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# What are the perceived coaching practices that have contributed to participation in a modified, low-risk form of boxing? An interpretive phenomenological analysis

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***Abstract:*** *Previous research identified several factors that have motivated sustained athlete participation in a modified, low-risk form of boxing. The importance of the 'coach-athlete relationship' was highlighted. The present study used Interpretive Phenomenological Analysis (IPA) methodology to identify the particular coaching practices that have influenced this relationship and contributed to their continued engagement with the program. The findings suggest that providing a holistic approach to athlete development, treating the participants as serious athletes, using modified games to promote skill acquisition and having a focus on athlete improvement rather than competition have been the most influential practices.*

***Keywords:*** *Box'Tag, Coach/athlete relationships, Community-based athletes, Sport coaching, Sport participation*

## I. Background

The present study is part of a project entailing investigation of the potential for a modified, low-risk form of boxing to achieve significant community uptake. Known as Box'Tag, this modified version of the sport has emerged in Australia over the past nine years. It is designed to add a new dimension to boxing by catering for people who are attracted by the fitness and skill aspects of the sport but do not wish to take part in the conventional form due to risk of injury. The need for such a new dimension in Australia is suggested by low rates of participation in conventional boxing relative to community interest in the sport **[1]**.

In keeping with recommendations from various medical and other experts **[2-8]** the rules of Box'Tag preclude impacts to the head. Instead, the target zone is confined to the front of the torso and small areas on the upper arms. Even then, any impacts above a moderate level of force are prohibited, and as an additional safety measure contestants are required to employ various items of protective equipment, including head guards and mouthguards **[1,9]**. In competition settings the scoring of Box'Tag is achieved through the use of an automated scoring system **[10]** that has been described in detail by Hahn et al **[1]** and Helmer et al **[9]**.
Participants wear specially constructed vests and gloves that incorporate sensor fabrics. This permits objective impact detection and continuous display of scores **[1,9]**.

Initially, research surrounding the Box'Tag project was directed largely at progressive elaboration of the automated scoring technology and its use in occasional competitions. However, it soon became apparent that due to substantial differences between Box'Tag and conventional boxing there was a need for design of Box'Tag-specific training programs. In 2012, such a program was established at the Canberra Police & Community Youth Club (Canberra PCYC).

The principal author of this paper became the coach. He was able to call on a long history as a high-level boxing coach, but found it necessary and productive to explore a whole range of new approaches.

Some participants in the Canberra PCYC Box'Tag program are now quite long-term adherents and in 2014 research was carried out to identify factors that had motivated sustained involvement **[11]**. The findings suggested that sustained participation in the program was the result of feeling a sense of belonging to a special community, perception that the training was purposeful, a focus on safety, and strong coach-athlete relationships. However, the participants did not fully describe what coaching practices they considered were the most significant for the building of strong relationships with their coach. Therefore, the present study was undertaken to discover the particular coaching practices that have influenced the development of strong coach-athlete relationships and contributed to sustained participation in the Canberra PCYC Box'Tag program.

## II. Outline and design of study

Interpretative Phenomenological Analysis (IPA) methodology was used to understand how certain members of the Canberra PCYC Box'Tag program make sense of the coaching they have experienced. The study was undertaken at Canberra PCYC where the prolonged relationship between the principal researcher/coach and the participants/athletes has enabled development of trust and rapport. The importance of strong relationships in qualitative research has been highlighted by Cohan and Crabtree **[12]**, Goodwin et al **[13]** and Payne **[14]**. These authors have suggested that new meanings can be co-constructed between researchers and participants (co-researchers) when mutual feelings of trust and rapport have been developed. This constructivist epistemological belief that researcher and participants working together can generate new knowledge guided the approach of this interpretative phenomenological investigation **[15-18]**.

IPA is a particular way of doing qualitative research and should be considered as a methodology in its own right rather than just a procedure for analysing data. It is underpinned by three key theoretical perspectives; phenomenology, hermeneutics and idiography **[19,20]**. The phenomenological orientation of IPA enables researchers to explore and provide rich descriptions of personal experiences **[21,22]**. The hermeneutic element provides an opportunity to interpret and provide contextual meaning to the descriptions **[19,22]**. The commitment to idiography allows a detailed and thorough analysis of relatively small numbers of cases **[19,21,22]**.

Smith and his colleague **[22]** suggest that researchers who use IPA should immerse themselves in an interpretative process that incudes their own interpretations to provide meaning to a particular event based on the thorough examination of the narrative or written account of the participant. These authors define this dual interpretation as 'double hermeneutics' and one that involves the researcher attempting to understand the participant, who is trying to make sense of a personal experience **[22]**.

Nevertheless, Larkin et al **[21]** and Smith et al **[22]** caution IPA researchers to be constantly aware of their personal beliefs throughout the research process and to use a flexible and adaptive form of bracketing to adjust any preconceptions as these personal beliefs may not become apparent until the phenomenon has started to emerge **[21,22]**. This approach to bracketing differs from the views of Moustakas **[23]** and Carpenter **[24]** who propose that researchers should put aside their personal beliefs and any knowledge of the experience in an attempt to suspend their assumptions.

In the context of the present study, data generated from three coach/athlete semi-structured discussions were individually and rigorously analysed in a way that included an 'insiders' perspective' from the principal researcher/coach to provide an interpretive representation of the participant/athlete experience **[22,25]**.

## III. Research procedure

There has been criticism of IPA for not ascribing to a fixed set of methods to obtain the findings. In particular, Giorgi **[26]** has argued that absence of fixed IPA methods makes the replication of IPA studies impossible. The present study made use of the steps outlined below in an attempt to address this concern.

### 3.1 Selection of participants and ethical considerations

The study followed the suggestions of Smith & Osborn **[27]** and used three participants/athletes to provide a detailed and rich description of the experience. Smith & Osborn **[27]** consider three participants as an acceptable number for graduate students using IPA methodology as a sample of this size can assist the learning process for the student while producing abundant data for a thesis.

However, because phenomenological researchers need to utilise samples that have directly experienced the phenomenon **[28-30]** a purposive sample was chosen for the study. It consisted of participants/athletes who: 1: had at least two years of experience working with the coach/researcher of the program, 2: had self-identified that the coach/athlete relationship was a significant reason for their sustained involvement with the program; and 3: were thought to be highly capable of providing a detailed account of the experience.

The participants/athletes who volunteered for the study were informed that the greatest risk associated with their participation was being identified through publication of data collected from them, but that every attempt would be made to prevent this from occurring. The participants/athletes were also advised of the benefits and purpose of the research and informed that they could disengage with the study at any time and that this decision would not result in any prejudicial treatment or exclusion from further participation in the Box'Tag program. The purpose of fully disclosing this information was not merely to satisfy a formal requirement, but also to develop a mutual understanding between the participants and the research team **[31]**.

In the end a 'thick' and 'rich' description of the experience was provided by two female participants/athletes and one male participant/athlete aged 37-47 yrs (M= 43.3 yrs). They are introduced below, although pseudonyms have been used to protect their identity.

**Phil:** Is 47 years old, has 4 children and has been attending training three nights a week for the past two and a half years.
**Sara:** Is a mother of two, who is 37 years old and has been a member of the club for a little over three years.
**Gina:** Is 46 years old and has no children. Gina has had a three-year involvement with the program.
It should be noted that the study was conducted as part of the routine program monitoring procedures of the Canberra PCYC, which agreed to make the data available for secondary analysis under an arrangement that was approved by the Human Research Ethics Committee of the University of Canberra.

### 3.2 Data generation and interview strategy

Data were generated through three one-on-one coach/athlete discussions that were audio-recorded and later transcribed verbatim. However, because the coach of the program was now performing the role of researcher/interviewer, both parties agreed to refer to the coach in the third person throughout the discussions. Adopting this approach provided an opportunity for the participants to give first-hand accounts of their experience free from any judgment, and in a relaxed and informal environment.

The discussions began with the principal researcher/coach asking each of the participants/athletes the same open-ended question –'Can you please tell me about the coaching practices you've experienced with the program?' The individual accounts were then investigated further by use of a funneling technique outlined by Smith & Osborn **[27]**. For example, one of the initial responses to the above question was, 'I'd describe the coaching as supportive, professional and experienced'. A prompt was then used to 'draw out' the meaning of this reply, 'So having a supportive, professional and experienced coach is important to you?' To which the participant answered, 'absolutely, it's crucial that a coach has all of these qualities'. An open-ended probe was used at this stage to further explore the previous response - 'Can you tell me why you think it's crucial for a coach to have these qualities?' By this stage of the process a richer description of the original answer was being provided by the participant.

As evident from the example above, the use of this funneling process throughout the interviews enabled each participant to reflect on his/her initial response and offer a more detailed explanation of the coaching practices they experienced.

The interview transcripts were provided to the participants for their confirmation and verification as a prelude to commencement of the data analysis phase.

### 3.3 Data Analysis

The transcripts underwent an interpretative process similar to one that was previously used by the research team in an attempt to understand the perceptions that have influenced a number of community-based athletes to have a two-year involvement with a Box'Tag program **[11]**.

The process began with each transcript being thoroughly examined, scrutinised and notated. For each individual, the notes were used to establish themes, which were then arranged into categories based on similarities. Once this was completed the individual results were compared to identify the overall themes for the group. The major themes that emerged were then used to provide an interpretative summary of the overall study. The procedure is shown in the illustration below and described more fully in the subsequent text.

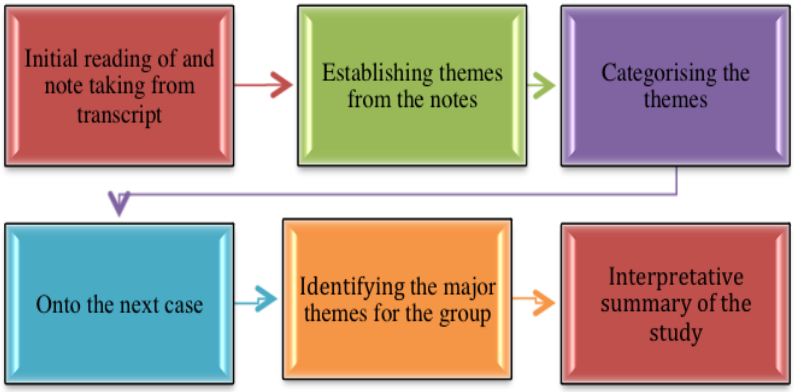


**Figure 1:** An overview of the steps by which data were analysed. The above process provided an opportunity for the interpretation of the individual accounts and the emergence of the group themes.

#### 3.3.1 Reading and note taking

The initial stage of the analysis involved reading and reviewing the first transcript a number of times. The purpose was to identify any sentence or word considered important. These initial thoughts were then

recorded on a separate page for further reading, review and reflection that resulted in the development of additional exploratory comments. Smith et al **[22]** consider this first step as a way of moving from the descriptive to the interpretative because the researcher has already begun to question the meaning of the texts.

Figure 2 below provides an example of how the exploratory comments were developed from the original transcripts.

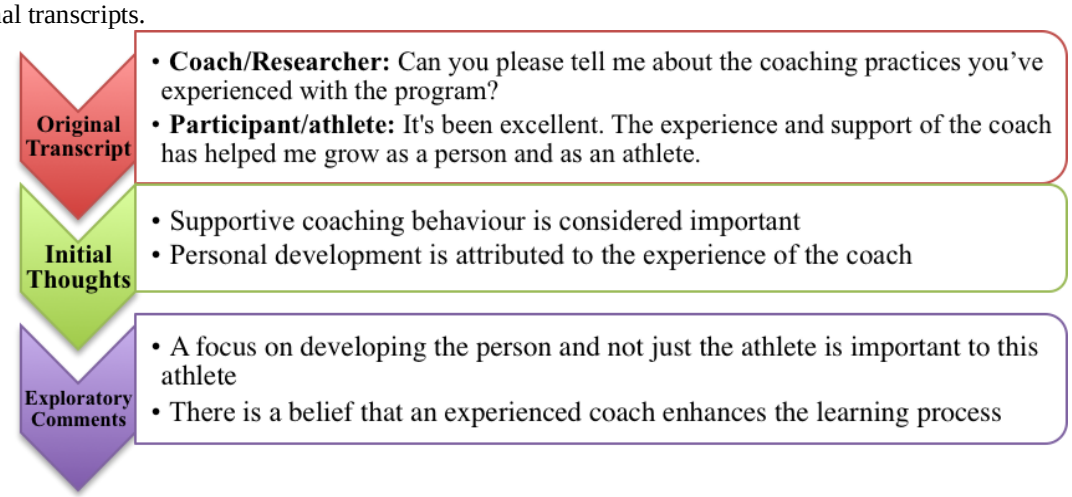


**Figure 2:** An illustration of the approach through which each transcript was explored.

### 3.3.2 Establishing themes from the notes

The purpose of the second step was to identify the emerging themes and construct them into short, meaningful phrases. At this stage of the process there was a shift away from the transcript and more of a focus on the initial thoughts and exploratory comments. Once identified, the themes then underwent further analysis. The following illustration shows how the themes emerged from the notes. A connected trail can be seen that shows how the initial descriptions were interpreted in an attempt to provide meaning to the participants' points of view.

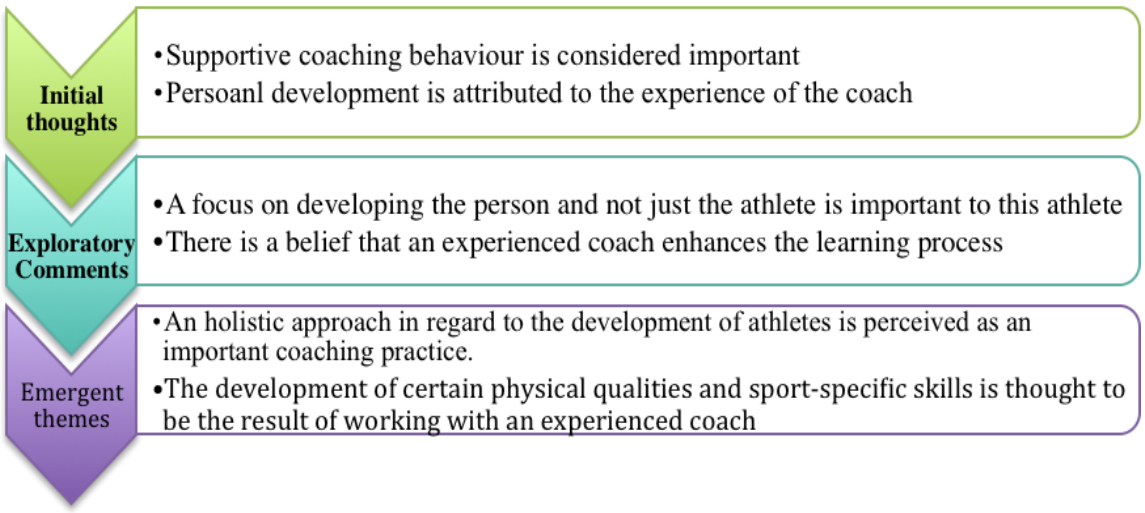


**Figure 3:** The approach used to convert the initial thoughts and exploratory comments into emergent themes.

### 3.3.3 Categorising the themes

An attempt was made during this phase of the analysis to discover commonalities among the emergent themes. The process included eliminating initially identified themes that did not appear to fit in with the evolving structure **[22]**.

Once ascertained, the major themes were grouped together based on their conceptual nature as exemplified in Figure 4 below.

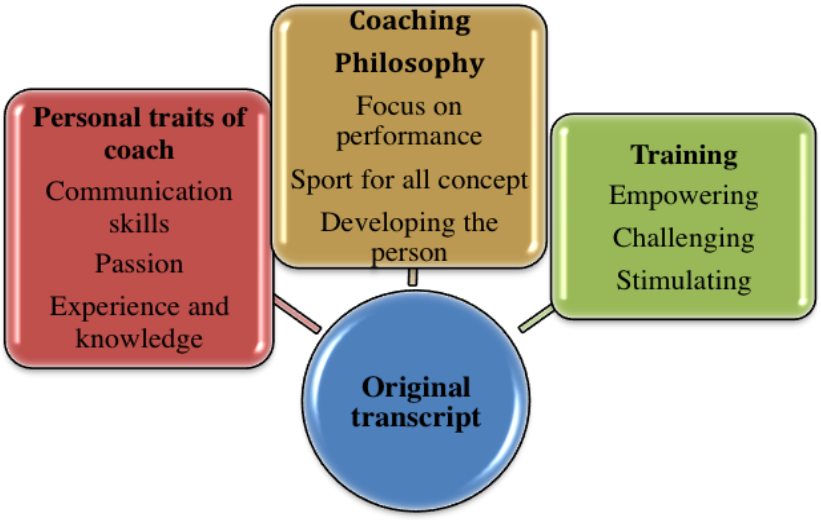


**Figure 4:** An Interpretative Phenomenological Analysis of the major themes arising from the first transcript.

**3.3.4 Onto the next case**

IPA requires researchers to remain committed to an idiographic approach when analysing data **[19,22]**. Therefore, the two remaining transcripts were rigorously explored one case at a time. Meticulously following the same process for each case separately enabled the emergence of new themes that were independent of each other.

**3.3.5 Identifying the major themes for the group**

The aim of the final phase of the analysis was to compare descriptions and comments from each of the individual tables and select the major themes for the group. This process involved placing the three individual tables beside each other and selecting the recurring themes that appeared to connect the separate versions together and that when combined would provide a richer account of the group experience **[22]**. After careful consideration and a thorough examination of the texts four predominant themes were eventually produced that present an understanding of the particular coaching practices most positively regarded by the three community-based athletes.

## IV. An interpretive summary of the study

The following summary reflects the 'double hermeneutic' approach of IPA by presenting an interpretative account of the participants' experience **[22]**. The major themes that emerged from an analytical interpretation of the participants' transcripts and that described particularly valued coaching practices that appear to be supportive of participation were:

- **Being more than just a coach**
- **Treating participants as serious athletes**
- **Using modified games to promote skill acquisition**
- **Focus on athlete improvement rather than competition**

It is important for IPA studies to present the major themes in order of significance **[22]**. The following sequence of themes accords with this requirement.

**Theme 1: Being more than just a coach**

The participants in the current study explained that for them a coach is someone who does much more than simply teach a sport. They saw an ideal coach as a passionate, experienced and highly motivated individual who is focused on assisting people to reach their potential in and out of the training area. As noted by Phil 'It's great that the younger guys are able to develop and grow here. I know training here has helped my son a lot'.

When asked how he thought being involved with the program had assisted his son, Phil said 'Well, his attitude towards schoolwork has changed a lot since training here. He's really focused now and I think it's because coach is always talking to him about the importance of education and the need to always do his best. (laughter) I should've brought him here years ago'.

Participants also discussed the skills and personal traits that they thought were necessary to be a coach and opined that being able to manage complex situations, plan thoroughly, communicate effectively and generally care about people were the most salient. The participants concluded that a coach should use these

skills to help develop the athletic qualities and technical proficiencies of the athletes, but also to assist with the overall development of the athletes by supporting them in other areas of their lives. This was particularly true for Sara who identified the 'care factor' as the catalyst for her prolonged participation when she said. 'I'd say the care factor has been one of the main reasons I'm still involved with the club'. Sara was then asked if she could elaborate on her response and added 'It's because the coach really cares about the people and from what I've seen and experienced has a positive influence on their lives'. Gina echoed these thoughts when she said 'I think our environment is more focused on developing the person so it's not just about the training for me. It's the fact that the coach cares about everyone and wants the best for us'.

The descriptions suggest that an approach to coaching focused on the overall development of the athletes with sport used as a vehicle to contribute to the wellbeing of the athletes has been positively regarded by the participants and could be considered a contributing factor for their continued involvement with the program.

**Theme 2: Treating the participants as serious athletes**

The participants indicated that they valued being regarded as talented and dedicated individuals whose aspirations are just as important as those of elite-level athletes.

For example, all the participants noted that they were welcomed and accepted by the other club members and explained that their quest to become better athletes was treated with sincerity and enthusiasm by the coach. As noted by Sara, 'During class our coach refers to us as athletes and, for me, it gives me a sense that as participants we are taken seriously, that our coach thinks we are able and that our goals are important'. Gina provided a similar response when she said 'I played a wide range of sports when I was younger and I enjoyed them all. However, I never considered myself to be an athlete, I thought the term was more suited and geared towards professional sports people. But, at training coach calls everyone an athlete and treats everyone the same. No one is belittled, excluded or put on a pedestal, creating an environment where everyone is treated with respect and every person is considered important'.

Participants also noted that individualisation of the training was another indication that they were taken seriously. The individualisation was seen as demonstrating the commitment of the coach getting to know the athletes, understanding the reasons for their participation, and devising programs to meet their specific needs. As explained by Phil, 'Coach understands that we all have different needs and he accounts for this every time we train. I remember one time when I had an injury I couldn't do squatting or lunging, so he personalised my training for that period and this allowed me to continue to train with the group without disturbing them'. Sara noted how her personal needs were constantly met when she said 'Even though the program is a group class, which varies in size from small to quite large, I always know that my needs are going to be met and that I will be supported. There are always individualised things that coach reminds me about that are specific to me'.

Another somewhat surprising sub-theme that underpins this particular finding suggests that for the participants in this study being able to provide feedback to the coach also indicated that they were being taken seriously. This is apparent in the following passage from Gina, 'Coach always seeks feedback from us. Usually, this is done at the end of the session when we're cooling down. It was suggested a while ago that we could all benefit by using this time to reflect on our performances. The really cool thing is coach takes part in it and everyone's free to say what we liked and didn't like about the session. I find this very beneficial and it reinforces how serious he is about helping us to achieve our goals'.

The above suggests that a coaching practice that values, respects and takes the needs of community-based athletes seriously by individualising the training process and encouraging athletes to provide feedback has been positively received by the participants and has been an important contributor to their long-term involvement with the program.

**Theme 3: Using modified games to promote skill acquisition**

The use of modified games for skill development was the third theme to emerge from the analysis. The participants described this approach as 'really beneficial', 'thought-provoking' and 'stimulating' and noted a number of advantages compared to the more traditional method for teaching skills. According to the participants, one of the main advantages was spending more time doing the activities and less time being told how to do them. For Phil, Gina and Sara, this was the result of not having to develop specific skills, or be of a certain level prior to participating in the games. Instead, they all suggested they were able to develop their skills and tactical appreciation of the sport by taking part in training drills that simulated 'real conditions' and required them to make decisions, respond under pressure and experience the consequences of those actions.

As explained by Sara, 'I really like the trial and error approach at training 'cause whenever we do the game stuff I stop worrying about making mistakes and just focus on what I have to do, then later on it sort of dawns on me and I'm like, I get it now'.

The participants noted that the use of game-based activities not only facilitated their active involvement in the learning process but also afforded them greater independence. They valued a coaching practice that

encouraged experimental learning by only providing suggestions rather than definitive answers.

The benefit of using implicit learning with minimum explicit technical instruction is evident from the following excerpt from Phil, 'I really enjoy the way we train because I'm actually learning more'. When asked why he thought he was learning more and what makes the training so enjoyable, Phil said 'For me, it's the right combination of trying to do something yourself and having a bit of guidance. I guess after a while we become less dependent on the coach for all the answers and learn more from each other and from simply doing the drills'.

The use of modified games for skill development appears to have enriched the participants' experience, suggesting that a coaching practice that promotes an enquiry-based approach to learning has assisted development of a strong relationship with their coach.

**Theme 4: Focused on improving not competing**

The final theme to emerge from the analysis was a focus on athlete improvement rather than formal competition. The emergence of this theme suggests that the participants were positively influenced by a supportive and inclusive approach to training rather than a win-at-all costs attitude. For example, the participants indicated that focusing on improving rather than competing reduced their stress, anxiety and fear of failing. This was particularly true for Sara, who said 'I've always found that I really suck when it comes to competing and even if there was a wisp of any sort of competition I would choke (figuratively) and never do as well as I did in training. This made it difficult for me to want to compete or to even train. But, in our program the focus is always on improving – but not to improve to be compared to anyone else, the sole purpose is to improve myself and as clichéd as it sounds to become better than I have been'. Gina also supported an approach that focused on continual improvement rather than competition and noted several advantages when she said 'I'm not a competitive person and winning has never been a driving force for me so training here fits in perfectly with my personality. Knowing I can go to training and I won't be compared against other athletes eliminates feelings of not being good enough'. Phil made a similar comment when he compared his current training to a previous experience. 'I grew up playing rugby league and it was all about winning. I used to put a lot of pressure on myself to win, and when this didn't happen I'd end up really disappointed and would put myself down a lot. It hasn't been like that here - instead of having to compete against the other athletes, everyone supports each other to do their best. This means there are no winners and losers...only winners. I now train so I can perform better and it makes training much more enjoyable'.

Participants believed that having a focus on improving rather than competing also assisted in creating an environment that was supportive, rewarding and provided a sense of unity. As explained by Gina, 'When you forget about competition, you tend to enjoy seeing the improvements and progress in others a lot more. It uplifts you and leaves you feeling like a winner. I know at training I always feel like a winner and I've never felt defeated'.

The importance of an emphasis on athlete improvement as opposed to competition was highlighted in all three interviews. It appears that a coaching practice focused on the progress and development of the athletes rather than promotion of competition has created an environment where the athletes feel a sense of camaraderie not rivalry. This practice has clearly been positively regarded by the participants and has been instrumental in their at least two-year involvement with the program.

## V. Discussion

The emergence of **the first theme** is compatible with the observations of other researchers. For example, Vallée & Bloom **[31]** and Lombardo **[32]** suggest that when coaches focus on the personal development of the athletes rather than just the athletic qualities, better long-term results can be achieved for both the athletes and the program. In addition Dale and Janssen **[33]** contend that the success of a coach should not be measured purely by wins achieved but also by the quality and strength of the relationships developed with the athletes. Dale and Janssen **[33]** propose that truly successful coaches assist athletes to reach their full potential by underpinning the coaching of sport skills with the teaching of life skills.

The positive influences of an holistic approach for athlete development were very apparent in the present study. Long-term adherence to the program has been influenced by a particular coaching practice that Lyle **[34]** describes as 'humanistic'. Lyle **[34]** contends that this form of coaching is concerned with the growth and development of the person and not just the athlete.

The participants in this study indicated **that being treated as serious athletes** was another important coaching practice that has influenced their at least two-year affiliation with the program. According to Mackay **[35]** being taken seriously is one of ten basic human social desires. Mackay **[35]** believes that in addition to fundamental needs such as water, food and shelter every person wants to be taken seriously, to be shown respect and to be listened to rather than ignored.

The emergence of the second theme is also consistent with the literature on serious leisure **[36-38]**,

which highlights that participating in leisure activities including community-based sporting programs tends to become an important life-style choice when the participants strongly identify with their chosen activity. Dionigi **[39]** suggests that this is particularly true for participants who perceive that their needs are being taken seriously and when there is continual improvement in a way that increases their identity as serious athletes **[39]**.

It would appear that the participants in the present study have self-identified as serious community-based athletes and have embraced a coaching practice that reinforced that identity.

**Using novelty games to promote skill acquisition** was the third theme to emerge from the analysis. Known as 'Game Sense', this particular approach to athlete development offers coaches an alternative to the traditional highly structured sessions that focus on developing technique prior to any actual participation **[40]**. Instead, the Games Sense approach enables athletes to develop the tactical appreciations of their sports by actively engaging in modified games and/or game-specific situations **[41,42]**.

Light & Georgakis **[43]** and Phil **[44]** have argued that Games Sense requires a new approach to coaching that is quite different from the more traditional directive style. These authors suggest that coaches who ascribe to Games Sense take on more of an 'educator' role and facilitate practice sessions that provide opportunities for athletes to discover the meaning and purpose of training drills by encouraging them to explore and discuss the tactical aspects of the activity **[43,44]**.

In the context of the present study, the comments and description provided by the participants show that a suggestive and guided approach to coaching has been seen to create individual learning opportunities for the athletes to develop their knowledge and understanding. This suggests that use of the Game Sense approach contributed to the building of productive interaction between the participants and the coach.

The emergence of **the final theme** illustrates how the participants' experiences were enhanced **by a focus on improving rather than competing.** This finding is compatible with the views of Collins **[45]**, who described sport development as 'a process of effective opportunities, processes, systems and structures that are set up to enable people in all or particular groups and areas to take part in sport and recreation or to improve their performance to whatever level they desire' **[45]** However, success in sport is often measured only by victories, medals and/or records broken **[46]**. While this mindset is still present and perhaps essential at the professional level, other factors such as prolonged participation, achieving personal milestones and self-improvement have recently come to be recognised as significant accomplishments in their own right **[47]**. This change in perception could be due to the increasing number of people who are choosing to take part in sport and other recreational activities for reasons other than competing and winning **[48]**. For example, Bailey et al **[49]** propose that involvement with sport occurs for a number of reasons and note that for many people competing and/or winning is not a significant motivator for their participation. In 2010 Baily et al **[49]** presented 3 categories of sport participation that are summarised below.

1. **Participation for Personal Wellbeing (PPW):** Participants who take part in sport for personal wellbeing reasons including the social and health benefits associated with participation.
2. **Personally Referenced Excellence (PRE):** Participants who gain enjoyment from skill development and the challenge of surpassing their previous performances.
3. **Elite Referenced Excellence (ERE):** Participants who engage with sport for the purpose of winning at the highest level possible and measure success by win/loss ratios.

It would appear that the participants in the current study fit into the first two categories (PPW and PRE), with little or no interest in inter-personal competition at any level. The findings of the study need to be considered in this context. It is likely that athletes in the third category (ERE) would value a different set of coaching practices. For the participants in the present research, though, a particular coaching practice focused on assisting athletes to develop and constantly improve their physical qualities, technical skills and tactical appreciations has clearly been regarded as preferable to any emphasis on formal competition.

## VI. Overview and conclusions

The current study provides evidence of the coaching practices that community-based athletes involved with the Canberra Box'Tag program regard as positive and appear to have contributed to their sustained participation. An holistic approach to athlete development, treating the participants as serious athletes, using modified games to promote skill acquisition and having a focus on athlete improvement rather than competition have emerged as the coaching practices most valued by the athletes.

However, due to the interpretative nature of the study the findings presented in this paper should not be considered as necessarily representing the opinions of all the athletes from the Canberra Box'Tag program. Since the findings are limited to the responses of three participants from a particular community-based sports program, they should be considered as having vertical generalisability (contributing to the building of an interpretative theory) and not horizontal generalisability (being applicable across settings) **[50]**. Essentially, readers should consider the ability of the findings to resonate with their own experiences, provide insights into

the investigated phenomenon, develop an understanding of the situation and relate to existing theories **[51,52]**, rather than concentrating primarily on how relevant they might be to other times, settings and people **[53,54]**.

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