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Coaching attacking philosophy in Soccer

A study of three Swedish elite coaches

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Abstract

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Summary :

Background: Coaching attacking philosophy in soccer can be done in many ways. Traditional coaching approaches are based on skill practice where the coach tells the player how to perform a certain skill. More recently some approaches have been developed, where different types of games are where players learn and the coach guides the players by asking questions. This study describes the pedagogy used by coaches on the elite level in Swedish soccer.

Method: The Game Sense approach has been used to create meaning of the qualitative data collected with semi-structured interviews.

Results: The result shows that the coaches' use game-centered but not as much player-centered coaching. This might be influenced by the lack of experience of player-centered coaching.

Conclusion: The study can be used as a discussion material in formal coach educations, which lacks of player-centered coaching. The results show that it is possible to implement the Game Sense approach on elite level in order to create theoretical and practical understanding.

Table of Contents

Abstract	2
Table of Contents	3
Introduction	4
Research questions	5
Background	7
History	7
TGfU	7
The Game Sense approach	8
Game-centered approaches	10
Player-centered approaches	10
Theoretical framework	12
Constructivist learning theory	12
Method	14
The participants	14
Data production methods	14
Data analysis	14
Ethics in research	15
Results and discussion	16
Theoretical Understanding	16
Practical Understanding	20
Key findings	24
Method discussion	24
Conclusion	25
References	26

Introduction

Being a soccer coach on the elite level is all about preparing a group of players to win games. In order to win games, the team needs to score at least one goal against the opponent. This competitive structure is fundamental to the soccer game. Players understand this concept and are aware of the rules that dictate what is allowed and what is not allowed on the field.

To create structure in the attacking play, various attacking philosophies and tactics are used by teams to score goals. Players are given different assignments on the field and together with their teammates; they move the ball in a pre-determined way that hopefully creates goal-scoring opportunities and goals. To execute these different tactics and attacking philosophies, as individuals and as a team, the players have to learn, technical and tactical skills.

Traditionally, coaching in soccer has been about developing technical skills (Evans, 2014). A session commonly consists of a skill component such as for example drills that allow players to practice passing. The exercises have generally focused on executing the perfect technique by rehearsing skills in an isolated situation, i.e. without opponents and no game-like pressure. In more recent years, the skill-based approach has been critiqued and in response, some approaches have given more attention to, and focus on, tactical awareness (Evans, 2014). Within a tactical approach, the game itself is what coaches try to instruct and teach. Decision-making on the field is the main focus and technical skills are learned in a game-like situation.

A study conducted on Dutch elite youth soccer players, for instance, has shown that tactical understanding and the ability to interpret and decide the right action in a specific situation on the field is the factor that best differentiates between more and the less successful players (Kannekens, 2009). Indeed, this study showed that at the age of 18, the players who scored in the highest category in positioning and decision-making were almost seven times more likely to reach the professional soccer level than those scoring in the lowest category.

The term "game sense" has been used to distinguish what it means to understand and execute on the field (Pill, 2012). In a similar way, "knowing the game" has been defined as being able to show knowledge in-action (Light, 2014). Basic to these concepts is the idea that "game sense" asks coaches to produce situations where tactics, decision-making and problem solving is critical (Webb, 2008). Within the theory of an approach named "Game Sense", it has been suggested that small-sided games with the purpose of achieving tactical and strategic thinking as well as the development of sport-specific motor skills is the best way to develop good decision-making (Pill, 2012).

Other authors have supported similar thinking using a player-centered approach when coaching. For example, the idea that coaches need to foster player ownership of their learning process and empower player decision-making (Davies, 2010). The coach should seek thoughts and perspectives from the players who have executed a drill by asking broad questions about what went well and why. In a player-centered approach the coach facilitates,

guides and assesses the practice and the players contribute with thoughts and new perspectives.

In previous studies there has been some gaps presented in the research. For example scholars have suggested that more research is needed on game sense on the elite level in sports (Evans, 2014). Plenty of studies have been conducted on an approach called TGfU and on Game Sense for physical education, which also suggests that there is a need for more studies on elite sports (Harvey, Cushion & Massa-Gonzalez, 2010).

Light (2005) suggests an increase of the contents of Game Sense or similar approaches in formal coaching education. Despite the potential benefits that Game Sense and similar approaches have, the research has almost exclusively been made on teaching in physical education (Harvey, Cushion & Massa-Gonzalez, 2010). There is a big hole to fill in the research on Game Sense and sports coaching and an even bigger hole to fill on the elite level (Evans, 2014). Light (2004) suggests that further research on coaches' experiences of Game Sense or similar approaches would enrich the understanding of learning in sports.

The aim of this study is to examine how elite soccer coaches in Sweden work with their teams in order to create goal-scoring opportunities. Specifically, this study aims to explore three Swedish elite level coaches' attacking philosophies and how they create understanding in their players both in theory and in practice. The concept 'Game Sense' as presented by Pill (2012) and Light (2013) will be employed to create meaning to the results from the interviews. This will provide an insight into the coaches pedagogic and didactic skills and methods, and answer the question of "how" they want to create learning in terms of understanding and executing an attacking philosophy.

To date, no studies have examined how Swedish elite soccer coaches think about and employ principles of Game Sense. We want to know if and how top-level coaches in Sweden use the Game Sense approach in their coaching, even if the use of it is unconscious. With this study, we will provide insight for ambitious coaches who want to develop their pedagogical tools. The study will be a reference for discussion and provide an intriguing approach of how coaches are educated by the soccer federation in terms of how we facilitate learning in soccer.

Research questions

In order to study how elite soccer coaches in Sweden work with their teams in order to create goal-scoring opportunities, we will answer the following two research questions:

How do elite soccer coaches in Sweden create;

- Theoretical understanding in their players for the attacking philosophy?
- Practical understanding in their players for the attacking philosophy?

This thesis is structured in the following way: Chapter 1 *Introduction* where we introduce the reader to the research topics and aims. Chapter 2 *Method* will provide information about how we have conducted this study. Chapter 3 *Literature review* that provides an overview on previous research and which perspective we have used to analyze our data. Chapter 4 *Results and Discussion* tries to connect the dots and describe what we have found. Chapter 5 *Conclusion* sums it all up in order to see what we have found and concluded.

Background

This chapter gives an overview of the history behind the Game Sense approach. It tells how the Game Sense approach grew from the needs of a structured way of coaching with a new perspective on learning in team sports. Traditional approaches to coaching have been challenged and coaching in team sports are in continuous need of being challenged to develop. Game Sense are based on the concepts of “player-“ and “game-centered” learning. These two concepts are introduced and explained in connection to Game Sense.

History

In 1964 and 1965 at a congress in Vichy, France, a need for a change in the way of teaching team sports was declared (Gréhaigne, Wallian & Godbout, 2005). The execution of skills was thought to get the base in the perception of situations and team organization was supposed to be more important.

Wade started in the late 1960s to use simple small-sided games as a tactical and skill-in-context development method (Light, 2013). He used games where technical skills were executed in a game-like situation where the idea of certain tactics was presented. This was also supposed to make the training more fun for the participants. Wade was convinced that playing games were overall more appreciated.

Wade had four principles for the coach in his method. (1) Maintaining interest through maximum participation, (2) taking responsibility for players understanding the content of training, (3) stimulating players to reach their potential and (4) being able to explain the game within an environment that fosters integrity and fair play. This was a beginning for many later developed approaches where the game and the players are in the center of education.

With the congress in Vichy and Wade’s thinking in mind, some work on tactical approaches was initiated in the 1980s. In these models, the cognitive process was thought to be very important in both organizational thoughts of the game and motor skills (Gréhaigne, Wallian & Godbout, 2005). The Teaching Games for Understanding model (TGfU) was one of these models.

TGfU

Bunker and Thorpe developed TGfU in 1982. The TGfU model was the first of many similar approaches developed during this time (Light, 2013). When Bunker and Thorpe developed their model, they recognized players or students, in a drill, to be standing in line waiting for their turn, and asking when they would play, with the idea that every training culminated with a game in the end. That is a situation that many coaches can relate to when exercises with queues has been used. Bunker and Thorpe thought that if the queues could be deleted, the players and students would have more fun and the training might become more effective.

The TGfU was firstly supposed to help physical education teachers to teach games. It was directed at pupils who did not have much knowledge or no knowledge at all of the game. Bunker and Thorpe formed a method for teachers and coaches where the players learned in the game. The players were challenged on their level by open questions and a good climate was supposed to make them reflect together over technical and tactical solutions. The approach had a practical purpose for the leaders. The theoretical base in science was at that time therefore not discovered.

At first the approach did not receive much attention. However the popularity of the approach had a turn-around at a conference in Plymouth 2001 (Light, 2013). After that, a trend has emerged of similar approaches being developed and of these tools being implemented in organizations in different parts of the world. For example the Singaporean Games Concept Approach (GCA), Tactical Games, Play Practice, Tactical-Decision Learning Model, Playing for Life and Game Sense (Griffin, Mitchell & Oslin, 1997). All these approaches have their differences but they all emphasize the focus on the game, decision-making, and intention for players/students to understand how the skills are important to the game and to develop them within the context of the game.

The Game Sense approach

Thorpe, who came up with the TGfU model, was working with the Australian Sports Commission in the late 90s. Together with the commission, he formed the Australian model of TGfU, which was more focused on sports coaching. This approach was given the name Game Sense (Light, 2013). Game Sense is like TGfU in that it challenges traditional approaches of sports coaching where technical perfection is in focus (Evans, 2014). In Game Sense, technique is challenged and developed within the game. The key concept of Game Sense is that most learning occurs in games with decision-making and competition, and that coaches ask questions that stimulate problem solving (Light, 2013).

The TGfU and Game Sense approach are very similar, but some aspects are different (Light, 2013). The Game Sense approach is less strict than the TGfU. The development of the Game sense approach model was made with coaches integrated in the process. Though the approach was for coaches and not teachers, they wanted creative freedom in the use of the model to still be able to maintain some existing practice. The local culture and environment are often a factor that makes coaches suggest the need of some modification of an approach. Researchers then question the extent to which the approach can be modified and still be used (Jarrett & Harvey, 2014). Game Sense is modifiable to some extent, more than TGfU. Another difference is that in TGfU the main focus is learning the game. In Game Sense the focus is more on a specific aspect of the game during an exercise (Light, 2013). Which makes the Game Sense approach more applicable to all levels of team sport. Depending on what skill or tactical part of the game the coach wants to develop, he forms the games and optimizes the conditions for reflection. Numbers of opponents, level of questioning and organizational aspects in the exercises are factors that challenge the players. A good coach can challenge an elite player on her/his level.

An example of what TGfU is, could be that players want to learn the game of soccer. The coach builds two teams of four and describes the rules. The coach then starts the game. After a while he pauses and asks the players a question. “What happens when we attack with all our players?” The players reflect and the answer could be “we have a bigger chance to score a goal” or “if we loose the ball, there is a big risk that the opposing team score”. Both answers are right and the reflection has created some understanding of the game. This is typical for TGfU. The players learn basic strategies of how to play the game and the outcome of the questions is not known before the reflection is made and the question is answered.

In Game Sense the problem solving can be more specific and the structure can be organized in a higher order by the coach. An example could be that the coach begins the exercise by saying “we will play with two defensive defenders and the purpose of the exercise is to develop our collective skill of switching the play from one side to the other. This is a big part of our attacking philosophy.” The coach starts the exercise and after a while he pauses and asks the players “how can we make these switches from one side to the other even faster?”. The players reflect and one player might answer, “we play a harder first pass and uses two touches” and another says “we can drop with a forward to the midfield and pass him instead”. The coach then might say, “That are two good suggestions. The second though goes outside our attacking philosophy though we want to have two forwards, but lets try the first suggestion.”

This shows how Game Sense is used within a preset structure. Game Sense is not about letting the players decide everything. It is about making players responsible of solving problems in the game by making them reflect.

Of the approaches presented, the Game Sense approach is the one that more specifically focuses on sports coaching (Light, Harvey & Mouchet, 2014). Instead of introducing children to sports, it develops game specific aspects. Game Sense is for players who have chosen to play the game and therefore, have some understanding of how to play the game. The players can be six-year-olds or elite level players (Evans, 2014).

The approach can be used for many purposes, both long-term and short-term. For example the approach can be used to correct mistakes from the previous match or to form strategies of how to use the weaknesses of the next opponent team. On a longer perspective, it could also be used within a season plan, in an education plan or in an individual development plan.

A coach can learn how to become a good Game Sense coach but still encounter obstacles (Jarrett & Harvey, 2014). The beliefs of coaching from learners are often that the coach should be a “general of the troops” as Kidman, Lombardo and Jones (2010) express themselves. Coaching has a traditional pedagogy, which is autocratic (Harvey, Cushion & Massa-Gonzalez, 2010).

Game-centered approaches

Both the Game Sense approach and TGfU do not break the game into pieces that are learned in non-playing exercises. Instead they both focus on learning during the game, which makes the approaches “game-centered” (Light, Harvey & Mouchet, 2014).

The environment in Game Sense is built to maximize the learning. However it is not always clear what the purpose of an exercise is. When a game is played the coach asks questions to the players, which stimulate more responsibility for their own learning. The game, combined with the coaches’ questions, stimulates the players intellectually and the learning outcome can reach a level that was not imagined before the exercise (Light, 2005).

A game in a game-centered approach should include opponents to create some sort of a competition. The exercises should be game-specific. If a coach wants to manipulate an exercise to make it fill its purpose, he could for example change the width of the field or the amount of players. An exercise includes decision-making (Light, 2014).

A game centered learning approach can be ineffective if the environment does not favor learning. Therefore, a good environment with good exercises is important. What a good exercise is, lies in the hands of the coach and is subjective. A good environment is when the social climate gives players a chance to reflect and discuss on a level that challenge their knowledge. An effectively used game-centered approach can have the potential to develop technique, decision-making, strategies and tactics and encourage higher-order cognitive thinking (Breed & Spittle, 2011).

Skills are learned within the games in Game Sense and other game-centered approaches. The focus is more on what and why to do something before how to do it (Jarrett & Harvey, 2014). In Game Sense, players become good at modifying the kicks rather than become perfect on the isolated performance. The players will therefore develop more skills that they are used to work with in complex situations. The players will not learn any unnecessary techniques that they can not adopt (Breed & Spittle, 2011).

Traditional instructional approaches often make players focus on instructions. Focus of attention can be divided in external and internal focus (Breed & Spittle, 2011). External focus is when attention is paid to external factors, like for example the outcome of a pass. Game Sense encourages external focus and that has been argued to be beneficial. An internal focus might interrupt the motor control process (Breed & Spittle, 2011).

Player-centered approaches

Game Sense is also a player-centered approach. A player-centered approach goes against and challenges the norm of coaching. Compared to a coach-centered approach, a player-centered approach is used far less (De Souza & Oslin, 2008).

In games like soccer, decision-making must be fast and coaches have no time to tell a player how to act in a specific situation when it happens on the field. Therefore, the players have to make decisions by themselves. A player-centered approach of coaching makes the players more responsible for their actions. Players are educated to be good decision-makers. The training should be constructed in order for the players to train their ability to make decisions often and also provide the opportunity to reflect on those decisions. The coach is thought to take a step back when it is about making decisions. This will make the players more independent (Light, 2005; Light, 2013).

Both the cultural and social environment affect decision-making (Light, Harvey & Mouchet, 2014; Gréhaigne, Godbout & Bouthier, 2001). Also intellectual, emotional, affective- and physical states have their effects on decision-making. The coaching thus needs to be holistic within the Game Sense approach. To coach holistically is to see the whole person. The Game Sense approach builds on holistic coaching.

In a study Jarrett and Harvey (2014) take up, instructional coach-centered and player-centered approaches with and without questions were compared. The study showed that player-centered coaching with questions had the best results on tactical knowledge in the sample of volleyball players. However, players can find the kind of learning in a player-centered approach difficult and uncomfortable (Kidman, Lombardo & Jones, 2010). That is a fact that the coach needs to know. To challenge the players on the right level and build a climate that secures the players from getting bad feelings about the coaching style is important. A bad coach according to this will not find the coaching style effective. Light (2014) explains that an important coaching skill is to be able to let the players debate, negotiate and compromise without having anyone feeling excluded. When the players form their own solutions through dialogue, the coach avoids being critical. Creativity and joy of discovery is promoted that way.

With this in mind we have directed our study to elite sports coaching. Our research will study how experienced elite soccer coaches individual coaching philosophies in offensive play, matches what is found in Game Sense. The work can be used as a basis for discussion and reflection in formal coaching educations.

Theoretical framework

Game Sense and TGfU were developed for practical reasons and had no ground in theory of how people learn (Light, 2013). With Game Sense, the Australian Sports Commission wanted to develop more thinking players and also motivate more players on all competitive levels (Light, 2013). Game Sense can be conceptualized using some theoretical perspectives (Light, 2014). The most arguable can be constructivist learning theory. While TGfU is more based on cognitive theory, the Game Sense approach is more connected to constructivist learning theory (Mouchet, 2014). In this study the theoretical framework we will use is the constructivist learning theory.

Constructivist learning theory

Jean Piaget developed cognitive constructivism. His idea was that the education system was supposed to foster creativity within the students. He observed children and came up with the idea that knowledge is not something that fills empty holes. Instead he thought that the children constantly process new information and compare that with earlier experiences to form their knowledge (Chambers, 2011). Light (2013) explains the constructivism as knowledge that is not put on top of earlier knowledge. It is something that changes constantly.

Constructivism can be divided in two major fields: cognitive constructivism and social constructivism. Overall the constructivist approach suggests that learning occurs through planning, problem solving, communicating and creating rather than memorization and repetition of information (Chambers, 2011). By processing new information and drawing conclusions from earlier experiences, the interaction with others and inherited predispositions, motivation, emotions, logic and intuition impact the learning gained from these processes. When using a constructivist approach, players develop their critical thinking and problem-solving abilities. To make the learning effective, players are participating in groups with active engagement where they interact about problems that are context specific. Light, Harvey and Mouchet (2014) are specific about the fact that the learning in game teaching has to be contextually relevant. Mouchet (2014) has also formed a model for what factors a decision depends on which is interesting in a constructivist's work.

In a constructivist approach, it is important to understand that knowledge is not perceived to be passed on from a coach to a player. The player is instead given an environment, built from the knowledge of the coach, in which players make meaning of situations and develop those (Light, 2013).

Social constructivism is built on Vygotsky's work. In social constructivism the culture is a prior source of what and how to think. When learners work with problem solving in a cultural environment, learning takes place (Chambers, 2011). Here, interaction between people is seen to have better capacity to build knowledge than intrapersonal reflection. In games, the interaction between people is made through communication, even in a non-verbal way (Light,

2013). In the Game Sense approach the communication and dialog is brought up during exercises. The social interaction in the approach is very significant.

An environment where players feel secure, open towards others, and exchange thoughts with teammates and the coach is a prerequisite to make the Game Sense approach effective. Such an environment is similar to the socio-moral environment that is recommended in a constructivist approach (Light, 2014). Light (2013) argues that social constructivism connects more with Game Sense than cognitive constructivism. In the social process that Game Sense provides there is a lot of interaction, collective thinking and collaboration.

Method

We have used a qualitative approach in the study. To define the elite level we have interviewed three coaches from the "Allsvenskan", which is the highest competitive football league in the Sweden. The coaches were asked to participate because of our subjective thoughts, that they would be interesting for the purpose of the study. What we think makes the coaches interesting for the study can be seen in the description in the next paragraph.

The participants

Mikael has been a head coach on the elite level for the past seven years. Mikael began his coaching career in 1989. He has no past experience as a player on the elite level. As head coach he has won the national title once and the Swedish cup twice. In 2009 he was awarded "coach of the year" in Sweden.

Pelle began his head-coaching career in 1996 and has been coaching on the elite level in Sweden since then and has more than fifteen seasons as a head coach. Before his coaching career, Pelle played as a forward on the elite level in Sweden between the years 1981 and 1992. Pelle is known for his good results with proportionately small resources in comparison with clubs on the same level.

Peter has been a head coach on the elite level since 2009 and has spent those seasons with the same team. He began his coaching career in 1993. Before coaching he played as a forward on the elite level in Sweden for almost ten years. Peters' team is generally thought of as a team playing attractive offensive soccer.

Data production methods

We have interviewed three coaches on the elite level in Sweden in semi-structured interviews (Sparkes & Smith, 2014). The interviews have been documented with video and audio. During the interview the coach had a whiteboard available to visualize his methods and exercises and that is the reason to film the interviews. Before the interviews of the coaches, two pilot interviews were conducted (Sparkes & Smith 2014). This was to get comfortable with the equipment and to evaluate the questions we had prepared. We have categorized the questions in the interview into three topics; (1) Attacking philosophy of the coach, (2) Creating theoretical understanding in the players for the philosophy, (3) Practical implementation of the philosophy. The first topic is used as a base for the rest of the interview. The interview person can recall to the first topic to be able to describe the other two. Topic (2) and (3) will be the basis for analyzing and categorizing of the data from the interview. The interviews were held in Swedish.

Data analysis

Our analysis has been of interpretative phenomenological character (Sparkes & Smith, 2014). In interpretative phenomenological analysis, a researcher can try to understand personal lived

experience and the participants understanding of for example a social situation. In our case, we want to describe the pedagogy that elite coaches use and experience being the best for players to learn. The data that the interviews give are compared to the Game Sense approach and the findings are presented. What in Game Sense are the coaches using and what do they not use.

Though the interviews were filmed, the data conduction has also an observational value. First, the film was watched to get an overview of the interview and notes were taken. Sparkes and Smith (2014) suggest that notes could be called “exploratory coding”. The second step was to identify themes that could be theoretically connected to Game Sense. The themes were connected and hierarchically sorted and some themes that had low hierarchical order or could not be connected to Game Sense were sorted out. In the result the themes are presented, explained and connected to the literature review in order to make sense of the quotes from a more theoretical perspective. The quotes are translated word for word from Swedish to English.

Ethics in research

Before each interview, the way to record it has been described and confirmed by the interview person. We also described the purpose of the study and why we had chosen to include them in it. The interview persons have also confirmed that the study uses their real names. When the initial contact was taken, the interview persons were informed that they, without any consequences could leave the study at any time before the study was handed in. While analyzing the data we carefully tried to be as objective as possible to avoid a subjective interpretation. We have also sent a copy of the thesis where they are given the opportunity to accept their part in the text.

Results and discussion

The two research questions split this chapter in two sections. The first part takes up the pedagogy that coaches describe they are using to give the players a theoretical understanding of how to play. Part two gives the pedagogy for practical implementation. The subheadings structure the results and link the review of literature to the results.

Theoretical Understanding

The pedagogy to make players learn the theoretical understanding of how to play according to attacking philosophies is investigated in this study. The three coaches interviewed all bring interesting points to this research question. The following section gives a picture of the opposite to social constructivism. The knowledge is given from the coach to the players. The coaches witness of a need of a clear framework to work within, in their attacking play. All three coaches have principles in their attacking play that they have decided from, for instance the characters of the players and the clubs prescriptions. However, inside these frameworks, there are possibilities to work with the Game Sense theory and a constructivist approach.

The framework of the attacking philosophy

All three coaches provide a framework for their players, the attacking philosophy. In Game Sense coaching there can be space for the players in the squad to discuss and frame the attacking philosophy. These coaches have framed the attacking philosophies by themselves. "There is a reason that there is a coach, the coach is the coach. I listen to players a great deal, but it has to be the coach who makes the fundamental decisions", says Mikael.

Mikael explains how he provides the team's identity, principles, details and game plan. He wants to create good conditions for the players to be creative by providing the fundamental parts of the attacking philosophy and then allows the players to contribute with the smaller details within their roles. As Mikael says, "I provide a platform from where they can create themselves".

Within the Game Sense approach you could provide a structure and from that structure, evaluate and discuss the actions and decisions made on the field. It can still be very player-centered and game-centered.

In order to create a theoretical understanding for the attacking philosophies in their players, the coaches use various methods. In the Game Sense approach, reflecting on a lot of questions according to the philosophy and discussing them in the squad, could have been a way to learn the theoretical understanding. That would be a way to make it player-centered. All three coaches are more coach-centered and speak about continuity and repetition. Peter argues that it varies amongst the players how much time is needed to grasp all of the concepts in their tactics. Mikael highlights the importance of rhetorical skills and being able to present the same message in different ways in order to get the message across. For example he will continuously repeat and reinstate the identity of the team and always analyze what happens on

the field by that identity. "First I tell them; I'm about to tell you something, then I tell them, after that I tell them that I've just told them something". These methods give a picture of a more coach-centered approach.

Pelle reinforces the importance of rehearsal and adds that, in order for players to gain knowledge and understanding of the things coaches repeat for a certain individual, the player needs to experience some success in what he is doing on the field. In Game Sense, to challenge the players on their level is an important factor for a coach (Light, 2013). Pelle adds that statistics are not the key evaluator of players' understanding and execution of his role, but more so the fulfilling of the individual role in terms of doing the things his teammates expect him to do. If the player fulfills the role and executes what is asked, the team will benefit and he, along with the team, will experience success in the system.

Mikael speaks about two different ways of laying out the fundamentals for the attacking philosophy. The tactics board could be one way where he shows the players their formation and key principles in that formation. In Game Sense a tactical board could be used to ensure that the players have understood a question and reflect on and discuss the same situation. However Mikael is using the tactical board more to present the information, which makes his strategy more coach-centered. He also uses what he calls a "fictive" tactics board where he, on the field, places the players in their position in the formation. From there he will talk about concepts and movements. "Everyone is not able to see themselves as a dot on a board, they need to see it on the field". In the Game Sense approach, optimizing the possibility for reflection among players is a key concept (Light, 2013). Mikael tries to clarify by presenting the same message in different ways in order to capture every player's different ways of grasping the message.

Pelle implements theoretical understanding on the field. If he needs to emphasize something he will use small cones to show a player the bigger picture. Peter speaks about similar methodology, he argues that theoretical understanding can exist in many of the players but for him it is about what you do on the field. The execution itself needs to be in the center of attention. Here the connection to Game Sense and the concept of learning on the field and not from non-playing exercises can be made (Light, 2013). Pelle and Peter place the players on the field to get them to learn. It could also be interpreted as a way of directing the learning process to the field and the idea that playing the game itself is the most beneficial experience in terms of creating theoretical understanding for the players.

Pelle also highlights the importance of fulfilling the role within the team. "There isn't so much to discuss. This is what happened in the game (referring to a specific situation) and that is not what we want. It isn't a negotiation. This is how we want it (refers to their tactics). It is about knowing where we have each other on the field. I want certain things you can count on in every situation". The attacking play is set by him self. In Game Sense coaching, the coach might have asked the player some questions to make him reflect on the situation. The question could have been "How do you think you should have done in this situation according to our attacking philosophy?"

Pelle speaks about the importance of knowing where your teammates will be or what they will do on the field. "We are looking for quality in the attacking play and for that we need cooperation, the left hand needs to know what the right hand will do". Pelle wants a clear and determined way of how to do things on the field but at the same time he respects the fact that the player needs to make the decisions; "Soccer is a complex sport, you can't say 'now we do this, then we do that'".

Mikael and Peter also speak about the complexity of the sport of soccer and how hard it is to scheme and plan for everything that happens on a soccer field. Mikael argues that; "If you talk too much about predetermined ball paths you'll risk losing the players' creativity. This isn't a shift or pattern in handball, soccer is so much more complex". Peter says; "Soccer is too hard, I experienced when I played myself, that I as a coach couldn't possibly control all the movements and decisions on the field. If you give your player too many instructions, he will think only about executing them". Jarrett and Harvey (2014) describe a research that has highlighted the fact that too many instructions can narrow the focus and close out important information. In Game Sense, instructions are unwanted. Instead the players reflect on the questions the coach asks (Light, 2013). Peter continues to explain how the final sixth of the field is all about the players' individual qualities and how you need great players to be successful in that area of the field. This could very much be linked to the Game Sense theory in terms of placing responsibility in the hands of the players (Light, 2013). The players need to find their way of scoring.

Video

The three coaches all mention video as a tool for creating theoretical understanding for the players. Mikael argues that video is the best way of clarifying things that occur on the field. Pelle has his own video analysts in his coaching staff. The video analyst sits down with the players individually to work with the theoretical understanding. Peter uses video after the game to clarify his image of what happened during the game. His players then receive pictures of positives and negatives from the game. Peter explains how he prefers to work with video material individually with each player; he believes it is the best way. Video is seen as a possible tool within Game Sense. A video could be a good tool for players to relive situations and to enable reflection. Some research has been made with video to have players reliving situations and explaining their thoughts (Mouchet, 2014). That is also a good opportunity for coaches to understand their players and via that, challenge their players with questions on their level (Light, Harvey & Mouchet, 2014).

Emotions affect the decisions players make on the field (Light et al, 2014). How to facilitate emotions and include them in the process is important for the coach. "I don't like an open discussion in the locker room after a game where the coach asks what the players thought about the game. There are so many emotions. Every player has his own performance as basis for discussion and that rarely represents what happened on the field collectively". Peter prefers to watch the games a second time on video to eliminate the emotions that can be

present after the final whistle, and then he presents his image of what happened during the game. Even though the Game Sense approach highlights the importance of reflection among the players (Light, 2013), emotions need to be handled to create a learning experience. Peter suggests that, in order to learn, we need to be in an emotional state that allows us to be as objective as possible in the collective and individual analysis.

Individual talks

Individual talks are mentioned in every interview when we talk about theoretical understanding. "I try to find different ways to reach every player individually", Peter clarifies how it is important to understand why certain things are right or wrong on the field and how that understanding comes from individual talks. He is not out to find a scapegoat, it does not matter who's fault it was, but what could a player have done different in a specific situation is important to talk about. By asking that question, "what could you have done different?" Peter gives the player responsibility of the development and makes his player reflect. Asking questions is a big part of the Game Sense approach (Light, 2013). If the coach is a good questioner, the possibility to build motivation in a player is great, according to the self-determination theory (Weinberg & Gould, 2011).

Limited empirical research has been conducted on the motivational climate in game-centered approaches. Light (2014) makes a connection to self-determination theory (SDT). SDT emphasizes that feelings of autonomy, competence and social relatedness are important for well-being and motivation. The way players are empowered to take responsibility for the development and how they are being involved in the process of the development provides a sense of autonomy, competence and social relatedness. The more successfully a coach provides these circumstances where the players experience these feelings, the more motivated they will become (Weinberg & Gould, 2011). Gréhaigne, Godbout and Bouthier (2001) write how cultural and motivational factors are important in the decision-making and the engagement in the action, and how it reciprocally reinforces motivation if the competences of decision-making are developed.

Mikael describes how he often talks to his players individually but also in pairs. If two players have a relationship on the field, for example two players playing next to each other in games, he opts to speak to them at the same time to spark discussion and ideas of how to collaborate on the field. In such a situation, Mikael is really facilitating learning in a social constructivist sense (Chambers, 2011). The two teammates collaborate and construct knowledge together by reflecting on each others experiences under guidance in terms of questions from Mikael. This fits well into Game Sense where the coach poses questions to create problem-solving players (Evans, 2014). In Game Sense, empathy and meaningful relationships are encouraged, both among the players but also between the players and coaches (Light, 2014).

Social interaction and happiness is shown to have strong relation. Light (2014) has also shown results that links social interaction and joyful experience. Learning is related to positive emotional states and social factors. Light (2013) also comments that to be in positive

emotional states by common sense can be related to learning. Feelings of belonging are important and can be related to the SDT.

Practical Understanding

This part investigates how the elite coaches use pedagogy to make learning in theoretical understanding and practical execution of their attacking philosophies. The theorization is made with the Game Sense approach. What follows is a discussion with examples of how the coaches work to make their players execute the philosophy.

Tactical warm-up

“The theme is always tactical in training, never technical”. Peter builds his training with a tactical purpose in every exercise. Even in isolated warm up-exercises, there is a tactical purpose. “The first exercise has tactical instructions. The players get warm in the bargain. I don’t like calling it a warm-up”. By having a tactical purpose even in the warm-up, Peter makes his trainings effective. The players have to be concentrated, pass the ball with a thought-process behind it and reflect on the attacking play. This goes along with the Game Sense approach. Peter also uses coaches as defenders in these exercises, which challenge the decision-making and the understanding of where to pass and why to pass there. In Game Sense, the inclusion of decision-making is encouraged in the exercises and reflection is a major prerequisite for learning (Light, 2013). *What* and *why* are the questions that should be reflected upon. For example, the ball should be played to the forwards left foot to make it easier for him to be able to shoot on the goal and score. Game Sense does not focus on *how* the foot should be angled to pass the ball in the right direction (Jarrett & Harvey, 2014).

Pelle and Mikael have similar thoughts as Peter. The tactical parts are presented early in training. “I often start with a passing exercise. There I want a structure that the players can relate to in the game. It is good if the purpose of the session is set already during the warm-up”, Pelle says. Even passing exercises are *game-specific* in Pelle’s training and he tries to make them *include decision-making*. To be able to construct relevant knowledge, those two factors are of importance (Light, 2013). Mikael includes decision-making and game-specificity with another argumentation. He relates to the fact that exercises can not be built on player A passing to player B who stands on a predetermined spot. “I don’t want any passing exercises where the passing movement is predetermined. Soccer is complex”.

Train in your role

All the coaches talk about the importance of roles on the field, and how the players work within the roles in training that they are likely to have in a game.

“You have a role as a player and that is what you’re supposed to execute in games. The role fulfillment is what you’re working on all the time in training. The training should form pictures that you can recognize in a game”. Pelle has a structure in his training sessions where the players should be able to see their role. For example, he can play four against two and in those games the players work within their role. In all game-like exercises in training, Pelle’s

goal is that the idea of the game should be recognized for the players. “Tactical parts in the different faces of the game should always be followed in every game-like exercise”. By putting the player in his role in every exercise, the player will be working with the skills he use in the game and will constantly make decisions similar to those he/she makes during a competitive game. For a coach, Game Sense is about forming an environment where the player can construct knowledge (Light, 2013). Game-specific exercises are a prerequisite to form a good environment and make the training game-centered.

Mikael shares a similar thought and says that the players should recognize their role. “In training the exercises are shaped from the game as a whole. I break the game down in parts and try to work with different tactical scenarios, always with the players in their roles.”

Adjusting field sizes

In Game Sense, the manipulation of the exercises is a key to form an environment that stimulates learning through the game (Light, Harvey & Mouchet, 2014). The manipulation can be done in many ways. For example the number of defenders can be changed, the time of playing between each break can be adjusted and the number of balls can be changed. One factor that all coaches brought up to discussion during the interviews were the adjustment of the field size.

“If we as a team are expected to lead and direct the game the width of the field is big and the length is short to encourage switching side of the ball. If we will play with a lot of contra attack, the field should be narrow.” Peter prepares his players regarding to his expectations of the next match. If the purpose of an exercise is not adequately reached, Peter makes adjustments in the exercise. “I don’t make a new exercise, I maybe shrink the space instead”. The sense the coach has for what to adjust in an exercise is an important skill in Game Sense (Light, 2013). A coach who manages to reach his purpose in the exercises will facilitate construction of knowledge.

Mikael encourages coaches to be accurate with the sizes the games are played in.

“Instructions are most important, but the organization of an exercise is very important too, for example, the size of the field”. He means that the purpose of the exercise is reached by being observant of what is happening in the game and adjusting it. “You have to adjust the spaces for the purpose”.

Pelle also reflects over the importance of realistic proportions of the field. He refers to experiences when he has been watching kids play during training and the spaces often have been too big to optimize development of the players.

Decision-making

Pelle also refers to the proportions of the field when it comes to development of decision-making. “To benefit the decision-making the proportions must be realistic. They can’t be too small so the ball possession switches between the teams all the time and the players get lactic

acid in their muscles”. With a good feeling of the proportions, he means that the coaches can maximize learning. Mikael means that decision-making should be learned in game-like situations. “Fast decisions are trained in functional, directional games with the right proportion of the space. If you are training with good collaborators who force you to make fast and good decisions, then you will develop that skill”. Light, Harvey and Mouchet (2014) explain that in situations where very fast decisions are forced, the players generally make decisions shaped by earlier experience. An instruction in such a situation seems to be worthless. This is a reason for the coach to make environments where good decisions are taken in training. Peter lifts up a fact that is mentioned earlier in this thesis. He continues, “game sense was earlier seen to be something players were born with, but of course it is possible to develop”. Mouchet (2014) mean that a coach needs to understand a player’s subjective experience of a situation to be able to facilitate learning.

“If we use exercises where the players can challenge each other every day, we will see a progress in the decision-making”. In a training session Pelle means that the coach is responsible for making good exercises that will challenge the players decision-making on the right level. This can be related to Game Sense. Sometimes when a new exercise is introduced it probably has to be very strict at the beginning to make the players understand it. “I hope all exercises finally include decision-making even if the decision-making is limited to a number of possible decisions. It can take some time to make an exercise work sometimes”.

Flow is a state that Csikszentmihalyi came up with when he studied what make tasks intrinsically motivating. The state is explained as when players feel like the mind and body become one. Elements that, among others are important to reach a flow state are (1) the balance between challenge and skills, which means that the player needs to think that he/she has the skills to manage the challenge. (2) Team play and teammates interacts through open communication and (3) optimal environmental and situational conditions (Weinberg, Gould, 2011). All these three can be related to what the coach in Game Sense wants to work for. The state *flow* is a positive learning state (Light, 2014).

When a coach asks questions and designs the exercises so that the players are challenged but find their skills good enough to manage the challenge, they are provided with an environment that fulfills the first (1) element. This is what Pelle describes that he wants to manage as a coach. The third (3) element is also provided through the choices of exercises and even the second (2) element is provided through the decision of exercise. The problems that the coach provides for the players to solve and the questions the coach asks allows opportunities to manage the second (2) element. Also the material and organizational factors that impact goes into this element.

“To me, everything is about making decisions. It must be included all the time. All forms of games are more developing for a soccer player than if a coach blows a whistle and says ‘you stand there and you stand there’”. By making the decisions and reflecting on them the player learns. But some structure has to be there according to Peter. “The players characteristics linked to some guidelines must be there to build some structure. However, the decisions have

to be made by the players. The coach can't make the decisions. This fact has to characterize everything we do". The last statement is the base for the whole Game Sense approach. Game Sense wants to create independent players who can make good decisions on the field (Light, 2013).

Pelle has developed a lot of players in his days as a coach. "Perceiving and decision-making is developed through continuous work. It takes time to become good. It takes time to automatize. The time factor shouldn't be underestimated. I have seen players who has been in need of a lot of time before they get their breakthrough". Perception, decision-making and action have very little, if any separation-time. As Pelle says, the process needs to be automatized on an elite level (Light, Harvey & Mouchet, 2014). He also makes a point about the differences in having a good game sense in playing four against four compared to being able to perform on a top-level in eleven á-side soccer. "Players can be very good in the small-sided-games but having trouble seeing the game as a whole in the big game".

The skills in decision-making are seen to be more critical than technical and physical characteristics. Peter points at it by saying, "if you don't work fast enough in your head, it doesn't matter how good technique or physique you have". He also says that it is more accepted to make a technical mistake than a tactical. The highlighting of importance in good decision-making is also recognized in Mikael's comments. He means that in the Swedish first division, the decision skills are critical in more situations than the technical. "I think the decisions makes the players fail in greater extent than the technique". This is a fact that makes Game Sense seem like a good approach even in elite soccer.

Technical development

The technical skills are supposed to be developed within game-like exercises in Game Sense (Light, 2014). This will make the technique functional and the players will be able to use it in games. In the traditional approaches, the skills are trained in an isolated environment. The players will be good in modifying their techniques in relation to the specific situation (Breed & Spittle, 2011). Peter lifts this perspective within education of youth players. He says "some of the technical training that coaches have been occupied with earlier in youth soccer, antagonizes the development of game sense. You can provide players with technical training where the game sense is still developed". There is criticism in Peters' experiences of technical training for youth players. This also projects in his way of organizing technical training for players in his team. "We always want to link the technical to the tactical. To stand in the right position on the field after training and repeat the technique, imagining a situation in a game is the best way to train a technical element. The tactical link to the technical element needs to be conciseness made".

"The technique and individual skills are very important but I think they can be developed at the same time as the game sense". Mikael is also highlighting the development of game sense. His thoughts in this question can be connected to the fact that he never wants a passing exercise to have predetermined passes.

Key findings

This study finds that some coaches are using game-centered approaches in elite soccer in Sweden, but they do not use a player-centered approach in the same extent. De Souza (2008) states that coach-centered approaches are used more than player-centered. Maybe the learners' expectations of how a coach should be affect the coaches' choice of approach. Jarrett and Harvey (2014) suggest that if a player-centered approach is going to be introduced, the players should be educated in what are expected from them. Another factor that might influence the coaches in their choice of not using a more player-centered approach is the fact that it takes more time before you see the results (Light, Harvey & Mouchet, 2014). In elite soccer the coaches seldom get so much time and can not afford to lose matches. The short-term outcomes will therefore be of priority.

A third explanation could be that the coaches have not been introduced to a player-centered approach. Formal coach education seldom includes discussions about player-centered approaches. Most of them focus on instructional, coach-centered perspectives. The coaches might neither have experience of coaches that has used player-centered approaches during their careers (Kidman, Lombardo & Jones, 2010). It could therefor be argued that we have an coach education system that reproduces itself.

However, the coaches use a lot of Game Sense pedagogy without knowing it. Another study has shown the same thing for elite rugby coaches (Light, 2013). All three coaches that were interviewed in this study are game-centered in their coaching and highlight the importance of decision-making, training technique in game-like exercises and being able to adapt to a role.

Method discussion

The reliability of a study like ours is fulfilled by making the analysis process logical, traceable and documented (Sparke & Smith, 2014). In our study we have had an interview with observational influences though the interview was filmed and the coaches were using a tactical board to explain some of their pedagogical philosophies. The quotes are traceable but the traceability could have been even easier if the quotes were time-tagged in the films, which is a weakness.

In the study we want to *describe* the coaches' pedagogy in a relation to the Game Sense approach, which is theorized through constructivism. The interpretation is therefore of importance of being fair and to some extent objective. The traceability of data production ensures this. Sparkes and Smith (2014) give a recommendation of using a supportive but critical friend during the analysis. The authors of this paper have given each other that support during the analyzing process.

This study is not an attempt to generalize a result over elite coaches in Sweden. The study gives three examples of the pedagogy these coaches use.

Conclusion

Having conducted this study we feel it would be possible to implement a Game Sense approach on the elite level of Swedish soccer. The coaches that we have interviewed do not deliberately use the Game Sense approach but they use many of its themes and tools. This sparks interesting questions about what the reasons for certain methods that are being used by the coaches. We would argue that the fact that they are and have been successful for a long time proves that the usage of their methods generates success in terms of coaching their teams.

The coaches in this study clearly state that they work towards collective improvement of the collective play. Individual skill development is not mentioned as a key ingredient, which would suggest that the focus on tactics and teaching the philosophy is a crucial ingredient in the work of a soccer coach on the elite level in Sweden. The fact that individual skill development is not mentioned could be because many of the players possess the skills necessary and there are no benefits to come from further development of those skills. On the other hand, we would argue that the benefits from engaging the players in the process of making decisions on the field and evaluating them is well proven within this study and would also reinforce the idea that the Game Sense approach could provide an interesting perspective to soccer coaching education.

We believe that this study could be used as a reference for discussion and reflection within soccer coaching education. The Game Sense approach does not necessarily discredit the methods that are being taught in formal soccer coaching education in Sweden, but it highlights other aspects such as player-centered and game-centered approaches. The idea that individual skill development is the key to developing competent players and teams needs to be challenged and the focus should shift towards an idea of engaging players in a thought process that extends on the field and develop their decision-making and thereby their game sense.

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