

# The Acquisition of Knowledge by the Coaches: Can Qualitative Approach Help?

*Perolehan pengetahuan oleh jurulatih: Bolehkah pendekatan kualitatif membantu?*

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## **Abstract**

This research is to study the knowledge of four (n=4) coaches in training at two football academies in Malaysia. This study applied a qualitative methodology (interviews and observations) to explore the unique features and circumstances surrounding the football academy coaches. Subsequently, the findings of this study revealed that i) the development of knowledge of coaching has taken place in the academy but constrained by factors involving the coach education programme at the academy level; ii) the weaknesses of the coaches in transferring important knowledge to the players.

**Keywords** coaches' knowledge, coaching process, coaches' behaviour, qualitative approach

## **Abstrak**

*Penyelidikan ini mengkaji pengetahuan empat (n=4) orang jurulatih akademi bolasepak di Malaysia. Penyelidikan ini menggunakan kaedah kualitatif (temuduga dan pemerhatian) untuk membolehkan huraian dengan lebih lanjut mengenai senario yang lebih jelas mengenai jurulatih akademi bolasepak di Malaysia. Hasil penyeldikan ini telah mendapati, i) terdapatnya pembangunan pengetahuan dikalangan jurulatih, tetapi terdapat banyak faktor penghalang termasuk program pendidikan jurualtih diperingkat akademik, ii) kelemahan jurulatih untuk memindahkan maklumat atau pengetahuan kepada pemain semasa latihan.*

**Kata kunci** pengetahuan jurulatih, proses kejurulatihan, tingkah laku jurulatih, pendekatan kualitatif

## **INTRODUCTION**

In the acquisition of knowledge by the coaches, particularly the development of the coaches' knowledge of coaching, the findings of this study highlighted that development of knowledge of coaching has taken place in the Academy but constrained by factors involving the coach education programme at the Academy level. Coaches in both academies develop their knowledge of coaching through readings, seminars, workshops, courses and programmes on coaching, integrated with their long experience in coaching. This finding confirms the previous research on the importance of coaches requiring knowledge in the coaching process from various resources related to their sports (Gould, Giannini, Krane & Hodge, 1990; Martinez, 1993; Cushion, 2006; Jones & Turner, 2006), the fact that the coaches' knowledge and its application has a direct impact upon the coaching process (Lyle, 2002), and the need for coaches to continually expand their knowledge and develop new strategies to meet the needs of increasingly diverse students (Shulman, 1987).

## **Research Methodology**

In collecting the data, a number of different approaches were chosen to allow for the generation of data. As noted by O'Kane (2000) and Punch (2002), there is no single accepted method for generating or analysing data, and many authors point to the utilisation of multiple research techniques to gather richer information. As explained by Burgess (1985), the techniques used in qualitative research may include observation, documenting, analyzing, and interpreting attributes, patterns and characteristic. The data collection in this study came from the combination of the interviews, and observations analysis. Thus, data in the form of quotes from interviews, episodes from field observations evidence are to be presented to support adequately and convincingly the study's findings.

## **Data Analysis**

The data obtained from the interview and observation techniques have been analysed in accordance with the phase of analysis. This means the overall data came from the combination of the interviews, and observations analysis, which relate to each other. For purpose of description of the analysis, it begins with the interview transcripts and progressing to the creation of 'tags', to 'properties', and then finally to the highest order, 'categories'. The process of creating tags entailed dividing and cutting the text from the interview transcripts into pieces of information or meaning units. A description of each step in this analysis is explained as follows:

### **i. Creating Tags**

The aim of the first part of interpretational analysis, creating a tag was to produce a set of concepts, which adequately represent the information included in the interview transcripts. An open coding strategy was used to identify meaningful pieces of information (Glaser & Strauss, 1990; Strauss, 1987). The process of creating tags

entailed dividing and cutting the text from the interview transcripts into separate pieces of information or ‘meaning units’. Tesch (1990) defined a meaning unit as a “segment of text that is comprehensible by itself and contains one idea, episode or piece of information”. When the content in each interview stood out as meaningful in itself, it was isolated as a separate piece of text from the material that surrounded it. At this point, the coder was not concerned with the exactness of the tag, for the tag could be changed in the analysis process, or could be later combined with other tags with similar meaning. Therefore, each meaning unit was tagged with a provisional name describing the topic of the text segments. For example, from the following interview quote, the content which stood out as meaningful in it is isolated as a separate piece of text.

*“I gained most knowledge from seminars and workshops that I attended. Sometimes, there happened to be a conflict of ideas but I apply whatever valuable knowledge for the benefit of my players.” (Lee)*

Thus, ‘*gaining knowledge from seminars and workshops*’ was the text separated from the interview transcript into a meaning unit. From this meaning, the ‘tag’ known as ‘Workshop/Seminar’ was created. The aim of this stage was to separate similar data segments from their context with like tags, a process referred to as ‘de-contextualising’ the information (Tesch, 1990). The interview transcripts were analysed on a line-by-line basis.

## **ii. Creating Properties**

The second step of interpretation analysis was creating properties. This involved listing and comparing the tags created in the first phase. Tags with similar meanings were then gathered and a label that captured the substance of the topic was created to identify the cluster of tags. According to Tesch (1990), the purpose of this process is described as “re-contextualising” the information, which served as a preliminary organising system for the data. This initial classification system was built according to three critical characteristics of categorization; 1) Coding experience, 2) Inductive inference; and 3) Similarity (Smith, 1990).

First, the coding or tagging experience, which was essential to categorising a large amount of data, was used to rearrange the text into manageable and organised units. Second, inductive inference was used to create properties. In this process, there were no predetermined patterns before data collection; the important dimensions of the interviews emerged from the analysis. In other words, tags and properties were generated from the data (Patton, 1980). Thirdly, the properties were judged by their similarity, so that the data in each property were similar to each other, yet separate from the data of other properties (Smith, 1990). This characteristic of a property could be referred to “as its internal homogeneity and external heterogeneity” (Patton, 1980).

Similar tags were re-grouped and organised into certain categories that were referred to as ‘properties’ (Côté, Salmela, Baria & Russell, 1993). Côté *et al.*, (1993) noted that it was important that the tags, not the meaning units, were compared in this phase. The data is continuously modified and analysed until a consensus of all

the properties is identified. In context of this study, for example, the tag “Gaining knowledge” was regrouped with similar meaning unit into a large property named “Growth Processes of Coaches”. Since properties were developed from the data, they were modified and refined until a satisfactory system was established (Tesch, 1990).

### **iii. Creating and Conceptualizing Categories**

The next step of the analysis involved two procedures aimed at defining major categories in terms of their properties and dimensions. Firstly, the goal was to regroup similar properties under a more abstract category. This procedure involved the same analysis process as “creating properties” except that in the present analysis the properties were compared instead of the tags, resulting in higher level categories. Therefore, the properties were defined as “sub-categories of a broader category and they helped to provide characteristics to that category” (Glaser & Strauss, 1990). Second, the content of the meaning units of each property to look for “commonalities in content” and “uniqueness in content” (Tesch, 1990). This procedure allowed the researcher to provide dimensions for each property, that is to locate the property along the continuum (Strauss & Corbin, 1990).

Additionally, Strauss and Corbin (1990) noted the final stage of analysis is creating a concise theoretical formulation once the data has been collected. This involves a further inductive analysis of the content whereby relationship is identified between the properties. In a sense, this stage is similar to the earlier stage of creating properties, except it is now done at an abstract level of analysis (Côté, Salmela & Russell, 1995; Strauss & Corbin, 1990). Strauss and Corbin (1990) noted that the importance of the constant comparative method, which involves analysing data until a saturation of knowledge has been reached.

Strauss and Corbin (1990) also emphasized that when all the stages are carried out and higher-order categories describing the coaches’ knowledge and behaviour have been achieved, the researcher must ensure that he or she compares, contrasts and re-analyses the categories to make sure that it accurately details the information from the interviews.

Côté and Salmela (1994) suggested three questions for assisting this procedure. The three questions are: i. “Are all the meaning units that are regrouped into a property similar or different?” ii. “What are the similarities in the content of each property?” 3. “Is there confusion or contradiction in the content of the categories?” (p. 466). This procedure allowed the researcher to provide dimensions for each property, that is, to find the property along the range (Strauss & Corbin, 1990). For example, a coach may have knowledge about “giving feedback”, which is a property of the higher-level category “training technical skill”. However, not every coach gives the same amount of feedback when teaching a technical skill, thus the dimension of the property, “giving property”, could vary between “never” and “always”. Providing dimension for the properties helped to uncover as much variation as possible between coaches.

In this study, since the raw data of interviews were quotations, each interview was transcribed verbatim from the tape recorder immediately after the completion of each interview. The researcher listened to each interview session numerous times prior to

transcription. Then, the interview texts were separated into pieces of text that contained a theme of information that could stand on its own (Tesch, 1990) and they were translated from Malay language to English language. Editing procedures were also done on data. Names and references which relate to the anonymity of the respondents were deleted and relevant information was added to clarify any ambiguous parts of the texts. This is to ensure that the respondents' identity would remain anonymous by changing their names and identifying features, thus protecting their confidentiality which is an important issue in the reporting (Kvale, 1989).

After the transcription of each respondent interview was completed, the researcher read them numerous times in order to clarify and search for any further relevant information. As suggested by (Kvale, 1989), this process helped me to : 1) become highly familiar with each respondent's interview; 2) continually check the credibility and trustworthiness of the interview process, and facilitate the later phase of the content analysis. The validation and credibility checks were an on-going process which consisted of continually questioning the interpretation of the respondents.

In analysing the data acquired through observation, (Adler & Adler, 1994; Strauss & Corbin, 1990) it was noted that, to begin with the analysis of the observation data, the basic concepts and categories were generated and developed. Thus, some concepts which are related to this study helped me to make sense of what was going on in the coaching process. In processing the observation, the researcher tried to listen to and transcribe the recording of my voice as soon as possible after the end of each training sessions and competition. Listening to the recording notes and inferences made during the observation and transcribing them was deliberate. Indeed, analysing qualitative data is a lengthy process of listening, reading, re-reading and making deductions and inferences until a pattern of language use emerges.

## **Results**

### **i. The Acquisition of Knowledge**

This study confirms the integration between experience and knowledge to promote learning and develop expertise (Marten, 1997; Farrell, 2004), the significant influence of knowledge and experience on the coaching setting (Cushion, 2006) and the use of experiential learning to transform coaching experience into coaching knowledge (Schon, 1983; 1987).

However, constrained by factors involving the coach education programme at the academy level lead to a minimal development of knowledge of the coaches. The findings showed that the coach education programmes were limited and contained theoretical knowledge with no practical coaching aspect. In addition, the findings revealed that there was no formalised mentoring programme at the academy level. Thus, there was no mentoring practice taken place among the football coaches in this study. As explained by the coaches:

*“Currently we don't have anybody who can monitor us and give any feedback from the coaching perspectives.” (Amrit)*

*“the Football Association of Malaysia (FAM) has not introduced a mentoring system and I don't think they want to implement it.....because it takes quite some time to formalize it.” (Lee)*

These problems suggested that the coach education programmes which only provided coaches with a substantive content and pedagogical knowledge base (McCullick, Belcher & Schempp, 2005) have not helped the coaches to develop their knowledge of coaching. Besides, the absence of a formalized mentoring programme at the academy level left the coaches with limited knowledge, perhaps only their hands-on knowledge, with no further development of new knowledge in coaching practice. As noted by Gilbert and Trudel (1998), knowledge is constructed through experimentation with new strategies, as well as modifications of existing strategies from the coaches' scope. Therefore, a better equipped coach education programme and mentoring programme will help the coaches to construct a strategy that will allow the coaches to resolve problems.

The findings confirmed the importance of the mentoring process in the coaching practice, without which, the coaches will be deprived of the process that has important implications for the quality of sport performance, as had happened in this study. In this study, the mentoring programme was not seen as an important part of the coach education programme where the coaches could acquire knowledge and experience. This is in marked contrast to Lyle's (2002) suggestion that the preparation for coaches to coach a team or athletes cannot be left to experience alone and a focus on the importance of mentoring is needed in order for coaches to gain knowledge through informal ways.

Other previous coaching literature has proved also proven the significance and benefit of having the mentoring process in relation to the quality of sport performance (Walton, 1992; Miller, 1992; Bloom, 1996; Gilbert & Trudel, 1998; Gould *et al.*, 1990; Bowers & Eberhart, 1988; Lyle, 2002; Cushion, 2006).

## **ii. Transfer of Coaching Knowledge**

The use or transfer of knowledge by the coaches to the players to improve performance constitutes another important finding of this study. In the coaching process, apart from the coaches, the players, as the coaching recipients are the other important element in the process. The transfer of knowledge to the players is very important in the coaching process. Coaches cannot rely on their knowledge per se, but they should know how to organize and apply or make use of their knowledge in a particular sport. If coaches failed, it will affect the quality of coaching. The way coaches organize and structure their knowledge very much related to the experience of the coaches (Rink, French, Lee, Solomon & Lynn, 1994).

The present study was identified that coaches in both academies have concentrated on the tactical training aspect of the players at the expense of the full training programme involving the physical, technical and psychological aspects of being a successful player. As mentioned by the coaches:

*“The players must understand the importance of training intensity, so we always spent time with the players running activities, such as the shuttle run. However, the training intensity is quite flexible...and I don't like to put my players in the fatigue zone.” (Lee)*

*“Normally we did 12 minute run; I like to know their average time. They bring their average to me and I will look and see whether or not they are improving. I do it right through the season so I know exactly where they are. It also allows me to give them the reinforcement and support they need to take the next step.” (Amrit)*

The researcher found was that the players would commence training on the field at 5.20 p.m and finished at any time between 7 to 7.30 p.m. Every session would commence with slow jogging and dribbling that the players would initiate, but the actual training session will begin with the arrival of the coach. The coach, Amrit would join them for light jogging and after 10 to 15 minutes, the coach would begin with the coaching session (Field notes).

In fact, the coaches were found to have spent more of their time on the tactical training aspect and most of the time, to train the players according to the immediate needs of the game. As explained by the coaches:

*“I have various styles of drills. For example, sometimes I ask my players to ‘stop’ and continue, and then ‘stop’ again, then continue....finally we have competitive drills until I am satisfied with such doing.” (Rafel)*

*“I preferred a simulation practice because it looks like a game, followed by a five on five and then three man plays. The advantage of this approach is to make the training more effective because there is a combination of technical and tactical training.” (Lee)*

The findings of this study also revealed that the coaches had difficulty in applying the knowledge of sport science to the players and the coaches in this study were unsuccessful in helping their players to appreciate the important aspect especially on mental preparation as suggested by Bloom (1997) and Salmela (1996). Amrit and Lee commented as follows:

*“We know the importance of sports science knowledge for the players, however we have to close one eye, because we need to concentrate and prepare the team for the competition.” (Amrit)*

*“...there is not enough time for us to provide our boys with sports science knowledge, although it is important, we need to be qualified for the second round.” (Lee)*

In effect, the finding showed a significant impact on the players' performance. An obvious example was the players' poor fitness level during training sessions, poor kicking technique, the players' problem in coping with the pressure and stress during the game that distracted their concentration on the game and the decline in the game results. As mentioned by Lee and Amrit:

*“In most games, my boys only kept going for the 35 minutes of the first half. After 10 minutes they played quite slow....sometimes I have to shout at them, just to make them*

*move.” (Lee)*

*“My players are not really fit, because we only have 1 to 2 hours of training session daily...not much we can do about it.” (Amrit)*

From the observation, players from the City Football Academy could only run 4 to 6 times round the field, in a 12-minute run (Field notes). This was also expressed by the players:

*“We realise our level of fitness is not good and this is proven during the 12-minute run... it’s really tiring.” (Sani)*

*“Frankly speaking, I could only do the 12-minute run in just 4 rounds.” (Joe)*

*“To me, the physical activity is the most tiring, especially the 12-minute run” (Ronald)*

For the Forest Football Academy, the players were only fit for the first 30 minutes. After that, they did slow running and started to kick the ball outside the field to get recovery (Field notes). As the players commented:

*“I purposely kick the ball outside the field so that I can have a break.” (Deen)*

*“Our team will reduce the game rhythm after the first 20 to 30 minutes, so that we can gain back our energy to continue playing.” (Roy)*

*“... errr, I admit we do not run fast during training...usually for the first 20 minutes.” (Rod)*

## **Implications of research**

The findings of the present study offer significant contributions to coaching development in Malaysia. This study extends the previous research on football coaching by analysing coaches’ knowledge during the coaching process since there is very little literature that elaborates the impact of knowledge of coaches on the performance of players. None of the previous authors looked at the relationship between knowledge of coaches and previous models of the coaching process also did not embrace the study of the performance of the players. This study also fills an important research gap on the Malaysian Football Academy since to date no research has been carried out in Malaysia on the area of coach education, particularly in football. Thus, the study of the knowledge of the football coaches will add to the literature on coach education in the country. The acquisition and development of coaches’ knowledge will need to be given serious attention in coaching practice and coach education in Malaysia

Since this study is the first study related to coach education programmes in football academies in Malaysia, it provides valuable recommendations towards a better coach education in the country that will eventually help to upgrade the quality and image of the coaches. The study provides possible proposals to overcome the problem of declining performance experienced by the national football team at present. Thus, the study may benefit the football academy generally, as well as the coaches and the players specifically, because it recommends various important suggestions to overcome



the weaknesses in the coaching process. For the Football Association of Malaysia (FAM) and the state Football Association of Selangor (FAS), this study revealed the importance of managing the academies professionally on the part of the FAM and the state FAS, whereby the problems involving the football academy need to be given immediate attention by the administrators.

## **Conclusions**

From the above discussions, it shows that the basic concepts and principles relating to research methodology have been expounded and relevant methods of data collection used in the study were elaborated. As discussed, qualitative research enabled researchers to explore the unique features and circumstances in the coaching practice. It is hoped that future research can also focus on the coaches and the players in other sports at various levels. If this can be done, it is hoped that a theory or a coaching model can be developed as a guide for the coaching practice in the Malaysian perspectives. These additional studies will help to provide a basis for comparative analysis of the coaches' knowledge in these academies. It would also be beneficial in future to further research the coach education programme being implemented at the national and international level to examine the comparative aspects of the programme that should ultimately benefit the coaches and the players.

Greater importance should be placed on the review of the coach education programme to ensure the effectiveness of the programme in producing competent coaches and quality players in future. Future research should also continue to examine the role and involvement of more parties or agencies in the development of the coach education programme in the country, including the National Sports Council, the National Coaching Board and the Ministry of Education, to give an insight into the effectiveness of the programme from a different perspective. As this study focused on the football coaches' knowledge during the coaching process, future research should consider expanding the study of the coaches' knowledge to coaches in other games or sports. The future research should also consider examining other football coaches at the national and international level and provide a comprehensive analysis of their knowledge during the coaching process.

## **Acknowledgements**

Special appreciation and thank to Faculty of Sport Science and Coaching UPSI and all those who helped make this research a reality.

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