggie, engaging with the interviews made her more 'aware' of her in-game decisions. These results are related to Kolb's (1984) 'experiential learning theory', where learning is as a result of understanding and unpicking prior experiences. However, as a development to Kolb's theory of experiential learning, using explicitation techniques aimed to provide participants the opportunity to develop their understanding through re-living the experience. Through verbalisation, players were able to develop understanding of previous experiences through an evocative state and use this to inform future decisions whilst playing.

The results also showed that engaging in the interviews reduced players 'inattentional blindness', a phenomenon defined by Furley, Memmert and Heller (2010) as a players' inability to consider all to possible options of play in a complex game-environment. Whilst this previous research suggested that a coach's feedback from the side-lines can help aid players spot alternative options, this creates coach-reliant players (Furley, Memmert & Heller, 2010). However, my results show that through engaging in this study's interviews the participants were able to develop their awareness of teammates on court whilst playing. The participants, such as Maggie who described herself as being more 'aware' whilst playing, highlighted this development. Therefore, it is recommended that

these interviews should be used within coaching sessions in order to develop players' awareness of other players in games. This will then aid players in becoming less coach reliant whilst they are playing by limiting the amount of in-game feedback they require from the coach on the sideline.

5.3 Limitations and Recommendations for Future Research

This study was based on developing the use of explicitation techniques in interviews lasting three minutes on average due to the limitations of implementing these techniques during coaching sessions. However, the existing explicitation interviews literature has used interviews lasting around thirty minutes or longer for participants to reach a full state of evocation (see Mouchet, 2005). It is important to note, therefore, that whilst this study shows development of the use of explicitation techniques in interviews during training sessions, it is probably not possible for participants to reach a 'full state of evocation' in such a short period of time. Instead, a 'touch of explicitation' (Mouchet, 2018) is recommended to allow the participants to reach a similar state that allows them to re-live the situation in order to learn from previous decisions. Furthermore, in this study, the theoretical underpinnings such as Mouchet's work (e.g. 2005) were not fully explained to participants so as to not influence their perceptions of how the interviews were helping in a coaching environment. Explaining benefits from previous research would potentially have been beneficial to gain 'buy-in' from players to help them to better engage with the technique and me as their coach.

Whilst the results show that some participants found it beneficial to close their eyes during the interviews, it could also be argued that this was due to a difference in location compared to previous research (e.g. Mouchet, 2005). For example, the interviews run by Mouchet (2005) were conducted in a separate room, in comparison the interviews run in my study which were conducted in the sports hall, close to the court being used for the rest of the training session. There were a lot of distractions around for the participants when conducting the interviews, and the participants closing their eyes limited these visual distractions. However, this area should be further researched in order to identify the necessity of these techniques in order to aid participants' verbalisation of previous decisions. Furthermore, the use of explicitation informed interviews could be a useful addition to coach education courses in order to develop coaches' understanding of how questioning can be further applied.

An additional avenue for future research is to examine the use of explicitation techniques specifically with decisions made in defence, as well as attack, from the very beginning of the study. Whilst the results of this study show that the participants believed it could be beneficial later in the study, this was not fully explored due to the time constraints of data collection. It is hypothesised that the interviews would still be conducted as documented in this study to discuss decisions in defence too, however this would need to be further examined.

Finally, it would be beneficial if future studies explored how coaches can work together to develop the utilisation of the explicitation techniques within other coaching practices. For example, future research should examine the techniques in other environments such as other sports. Other sports will present different contextual difficulties for applying the explicitation techniques within those environments (e.g. different practice set-ups).

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Appendices

Appendix A – Participant Information Sheet

Appendix B – Participant Consent Form

Appendix C – Researcher Reflections and Fieldnotes

Appendix D – Players' Reflective Logs

Appendix A – Participant Information Form

Participant Information Sheet

Title of Project: The Development of Explicitation Style Questioning in Coaching Korfball

What is this study for?

Recent studies in sports coaching have highlighted the use of explicitation interviews (Mouchet, 2008) within sports coaching practice. Specifically, this research has focused on the use of individual interviews, either on coaches or their players, that involve the researcher guiding them through reflections on specific incidences of decision-making within their practice in games.

Why should I take part?

Although this is an Action Research study and is the first time this technique will be used in this way, the aim is for the technique to develop players' understandings of their own actions. Therefore, it is aimed for this study to be beneficial in your development as a Korfball player.

I want to take part, what will I need to do?

Each week in training, during the game-related elements of training I will hold a short individual interview (around 3-5mins) involving in-depth questioning into a specific event that has taken place in the game. This will be either after the training game ends, during a water break or during a substitution break. Furthermore, the use of extended questioning may be used as part of task design in sessions — as part of drills or set up game scenarios.

The study may also require you keep a reflective log, this will only need to be completed weekly within 48hours of our Wednesday training session (or Tuesday if Wednesday training doesn't happen for any reason). This is so I can evaluate your reflections on the training sessions, and also for you to give feedback on how you're finding the study.

The final part involves a Focus Group interview at the end of each cycle of the research, this is to have a conversation with all the players and myself to find out how everyone is finding the process. This gives you an opportunity to discuss any aspect of how the process is for you as players, and for me to ask for your feedback and advice in how you think we can better this process. As this is an Action Research project, the application of the questioning technique in practice will change and be constantly developing.

What if I change my mind during the project?

You can change your mind at any point, and you have the right to withdraw at any point.

I don't want to take part.

That's absolutely fine! This project does involve some time commitments on your part, and I completely understand if you do not want to take part for any reason. The study will still be continuing with other participants and will not negatively affect your experience within training.

How we protect your privacy:

Any personal information that is not part of the data used in the study (e.g. name, email address, etc) will not be shared in the final written thesis, however names may arise as part of discussions with research supervisors. However, this information will not be shared wider than the supervisory group. Any quotes or observations used as part of data in the written thesis will use a pseudonym.

All participant data collected in the course of the research (including personal information – e.g. contact details) will be stored on a password protected computer and handled in accordance with Cardiff Metropolitan University's data storage and handling procedures. Extremely careful steps will be taken, to make sure that you cannot be identified from any of the data collected. When we have finished the study and analysed the information, all the forms utilised to gather data will be destroyed. We will keep the form with your name and address and we will keep a copy of the attached consent form for 10 years, as we are required to do so by the University.

YOU WILL BE GIVEN A COPY OF THIS TO KEEP, AS WELL AS A COPY OF YOUR CONSENT FORM

Contact Details:

Alice Hunterst20020299@cardiffmet.ac.uk

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Appendix B – Participant Consent Form

PARTICIPANT CONSENT FORM

Participant name:

Signature of Participant

Signature of Researcher

Name of Participant

Title of Project: The Development of Explicitation Style Questioning In Coaching Korfball. Name of Researcher: Alice Hunter

Participant to complete this section: Please initial each box. I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason. I agree to the use of anonymised quotes in publications. I agree to the Focus Group being audio recorded. I agree to the individual meetings being audio recorded. I agree to the use of observational notes. I agree to take part in the above study.

Date

Date

Date

Appendix C - Researcher Reflections and Fieldnotes

Before First Session (29/1/19)

- Nervous to actually be starting the interviews after so much writing and time sorting out ethics etc.
- However, the meeting with my supervisors was very productive and allowed for the discussion of the initial interviews that I had proposed. Also allowed the planning for the proposed developments to be used if/where appropriate.
- Got ideas for how to use it based around the normal session structure – can start to use ideas in the initial drill sessions when there's less going on and it's easier to talk to people on the sides.
- Should work however I'm still nervous about using the techniques in practice after spending so much time just reading about it

During the Session (29/1/19)

- session wasn't as it is every week no communication as to a different set up
- No warm up straight into games to give people experience reffing, which is nothing like normal.
- Feeling intimidated by prospect of pulling people over to ask them questions
- People keep starting conversations with me when I'm formulating questions to ask!
- Need to make notes on one situation and then question if/when they sub
- This is exactly why I don't plan sessions I'm annoyed as I'd planned how I was going to start using the interviews at a smaller level in a drill and not straight as a full game situation!
- Am I making excuses?
- New plan- spoke to Jackie before the next play and said I'd observe her in the next section
- plan was a good idea till the water break was about 1min long instead of the normal 3-4mins!

- Plan C just practice using the questions with one of the players and get them to pick an event that's happened in the last section
- Maggie was the sub in the next rotation so I took her to one side to try and practice using the questions, as I couldn't just sit there anymore.
- Planned a few bits in my head to ask her, then called her over and recorded a 3min mini interview to try and get into the use of the techniques
- It felt good after to have actually tried something I started it in the wrong tense, but it was good to start as it will take a lot of practice to get used to this

After First Session (30/1/19)

- Initially still annoyed that the session was nothing like normal and I hadn't really had a chance to use the interviews as I was hoping to, but I need to get into the sessions more.
- The mini questions with Maggie were good I could see that she was really trying to remember what had happened, she used a lot of gestures (I tried to mimic them where possible).
- We went into detail around what she was seeing, and I tried to prompt and probe her by getting her to explain in detail who was around her and who she was seeing/not seeing.
- I've also now asked her to complete a reflective log about that event to see how the logs will work with a small example.

- (Now go over the transcript from the interview)

- After listening to the interview and transcribing it, I was slightly disappointed, as at the time I had thought more positively about the interview. I knew that I'd started it in the wrong tense (meant to imagine they're re-living the experience kind of big point) but I did correct this halfway through.
- I led her through the interview too much especially as I wasn't 100% sure that I'd watched the event she was talking about.
- I didn't give her enough time to reflect about the event before starting, especially as she didn't have a video reminder and that I wasn't sure which one she was going to pick.

- Although I changed the tense that I was using to ask her questions, I didn't make sure that she was answering in the right tense (think this is crucial)
- The majority of questions seemed to be along similar lines read in other studies, but some asked for judgements and not descriptions (Asking about how Kelly was defending her)
- Maggie could give a fair amount of detail as to the event that had happened, and was helpful for her to describe why she moved.
- I did find it difficult to not judge when she'd moved I think that she should have made the decision to clear out, but she has made the right decision
- This could be showing me that she can't read the situation that well? Although she made the right decision, from what she was saying it was clear that she knew she wasn't in a great feed position. Additionally, Dave hadn't passed her the ball so she knew that he wasn't comfortable with where she was too.

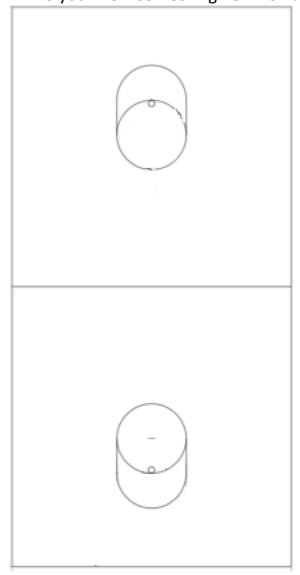
Reading through First Reflective Log

- Maggie didn't reflect on the event that I had questioned her about
 need to make this clearer in the instructions
- STILL NOT IN THE RIGHT TENSE need to make this clearer too
- Nowhere near as much detail as I wanted maybe it was rushed?
- Not back in the specified time frame
- Not from one of the people I wanted it from
- Highlight areas on the reflective log to analyse the themes??

Appendix D - Players Reflective Log					
Reflective Log					
Name:					
Date:					
<u>Venue:</u>					
Event:					
<u>Time of Reflection after the Event</u>					
Reflection Process					
Think about an incident or action during the session/match where you were					
required to make an important decision. In the box below outline the situation					
you are referring to.					
Outline the event:					
Why are you choosing this situation?					

In the Reflection Box on the next page describe in detail the situation which you just outlined in the box above. Consider the situation you are referring to in these three sections:

- 1. What is building up to this moment? What are you aiming to do?
- 2. What are you doing? What are you thinking about? What are your prioritising?
- 3. What happened as a result? What do you think about the situation now? Do you know something new now?



Use the following diagram of the korfball court to show where you and your team-mates are standing, if necessary, add where the defenders are too.Page Break

Using the three sections outlined, these following questions can further guide your thinking around this event:

• What are you thinking?- How do you feel?

What can you hear?- What do you say (if anything)?What can you see?- What are you focusing on?
Please complete this in the present tense – as though you are in the moment
and it is happening now.

and	it is ha	ppenin	ig now	· · · · · · · · · · · · · · · · · · ·
Wh	at is hap	pening	now? \	What is the score at the moment?
Wh	at decisi	ion are	you ma	king? What will you do?
			•	
Wh doi:		pening	now yo	ou have made the decision? What are the people around you
Dload	a highl	iaht wh	ore vo	ou think you are on these scales (1 = very low 2 = very high
				your decisions on the ball in attack?
1	2	3	4	5
		are yo	u abou	t previous decisions and using these to develop future
decis 1	sions? 2	3	4	5