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**AN INTERPRETATIVE PHENOMENOLOGICAL
ANALYSIS OF COACHES' EXPERIENCES OF WORKING
WITH CHILDREN WITH SPECIAL HEALTH CARE NEEDS
AT AN EXERCISE REFERRAL SCHEME**

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Submitted in part fulfilment of the requirements for the

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An interpretative phenomenological analysis of coaches' experiences of working with children with special health care needs at an exercise referral scheme

ABSTRACT

This article reports the Interpretative Phenomenological Analysis (IPA) of semi-structured interviews conducted with six youth sport coaches. The coaches worked on an exercise referral scheme providing physical activity and sport sessions for young people with emotional and behavioural special health care needs (SHCN). Attention deficit hyperactivity disorder (ADHD) and autistic-spectrum disorders (ASD) were common reasons referral. Six coaches were interviewed about their experiences. The paper aims to explore participants' reflections about their experience of coaching at an exercise referral scheme for children with SHCNs. The analysis focuses on how coaches made sense of and accommodated the children in classes by finding meaning in behaviour and being flexible and responsive to individuals and groups. Accounts of engaging the children to promote enjoyment of activities are discussed. This has implications for the inclusion of children with conditions such as ADHD and ASD in extracurricular physical activity and sports.

Key words: coaching issues; youth sport and physical activity; exercise referral scheme; children; attention deficit hyperactivity disorder (ADHD); autistic-spectrum disorders (ASD); special health care needs (SHCNs); interpretative phenomenological analysis (IPA)

INTRODUCTION

Participation in sports and physical activity is a cornerstone of child development and in the UK it is recommended that children engage in at least one hour of physical activity across each day (Cavill, Biddle & Sallis, 2001). Children with special health care needs face formidable barriers to participation in such pursuits because of widespread inequalities in exercise and leisure (Collins, 2004). A lot of physical activity in childhood occurs outside of schools in organised sports and other activities (Ross, Dotson, Gilbert & Katz, 1985; Simons-Morton et al., 1990). There is concern that disadvantaged children only take part in sport and exercise at school when the priority of physical education (PE) in the curriculum appears to be declining (Sport England, 2000).

Youth sports participation provides opportunities to experience positive inter-group relationships, community integration, social status and social mobility (Wankel & Berger, 1990). Representations of community membership can include belonging to sports clubs (Stephens, 2007). Participation in sports and structured leisure activities appear to be important in the development of a sense of community and social well-being (Albanesi, Cicognani & Bruna, 2007; McMillan, 1996). Bourdieu (1978) proposed that sports participation offers opportunities to accumulate social capital via the social connections arising from participation. This can lead to further accumulation of resources, in some cases material, through privileged access to groups and financial opportunities (Bourdieu, 1978).

Participation in extracurricular youth sport activities is associated with better outcomes in education (Bartko & Eccles, 2003; Eccles, Barber, Stone & Hunt, 2003) and adult employment (Larson & Verma, 1999) and may reduce delinquency (Eccles & Barber, 1999). However, the extent to which sports participation contributes to the development of prosocial behaviour is contested (Danish, 1983; Rutten, et al., 2007). This confusion arises in part because different activities and different contexts (e.g. recreational and competitive, and team and individual sports) have been studied (Duncan, Duncan, Strycker & Chaumeton 2002). Coaches' relationships with young people can impact upon the potential prosocial and antisocial outcomes of youth sport participation (Rutten et al., 2007).

Youth sports coaching

Competitive and performance oriented contexts may promote antisocial behaviour when the setting for youth sport is characterised by self-interest and lack of concern for others (Rutten et al., 2007). Alternatively, sport can be constructed as promoting respect for rules, respect for opponents, fairness, equal opportunities for participation and mutual cooperation (Arnold, 2001). Youth sport coaching has been categorised as a developmental intervention (Strean, 1995). It appears reasonable to expect that participation in youth sport has the potential to have both a positive and negative impact on social development (Danish, 1983) and coaches appear to play a role in this (Rutten et al., 2007).

Youth sport is associated with decreased risk of antisocial behaviour in individuals who report experiencing favourable relationships with coaches (Rutten et al., 2007). Coaches

can play a key role in children's development as they directly affect the social behaviour and self perception of young people in their care (Tofler & Butterbaugh, 2005). Coach-athlete relationships may protect against antisocial behaviour and promote prosocial behaviour as coaches can provide young people with positive role models and emotional support (Rutten et al., 2007). A review of qualitative research concluded that young people found sports participation more enjoyable when they were encouraged to experiment with different activities and had a range of choices (Allender, Cowburn & Foster, 2006). Young people were less favourable about environments in which winning and competition are emphasised.

Coaches can create an environment emphasising effort, enjoyment and improvement, or they can emphasise comparison with others (Weiss, Amorose & Wilko, 2009). The motivational climate in exercise and sports contexts can be categorised as 'mastery' or 'performance' orientated (Biddle & Mutrie, 2008; Weiss, Amorose & Wilko, 2009). In mastery climates mistakes are viewed as part of the learning process and praise is contingent on effort as opposed to actual outcome of performance. In performance climates group members are compared to each other and praise comes in response to performance that is superior to the group norm.

Motivation is higher in classes that present students with more choice (Goudas, Biddle, Fox & Underwood, 1995). When coaching style was manipulated to compare conditions of more choice with less choice about activities in class, motivation was consistently higher among those experiencing more choice (Goudas et al., 1995). Perceptions of a mastery climate predicted intrinsic interest and intentions to participate in future when children experienced two different activities that allowed comparison between mastery

and performance coaching styles (Biddle et al., 1995). Choice appears to be an important dimension in mastery climates and is an important factor in promoting physical activity in children (Allender, Cowburn & Foster, 2006; Goudas & Biddle, 1994; Goudas et al., 1995; Rees et al., 2001).

The importance of coaching style and leadership in exercise settings is obvious and should be subject to psychological inquiry in order to further understand and promote effective coaching (Carron, Hausenblas & Mack, 1996). It is likely that some coaches create environments that have elements of both performance and mastery climates and clear distinctions between the two types of climate may be too simplistic in routine practice. Tofler and Butterbaugh (2005) lament that community coaches too often have minimal knowledge of psychological development and positive ways of motivating and involving children.

It is becoming clear that the majority of coaches learn to coach primarily through experience (Gilbert & Trudel, 2006). Gilbert and Trudel (2006) have drawn upon Schon's (1983) influential theory of reflective practice which essentially considers the ways that professionals transform applied experience into knowledge and practice. Reflective practice appears to be an important means by which youth coaches learn from challenges encountered in the field (Gilbert & Trudel, 2001; 2005).

Experience of coaching children with special health care needs such as attention deficit hyperactivity disorder (ADHD) appears to be related to coaches' confidence, self perceptions of efficacy, and willingness to work with children with ADHD (Beyer, Flores & Vargas-Tonsing, 2008). Beyer and colleagues (2008) suggest that coaches who

lack knowledge of ADHD may view children with the condition as disruptive or misbehaving and react in unhelpful ways, instead of adapting coaching styles to the situation.

Special health care needs and physical activity

Special health care needs (SHCN) is a term that refers to children who come to the attention of services and policy makers because they need different provision and support than their peers (Minihan, Fitch & Must, 2007). Children with SHCN are at increased risk of chronic physical, developmental, behavioural or emotional conditions that involve services beyond the requirements of children generally.

Parents of children with SHCNs have indicated that physical activity is an important issue that is often overlooked by health professionals involved in their children's care (Minihan, Fitch & Must, 2007). Children with SHCNs may encounter difficulties being included in sports and active play for a variety of reasons. Children diagnosed with conditions such as attention deficit hyperactivity disorder (ADHD) and autistic spectrum disorders (ASD) may experience social, behavioural and motor difficulties that make it difficult for them to become involved in sports and active play in and out of school (Attwood, 2007; Leroux, 2009).

It appears that the provision of opportunities for sports and physical activity participation are important developments in psychological and social interventions for children with ADHD and ASD (Attwood, 2007; Barkley, 2004; Leroux, 2009). Sports

and physical activity can offer essential developmental and therapeutic benefits specific to such conditions (Attwood, 2007; Leroux, 2009).

An exercise referral scheme for children with SHCNs

Young Person's Positive Moves (YPPM) is an exercise referral scheme for 8-13 year olds who are not accessing mainstream physical activity sessions because of an SHCN. Reasons for referral include autism, diabetes, low self-esteem, ADHD, dyspraxia, depression and anxiety. A range of sports and physical activities are prescribed by paediatricians and school nurses as part of the local strategy to address SHCNs (Sugden, 2007a). The activities include football, gymnastics, swimming, dance, fundamentals of movement and youth gym. All of the coaching staff are experienced coaches and have received training from a paediatrician to prepare them to understand the children's needs.

There is a dearth of research into coaching children with SHCNs in sport and physical activity, despite the apparent importance of such activities for children with ADHD and ASD (Attwood, 2007; Barkley, 2004; Leroux, 2009). This study aims to explore coaches' experiences of involvement in a novel exercise referral scheme for young people with SHCNs; with specific reference to their experiences of relationships with the children and parents involved, and the ways that coaches understand the needs of the children based on experiences of coaching them. The implications of these experiences for the coaches and the children they coach on the scheme are discussed.

METHODOLOGY

Interpretative phenomenological analysis (IPA) (Smith, Jarman & Osborn, (1999) was used to allow exploration of the experiences and understandings of sports coaches working on an exercise referral scheme for children with special health care needs. Six coaches were interviewed using a semi-structured interview. In order to protect confidentiality the identifiable activities have been restricted to football and sports generally. Several coaches led football sessions, while in other activities there was only one coach and it would be possible to identify participants who were perhaps the sole coach in their area.

Participants

Participants were coaches on an exercise referral scheme for young people with special health care needs. All worked professionally as coaches on the scheme, as well as in other areas of coaching. The sample was ethnically homogenous, being all white of English origin. Participants were aged between 18 and 49. Two women and four men participated. They had a variety of coaching experiences prior to working on the scheme and collectively had over seventy years experience as coaches.

An opportunity sample was necessary in order to address the research question. The literature, and the professional experience and networks of those involved in the scheme indicate that it is unique in the UK. Therefore this approach to sampling is justified in order to understand the meaning that coaches give to working on an exercise referral scheme for young people with SHCNs.

Ethical Issues

Ethical approval was granted by the Institute of Work, Health and Organisations at the University of Nottingham. All participants gave informed consent and were aware that publication of findings would be sought. Participants were known to the researcher through contact at meetings and sessions prior to the study when the researcher was volunteering on the project in an administrative capacity. This was not considered to pose any ethical problems but is acknowledged for the sake of clarity. The literature indicates that prior familiarity with researchers can increase willingness among youth sport coaches to participate in studies and provide accounts of their work at interview (Strean, 1995).

Interpretative phenomenological analysis

The phenomenological perspective asks how people experience the object of inquiry and how they interpret this experience. As a method, IPA privileges the self-reflective capacity of participants (Smith, Flowers and Osborn, 1997). Interviewing participants in a study using IPA requires people to tell their story in their own words about the topic of interest.

Transcripts were interrogated according to the principles of IPA. Interpretative phenomenological analysis is an idiographic approach, starting with specific examples from each transcript and then developing more generally applicable themes about the phenomena of interest (Smith & Dunworth, 2003). The analytic process is highly

structured in IPA, with clear and practical procedural steps to follow (Smith & Dunworth, 2003; Smith, Jarman & Osborn, 1999; Smith and Osborn, 2003). While the researcher is furnished with a structural procedure within which to work, a fundamental value of IPA practice is that the researcher is a research resource. It is an explicit assumption that they are bound up with the analysis and interpretation so that the meanings ascribed must be owned by the researcher and cannot represent objective truths.

Put simply, IPA is aimed at detailed exploration of the participants' view of the topic being investigated (Smith, Jarman and Osborn, 1999; Smith and Dunworth, 2003). It is particularly effective when considering how individuals perceive particular situations that they face, and how they make sense of their personal and social world in relation to issues of complexity, process and novelty (Smith and Osborn, 2003).

Interpretative phenomenological analysis was selected because openness to the meanings made by participants about their experiences is stressed, as opposed to seeking to understand such experiences in relation to existing literature. This approach is applied atheoretically to the extent that studies, questions and analyses should not be founded on the literature in an area of interest as this may close down questions, reflections and interpretations of participants' experiences (Shaw, 2001). There was a paucity of literature addressing coaching and SHCNs at the time that this research was planned and undertaken. Furthermore, IPA aims to highlight convergence and points of divergence in participants' accounts of the phenomena of interest. As the coaches on the exercise referral scheme led different activities, and encountered different groups of children within these, the tolerance of differences and similarities within and between

accounts made IPA an attractive method for the purpose of this study. Therefore, the selection of IPA is justified as a means to explore coaches' experiences of their practice and the social processes involved in coaching children with SHCNs on a novel exercise referral scheme.

RESULTS

Multiple readings and coding of transcripts produced three master themes. Only one can be reported here, *acceptance and accommodation of children's limitations in sports*.

This master theme encompassed a variety of themes about how coaches internalised the issues that they faced, and contextual factors that influenced coaching at YPPM. It has been selected for discussion here as it appeared to offer practical insight into coaching issues and practice at the exercise referral scheme.

The master theme '*communication and relationships*' was commonly supported by accounts of four distinct relationships: coach-child, child-child, coach-parent, and child-parent. Communication was also a key feature when strategies to accommodate the children were reported. The third master theme was '*development and values as a coach*'. This theme encompasses coaches' accounts of how YPPM has affected them, and develops representations of how coaching values that privilege inclusion and development over attainment and competition are necessary for YPPM. Due to current limits on space, these two themes and corresponding subordinate themes are reported elsewhere.

One important thing is though, which is so hard for us to grasp, for coaches, is that you're not going to get success with all of 'em. There's some guys that you know, no matter what you do, no matter how easy it is, their behaviour, their attitudes and er their abilities are just going to stop them from progressing.

(Participant 3)

Working with children with SHCNs required accepting that some might not make any discernable progression. Progression appears to be the measure of success among coaches in this representation. When progression does not occur, coaches may experience a significant role challenge. Despite the best efforts of coaches it appears that the internal characteristics of some children were experienced as barriers to their progress. When such barriers were encountered by coaches they appeared to find other ways to frame their coaching activities and objectives, such as children's enjoyment and development on an individual basis as opposed to progression to mainstream clubs. These interpretations are developed further in the following sub-themes.

Concentration and attention

Common coaching issues represented in the accounts of coaching at YPPM involved working with children who had limited attention and concentration. Coaches accepted this difficulty as a characteristic of the child and worked to accommodate it in their sessions. Some representations appeared to frame this as simply something to be managed in the sessions. These difficulties were located within the child. However,

coaches in the main identified it as their responsibility to get children's attention and respond to any such issues. Attention and concentration were represented as being mediated by external influences within the coaching environment aimed at providing stimulation and enjoyment.

It's mainly getting that attention. If you can get their attention that's the main thing. (Participant 1)

If you keep the concentration up you'll be fine. It's just that lack of concentration and it could just spark off to something that you need to keep a grip of. (Participant 4)

Concentration could be lost rapidly and alertness to signs, such as complaining of tiredness or going off task, was necessary in order to respond appropriately. Some children at YPPM were experienced as highly distractible.

Some of them have got erm concentration of a light switch going on and off. One they're there, next gone and its so fast, some'll say that they're tired, some'll start wandering around (Participant 3)

Problems with attention and concentration were not limited to individuals. Some participants provided accounts of a social process by which this issue could manifest among the group. This represented a need to maintain vigilance in order to manage interactions between individual concentration and group dynamics.

It's basically like dominos really. One gets knocked over, the rest of 'em are probably going down. That's, basically that's, you've got to try and keep them concentrating all the way through, 'cos if one goes the rest'll go. (Participant 4)

Enjoyment

All participants provided accounts of the importance of children enjoying the sessions. Problems with attention and concentration could be addressed or prevented by providing activities that children enjoyed.

It's just their attention as well, if they concentrate, if they enjoy something then they're going to concentrate on it more than if they don't enjoy it. (Participant 5)

Participant 2's account of their experiences on YPPM was distinct from others in that Participant 2 did not report experiencing issues related to concentration, attention or any other problems internal to the children at YPPM. In this extract they account for this absence of problems because the children enjoy the sessions.

All I can say is they want to be there, its something they enjoy doing and it doesn't become a problem. (Participant 2)

The children's enjoyment represented a primary coaching objective. In the following extract this is juxtaposed with, or at the expense of, concern and expectation about attainment or competitive level.

Basically my main goal for me is to make sure that the kids enjoy it. I don't really mind if they, if they don't make it professional or they don't get into mainstream
(Participant 4)

Engaging children

Related to the theme of *enjoyment*, accounts included representations of having to be flexible and seeking out ways to elicit children's initial engagement in the sessions.

You try all sorts of different things and see what actually gets them there to start it. (...) Try something else if they don't want to do one thing. (Participant 1)

In addition to enjoyment, an important strategy to engage the children was to make activities meaningful and rewarding. Issuing commands by shouting was represented as an unreliable intervention; this is developed further in the master theme of *communication and relationships*. Trying different things and seeing which worked best could be complemented by giving children objectives and using rewards to motivate children to follow instruction.

But I've had to do a lot of, try different things with them and see which things work the best, because sometimes shouting at them does not work and you have to give them something to work towards and then if they sort of don't do it as good or misbehave then you sort of, like a chart system, like I use this sometimes.
(Participant 5)

Participant 2 again provides an alternative representation based on the absence of problems encountered coaching at YPPM. Below, this is accounted for because the coach overlooks or ignores any clinical issues and engages with the children on the sole basis of the activity.

I just treat them as footballers when they go into that gym. Like I say some of them seem to leave the problems at the door and maybe they pick them up afterwards.

(Participant 2)

Finding meaning in behaviour

Participants attempted to find meaning when behaviours were experienced as challenges that required unique responses beyond routine practice. These coaching issues often related to children's concentration and attention, or boredom or misbehaviour. These meanings were used to account for children not complying with coaching instructions or rules. Training and experience represented means by which this interpretative skill was developed.

You know when they're getting bored and know when there's something else, hence why trainings important to find out more about what's going on really.

(Participant 5)

I tend to be able to tell now I've worked with them which one's sort of are struggling with the like attention and the breaking down and listening and how they, you can just sort of tell. (Participant 5)

It appeared that understandings based on pathological meanings (attention and concentration) competed with normalising explanations (boredom and misbehaviour) depending on the agency or control over behaviour ascribed to the child at the time. When pathological explanations were excluded children were credited with agency and difficult behaviour was interpreted as misbehaviour. Children could be protected from blame by identifying environmental characteristics elsewhere, such as over-protection or lack of boundaries, to account for unwanted behaviour and transgressions at coaching sessions. Externalising the meaning of children's behaviour in this way appeared to maintain the possibility of positive regard for children when the coaching relationship was threatened.

I think most of 'em have either been wrapped in cotton wool or they've got used to getting away with things due to whatever, if they've got the disorder. Sometimes you think oh right that's not in the disorder, he's just playing, trying to wind people up or he's bullying. (Participant 4)

Children's behaviour could also have a communicative function or symbolise that children were not engaged with or enjoying an activity. Being alert to this and using experience to reflect upon the meaning of such signs appeared to help coaches identify problems and initiate responses to the behaviour in question.

Obviously there are signs with the ADHD's, whether they be tapping on their heads or spinning around, obviously I have seen first hand some of the signs that they have. But they, after a while you just pick up that it, you pick it up and you

realise that oh right so obviously this isn't floating their boat, you want to keep them concentrated, you want to keep them happy as well or they're not going to be there all together. (Participant 4)

Being responsive v. planning.

The need for coaches at YPPM to be flexible and open to adapting their sessions to the children was a prominent theme. This involved a process of reflection-in-action, thinking on one's feet, in order to quickly respond to the varying presentation of the children. This theme was related to finding meaning in behaviour, as often the reflective process involved the coach having a formulation of the issue and this formed the basis of the coaching response. Coaches were also willing to negotiate activities or allow children some control in deciding what to do.

I don't plan sessions for positive moves. I just go along with equipment, see what sort of moods they're in and just adjust. (...) You've got stock stuff in your head that you do regularly, but then you should be able to, right what can I do with this, all right we'll do this, you know, you think on your feet, think quick, and, ask them. (Participant 1)

Just a case of thinking on your feet and adapting too, cos you can plan to your hearts content but on the day it never works so I don't spend, to have too much time, I have lots of contingency plans in order and if they don't, it's it's a lot more relaxed like they can tell me what they want to do. (Participant 5)

This skill of being able to switch activities and respond quickly was seen to be derived from experience. Without this skill and the necessary experience, it was considered likely that once problems occurred in sessions they would become entrenched.

I can change practices very quickly if it's not working. Inexperienced coaches wouldn't have that ability to do that so if it goes wrong the chances are it stays wrong. (Participant 2)

Children were seen to communicate to coaches a variety of reasons why an activity needed changing. A positive meaning was given to the YPPM programme because it allowed adaptive coaching responses to children's abilities.

If they don't want to do it or if they're finding it hard or if they don't really enjoy it or they're not finding it, if it's too hard for them like, they'll let you know and that's that's the good thing about it. You can swap and change it to suit the abilities. (Participant 4)

While coaches did not approach sessions with rigid session plans, representations of objectives and structures that promoted the unique needs of individuals were evident. Imposing a plan on the children was seen to be futile and instead an openness and flexibility was required. This sense of flux was not restricted to occurring within sessions. Responsiveness and openness to change was required across the programme. Each term raised new issues as children with a variety of needs joined YPPM.

It is constantly changing, we're constantly seeing different types of kids in sessions of programmes and that kind of thing so we're constantly having to change every 12 weeks. (Participant 6)

Time. :

Time allowed coaches to work with children to reach their potential and this varied for each child. For some children it was necessary for coaches to wait a long time to notice any observable progress; in some cases it had to be accepted that they would not progress markedly. An account of the challenge this posed to Participant 3 was presented at the beginning of the over-arching theme *accepting and accommodating children's limitations in sport*. De-emphasising the importance of attainment as a product of time invested and privileging the enjoyment, fitness and social benefits of participation appeared to be a strategy to overcome the challenge that this represented for Participant 3.

Some of them are not no matter how much time they give 'em, they're not going to make it to a mainstream club, but one thing they are doing is trying. They're trying and they're enjoying themselves and they're getting fit and healthy and they're working with others. And I think again that's one thing we cannot overlook. (Participant 3)

Having time to accommodate the issues encountered with children with SHCNs appeared to be crucial to coaches experiencing success at YPPM. The structure and

purpose of YPPM allowed coaches to get to know the children and use their experience to find out what style of delivery the children respond to.

If you sort of do like a trial session and see how it goes, see what characteristics they've got and try to sort of relate your experience to how they respond to that sort of way of teaching it's a lot easier, but again its time and sometimes when you've got twenty in a class its not that easy. That's why the positive moves programme is brilliant. (Participant 5)

Time was experienced as a barrier to coaching some children with SHCNs in mainstream settings. The following account is a reflection upon parents of children at YPPM criticising coaches elsewhere for excluding children with SHCNs. This is interpreted as a defence of coaching practices in those settings. It gives legitimacy to children with SHCNs not being included in mainstream teams. It is further interpreted as maintaining neutrality as to blame for this situation. Incompatibility between the context of a mainstream club and the time required to meet the individual needs of some children with SHCNs is the central meaning here.

If you've got mainstream football out on a field and you get a guy with ADHD or autism who, who tends to run off, you know, a mainstream coach cannot deal with that situation. (...) And to have er a guy in with disabilities like that is going to take a lot of time and he cannot do both. He can't work one-on-one and train his squad ready for the match on Saturday kind of thing. So I think that's the biggest reason why kids with these kind of disabilities don't make mainstream teams. (Participant 3)

Participant 5 also experienced coaching children with SHCNs as requiring more individual time to be spent with children than is typical in mainstream settings. This time was required in order to be able to deliver instructions and respond to children who do not understand tasks.

I think that certain children can just get on with things and do as they're told and just need to be told once to do something. Whereas children that struggle with that need more time and if they don't understand it you have to go over it and break it down. So at mainstream cos you've got so many children to deal with it's hard to break it all down for each individual person and spend the extra time with the people that need the extra time I suppose. (Participant 5)

Patience and tolerance.

Patience was another important factor for accepting and accommodating children's difficulties, both in relation to the challenges presented in sessions and also patience with some children's slow progress. Patience represented a crucial component in the delivery of coaching at YPPM.

I think patience is one of the, I think the big ingredient. (Participant 3)

I think the main thing you have to realise is that they all can progress, it's just that some progress at different paces. (Participant 4)

In the following account a coach identifies experiencing a different level of tolerance when children do not comply with instructions at YPPM compared to coaching elsewhere. This is dependent upon the coach giving different meanings to off-task behaviour according to the context of the session and the corresponding expectations for children's behaviour.

In mainstream I don't let kids mess about, that's my biggest hate. With these positive move kids I have a lot of tolerance, a higher tolerance for it because I know they don't always understand and you need to coax them into coming to do what you want to do, whereas in mainstream when they do know better then my tolerance level is lower with them. (Participant 2)

The next account appears to involve a similar experience of having to be more accommodating of behaviour at YPPM. In this account patience represents a response to children testing the boundaries of their relationship with the coach. Patience is also given broader meaning as it relates to relationships outside the coaching dyad and includes parents.

Some were like I say, will see how far they can go to push you and things like that but erm, I think that it, it's all this, it all boils down to this one little thing of patience. I think patience is so important and it's got to be patience with the kids, got to be patience with the parents, coaching staff, everybody's got to have that extra little bit of patience. (Participant 3)

As we have seen earlier, Participant 3 appeared to experience a conflict between their expectations of children's progress as a marker of success and the realities of the limits to some children's ability and development at YPPM. Strategies to resolve this conflict include developing a sense of delayed gratification, or being patient enough to allow for limited progress over the course of time.

Patience and time. It's, it's something that you've got to work on and, you know, some guys will come on leaps and bounds over one term or two terms, some of them are gonna need a lot lot longer. (Participant 3)

Although patience and tolerance were key factors in the success of YPPM, some coaches anticipated that they would find their jobs more challenging in future. This representation indicates that patience and tolerance alone might not be enough for all individuals as referrals became more complex.

I've noticed that the paediatricians are referring more erm... more player, er kids with more severe disabilities you know, a high, on the high scale of ADHD and autism, so you know there is gonna be a stage where we're finding it hard to work with individuals. (Participant 3)

Focusing on individual development

This theme represented a key principle from sports coaching generally. It reflects the need to respond to the development of mastery of a skill and to counter loss of interest

in an activity by providing children with the stimulation of further challenges. The focus is on individual skill development.

But they also need to be challenged and that's when you, when I recognise when a kid has achieved the best they can do within that skill then I push them on because they're getting bored. (Participant 1)

Coaches in mainstream settings were criticised for assuming ability based on children's ages and placing demands on children with SHCNs that were too difficult for them. The following accounts suggest that it was important to build from basic principles and the stage the child was at when coaching children with SHCNs. It appears that unrealistic demands in mainstream settings are a barrier to children with SHCNs participating in sport as individual needs are not accommodated.

And that is, the others are going too far too advanced, they're looking at their age and they should be doing this, they should be doing that. They should go straight back down to the early stages. (Participant 1)

A PE teacher wouldn't do that. He'd get all of them doing the same drill then a match. And the poor positive move kid or the mainstream kid that got two left feet will stand there and probably hardly get a kick. (Participant 2)

When children were presented with challenges it was important to recognise and reward their attempt at it, and to encourage this ethos among the children, without regard to attainment. The children were seen to be achieving based on their participation, having

a go. This is a characteristic of a mastery climate in sport where praise is given for effort.

We make sure that when we challenge, when we are doing things like the speed kick, that they all give each other a round of applause no matter what the score is, whether they got one mile an hour or forty-two mile an hour. (Participant 3)

Representations of children being seen to achieve on their own terms are amplified in the following account. The importance of promoting a mastery climate is evident. The aim is personal development. Emphasis is placed on the active exclusion of characteristics of performance climates, where group members are compared to each other and praise is a response to superior performance relative to peers.

What we try to stress to them right from the beginning, it's not what your mate can do or one of the other referrals. It's what you can do. (...) That's what our aims are, to make sure that they do what they can do, not what others or what others expect of them, you know, that's the thing. (...) I think again that is one of the things that we should set out from the outset, that you know it's all personal goals not you know, nobody's expecting you to beat the next player or boy or girl or whatever, you know. (Participant 4)

Small groups and one-to-one coaching

This theme was closely related to the previous themes *patience and tolerance* and *time*. Small groups were necessary in order to meet individual needs and provide equal

opportunities to participate in sports. Larger classes precluded this because it might be difficult to manage the children and keep them on task. Small groups were also experienced as enabling opportunities to accommodate the need for greater support and tuition in sport for children who have SHCNs. It was necessary to have a higher coach-child ratio when working with children with SHCNs in order to manage groups, problems with concentration, and respond to needs relating to limited motor skills.

I think everyone should get an equal opportunity to have a go at gymnastics. It's just better in this sort of situation where you can give them more one on one attention. Whereas in a normal class based you'd struggle to keep them in order I think. The ratio's a lot higher. (Participant 5)

You've got to have enough coaching staff erm, for several different reasons, erm but I think the main one is often the concentration of these guys and you're often having to take somebody to one side and go into more depth with what to do, even the simple thing as running, simple things like that. (Participant 3)

I had one of the mums say to me can you help him kick a ball because he goes to football and he can't kick a ball, but because they're in a big group he doesn't get that one to one to try and kick a ball. (Participant 1)

The importance of being able to work one-to-one with children with SHCNs was amplified by Participant 1 as a crucial factor in responding to difficulties with attention and concentration. As a counter-measure to this difficulty it was necessary for the coach to be able to concentrate on, or for, the individual. This allowed a rapid response in

order to provide appropriate stimulation and interest when concentration difficulties or distraction became evident.

They do need that one-to-one because if their concentration goes within a split second, as soon as your back's turned they're not interested so you've got to really concentrate on them. (Participant 1)

With positive moves kids they do need that one- to-one because as soon as your back's turn they've got no attention there, they're not interested, they just wander off doing something else in general. They really need that stimulation all that time. (Participant 1)

Participant 2's experience seemed to vary from the consensus about small groups being necessary in order to manage the coaching issues encountered with children with SHCNs. Small groups appear to prevent some of the coaching issues associated with coaching larger groups in mainstream settings generally.

*I've had more problems with mainstream kids in sessions than with this group.
(...) A lot of that is because you're working with a bigger group. (Participant 2)*

One-to-one coaching and small groups seemed to be experienced by the coaches as a favourable characteristic of coaching at YPPM. This structural factor appeared to allow coaches to focus on basic principles and to progress as necessary. A tension is evident between this need and the demands encountered in larger groups.

I prefer doing one-on-ones, but when it's two or three in the group it, that way you can get into basics with them, you can, you can progress whenever you like, not having to suit the needs of everybody else. (Participant 4)

It was evident that the possibilities for small groups and individual coaching afforded by YPPM were experienced by the coaches as enabling children's development. Overall there was an enthusiasm and excitement among the participants for this feature of the scheme.

I think we can work miracles if you, if you worked one-on-one with them.
(Participant 3)

DISCUSSION

This paper has highlighted a number of themes interpreted from sports coaches' accounts of experiences of working with children with SHCNs on an exercise referral scheme. These themes were interpreted as being broadly to do with the ways that coaches accepted and accommodated the children on the scheme. Children's difficulties with concentration and attention were the main challenges that coaches reported experiencing and some children were viewed as highly distractible. A number of themes relating to how coaches experienced responding to these issues were presented.

Problems following instruction and remaining on task are associated with coaching children with conditions such as ADHD and ASD (Beyer, Flores & Vargas-Tonsing, 2008). This was supported by the coaching experiences reported here. Participants'

identified that concentration and attention were the main challenges experienced when coaching on the exercise referral scheme. Although the coaches interpreted the problems as internal to the children, it appeared positive that they also experienced this as responsive to the coaching environment. The coaches took responsibility for responding to these difficulties and avoided viewing the children's behaviour negatively.

Being able to quickly change activities was a common experience amongst the participants. They described having to be alert and responsive to signs of children losing interest. Participants learnt through experience to interpret the signs that children were not concentrating. Experience of working with children with ADHD is associated with coaches having positive attitudes to coaching children with the condition (Beyer, Flores & Vargas-Vargas-Tonsing, 2008). Participants approached children's concentration and attention difficulties by transforming them into issues that coaches had to be responsible for. Participants sought to find what would work, what would engage a child's attention and what they would enjoy, consistent with images of artful teachers who do not require children to conform to the adult's repertoire of practice (Schon, 1983).

The participants described focussing on enjoyment and finding ways to engage the children. Some participants were explicit that their main goal was for children to enjoy the sessions and they were not concerned about competitive success. Coaches play a central role in setting the motivational climate and the promotion of enjoyment from participation is a key feature of creating a mastery climate (Weiss, Amorose & Wilko, 2009). Mastery climates are important because they have been shown to promote participation and enjoyment of physical activity among children (Allender, Cowburn &

Foster, 2006; Biddle et al., 1995; Goudas et al., 1995; Rees et al., 2001). Other themes reported here that resonated with notions of mastery climates included *being responsive v. planning* and *focussing on individual development*.

Within the theme *being responsive v. planning* some accounts included asking children what they want to do. Leadership was negotiated rather than imposed. Choice is an important feature in mastery climates and is associated with promoting children's participation in sports and physical activity (Allender, Cowburn & Foster, 2006; Goudas & Biddle, 1994; Goudas et al., 1995; Rees et al., 2001). Giving the children choices about activities and use of equipment was an important part of the coaching experience on the exercise referral scheme.

Individual development, participation and effort were privileged in the theme *focussing on individual development* and practices that promoted comparison to peers or emphasised expectations about absolute level of athletic performance were rejected. Some participants here spoke of making sure that effort is applauded regardless of level of performance. An emphasis on individual development without comparison to peers is another important factor in the creation of mastery climates (Biddle & Mutrie, 2008; Weiss, Amorose & Wilko, 2009).

Reflection-in-action and reflective practice generally appeared to be crucial in determining coaches' sense of success and their abilities to engage the children.

Accounts of 'thinking on your feet' were evident. This has been identified as a key feature of reflection-in-action (Schon, 1983). Coaches learn to coach primarily through experience and reflective practice is central to this (Gilbert & Trudel, 2006). Reflective

practice in youth sport coaching is a means by which coaches identify problems and generate and test strategies to address such challenges, and a means by which experience is transformed into knowledge (Gilbert & Trudel, 2001; Gilbert & Trudel, 2006).

Reflective practices whereby meaning was given to behaviour in order to inform coaching responses were interpreted within the theme *finding meaning in behaviour*. For some participants it was important to be able to interpret signs that children were not paying attention or concentrating and this skill was positioned by participants as being acquired through experience. Pathological meanings competed with normalising explanations depending on the agency one coach gave to children for the behaviour in question. This is further interpreted here as resonating with concerns about the impact of labels such as ADHD and the ways that such conditions are constructed by the social environment (Newnes & Radcliffe, 2005). Through experience coaches were able to give meaning to behaviour and were able to distinguish between simple misbehaviour from problems associated with conditions, considered an important skill for coaches because misattributing behaviour may lead to exclusion (Beyer, Flores & Vargas-Vargas-Tonsing, 2009)

Participants spoke of the importance of having patience and tolerance with children in sessions and also of being patient about the rate at which children's skills progressed. Coaches may typically expect effort to correspond to children's development of competence (Weiss, Amorose & Wilko, 2009). However, coaches' experiences on the exercise referral scheme challenged such expectations and it was necessary to accept that some children would take a long time to progress. This may hint at a flaw in

notions of mastery climates as some children appear to challenge the assumptions it makes about the trajectory of skill and competence development.

The structure of YPPM was experienced by the participants as supporting responsive practices and enabling the coaches to accommodate the children. Structural factors such as the time available to coach individuals, and the small groups that made this possible, were viewed as important parts of the scheme. Time has previously been recognised as an important issue to coaches and a constraint on their practice (Strean, 1995). These structural factors were contrasted here with coaching time and group sizes in mainstream recreational and competitive coaching settings.

The participants reported that in their experience the exercise referral scheme was a necessary intervention in order to be able to provide sports and physical activity coaching to some children with special health care needs. These opportunities were not considered by the participants to be available in mainstream extracurricular settings, consistent with concerns expressed by Sport England (2000) that opportunities for disadvantaged groups are limited. The coaches interviewed here believed that in most cases they were able to ensure children with SHCNs developed skills and abilities and benefited socially as a consequence of attending an exercise referral scheme designed to meet their needs. Adapted physical activity represents a socially acceptable intervention with a benign side-effect profile for children with ADHD and ASD (Attwood, 2007; Barkley, 2004).

Practice in mental health services in general has been criticised for overlooking the importance of physical activity in treatment planning (Callaghan, 2004; Daley, 2002)

and parents of children with SHCNs have indicated that clinicians overlook children's physical activity (Minihan, Fitch & Must, 2007). This paper has implications for psychologists and youth sport and physical activity coaches who work with children with SCHNs.

Coaches are significant adults to the children they coach (Tofler & Butterbaugh, 2005; Weiss, Amorose & Wilko, 2009). Coaches' relationships with young people can play a role in determining prosocial outcomes of youth sport participation (Rutten et al., 2007). Children with SHCNs face significant inequalities in leisure (Collins, 2004). They may face exclusion from sports and physical activity (Attwood, 2007; Beyer, Flores & Vargas-Tonsing, 2008) despite the potential positive contribution such participation can make to outcomes in education and employment (Bartko & Eccles, 2003; Eccles, Barber, Stone & Hunt, 2003; Larson & Verma, 1999) and the protective effect it may have against delinquency (Eccles & Barber, 1999). The exercise referral scheme discussed here has the potential to have a positive role in the development of the children who participate. Social well-being and sense of belonging to the community are promoted by participation in structured sports and leisure activities (Albanesi, Cicognani & Bruna, 2007; McMillan, 1996).

Improvements in all aspects of children's lives should be a key objective in the health care offered to children with SHCNs (Leroux, 2009). Leroux (2009) encourages a focus on achieving complete wellness. Interventions have traditionally focussed on outcomes in the home and the school, ignoring the importance of enjoyment of life outside of school. Performance in school, healthy relationships in the home, and successful interactions with members of extracurricular groups and friends through sports and

social groups should be promoted for children with SHCNs (Attwood, 2007; Leroux, 2009).

It is recommended that coaches on exercise referral schemes for children with SHCNs should be supported by parents and health care workers to understand the unique manifestations of difficulties associated with conditions such as ADHD or ASD. This would support coaches in identifying ways to respond to children, what they enjoy and find motivating, and triggers and signs of difficulties with concentration and instruction. A further recommendation based in the findings presented here is that structures should be put in place to ensure coaching practice is informed by values and objectives consistent with promoting mastery climates. A programme-wide atmosphere of freedom to experiment and develop creative approaches by organisations responsible for the delivery of exercise referral schemes has been shown to be of value here. This is consistent with recommendations to promote innovative and reflective practices and consider structural and contextual factors in developmental youth sports coaching (Gilbert & Trudel, 2006; Strean, 1995).

Limitations of the study

The literature showing that coaching skills are acquired through experience and that with such experience knowledge is transformed into practice indicates that these findings about internalisation and reflection on coaching issues would not necessarily be transferable. Inexperienced coaches or coaches who are experienced in youth sports coaching but who rely on standard procedures and/or have not enjoyed the success with children with SHCNs that these participants experienced would be likely to provide

different accounts and corresponding themes to those reported here. This sample was restricted to a group of coaches immersed in a unique coaching culture and enterprise and this will have shaped their experiences and ways of talking about it (Culver & Trudel, 2006).

This study is limited by the method as to the claims that can be made about 'finding' that the participants applied the techniques and values associated with the literature on mastery climates in sports coaching. However, some of its central features, such as focussing on choice, enjoyment and individual development were interpreted from the coaches' accounts. These features were interpreted as important in the coaches' experiences. Reflexively, it is important to note that the literature on mastery climates was identified by the author after the interviews and initial analysis were conducted.

In retrospect a further limitation of the study is that it did not ask participants about any strengths the children may have had in sports or physical activity, such as energy, stamina, rule following or commitment to practice. Such strengths may be associated for some children with SHCNs and sport. However, it is considered that the questions and flexibility of the semi-structured interview schedule would allow some participants to raise such issues. It would be interesting for future research to explore this further.

The context of the interviews discussed here may have affected the ways that experiences were reported by participants. The interviews were conducted as part of the researcher's doctorate in clinical psychology and this may have given rise to expectancy effects among participants as to what they should emphasise and things that were left unsaid.

Implications for future research

It will be important for future research to clarify the nature and extent participation and exclusion for children with SHCNs in sport and physical activity, and to clarify any benefits and risks. An immediate possibility for future research emerging from this study would be to explore children with SHCNs and their parents' experiences of participation and exclusion. Some preliminary work has been done with parents of children in the exercise referral scheme reported here in focus groups for the purpose of evaluating the programme. Parents reported significant experiences of barriers and exclusion by coaches and community-based organisations based on their children's SHCNs. It appears important to explore this further in future research.

Children and parents' perceptions and experiences of motivational climates on the scheme and elsewhere also appear to be important issues requiring further exploration. . In particular, it appears important to address children's experiences. While tentative interpretations have been offered here about the role of mastery climates in coaches' experiences of the exercise referral scheme, the views and experiences of the children participating are essential to furthering such interpretations. Finally, it appears important to gather the perspectives of coaches in mainstream settings about including children with SHCNs in order to further understand barriers and facilitators to inclusion.

CONCLUSION

Accounts of learning from experience and using experience to transform knowledge were evident here as coaches searched for meaning of their experiences in order to develop practices to meet children's needs. Participants' accounts indicated that they learnt to identify issues and respond accordingly through experience and reflective practice. The strategies that the coaches used to internalise problem situations resonated with Schon's (1983) illustration of how challenging practice dilemmas encountered in teaching are internalised through reflection. Schon (1983) argues that artful teachers seek to understand and find meaning in children's problems with learning. The findings presented here offer limited support for the importance of mastery motivational climates in promoting sports and physical activity participation among children with SHCNs.

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Appendix A: Instructions for authors (Journal of Community and Applied Social Psychology)

Aims and Scope

The Journal of Community & Applied Social Psychology will review and report concepts, methods and experience relating to individual and social behaviour in the context of community problems. The journal will be international in scope, reflecting the common concerns of community practitioners and researchers in Europe and worldwide.

Emphasis will be given to:

- Innovative concepts and interventions
- Evaluation of methods and experience
- The promotion of well being and social justice
- Dialogue between researchers, practitioners and lay members of the community.

The content of the journal will include:

Research papers which report quantitative and qualitative studies (or applications of case study methods)

Review articles which survey theoretical developments or topics of major interest

Innovations in practice , brief reports by practitioners which describe interesting new developments and interventions

Communications and commentary or informal accounts of new ideas, initiatives, or interventions in progress, and commentaries on social, legal, medical, educational or administrative developments from the community psychology perspective.

Book and other media reviews

Calendar of events , conferences relevant to Community & Applied Social Psychology

Debates and commentaries arising from the research and review articles will be warmly welcomed and encouraged, and published as part of that section of the Journal.

Contributions are invited on all aspects of Community & Applied Social Psychology, including the psycho-social aspects of: Mental & Physical Health * Stress * Addictions * AIDS * Racism * Immigration * Ethnicity * Gender * Identity * Sexuality * Community Empowerment and Participation * Environmental Issues * Organisation & Communities of Practice * Crime, Police and Legal

Processes in the Community * Deviance & Delinquency * Family Problems & Care * Social Competence, Deprivation, Poverty, Homelessness * Organisation of Treatment Environments * Health Education & Social Services * Community Care, Community Centres & Programmes * Voluntary & Informal Care & Community Action * Professional Issues for Psychologists & Community Practitioners.

Readership

Social Psychologists · Clinical Psychologists · Social Workers · Administrators · Community and Health Professionals · Social Scientists · Psychiatrists

Instructions To Authors

Initial Manuscript Submission. The preferred submission method is by e-mail attachment (WORD Format) to: email:

s.g.l.schruijer@uu.nl . Alternatively submit three copies of the manuscript (including copies of tables and illustrations) to Sandra Schruijer, Utrecht School of Governance, University of Utrecht, Bijlhouterstraat 6, 3511 ZC Utrecht, The Netherlands.

Authors **must** also supply:

- an electronic copy of the final version (see section below),
- a Copyright Transfer Agreement with original signature(s) - without this we are unable to accept the submission, and
- permission grants - if the manuscript contains extracts, including illustrations, from other copyright works (including material from on-line or intranet sources) it is the author's responsibility to obtain written permission from the owners of the publishing rights to reproduce such extracts using the Wiley Permission Request Form . Permission grants should be submitted with the manuscript.

Submitted manuscripts should not have been previously published and should not be submitted for publication elsewhere while they are under consideration by Wiley. Submitted material will not be returned to the author unless specifically requested.

Electronic submission. The electronic copy of the final, revised manuscript should be sent to the Editor **together with** the paper copy. Disks should be PC or Mac formatted; write on the disk the software package used, the name of the author and the name of the journal. We are able to use most word processing packages, but prefer Word or WordPerfect [and TeX or one of its derivatives].

Illustrations must be submitted in electronic format where possible. Save each figure as a separate file, in **TIFF** or **EPS** format preferably, and include the source file. Write on the disk the software package used to create them; we favour dedicated illustration packages over tools such as Excel or Powerpoint.

Title and Abstract Optimisation Information. As more research is read online, the electronic version of articles becomes ever more important. In a move to improve search engine rankings for individual articles and increase readership and future citations to Journal of Community and Applied Social Psychology at the same time please visit **Optimizing Your Abstract for Search Engines** for guidelines on the preparation of keywords and descriptive titles.

Manuscript style. The language of the journal is English. All submissions including book reviews must have a title, be printed on one side of the paper, be double-line spaced and have a margin of 3cm all round. They should not normally exceed 7,000 words in length, or equivalent in text, references and tables, and should include a word count where possible. Illustrations and tables must be printed on separate sheets, and not be incorporated into the text.

- The **title page** must list the full title, a short title of up to 40 characters and names and affiliations of all authors. Give the full address, including e-mail, telephone and fax, of the author who is to check the proofs on this page, as the *Journal of Community & Applied Social Psychology* operates a 'blind' reviewing system.
- Include the name(s) of any **sponsor(s)** of the research contained in the paper, along with **grant number(s)**.
- Supply an **abstract** of up to 200 words for all articles, except book reviews. An **abstract** is a concise summary of the whole paper, not just the conclusions, and is understandable without reference to the rest of the paper. It should contain no citation to other published work.
- Include up to ten **key words** that describe your paper for indexing purposes.

Short Papers of no more than 2,000 words in length [or equivalent in text, references and tables] are encouraged. Research papers, Innovations in practice and Communication and commentary are all welcome in the Short Paper section. Submissions will be reviewed in the usual way but it is anticipated that the reviewing and publication process will be of shorter than average duration than for longer papers. Abstracts for Short Papers should be of around 50 words.

Reference style . The APA system of citing sources indicates the author's last name and the date, in parentheses, within the text of the paper.

A. A typical citation of an entire work consists of the author's name and the year of publication .

Example: Charlotte and Emily Bronte were polar opposites, not only in their personalities but in their sources of inspiration for writing (Taylor, 1990). Use the last name only in both first and subsequent citations, except when there is more than one author with the same last name. In that case, use the last name and the first initial.

B. If the author is named in the text, only the year is cited .

Example: According to Irene Taylor (1990), the personalities of Charlotte. . .

C. If both the name of the author and the date are used in the text, parenthetical reference is not necessary .

Example: In a 1989 article, Gould explains Darwin's most successful. . .

D. Specific citations of pages or chapters follow the year .

Example: Emily Bronte "expressed increasing hostility for the world of human relationships, whether sexual or social" (Taylor, 1988, p. 11).

E. When the reference is to a work by two authors, cite both names each time the reference appears .

Example: Sexual-selection theory often has been used to explore patterns of various insect matings (Alcock & Thornhill, 1983) . . . Alcock and Thornhill (1983) also demonstrate. . .

F. When the reference is to a work by three to five authors, cite all the authors the first time the reference appears. In a subsequent reference, use the first author's last name followed by *et al* . (meaning "and others") .

Example: Patterns of byzantine intrigue have long plagued the internal politics of community college administration in Texas (Douglas *et al* ., 1997) When the reference is to a work by six or more authors, use only the first author's name followed by *et al* . in the first and all subsequent references. The only exceptions to this rule are when some confusion might result because of similar names or the same author being cited. In that case, cite enough authors so that the distinction is clear.

G. When the reference is to a work by a corporate author, use the name of the organization as the author .

Example: Retired officers retain access to all of the university's educational and recreational facilities (Columbia University, 1987, p. 54).

H. Personal letters, telephone calls, and other material that cannot be retrieved are not listed in References but are cited in the text .

Example: Jesse Moore (telephone conversation, April 17, 1989) confirmed that the ideas. . .

I. Parenthetical references may mention more than one work, particularly when ideas have been summarized after drawing from several sources. Multiple citations should be arranged as follows .

Examples:

- List two or more works by the same author in order of the date of publication: (Gould, 1987, 1989)
- Differentiate works by the same author and with the same publication date by adding an identifying letter to each date: (Bloom, 1987a, 1987b)
- List works by different authors in alphabetical order by last name, and use semicolons to separate the references: (Gould, 1989; Smith, 1983; Tutwiler, 1989).

All references must be complete and accurate. Where possible the DOI for the reference should be included at the end of the reference. Online citations should include date of access. If necessary, cite unpublished or personal work in the text but do not include it in the reference list. References should be listed in the following style:

Journal Article

Gardikiotis, A., Martin, R., & Hewstone, M. (2004). The representation of majorities and minorities in the British press: A content analytic approach. *European Journal of Social Psychology*, 34 , 637-646. DOI: 10.1002/ejsp.221

Book

Paloutzian, R. F. (1996). *Invitation to the psychology of religion* (2nd ed.). Boston: Allyn and Bacon.

Book with More than One Author

Natarajan, R., & Chaturvedi, R. (1983). *Geology of the Indian Ocean* . Hartford, CT: University of Hartford Press.

Hesen, J., Carpenter, K., Moriber, H., & Milsop, A. (1983). *Computers in the business world* . Hartford, CT: Capital Press. and so on.

The abbreviation *et al.* is not used in the reference list, regardless of the number of authors, although it can be used in the text citation of material with three to five authors (after the initial citation, when all are listed) and in all parenthetical citations of material with six or more authors.

Web Document on University Program or Department Web Site

Degelman, D., & Harris, M. L. (2000). *APA style essentials* . Retrieved May 18, 2000, from Vanguard University, Department of Psychology Website:

http://www.vanguard.edu/faculty/ddegelman/index.cfm?doc_id=796

Stand-alone Web Document (no date)

Nielsen, M. E. (n.d.). *Notable people in psychology of religion* .

Retrieved August 3, 2001, from

<http://www.psywww.com/psyrelig/psyrelpr.htm>

Journal Article from Database

Hien, D., & Honeyman, T. (2000). A closer look at the drug abuse-maternal aggression link. *Journal of Interpersonal Violence*, 15 , 503-522. Retrieved May 20, 2000, from ProQuest database.

Abstract from Secondary Database

Garrity, K., & Degelman, D. (1990). Effect of server introduction on restaurant tipping. *Journal of Applied Social Psychology*, 20 , 168-172. Abstract retrieved July 23, 2001, from PsycINFO database.

Article or Chapter in an Edited Book

Shea, J. D. (1992). Religion and sexual adjustment. In J. F. Schumaker (Ed.), *Religion and mental health* (pp. 70-84). New York: Oxford University Press.

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Appendix B: EXTENDED LITERATURE REVIEW

Overview and justification of study

This study examines the experiences of a small number of coaches who work on an exercise referral scheme for children with special health care needs (SHCNs) such as attention deficit hyperactivity disorder (ADHD) and autistic spectrum disorders (ASD). Children with SHCNs can face significant barriers to involvement with peers in extracurricular physical activity and sports. These barriers arise due to difficulties directly related to a condition, such as immaturity in motor skills, problems with concentration and impulsivity, and because of the social stigma associated with these difficulties (Attwood, 2007; Houston-Wilson, 2005; Lavay, 2005).

It is widely accepted that regular physical activity and exercise confer substantial health benefits on the individual participant. The physiological benefits have been extensively studied in adults and are universally acknowledged (Health Education Authority, 1997). Individuals who exercise regularly can also benefit psychologically from reduced state and trait anxiety, lower rates of depression, improvements in cognitive functioning, improved self-esteem, enhanced mood states and greater capacity to endure stress (Health Education Authority, 1997).

It is apparent that regular participation in physical activity and exercise can both prevent and ameliorate ill-health. This has led to increasing recognition of the importance of physical activity and exercise for public health (Biddle & Mutrie, 2008). Sedentary behaviour and the associated social, economic and health outcomes present industrialised nations with epidemics in physical inactivity and obesity (Hagger &

Chatzisarantis, 2005). Many forms of exercise are healthy and physical activity is now a public health priority for governments and other agencies (Biddle and Mutrie, 2008). Physical activity (PA) is used here to refer to health-related and sport-related activity (Mutrie and Parfitt, 1998).

Since the 1990's UK National Health Service (NHS) priorities have changed from reacting to illness and disease to a greater emphasis on primary and secondary prevention (Biddle & Mutrie, 2008). This has led to a growth in public health initiatives focussing on reducing sedentary behaviours. Corresponding developments in exercise referral schemes for those known to be at risk of health complications arising from inactivity have occurred but are yet to become widespread (Biddle & Mutrie, 2008).

It is not the purpose of the current project to directly address the physical or psychological health benefits of physical activity for young people. It is acknowledged that physical activity has many health and developmental benefits for young people. Such benefits are shown to occur to growth and maturation, aerobic fitness, muscular strength, bone mass and strength, and protection against health problems including diabetes, heart disease and obesity (Armstrong and Welsman, 1997). However, it is noted that others have contended that there is no compelling evidence unambiguously relating childhood physical activity to childhood health (Riddoch, 1998).

Physical activity is recognised by the Department of Health (2004) as a cornerstone of child development and psychological well-being. Clinical psychologists working in Child and Adolescent Mental Health Services (CAMHS) play a key role in promoting the development of children with special health care needs (SHCNs). Clinical

psychology and mental health services in general have largely neglected to consider the inclusion of physical activity and exercise behaviour as components in care planning (Daley, 2002). Opportunities for clinical psychologists in the UK to refer to exercise promotion schemes and share knowledge and skills with exercise leaders remain limited at present. However, there has been recent growth in the availability of exercise referral schemes and current public health developments make this likely to continue (Biddle & Mutrie, 2008).

As energy intake and energy output are determined primarily by behaviour, psychology is a key discipline in understanding and addressing the problems of sedentary lifestyles and physical activity within the general population (Biddle & Mutrie, 2008). There is now an established sub-discipline within psychology that is concerned with physical activity and exercise related behaviour as well as a flourishing trade in sport psychology. Within the UK these disciplinary developments are represented by the Division of Sport and Exercise Psychology within the British Psychological Society (BPS). The BPS Division of Health Psychology overlaps with these interests, particularly when the emphasis is on health as opposed to performance or participation. It is important to justify at the outset of this report why this project is relevant to clinical psychology.

Clinical psychologists could benefit from understanding the implications of SHCNs for coaching in order to support exercise behaviour through care planning. Parents of young children with SHCNs have indicated that physical activity is an important issue that is often overlooked by health professionals involved in their children's care (Minihan, Fitch & Must, 2007). While physical activity leaders are gaining a toehold in some NHS

Trusts, it is by no means commonplace for exercise and physical activity to be included in care plans (Callaghan, 2004; Daley, 2002). This is particularly true for mental health services, where clinical psychology and psychiatry have been criticised for overlooking this aspect of mental health promotion and recovery (Daley, 2002). This may change as the introduction of Physical Activity Care Pathways (PACPs) is occurring in the National Health Service (NHS) (Department of Health, 2009). It is perhaps timely for clinical psychologists to join in the debates about physical activity promotion among the populations that they serve.

It is possible that further dialogue between clinical psychologists and those working in exercise promotion settings could benefit service users. Clinical psychologists working with children with SHCNs such as autistic spectrum disorder (ASD) and attention deficit hyperactivity disorder (ADHD) should support families and young people to become more active and promote health and well being (Attwood, 2007; National Institute for Health and Clinical Excellence (NICE), 2008).

By learning from coaches, clinical psychologists can work with families to identify and overcome the barriers to physical activity that might be associated with emotional and behavioural SHCNs. A further benefit of such dialogue is the potential for clinical psychologists to support coaches by providing consultation regarding the children's conditions and coaching issues that might arise in sessions. Consultancy is likely to be an important form of service delivery for the survival of clinical psychology as a profession (Pilgrim, 2008). Perhaps the introduction of PACPs will provide opportunities to expand the scope for clinical psychologists to offer services in this way. Clinicians working with children with SHCNs should work to improve outcomes in all

settings in which children develop. This should include extracurricular, sporting and social opportunities beyond the home and school (Attwood, 2007; Leroux, 2009)

Increasing young people's participation in health enhancing physical activity is not the responsibility of one organisation or sector (Cavill, Biddle & Sallis, 2001). Education, local authorities, health and other national government departments, media, and sport and recreational organisations have key roles to play (World Health Organisation (WHO), 2004). Programmes should be designed to meet the specific needs of young people with SHCNs, requiring the involvement and coordination of national, regional and local agencies (Biddle & Mutrie, 2008) but such programmes are yet to become widely available (Sugden, 2007a; Minihan, Fitch & Must, 2007).

The aim of the current project was to explore the experiences of professional coaches involved in an exercise referral scheme for young people with emotional and behavioural SHCNs. The coaches have direct experience of leading physical activity programmes for young people with SHCNs and also of working in mainstream developmental coaching settings. By talking about their experiences during semi-structured interviews, the coaches provide valuable reflections about the issues encountered when accommodating children with SHCNs in physical activity sessions.

The exercise referral scheme is called Young Person's Positive Moves (YPPM). This appears to be the first scheme of its kind in the UK and there are no manuals or guidance on which to base practice (Sugden, 2007a, 2007b). The coaches had initial orientation sessions with a community paediatrician regarding the conditions of the

children being referred, but otherwise have had to apply and adapt their skills from mainstream coaching.

Parents of children with behavioural and emotional SHCN have indicated that they and their children value YPPM for its specificity to their needs (Sugden, 2007a; Sugden 2007b). Some parents also proposed that the knowledge and skills of the coaches that deliver the scheme could helpfully be applied in mainstream community organisations. For many of the children and parents involved in the scheme, prior experiences of accessing community-based organised physical activity (e.g. football, dance or gymnastics) had been problematic, with descriptions of children being rejected and subject to stigma because of their condition (Sugden, 2007b).

The aim here is to develop understanding about coaches' experiences of working with children with emotional and behavioural SHCN at an exercise referral scheme. Specific aspects of experience that are of interest include relationships with children and parents, and ways that children's needs are understood. The latter aim is framed by the need to complete a project towards a doctorate in clinical psychology. The former aim of looking at relationships with parents was arrived at following observations made during my wider involvement with the scheme and because parents of children using the scheme had directly influenced the decision to undertake the project. It became apparent that coaching at YPPM involved coaches and parents forming relationships on the basis of children's participation in the scheme, leading to curiosity about how these relationships informed experiences of coaching. Coaches and their experiences are undoubtedly important in the promotion of physical activity among young people with SHCNs. This is supported by recent research (Beyer, Flores & Vargas-Tonsing, 2008).

The literature review presented below begins by briefly discussing the prevalence of physical activity and exercise among young people. Evidence regarding barriers to participating in physical activity is reviewed. It then describes the position and policy of government in the UK with regard to physical activity, exercise and health. The importance of recreational physical activity for children with SHCNs is discussed and some strategies for inclusion are illustrated. An overview of the development of exercise referral schemes is provided and community interventions to increase physical activity are discussed. Group climate and the role of coaching and exercise leadership in promoting physical activity are described and the use of reflective practice by coaches is examined. Finally, the literature review concludes by describing the exercise referral scheme that the interview participants for this thesis were recruited from.

Prevalence of physical activity among young people in the UK

In 1997 the National Diet and Nutrition Survey investigated the prevalence rates of physical activity among a representative sample of 2672 young people aged 4 to 18 in the UK (Department of Health, 2000). The majority of young people achieved moderate intensity physical activity for 30 minutes each day but concern was expressed about the numbers not participating in an hour or more. The report concluded that there were high levels of inactivity among young people in the UK. Participation declined with age and those in late adolescence participated least. There was a clear sex difference with males being more active and females less active. Among 11 to 18 year olds, males frequently reported football and other ball games, brisk walking, and cycling as modes of activity while females reported brisk walking, domestic chores, running/jogging, physical

education and gym activities (Department of Health, 2000). Girls are becoming inactive at a higher rate than boys, although activity levels among 11 to 13 year olds appears to be decreasing generally (Armstrong, Welsman & Kirby 2000).

In 1999 Sport England conducted a survey of physical activity in and out of school among a random sample of 3,319 young people 6 to 16 years old, and 151 physical education (PE) teachers (Sport England, 2000). The results were compared with a similar survey from 1994. An increase in those spending between 30 minutes and an hour on PE each week was reported but there was a decline in those spending two or more hours on PE. The overall trend was that more young people were spending less time in PE rather than more and this was most marked for primary schools. While all secondary schools had at least one specialist PE teacher, only half of the primary schools had teachers with a specialist PE qualification.

A slight increase in young people participating in physical activity out of school was reported (Sport England, 2000). Both boys and girls reported increased participation in football, the most popular type of sport. Boys showed a greater preference than girls for team sports and there was a slight increase in membership of an organised sports club outside school. While the findings were positive overall with relation to increased participation in physical activity outside school, this trend was not thought to compensate for the decrease in opportunities for physical activity in the school curriculum, reflected in the downward trend in time spent in PE. Furthermore, the authors were cautious about the extent of opportunities for extra curricular sport as these were likely to be more appealing and accessible to skilled young people and those with better access to facilities. Concern was expressed about disadvantaged groups only

taking part in sport and exercise at school when the priority of PE in the curriculum appeared to be declining (Sport England, 2000).

Facilitators and barriers to physical activity

A systematic review of studies investigating barriers and facilitators to young people's physical activity found that research has concentrated on children in mainstream schools and little attention has been paid to issues of diversity and social exclusion (Rees, Harden, Shepherd & Oliver, 2001). While it is unclear how applicable these studies are to children who infrequently or never attend school (Rees, Harden, Shepherd & Oliver, 2001) or to children with SHCN, it is worthwhile to consider the barriers and facilitators that apply to children in general.

The majority of the sixteen studies identified by Rees and colleagues (2001) of young people's views about physical activity asked about perceptions of physical activity and what stops them taking part. There was a consensus among young people that physical activity is beneficial in helping to develop new skills, increasing health and fitness, and providing opportunities for socialising and enjoyment. Differences in perceptions of physical activity were apparent between the sexes. Adolescent girls value the role of physical activity in maintaining weight and disliked competitive exercise. Some studies reported that girls found that their perceptions of femininity and leisure time conflicted with attempts to be physically active. Boys generally found physical activity to fit well with their leisure time and male identities, but less active boys reported a dislike of competitive exercise, such as sports (Rees et al., 2001).

Barriers to physical activity were categorised as relating to self, others, practical and material resources/circumstances and schools (Rees et al., 2001). Feelings of incompetence, anxiety about negative evaluations by others, lack of motivation and constraints associated with parents and peers were related to self and others. Lack of time, cost, transport and facilities were identified as barriers in practical and material resources. Many young people reported that negative perceptions of physical education in schools were associated with lack of choice and negative and insensitive behaviour of teachers (Rees et al., 2001).

Young people identified demonstrating their skills, social benefits and weight control as facilitators in the self category, with parental and peer support providing facilitation from others (Rees et al., 2001). In order to promote physical activity, young people considered emphasising fun and the social benefits of physical activity to be important, rather than the physical benefits. They suggested increasing or modifying material resources by making access to clubs and facilities affordable and providing more choice in activities (Rees et al., 2001).

Research into determinants of physical activity has historically used quantitative methods to ask pre-determined questions about an individual's knowledge, attitudes or beliefs about sport and physical activity (Allender, Cowburn & Foster, 2006). While such studies can address trends in participation they are unable to account for how children adopt, maintain or cease participation in sports and physical activity. Qualitative methods allow in-depth exploration of individual experiences and perceptions of facilitators and barriers to physical activity as such approaches are

sensitive to contextual, social, economic and cultural influences on participation (Allender, Cowburn & Foster, 2006).

Allender and colleagues (2006) reviewed twenty-four qualitative research papers from the UK that examined children and adults' reasons for participation and non-participation in sport and physical activity. The majority focused on children, their parents and teenagers. Overall the findings of Allender and colleagues (2006) were consistent with those reported by Rees et al. (2001).

Young people found participation more enjoyable when they were encouraged to experiment with different activities and had a range of choices, and were less favourable about environments in which winning and competition were emphasised (Allender, Cowburn & Foster, 2006). Enjoyment appeared crucial to participation, and fun and social support were more important than any perceived health benefits. Teenage girls were also motivated by body shape and weight management (Allender, Cowburn & Foster, 2006). Competitive sports and highly structured activities were found to be barriers to young people and negative experiences at school, peer pressure, lack of teacher support and competitive classes were reported as barriers to teenagers.

Masculine and gendered language appears to be pervasive in sport and operates as a significant barrier to girls and women, and males who are less motivated by competition and who identify less with masculine discourse (Allender, Cowburn & Foster, 2006).

Parental support and encouragement impacted positively on participation, while parental concerns about safety discouraged physical activity (Allender, Cowburn & Foster, 2006). Parents are more supportive of activities that are easy to access and

conducted in safe environments where activities are available for other family members (Allender, Cowburn & Foster, 2006).

There has been a dearth of published research into facilitators and barriers to physical activity among children with special health care needs (SHCN). However, it can be anticipated that the social and behavioural difficulties associated with SCHNs such as ADHD and ASD will be associated with unique challenges in physical activity settings (Attwood, 2007; Leroux, 2009). Supporting young people with SHCNs to participate in sport and physical activity requires adaptations to typical coaching practice (Houston-Wilson, 2005; Lavay, 2005).

The development of positions and policies on increasing physical activity among young people in the UK

Changes in lifestyle in the latter half of the twentieth century were accompanied by health benefits and problems (Biddle & Mutrie, 2008). The benefits include increased life expectancy largely due to advances in the prevention and treatment of infectious disease. The health problems of modern life have been called ‘hypokinetic diseases’, denoting health problems arising from inactivity (Biddle & Mutrie, 2008). These include poor mental health, coronary heart disease, obesity, low back pain, osteoporosis, hypertension, diabetes and some cancers. Lifestyle factors in modern times have shifted the cause of premature death onto risk factors such as smoking, poor diet and lack of physical activity. Many governments and international agencies now have explicit objectives regarding increasing life expectancy and quality of life and it is usual for

health related physical activity to be prominent in such initiatives (Biddle & Mutrie, 2008).

In 1985 the World Health Organisation (WHO) set 'health for all' targets and made proposals for action in Europe along four dimensions of health: equity in health, adding 'life to years', adding 'health to life' and adding 'years to life' (World Health Organisation, 1986). In 2004 WHO presented a global strategy for diet, physical activity, and health to intervene in the problems of industrialisation and concomitant decline in physical activity. This strategy aims to redress the economic and social burden of chronic diseases that are related to physical inactivity and demands a whole population, multi-sector, multi-disciplinary approach that is culturally relevant. Efforts to increase physical activity are seen to require a societal rather than individual focus and governments are encouraged to reflect this in policy (WHO, 2004).

The 'Health of the Nation' project (Department of Health, 1993) represented a shift in approach to health care and promotion when it was introduced in England with the overall aims of reducing premature death and increasing life expectancy and quality of life (Biddle & Mutrie, 2008). The Health of the Nation initiative was continued by the new Labour government, whose 'Our Healthier Nation' initiative explicitly addressed social inequality as contributing to health and health inequality (Department of Health, 1998) and this remains a key element of government policy (Biddle & Mutrie, 2008).

Growing concern about the changes in morbidity and mortality patterns facing many contemporary societies is reflected in increasing numbers of position statements and policy documents (Biddle & Mutrie, 2008). Physical activity during childhood has a

range of health benefits including healthy growth and physical development, maintenance of energy balance, psychological well-being and social interaction. Physical activity in childhood can improve attendance, attainment and behaviour at school by improving concentration and self-esteem and can help to establish an active lifestyle in adulthood (Biddle & Mutrie, 2008.).

In 1997, the UK Health Education Authority (HEA) initiated a process of expert consultation and review of the evidence regarding the promotion of physical activity for the advancement of health among young people (Cavill, Biddle & Sallis, 2001). Experts were commissioned to prepare review papers on key aspects of physical activity and young people. The aim was to develop a public health policy framework to maximise opportunities for young people to be physically active (Biddle, Sallis & Cavill, 1998). The expert position statement recognised that the health and enjoyable experiences associated with physical activity are a normal part of childhood (Cavill, Biddle & Sallis, 2001).

Prior to the HEA expert consultation most recommendations for children and young people had been based on those for adults, recommending 30 minutes moderate activity most days (Cavill, Biddle & Sallis, 2001). The commissioned expert reviews and subsequent discussions indicated that most children met this minimum but there was wide variation between being very active and inactivity. There was also a consensus that boys were more active than girls and that this difference steepened into maturity.

The main recommendations for young people and physical activity were that all young people should participate in moderate intensity physical activity for one hour on most

days as a minimum, with relatively inactive children participating for an initial minimum of thirty minutes (Biddle, Cavill & Sallis, 1998; Cavill, Biddle & Sallis, 2001). At least twice a week such activity should aim to enhance and maintain strength, flexibility and bone health. These recommendations have not changed and are currently applied across the UK (Department of Health, 2004).

It is not possible to arrive at a precise minimum or optimum dose of physical activity for young people (Cavill, Biddle & Sallis, 2001). The consensus on one hour most days was informed by the growing problem of overweight and obesity among young people, despite it being considered that most young people are active. The experts concluded that it was important to stimulate increased physical activity among young people; hence one hour was agreed as more favourable, particularly for primary school aged children (Cavill, Biddle & Sallis, 2001). This could be taken continuously but there was agreement that it is more natural for children to be active in shorter bouts and it is more typical for children to achieve their daily activity intermittently. Type, setting, intensity, duration and amount of activity naturally varies day to day and can include play, climbing, skipping, sports, active transportation through walking and cycling, swimming, gymnastics, dance, and structured exercise (Cavill, Biddle & Sallis, 2001).

The issue of research into outcomes in this area is beset with difficulties of measurement and conceptualisation (for example Biddle & Mutrie, 2008) upon which we cannot linger here. While the evidence base regarding the health benefits of physical activity for adults is robust, debate about the nature and extent of public health problems and solutions for children continues (Cavill, Biddle & Sallis, 2001). One illustrative problem when considering evaluation of interventions with children is that while

exposure to risk of inactivity begins in childhood, the resulting increase in health problems and premature death occurs in middle to older age (Department of Health, 2004). Public health initiatives involving young people are advised to evaluate participation in physical activity and exercise rather than specific clinical variables relating to fitness (Department of Health, 2004).

Social and environmental factors are crucial determinants of participation in physical activity and a social-ecological model is recommended as most appropriate when seeking to understand and modify health-related physical activity (Almond & Harris, 1998; Biddle & Mutrie, 2008; Cavill, Biddle & Sallis, 2001; Department of Health, 2004; Wold & Hendry, 1998; World Health Organisation (WHO), 2004). Many sectors are involved at national, regional and local levels and substantial coordination between agencies is needed for programmes to be designed to meet the specific needs of young people (Cavill, Biddle & Sallis, 2001).

Attempts to promote health through physical activity often recognise the psychological benefits of exercise across the life cycle (Biddle & Mutrie, 2008). Activity levels in childhood correlate with activity in adulthood (Biddle & Mutrie, 2008; Cavill, Biddle & Sallis, 2001). It is therefore important to ensure that children have opportunities and are supported to be active, as this can be protective in adulthood.

Clearly, policy and position of central government is important but local delivery and integration of services is also crucial to success. Significant changes at the grass roots in the UK occurred in the 1980's with schools and local education authorities in the vanguard of those seeking to promote physical activity (Fox, Boutcher, Faulkner &

Biddle, 2000). In the 1990's exercise prescription schemes were developed when leisure services teamed up with primary health care but secondary care services were slower to take these up (Fox, Boutcher, Faulkner & Biddle, 2000). Mental health services have been criticised for neglecting to consider the benefits of exercise (Daley, 2002).

In the absence of studies of attempts to increase participation of children with SHCNs in physical activity in the community, this is an exciting opportunity to undertake descriptive qualitative inquiry into phenomena that have implications for coaching practice, exercise referral scheme development and CAMHS workers. Steps are now underway to establish Physical Activity Care Pathways (PACP) in primary and secondary care to address inequalities in participation for all relevant groups irrespective of age (Department of Health, 2009).

The recent guideline from the National Institute of Clinical Excellence (NICE, 2009) on attention deficit hyperactivity disorder (ADHD) recognises the importance of recreational physical activity and sports. It recommends that clinicians help children and families to find such outlets for children to boost self-esteem. Attwood (2007) gives similar encouragement to parents and clinicians to promote physical activity in young people diagnosed with autistic spectrum disorders (ASD). The informants for this study are coaches on an exercise referral scheme for young people with SHCNs including ADHD and ASD. Young Person's Positive Moves (YPPM) is an early example of a PACP for children with SHCNs. It is hoped that by learning about the experiences of coaching the children this thesis will contribute to the future development of exercise referral schemes for children with SHCNs.

The importance of physical activity and sport to children with special health care needs

Mental health services have been criticised for overlooking the importance of physical activity in treatment planning generally (Daley, 2002). The following section focuses on ADHD and ASD because these are two conditions commonly seen at the exercise referral scheme with which this thesis is concerned. For children diagnosed with ADHD, physical exercise provides a relatively harmless and socially acceptable intervention with a benign side effect profile, but it is yet to receive the attention it warrants in the literature (Barkley, 2004). Similarly, children with ASD may benefit from interventions aimed at sport and physical activity competencies (Attwood, 2007).

Parents of children with SHCNs have indicated that clinicians often overlook children's physical activity levels and participation in sports (Minihan, Fitch & Must, 2007).

Improvements in all aspects of children's lives should be a key objective in the health care offered to children with SHCNs such as ADHD (Leroux, 2009) and ASD (Attwood, 2007). While interventions have traditionally focussed on outcomes in the home and the school, ignoring the importance of enjoyment of life outside of school, Leroux (2009) encourages clinicians and parents to focus on achieving complete wellness. This is dependent on the child experiencing success both inside and outside the classroom and home.

Attention Deficit Hyperactivity Disorder (ADHD)

Peer interactions among children are crucial to social and emotional development.

Rejection by peers in childhood is associated with negative outcomes and externalising behaviour in adolescence, including delinquency, school drop out and emotional and behavioural problems (Coie & Cillessen, 1993; Coie, Terry, Lenox, Lochman & Hyman, 1995). Children diagnosed with ADHD are at risk of significant deficits in peer relations (Bagwell, Molina, Pelham & Hoza, 2001; Hodgins, Cole & Boldizar, 2000; Lopez-Williams et al., 2005; Stormont, 2001).

Participation with peers in physical activity and sport provides opportunities for children diagnosed with ADHD to practice a range of developmentally appropriate social skills in ecologically relevant contexts (Lopez-Williams et al., 2005). Such activities play an important role generally in children's development of social relations and adjustment (Pellegrini & Blatchford, 2002). Sports games are one of the main forms of play among boys (Blatchford, Baines & Pellegrini, 2003).

Negative experiences in sports and physical activity have been linked to decreased self-confidence, and poorer athletic performance is associated with poorer social relationships, lower popularity and less respect from peers (Gross & Johnson, 1984).

Children with ADHD may be at heightened risk of enduring social deficits because the social behaviours associated with ADHD appear to play a role in peer relationships and rejection in particular (Lopez-Williams et al., 2005). Sports performance and competence in physical activity appear to play a unique role in the formation of friendships and acceptance by groups in children diagnosed with ADHD (Lopez-Williams et al., 2005).

When offering interventions for ADHD, clinicians should promote performance in school, healthy relationships in the home, and successful interactions with members of extracurricular groups and friends through sports and social activities (Leroux, 2009). A study of 63 children has demonstrated the unique role of sports performance and social behaviour in the peer relationships of children diagnosed with ADHD. Lopez-Williams and colleagues (2005) found that athletic performance is associated with peer relations above and beyond the impact of social behaviour. They proposed that this provides a compelling argument for the inclusion of athletic performance as a treatment component for children diagnosed with ADHD.

Lopez-Williams and colleagues (2005) provide evidence that children with ADHD who are good at physical activities, exhibit fewer negative and more positive behaviours are more likely to be accepted by a group of children with ADHD and nominated as a best friend. They also found those children who exhibit more negative and less positive behaviours, and are less able than their peers in physical activities are at greater risk of rejection by their peers with ADHD. The authors note that it is not novel to consider negative and positive behaviours as important in children's social relationships. Athletic performance could be an important and unique element in the social relationships of children diagnosed with ADHD (Lopez-Williams et al., 2005).

A significant limitation of the study by Lopez-Williams and colleagues (2005) is restricted ecological validity. They conducted an intervention study with 63 children diagnosed with ADHD. Participants were enrolled on an 8 week summer school programme 5 days per week 8 hours per day. The children's mean age was 9.08 and 58 were male. They were referred by local clinicians or had responded to adverts. 3 hours

per day were spent on academic work and the remainder in sports and recreation activities such as basketball, football, or swimming skills training. Children were divided into groups of 12 by age. Athletic performance, social behaviour and peer acceptance were measured and converted into z scores to allow comparison across a variety of measures.

The methodology employed by Lopez-Williams and colleagues (2005) allowed for multiple-measures and the achievement of robust reliability on measures of sports ability due to the length of the programme and the training and inter-rater checks on the observers adherence to scoring protocols, and this is a strength of the study. However, this setting was unique and it is questionable how much the effects would be replicated in natural settings such as school or community-based sports and recreational physical activity. The sampling was restricted to children diagnosed with ADHD. The researchers recognised that an experimental design was needed to improve upon their findings (Lopez-Williams et al., 2005).

Social ratings by children without the diagnosis of children diagnosed with ADHD might differ, so there are limits to how much the effects found by Lopez-Williams and colleagues (2005) might generalise to children with ADHD in mainstream settings. Despite these reservations, evidence is provided to suggest that sport and physical activity skills training should be integrated into interventions for children with ADHD as it may be a protective factor in social relationships and inclusion. Sport and athletic games are central to children's recreational activities and may be an ideal mechanism through which to effect positive change (Leroux, 2009; Lopez-Williams et al., 2005).

However, inclusion of children with ADHD in sport is not straightforward (Johnson & Rosen, 2000; Lopez-Williams et al., 2005).

The majority of children with ADHD are at risk of developmental delays in physical abilities compared with peers (Harvey & Reid, 2003). Physical, cognitive and behavioural features of ADHD can make movement and participation in sport difficult (Lavay, 2005). Poor self-concept, a low threshold for frustration and perceptions of poor competence can interfere with participation. Difficulties taking turns and remaining focused can be encountered, with children demonstrating excessive distractibility and short attention spans which interfere with learning of movements and drills; impulsivity and low levels of inhibition of action can also interfere with participation in sports and exercise activities (Bishop & Beyer, 1995). A study using parents as informants in a quasi-experimental design has shown that children with ADHD experience more difficulty in team sports compared to individual sports settings (Johnson & Rosen, 2000).

There may be a poor 'fit' between children with ADHD and team sports (Johnson & Rosen, 2000). Opportunities for contact with opponents, potential for negative feedback from peers and increased opportunities for off-task behaviour in team sports settings were associated with increased levels of aggression, emotional reactivity and disqualification among boys with ADHD compared with a group without ADHD (Johnson & Rosen, 2000).). While problems were evident in individual sports, there were indications that these were greater in team settings and that drop out and negative experiences were higher for boys with ADHD in team sports compared with individual settings (Johnson & Rosen, 2000).).

The study by Johnson and Rosen (2000) is limited by being reliant on parents as informants. Parents are not considered to be wholly reliable informants about the time that children spend in physical activity generally (Armstrong & Welsman, 1997) and parent-child interactions can be disturbed for children with ADHD (Erdman, 1998; Stiefel, 1997). It is therefore questionable how much parents pay attention to certain aspects of their children's behaviour when they have been diagnosed with ADHD, but the authors do not appear to acknowledge the limited reliability of this approach. The multiple measures and repeated independent observations of sports behaviour used by Lopez-Williams and colleagues (2005) would make for more meaningful comparison of the sports behaviour of children diagnosed with ADHD as compared to those without.

Sports and physical activity were most frequently mentioned by children with ADHD in focus groups as non-drug interventions that help with the condition (Singh, Keenan & Mears, 2007). There was agreement about the potential efficacy of such approaches and several children had experience of beginning sports programmes to help them release energy and feel good. Boxing and football were the most frequently reported sports that were considered to be helpful. All the participants in this study considered such non-drug interventions to be most effective when used in conjunction with medication. Apart from sports, the children did not consider other formal and informal non-drug interventions, like counselling and watching TV, to be effective (Singh, Keenan & Mears, 2007). There were mixed views about the abilities of children with ADHD in sports, some children associating ADHD with being good at sports, others with being bad at sport. It is clear from the literature discussed in this section that sports and physical activity are important aspects in the lives of children with ADHD.

Autistic spectrum disorders (ASD)

Although the findings of Lopez-Williams and colleagues (2005) about the relationship between athletic ability and social acceptance among children diagnosed with ADHD are specific to that group, it is possible that similar processes might apply to children diagnosed with other conditions. Children diagnosed with autistic spectrum disorders face increased risk of social problems such as rejection and bullying by peers (Attwood, 2007). These problems can be particularly evident in sport and physical activity where a child with ASD may be seen as a liability to the team or group because of poorly developed motor and social skills (Attwood, 2007).

Success in sport, particularly team sports, is highly valued by children and adolescents and the development of team work skills is relevant to the successful employment of adults with ASD (Attwood, 2007). Positive involvement in youth sport in the general population has been shown to be positively correlated with occupational achievement in adulthood (Larson & Verma, 1999). Positive experiences in sport may also foster citizenship, social success and positive peer relationships (Elley & Kirk, 2002; Evans & Roberts, 1987; Fraser-Thomas, Cote & Deakin, 2005; Larson, 2000).

Children with ASD often struggle socially with peers (Attwood, 2007). Interventions aimed at social and friendship skills can be resented because children with ASD do not wish to have attention drawn to their difficulties. Attwood (2007) proposes that the attributes of a good team member are the same as those of a good friend, therefore programmes aimed at teamwork may foster skills for developing meaningful

friendships. By changing the way programmes are socially constructed so that the development of teamwork skills are emphasised rather than friendship, motivation and cooperation among young people with ASD can be increased (2007).

It is widely recognised that children with ASD think differently to others, but they can also have a different way of moving (Attwood, 2007). Progress in abilities to catch, throw and kick a ball can be delayed and a lack of coordination of limbs can be apparent, particularly when running (Gillberg, 1989; Hallett et al., 1993). Children with Asperger's syndrome can have the appearance of clumsiness as they may trip or bump into objects (Attwood, 2007), which can arise due to difficulty with awareness of their body in space (Weimer, Schatz, Lincoln, Ballantyne & Trauer, 2001).

The integration of information about the position and movement of the body in space, proprioception, can be problematic in ASD and these difficulties can be apparent in play (Weimer et al., 2001). Mental preparation and planning of movement can also be impaired in ASD (Rinehart, Bradshaw, Brereton & Tonge, 2001; Weimer et al., 2001). Difficulties with planning and slow mental preparation time for movement may be more precise descriptors than clumsiness; the poor conceptualisation and planning of movement in ASD is consistent with the term apraxia (Attwood, 2007).

Problems with ataxia, impairment in muscular coordination and abnormal patterns of movement, are also evident in the general movement abilities of children with ASD (Attwood, 2007). Movements can be performed with abnormal force, rhythm and accuracy and an unsteady gait is sometimes observed. Signs of ataxia in children with

ASD can be observed in running, stair-climbing, jumping and touching a target (finger to nose) (Ahsgren et al., 2005).

When the motor clumsiness that is associated with ASD is considered, children with ASD may be expected to struggle in sport. There are exceptions and some children with ASD have a single minded determination, dedicate time to practice and achieve advanced levels of performance (Attwood, 2007). Children with ASD can develop a keen interest and ability in sport, particularly those requiring solitary practice, accuracy, timing and stoicism such as running, golf, rock climbing or swimming and such interests can be maintained in adulthood (Attwood, 2007).

When children with and without ASD were compared, children with ASD were found to participate less in moderate levels of physical activity (Rosser & Frey, 2003). A small sample of children wore accelerometers for five days. Accelerometers measure the intensity and duration of physical activity and provide more detailed information than pedometers. Fifteen children with ASD (age $9.5 \pm .9$ years) and thirteen children without ASD participated. There were no differences between the groups on time spent in light, vigorous and very vigorous physical activity. Children with and without ASD participated in comparable levels of activity in physical education in school, but children with ASD were less active during break time. It was concluded that the difference in moderate activity levels may have been due to children with ASD being allowed fewer opportunities to be active during breaks in school and free play activities. The authors suggest that children with ASD may benefit from interventions to increase physical activity in free play (Rosser & Frey, 2003). Pan & Frey (2006) recommend that

interventions should address increasing physical activity among young people with ASD.

Children with ASD may be limited in their use of adventure playground and sports equipment and their limited competence can increase vulnerability to teasing and bullying (Attwood, 2007). A lack of success at ball games and other playground activities has consequences for how much children are included in social games by others. Children with ASD may choose not to involve themselves as they become aware of their lower ability and exclusion by others. Children with ASD then also face limited opportunities to practice with peers to improve ball skills (Attwood, 2007).

While the social, linguistic and cognitive abilities associated with ASD have been relatively extensively studied and much clinical knowledge is available, research regarding movement and sporting abilities is lacking (Attwood, 2007). Attwood (2007) calls for an increase in research into movement ability and ASD and the development and evaluation of programmes to improve movement and coordination.

Strategies for the inclusion of children with special health care needs in physical activity and sport

Children with ADHD and ASD might be best placed in individual as opposed to team sports settings when the focus is on competitive sport participation (Attwood, 2007; Johnson & Rosen, 2000). However, the presence of diagnosis alone should not lead to the assumption that children require special consideration for participation in games and sports with other children (Houston-Wilson, 2005; Lavay, 2005).

Some children with SHCNs can show considerable competence in athletic abilities (Attwood, 2007) and may associate their condition with being good at sports (Singh, Keenan & Mears, 2007). However, for other children with SHCNs, their conditions can give rise to difficulties in physical activities with other children. It is likely that some will experience exclusion by peers because of behaviours and limits to ability that arise from the conditions (Attwood, 2007; Johnson & Rosen, 2000; Lopez-Williams et al., 2005). Given the developmental importance of physical play and sports games, outcomes in these areas should be targeted by interventions both in and out of school settings (Leroux, 2009).

There is a dearth of research addressing strategies for the inclusion of children with SHCNs such as ADHD and ASD in extracurricular physical activity. Some suggestions from the literature are now considered. Adults leading sport and exercise classes with children with SHCNs can benefit from increasing understanding of the children's conditions and being able to adapt the environment and activities accordingly to the individual (Houston-Wilson, 2005; Lavay, 2005). Children with ASD can experience hypersensitivity to noise in sports halls and gymnasiums where the noise of children's voices and surface impacts from feet, balls or other equipment can reverberate from the walls (Attwood, 2007; Houston-Wilson, 2005). This sensory input can make motor planning and execution difficult (Attwood, 2007).

Close proximity to other children and adults can be challenging for children with ASD. Coaches can reduce the need for eye contact, which can be difficult for an individual with ASD, by standing beside rather than in front of a child when demonstrating

movements and skills (Attwood, 2007; Houston-Wilson, 2005). Children with ASD can have problems with emotional expression and management, so coaches need to be able to respond helpfully when a child is in distress because they make an error or their team loses (Attwood, 2007). Understanding the condition can also help coaches to relate to children who do not demonstrate emotional reactivity in facial movements, as facial expression of emotion can be restricted in ASD (Attwood, 2007).

It is important to take into account the developmental and age appropriateness of tasks when planning sports or physical activities for children with SHCNs, (Houston-Wilson, 2005; Lavay, 2005). The interaction between the individual child, the environment in which tasks are performed and the nature of the task should be considered when coaching children with ASD: (Reid & O'Connor, 2003).

Coaches can gain a good understanding of the individual by gathering information from parents, teachers, and health care workers about what works in engaging the individual (Reid & O'Connor, 2003). Having an understanding of reinforcement for the individual child can help in the formation of rapport. It is important to build a relationship and have a rapport with the child in order to accurately ascertain their abilities and needs. Activities should start with those that the child can perform successfully and then progress in difficulty. This allows the child to experience early success and provides for better compliance on tasks (Reid & O'Connor, 2003).

The environment should be structured to introduce one task at a time and distractions should be limited (Reid & O'Connor, 2003). Individuals might be hypersensitive to noise and new stimuli when entering a new environment such as the atmosphere in a

gymnasium or sports hall (Attwood, 2007; Houston-Wilson, 2005). Coaches should orient the child to their surroundings and point out where things are done and where things are located. Children should also be inducted in a supportive way into how to move or make transitions between stations and activities. Labels can help children to retrieve and return equipment and concrete barriers, such as cones, can be used to partition the environment and help the child to stay safely within a designated area (Houston-Wilson, 2005). Concentration difficulties and impulsivity can present coaches with unique challenges in managing the use of space and equipment, so safety is of paramount importance when coaching children with SHCNs (Attwood, 2007; Houston-Wilson, 2005; Lavay, 2005).

Factors for coaches to consider when planning activities for children with ASD include: allowing time for children to gain familiarity with coaches and activities; promoting eye contact as much as is tolerable to the child; using clear and consistent cues and prompts; and providing feedback and reinforcement that is effective for the individual (Reid, O'Connor & Lloyd, 2003). The use of demonstration can also be helpful to support children with ASD to learn new skills and where possible natural cues, such as a football and a goal, should be used to minimise reliance on verbal cues (Houston-Wilson, 2005). Using correction procedures to take the child back to the last skill performed correctly can also facilitate learning when incorrect responses or actions are performed. The coach returns the child to the last correct response and they can then be assisted as necessary to complete the process correctly (Houston-Wilson, 2005).

Coaches should consider the tasks that children are asked to do and ensure that they are functional and appropriate for the child and the activity. Coaches can assess

performance by using a task-analysis approach (Reid & O'Connor, 2003). This involves identifying the requisite skills that are to be assessed and either breaking them down into component parts or assessing the skill as a whole. Football can be broken down into dribbling, passing, trapping the ball and shooting and each component assessed individually, or the sequence can be watched in flow (Houston-Wilson, 2005).

Assessments conducted in this way can then contribute to the identification of coaching goals and objectives based on unique needs and it is important that the child is engaged in activities that are consistent with their goals and objectives. This information from assessment should form the basis for instruction (Houston-Wilson, 2005).

Coaches can apply behavioural techniques to decrease unwanted behaviour, such as verbal outbursts or aggression, or to promote desired behaviour (Houston-Wilson, 2005). By focussing on antecedents, coaches can attend to what is happening in the environment or with the child that precedes or elicits the target behaviour (Houston-Wilson, 2005; Lavay, 2005). In the case of non-compliance, if the antecedent can be determined, e.g. aggression from another child, over-stimulation from other activities in the gym, or boredom, the coach can then intervene appropriately (Houston-Wilson, 2005).

Children with ADHD can place demands on coaches' skills to manage sessions because they can demonstrate increased emotional reactivity, aggression and off-task behaviour in sports and physical activity (Johnson & Rosen, 2000; Lopez-Williams et al., 2005). Having individual mentors or extra support staff to support coaches can be important in including children with SHCNs in these activities (Attwood, 2007; Houston-Wilson, 2005; Lavay, 2005).

Children with ADHD can struggle to inhibit impulsive behaviour and their aggression in sports can be a barrier to others including them, therefore they might be encouraged to pursue individual sports (Johnson & Rosen, 2000). However, children with ADHD are a heterogeneous group and there is no universal approach to meet their physical activity needs (Lavay, 2005). The majority of school children with ADHD will be taught physical education in schools with peers who do not have the condition. Inclusion in mainstream classes may need a plan to deliver extra support because children with ADHD are at risk of experiencing multiple failures in sports, such as making mistakes and being picked last for the team (Lavay, 2005).

Participation in sports needs to be a rewarding and successful developmental experience (Lavay, 2005). When practical, coaches can benefit from finding out about what approaches are used in the child's home and classroom and adopt that approach in the sport setting. This allows for the child to experience consistency across settings and can help the coach to identify early on what may work best for the child with ADHD (Lavay, 2005).

Coaches need to be more patient with children with ADHD, allow more time to complete some tasks and provide extra opportunities for repetition and practice (Lavay, 2005). As with ASD, coaches can support children with ADHD to learn by breaking skills down into simple component parts and progressing sequentially once the child has mastered a skill. Allowing time and resources for extra input from coaches for the ADHD child can be beneficial to their development. Lavay (2005) also recommends

that coaches for children with ADHD be selected carefully and that they gather necessary information about children from parents. Parents can provide coaches with information about the child's unique behaviours, strategies for overcoming problem behaviours, reinforcement and learning strategies that are known to work for a child (Lavay, 2005).

While it is possible that children with ADHD who have extra support in the classroom might find this extended into physical education at school (Lavay, 2005) such support in extracurricular settings is lacking. The strategies discussed in this section all appear to make good sense in relation to coaching children with SHCNs. To date no research has examined coaches' actual experiences of coaching children with these needs.

The informants for the current thesis are coaches who work on a unique exercise referral scheme for children with SHCNs. This project will contribute to understanding how coaches perceive their work and what they do on the scheme. It is hoped that this will provide clinically useful information about the inclusion of children with SHCNs in sport and physical activity, both in adapted settings such as exercise referral schemes and in mainstream recreational and extracurricular sport and physical activity. This could be useful information for clinical psychologists because it is likely that exercise referral schemes and physical activity for health will increasingly become part of practice in the NHS (Department of Health, 2009). Outcomes in extracurricular activity influence the development of children with SHCNs and should be considered by clinicians alongside outcomes in the home and school (Attwood, 2007; Leroux, 2009).

Exercise referral schemes and interventions to increase physical activity among young people

Current proposals to establish Physical Activity Care Pathways (PACP) in the UK build upon national developments in exercise referral schemes (Department of Health, 2009).

Exercise referral schemes in primary care in the UK have increased since the 1990's (Biddle & Mutrie, 2008). Such schemes for health promotion are supported by the epidemiological evidence of links between physical activity, health and illness (Biddle & Mutrie, 2008; Department of Health, 2004). Clarifying the health effects of physical activity for young people remains a challenge for researchers (Biddle & Mutrie, 2008; Cavill, Biddle & Sallis, 2001).

The absence of definitive research in this area does not denote the unimportance of physical activity for health in young people (Cavill, Biddle & Sallis, 2001). There is consistent evidence that physical activity benefits psychological health and is a factor in controlling obesity in young people, ample justification for intervening on a public health basis to support young people to participate in regular physical activity (Cavill, Biddle & Sallis, 2001).

It has been suggested that general practitioners are well placed to promote physical activity but may lack the knowledge and skills to promote it (Gould, Thorogood, Iliffe & Morris 1995). The amount that primary care workers are active themselves is likely to influence their commitment to interventions in this area (McKenna, Naylor & McDowell, 1998). The most widely available exercise interventions in health care are advice and counselling, and exercise referral schemes (Williams, 2009).

The evidence base regarding increasing physical activity in clinical populations is in its infancy. When lifestyle factors are discussed, clinicians tend to focus their efforts on diet and substance use (Williams, 2009). Primary care workers are perhaps uncertain about the type, frequency, duration and intensity of exercise for different groups, and may have additional concerns about the risk of exercise-related morbidity and mortality (Gould et al., 1995). Ethical concerns about the medicalisation of everyday life arise and clinicians may restrict advice about physical activity to those they think would be most receptive (Gould et al., 1995).

Observational studies indicate that there is a strong environmental influence on young people's participation in physical activity (Wold & Henry, 1998). However, despite the strong association between environmental factors and physical activity in young people, there are many gaps in knowledge. The evidence base for the effectiveness of community-based programmes to promote young people's participation in physical activity is limited (Sallis, 1998).

With the public health rationale that nearly all children can be reached through schools, most studies of interventions to promote physical activity in youth have been based in schools (Sallis, 1998). This approach can be problematic because the vast majority of physical activity in childhood occurs outside of schools in organised sports and other activities (Ross, Dotson, Gilbert & Katz, 1985; Simons-Morton et al., 1990). Also, the time allotted to physical education programmes is inadequate in relation to the physical activity needs of young people (Luepker, et al., 1996; Sallis et al., 1997a). Sallis (1998) proposed that programmes to complement school-based interventions for physical

activity in youth should be considered, with access to facilities and programmes in the community being a necessity.

Parents identified safety as the most important factor when considering where to allow their children to be active (Sallis et al., 1997b). Children need supportive environments in which to be physically active (Sallis, 1998). The goal of community interventions should be to provide supportive environments in which children and adolescents can participate in physical activity (Sallis, 1998). While environmental factors show strong correlations with physical activity in young people, the characteristics of environments that support physical activity are not well-defined and the relationship between sports and physical activity levels is unclear. Sallis (1998) called for work to identify the factors that influence use of facilities in the community to inform interventions aiming to increase physical activity levels in young people. Coaching influences participation (Tofler & Butterbaugh, 2005) and coaching practice depends upon local knowledge (Culver & Trudel, 2006). This project aims to explore coaches' experiences of delivering an exercise referral scheme to young people with SHCNs.

Group climate and motivation to exercise

Coaches influence the motivational climate of the group through the use of situational cues (Biddle and Mutrie 2008). By altering situational and contextual factors, coaches can increase self-determined or intrinsic motivation to be physically active. By conveying choice rather than control, providing a meaningful rationale for the desired behaviour and acknowledging the individual's perspective, leaders can skilfully engage with participants and perhaps increase participation in physical activity (Biddle and

Mutrie 2008). When leading an exercise, coaches can explain why certain exercises are 'good' and others 'bad' and describe the respective consequences of certain movements or activities. Coaches can be responsive to individual performance and allow participants to choose activities and adjust the pace and difficulty to suit their needs. By empathising with exercisers about feelings of exertion, incompetence, inadequacy, fear or embarrassment, coaches can support exercisers to approach rather than avoid physical activity (Biddle and Mutrie 2008).

The motivational climate in exercise and sports contexts can be categorised as 'mastery' or 'performance' orientated (Biddle & Mutrie, 2008). In mastery climates group members perceive that the dominant culture of the exercise setting is one of self-improvement. In such a setting mistakes are viewed as part of the learning process and praise is contingent on effort as opposed to actual outcome of performance. In performance climates group members are compared to each other and praise comes in response to performance that is superior to the group norm. In performance settings anxiety about making mistakes is often experienced by participants (Biddle and Mutrie 2008).

Interventions that are sensitive to the climate of groups in order to promote mastery, and therefore participation, are possible (Biddle & Mutrie, 2008). Motivation is higher in classes that present students with more choice (Goudas, Biddle, Fox & Underwood, 1995). Goudas and colleagues (1995) described a study of girls being taught athletics where the teaching style was manipulated to compare conditions of more choice with less choice about activities in class. Motivation was consistently higher among those experiencing more choice. As a dimension of a mastery climate, choice appears to be an

important factor in promoting physical activity (Goudas et al., 1995; Biddle & Mutrie, 2008).

In physical education classes at school, young people experience higher levels of intrinsic motivation in classes characterised by mastery climates (Goudas & Biddle, 1994). A study using a within-subject design showed that perceptions of a mastery climate predicted intrinsic interest and intentions to participate in future when the same group of children experienced two different activities (Biddle et al. 1995). Being able to choose between different activities is a facilitator of young people's participation in physical activity (Allender, Cowburn & Foster, 2006; Rees et al., 2001).

The links between motivational climates and positive and negative psychological outcomes have been explored in a meta-analysis of studies conducted in a variety of physical activity settings (Ntoumanis & Biddle, 1999). Positive psychological outcomes included satisfaction, intrinsic motivation and positive affect while negative outcomes included boredom and anxiety. When the overall effects from fourteen studies involving over 4,000 participants were analysed, mastery climates were associated with a large effect on positive outcomes and performance climates had moderate effects on negative outcomes (Ntoumanis & Biddle, 1999). Smaller effects were evident in the reverse directions. Associations between performance climates and positive outcome, and mastery climates and negative outcome were associated with small-to-medium effect sizes (Ntoumanis & Biddle, 1999).

While Ntoumanis and Biddle (1999) corrected correlations for measurement and sampling error, a weakness of the paper is that different types of setting (e.g. sport and

recreation) and different populations (e.g. adults and children) were combined. The motivations, preferences and experiences of children and adults involved in physical activity are different (Biddle & Mutrie, 2008). For example adults appear to have a greater preference for individual physical activity whereas university students and children favour social settings in which to exercise (Biddle & Mutrie, 2008). Therefore ratings such as satisfaction, boredom and anxiety are likely to be subject to different influences according to population and setting. Ntoumanis and Biddle (1999) recommended that measures of group climate should be developed that include features unique to the exercise setting and context under investigation. Items relating to social norms, e.g. perceptions of fitness or bodily appearance, and whether coaches stress individual performance and fitness or interpersonal comparison could usefully be included in future research (Ntoumanis & Biddle, 1999).

Investigations into group climates in physical education and sports settings provide a good foundation for research in exercise settings (Biddle & Mutrie, 2008). Groups provide an important setting for exercise for many people, although group exercise settings alone are not likely to be the best way of promoting mass participation in physical activity throughout the community (Biddle & Mutrie, 2008).

Leadership

Structured exercise activity often takes place in the social context of an exercise class and it appears likely that social-environmental factors are influential determinants of participation in exercise (Biddle & Mutrie, 2008). The important role of the exercise environment, and in particular programme leadership and group climate, is supported by

commonsense and it is surprising that the influence of coaching leadership style in exercise classes has received little attention (Biddle & Mutrie, 2008).

The importance of leadership in exercise interventions for clinical populations has been highlighted (Emslie et al. 2007). Emslie and colleagues (2007) used focus groups to explore the experience of participating in a trial of supervised group exercise for women receiving treatment for breast cancer (Emslie et al. 2007). They reported that exercise classes solely for women with breast cancer reduced gender-related barriers to physical activity, including anxiety about changes to appearance. Participants highlighted the importance of exercising with others who shared an experience of their condition and the expert leadership of specifically trained coaches was valued. Leaders were praised for their expertise and skill in adjusting exercises and the pace of the class according to the needs of participants. It was reported that the leadership of this class was different to standard exercise classes and was preferred, being experienced as more positive, relaxed and responsive to individual needs (Emslie et al. 2007).

Research on exercise leadership for clinical populations may provide new information regarding the role of leadership in providing support and motivation for participation (Biddle & Mutrie, 2008). One line of inquiry is to explore and describe coaches' experiences of providing leadership to clinical populations. The importance of this was highlighted by focus groups held with parents of young people with special health care needs (SCHNs) who participated in an exercise referral project (Sugden, 2007b).

Coaches often learn and develop their skills in communities of practice (Culver & Trudel, 2006) and are considered to have untapped localised tacit knowledge about the issues that need to be addressed on the ground (Jones, 2006). The importance of

coaching style and leadership in exercise settings is obvious and should be subject to psychological inquiry in order to further understand and promote effective coaching (Carron, Hausenblas & Mack, 1996).

Learning to coach through experience

Coaches are social pedagogues but the implications of this status have only recently been given serious consideration in the coaching literature (Jones, 2006). Coaches are expected to make decisions in the interests of others by applying good judgement in complex contexts and should be thought of and trained as professional educators (Jones, 2006.). Coach education programmes have been criticised for ignoring social realities on the ground (Jones, Armour & Potrac, 2004).

Coaching consists of social interaction and the exercise of power in complex, non-routine and problematic settings (Jones, 2006). Understanding of how coaches learn to coach is mostly informed by anecdote (Gilbert & Trudel, 2005). Although the coach's primary role is to educate (Jones, 2006), coach education has been criticised for overly focussing on sport-specific knowledge with limited impact on coaching practice (Cushion, Armour & Jones, 2003). Coaching experience and observation of other coaches have traditionally been seen as the main ways that coaching knowledge is acquired (Jones, 2006).

Coaches appear to value experiential learning more highly than learning from formal education (Jones, Armour & Potrac, 2004). It does not simply follow that accumulating years of coaching experience makes a good coach (Bell, 1997). Successful coaches

generate knowledge from practice through a process of reflection (Gilbert & Trudel, 2006). The definition of success varies by sport and context. Effective coaching in elite settings is often measured by winning while effective coaches in youth development provide optimal encouragement and learning opportunities (Gilbert & Trudel, 2005).

Dynamic rings of invisible social context surround coaches and their charges (McLaughlin & Talbert, 1993 in Jones, 2006). The complex leader-follower interactions that characterise coaching cannot be reduced to simple plans to be easily applied (Jones, 2006). Coaches at all levels (recreational, developmental and elite) are increasingly required to understand and use an increasingly complex and specialised knowledge base from sport science to fulfil a variety of roles (Gilbert & Trudel, 2006). However, coaching practice is not reducible to sport-specific knowledge, style of delivery, and the management of sequential set procedures (Jones, 2006). Coaches are assumed to have a great deal of localised tacit knowledge derived from experience about the issues that need to be addressed on the ground, yet coaching science has yet to systematically study many issues related to practice, leaving coaches to generate solutions to many of the problems that they face without an evidence base to inform decisions (Jones, 2006). However, a consensus is emerging in the coaching literature that reflective practice is central to the way some coaches learn and practice (Gilbert & Trudel, 2006).

Schon (1983) illustrated how reflection informs practice in professions such as architecture, psychotherapy, town planning and teaching. Schon's work on reflective practice has influenced learning and education in many professions. This approach has been used to provide a framework for thinking about reflection in coaching (Gilbert & Trudel, 2006). Schon (1983) argued that professions are often practiced in conditions of

uncertainty, disorder and indeterminacy. The unpredictable natures of these endeavours mean that professionals often encounter problem situations as opposed to problems to be solved. In order to act upon problems, practitioners must transform problem situations through the process of problem setting. Problem setting involves defining the boundaries of the problem and identifying possible directions of change through reflective practice (Schon,, 1983).

Schon (1983) distinguished between professionals who operate in well-established routines that maintain a boundary of comfort and certainty and those who work at the edges of established patterns and push the boundaries of practice, “There are those who choose the swampy lowlands. They deliberately involve themselves in messy but crucially important problems.” (Schon, 1983, p. 43). Practicing at the edge involves going beyond simple trial and error and instead uses reflective conversations to make sense of the unexpected.

Coaching issues in practice

Gilbert and Trudel (2001) developed a model of experiential learning based on reflective practice in coaching. They used a multiple case-study approach involving interviews with six coaches and non-participant observation of games and practice sessions over a sport season. Reflection was seen to be comprised of six components: coaching issues, role frame, issue setting, strategy generation, experimentation, and evaluation. Reflective conversations were used to work through coaching issues and learn from experience (Gilbert & Trudel, 2001.).

Coaching issues are the unique challenges that arise in practice and demand a response from the coach that is non-routine (Gilber & Trudel, 2006). Five main types of coaching issues have been reported: (1) athlete behaviour (attendance, discipline, focus and team morale), (2) athlete performance (consistency, technique and team tactics), (3) coach and athlete personal characteristics that influence communication and parent-coach interactions, (4) parental influence and (5) team organisation (coaching staff, fundraising, team selection and practice planning) (Gilbert, Gilbert & Trudel 2001a, 2001b). Coaches' role frames, or personal approaches to coaching, had two boundary components (age group and competitive level) that acted as a filter in identifying problems for reflection. Nine internal components characterised the coaches' personal views of coaching youth sport (discipline, team emphasis, equity, fun, personal growth and development, positive team environment, safety, sport-specific development, and winning). The nine internal components operated in relation to the two role frame components such that individual approaches to coaching were seen to be shaped by environmental characteristics, the athlete's age and competitive setting (Gilbert, Gilbert & Trudel, 2001a, 2001b). The competing demands between some internal components (e.g. between personal growth and winning) sometimes caused internal conflict and a struggle to find balance (Gilbert & Trudel, 2006).

Young Person's Positive Moves (YPPM)

The majority of exercise promotion schemes in the UK depend upon an alliance between primary health care workers and leisure centres, and are run by local authority staff (Biddle & Mutrie, 2008). That is the case with YPPM as it is joint-commissioned and funded by the local authority and a primary care trust. It originated from a leisure

service department that had delivered a successful exercise referral scheme for adults.

The exercise promotion officer was approached by a local consultant paediatrician who was concerned that children with SHCNs were not participating in local community-based exercise opportunities for a variety of reasons. They formed an alliance and worked with local coaches to develop YPPM with the aim of providing opportunities for young people with SHCNs to participate in age-appropriate and enjoyable physical activity. The coaches have first hand experience of leading this diverse group in physical activity sessions and have developed ways to understand and manage difficulties that arise. This thesis aims to explore coaches' reflections on these experiences in order to inform the future development of this and other potential exercise referral schemes for children with SHCNs. At the time of writing it is believed that YPPM is the only exercise referral programme of its kind in the UK.

Young Person's Positive Moves (YPPM) is an exercise referral scheme for 8-13 year olds who are not accessing mainstream physical activity sessions because of SHCNs (Sugden, 2007a). Referrals for the scheme are via a number of routes including paediatricians, school nurses and teachers. The scheme started in September 2006 and is a joint initiative between Gedling Borough Council, Gedling School Sports Partnership, Nottinghamshire County Teaching PCT, and the Gedling Health and Social Well-being Partnership Group.

The Young Person's Positive Moves project provides physical activities to young people with a range of SHCNs such as ASD and ADHD. The activities available to the young people include football, gymnastics, swimming, dance, and fundamentals of movement. All of the coaching staff are experienced coaches and have received training

from community paediatricians in order to understand the needs of the young people attending YPPM.

The programme runs on a twelve week, term time basis with the young people accessing the scheme for two school terms. At the end of each term a celebration event provides an opportunity to recognise the success of the young people and capture their thoughts and comments, along with those of parents, carers, coaches and referrers.

Children with SHCNs require as active and full social/leisure life as their peers (Attwood, 2007; Leroux, 2009). During programme development and evaluation work with parents and young people, it became apparent that there was a strong need for YPPM to provide programmes of physical activity in the community for children with SHCNs. A number of local barriers to physical activity were identified from the experiences reported by the families (Sugden, 2007a, 2007b):

- Physical barriers of buildings, equipment, geography, transport
- Supervision issues and ratios of coaches to children needing to be greater to assist access and safety and promote confidence in the young person and family
- Perceptions by children and families that participation in mainstream leisure activities is not supported or welcomed by others
- Children's SHCNs often associated with exclusion from mainstream activities and clubs, and reluctance of the child and family to seek further activities following exclusion
- Feelings that children with SHCNs are always treated differently and not allowed to have a chance at all activities

- Feelings that no one understands the children's needs and sees them as a nuisance and difficult
- Low expectations about participation in physical activity and sports from families, the children and society of children with SHCNs

Prior to YPPM there were no local leisure projects specifically focussed to meet the needs of children and families with SHCNs. Families have welcomed the chance to participate in a focused, clearly supervised and informed project that has good knowledge of their children's specific health needs and can tailor the activities to their child's needs (Sugden, 2007a, 2007b). Involvement of health staff in training of the coaches gave families and children the confidence that their specific needs are being met. Young Person's Positive Moves addresses some of the young people's health needs not previously met in any provision.

During celebration days focus groups were held with parents and carers of children attending YPPM. Parents and carers discussed their views of the importance of physical activity for their children, previous experiences of accessing mainstream physical activity and any barriers to such, and their views about and reflections on their child's attendance at YPPM activities.

It is important to note that all of the parents gave accounts of how their child had been excluded from other activities, and many parents agreed that participation was important for their children's social and personal development. When parents discussed barriers to their children's participation in physical activity and sport in the wider community, the themes that emerged included lack of suitable experienced and skilled

coaches, clubs elsewhere being competitive and not providing opportunities for the children to play, and lack of understanding about the children's conditions leading to exclusion. Some parents also talked about their child's condition being a barrier due to mobility difficulties and vulnerability to injury. Parents were understandably concerned about the impact on their children of exclusion from activities.

As noted above, many of the families and children had experiences of being excluded from activities. YPPM was seen as different from other opportunities because of the small groups. Small numbers in each class were seen to make YPPM easier for some children to manage. Many parents commended the coaches and instructors for their work with the children to meet their individual needs and the small class sizes were seen to facilitate this. A further theme about the importance of the YPPM approach was that the coaches understood the conditions presented by the children and they were seen to work with them to achieve their own potential.

Parents and carers spoke about the importance of coaches as both barriers and facilitators to their children's inclusion in physical activity in the community. It appears that the YPPM coaches have the skills and knowledge to accommodate young people with SHCNs in physical activity. Because most coaching knowledge and practice is derived from experience, this study explores the experiences of coaches who worked on an exercise referral scheme for young people with SHCNs. It is hoped that this could inform the future development of physical activity care pathways for children with SHCNs.

Appendix C: EXTENDED METHOD

Recruitment

An opportunity sample was necessary in order to address the research question. The literature and the professional experience and networks of those involved in Young Person's Positive Moves (YPPM) indicate that it is unique in the UK. Therefore this approach to sampling is justified in order to understand the meaning that coaches give to working on an exercise referral scheme for young people.

It was initially anticipated that twelve coaches would be approached for interview. During the study period three posts were vacant; nine potential participants were invited to participate and seven agreed. One did not participate due to difficulties arranging an interview. All coaches had been informed of the study by the leader of the exercise referral scheme and had agreed that I could approach them to invite them to participate. All coaches were approached individually at meetings and appointments for interview were made with those that agreed to participate.

The sample

Participants were coaches working on an exercise referral scheme for young people with special health care needs (SHCNs). All worked professionally as coaches on the scheme, as well as in other areas of coaching. Four men and two women participated. The sample was ethnically homogenous, being all white of English origin. Participants were aged between 18 and 49. They had a variety of coaching experiences prior to

working on the scheme (see table one). As Young Person’s Positive Moves (YPPM) runs in parallel with school terms, the duration that each coach had worked for the scheme is expressed as terms.

Table 1. Participants

Participant	Gender	Age	Ethnicity	Main coaching areas	Years of coaching experience	Length of involvement in YPPM
Dave	Male	44	White British	Speed, Agility, Quickness (fundamentals of movement)	20	3 terms
Jonny	Male	45	White British	Football, scheme development	15	2 terms
Elliot	Male	49	White British	Football, scheme development	27	4 terms
Phil	Male	18	White British	Football, Speed, Agility, Quickness (fundamentals of movement)	2	3 terms
Leanne	Female	29	White British	Gym and exercise, scheme development	9	4 terms
Carol	Female	24	White British	Gymnastics, scheme development	8	4 terms

The participants were all employed to deliver YPPM by Gedling Borough Council. Five also worked in other coaching contexts for other employers, such as clubs and schools and one worked on an adult exercise referral scheme.

Ethical approval was granted by the Institute of Work, Health and Organisations at the University of Nottingham. The letter of approval is included in Appendix D.

All of the participants were known to the researcher through contact at meetings and sessions prior to the study. This was not considered to pose any ethical problems but is acknowledged for the sake of clarity. The researcher's involvement with YPPM arose from an invitation to psychologists working in local CAMHS teams, where the researcher was on placement, to become involved in the exercise referral scheme. The researcher volunteered to become involved in this with the approval of the Lead Psychologist and Clinical Director of the local CAMHS service. Prior to interviewing participants the researcher had been a volunteer with YPPM for one year. This involved helping at busy recruitment evenings at the start of each term when children and families sign up to particular sessions, helping at celebration evenings at the end of term, and attending steering group meetings to discuss the scheme's development and evaluation.

Informed consent

Participants were verbally informed that the aim of the study was to further develop understanding of coaching children with special health care needs. They were told that the study was to be used for the researcher's doctorate in clinical psychology. Before the taping of each interview, participants were presented with an information sheet

(Appendix E) and invited to ask any questions prior to signing a written consent form (Appendix F).

Confidentiality

The limits of confidentiality were explained to participants. Participants were informed that they would not be named in the report. They were aware that information would be shared with others if there was a concern that someone was at risk. They were informed that interviews would be taped and transcribed and that they might be quoted in the final research reports.

Interviews

A semi-structured interview schedule (Appendix G) was developed. This was based on guidance on developing semi-structured interviews which are to be subjected to interpretative phenomenological analysis (IPA) (Smith, Jarman & Osborn, 1999; Smith & Osborn, 2003). The interview schedule was particularly informed by the questioning style illustrated by Smith and Dunworth (2003). Smith and Dunworth's (2003) schedule was developed to interview adults about their experiences of parenting a child diagnosed with ADHD. This was considered broadly similar to the aims of this project and its concern with adult workers' experiences of children with special health care needs. The interview schedule was further refined through discussions with research supervisors and colleagues. The aim was to use it flexibly to encourage detailed reflections on the experiences of coaching children with special health care needs. It

was hoped that the participants' and researcher's shared experiences of YPPM prior to the interviews would facilitate such detailed reflections.

Participants chose the interview location and time. One chose to be interviewed at home. Two chose to be interviewed at offices belonging to Gedling Borough Council and three chose to be interviewed in the bar area of leisure facilities during mornings when the bar was closed.

Participants were informed that they could decline to answer questions or stop the interview at any time. It was not anticipated that participating in this research project would give rise to any distress within participants. However, as a trainee clinical psychologist the researcher had experience of speaking to people in distress. Interviews were conducted sensitively and time for debriefing was included at the end of each interview.

Analysis

Readings of the interview transcripts were structured according to the qualitative procedure of interpretative phenomenological analysis (IPA) (Smith & Dunsworth, 2003; Smith, Jarman & Osborn, 1999; Smith & Osborn, 2003). The roots of phenomenology as a philosophical tradition are often said to be in the work of Edmund Husserl (e.g. Bronfenbrenner, 1979; Clegg, 1998; Giorgi and Giorgi, 2003). Philosophers Merleau-Ponty and Heidegger are credited with expanding phenomenological analysis by emphasising, "...the intrinsically meaningful and intentional nature of being in the world". (Yardley, 1997 p10).

Interpretative phenomenological analysis (IPA) is a brand of qualitative research used by psychologists seeking to understand individuals' experiences. Studies using IPA attempt to answer in-depth questions about the nature of individual experiences of phenomena.

Interpretative phenomenological analysis (IPA) is not a consensual label restricted to one school of research (Smith, 1996). In clinical and health psychology IPA has tended to be applied to furthering understanding in relation to an individual's experience of a health complaint. Phenomenology has been used within nursing to explore meanings associated with delivering services (Benner, 1994; Lemon & Taylor, 1997) and IPA has been used to explore nurses' experiences of working with self-harm (Thompson, Powis & Carradice, 2008). The current project uses IPA in a broadly similar way to explore experiences of working with health care issues as opposed to experiencing them directly.

The phenomenological perspective asks how people experience the object of inquiry and how they interpret this experience (Lemon & Taylor, 1997). This requires an intuitive process more akin to the application of an art rather than objectivity (Lemon & Taylor, 1997). Giorgi and Giorgi (2003) contend that a phenomenological perspective can be useful in psychology to make discoveries about the experiential world in ways that are psychologically significant.

As a method, IPA privileges the self-reflective capacity of participants (Smith, Flowers and Osborn, 1997). Interviewing participants in a study using the interpretative

phenomenological approach requires people to tell their story in their own words about the topic of interest. Participants' familiarity with publishing their self-reflections, orally or in writing, for the scrutiny of others varies; some require more encouragement and facilitation than others (Smith, Flowers and Osborn, 1997). Shaw (2001) argued that the IPA approach to interviewing and analysis, while differing substantially from clinical interviewing in terms of function, makes use of the skills of engagement and facilitation that clinically trained practitioners use on a day to day basis (Shaw, 2001).

Unlike some qualitative analysis procedures, the analytic process is highly structured in IPA, with clear and practical procedural steps to follow (Smith, Jarman & Osborn, 1999; Smith and Osborn, 2003). While the researcher is furnished with a structural procedure within which to work, a fundamental value of IPA practice is that the researcher is a research resource. It is an explicit assumption that they are bound up with the analysis and interpretation so that the meanings ascribed must be owned by the researcher and cannot represent objective truths.

The interviewer/analyser is inextricably a part of the research process. The interviewer must remain alert to the purpose of the study and facilitate the participants' expression of the meaning for them, in their words, of the object of inquiry. However, in the analysis the researcher must exert considerable interpretative effort in order to find out what the object means to the participant. Therefore, the analytic account produced by the researcher is a joint product of participant and researcher (Smith, Flowers and Osborn, 1997). It is a two-stage process known as a double hermeneutic (Smith & Osborn, 2008).

The aim of IPA is to develop psychological understanding of the meanings that experiences have for participants. This is achieved by conducting a detailed examination of how participants describe the phenomena of interest in relation to their personal and social world (Smith and Osborn, 2003). Put simply, IPA is aimed at detailed exploration of the participants' views of the topic being investigated (Smith, Jarman and Osborn, 1999; Smith and Dunworth, 2003). It is particularly effective when considering how individuals perceive particular situations that they face, and how they make sense of their personal and social world in relation to issues of complexity, process and novelty (Smith and Osborn, 2003).

Interpretative phenomenological analysis is an idiographic approach, starting with particular examples and working up to more general claims about the phenomena of interest. This is suited to the project proposed here because the article of interest, experiences of coaching children with special health care needs, has not been examined in the psychological literature. The aim here was to explore the different experiences that coaches have had in practice in order to comment on emergent issues experienced when coaching in this context.

Allen-Collinson (2009) criticised IPA for not being explicit enough about, or clearly adhering to, any phenomenological grounding and for not being wholly conducive to participants' own constructions of experience. It has been argued that the use of semi-structured interviews is problematic. The preconceptions inherent in the construction of the semi-structured interview can have a constitutive effect on accounts of experience and this dilutes the phenomenological aim to assemble descriptions and be faithful to the direct lived experiences of the participants (Allen-Collinson, 2009). However,

participants vary in the degree to which they are familiar with talking about their experiences for the scrutiny of others and some may require more encouragement and facilitation than others (Smith, Flowers & Osborn, 1997). Semi-structured interviews allow for flexibility in response to the participant and are perhaps considerably less rigid in practice than, Collinson (2009) describes. Interviews conducted within the IPA framework are flexible and can be responsive to what participants say; the participant is not a passive speaker and has the potential to set the direction of the interview (Smith & Osborn, 2003).

In IPA the researcher aims to draw themes from interview transcripts in an attempt to get an 'inside perspective' on phenomena of interest (Smith, Osborn & Jarman, 1999). The phenomenological emphasis on subjective experience is coupled to assumptions about the ways in which identities and experiences are constructed through talk.

Interpretative phenomenological analysis assumes that interpretative processes link the inner experience of the phenomena being described to what is said at interview (Alexander & Clare, 2004). Further assumptions of IPA complement this by clarifying the role of the researcher as co-constitutive in the process. Beyond selecting the topic and question areas, the researcher engages in processes of interpreting the participants' interpretation of their experience, a double hermeneutic process (Smith & Osborn, 2003).

Allen-Collinson (2009) appears to argue that the phenomenological researcher should be almost invisible and 'let the data speak for itself' through processes such as

bracketing (whereby the researcher's assumptions are bracketed off through an early process of reflection in an attempt to prevent them from constraining or corrupting what can be said about the primary experiences of the participants). In IPA the interpretative and constitutive role of the researcher is unapologetically placed at centre stage, while what can be said about the experience of participant's must be firmly grounded in what participants actually say (Smith & Osborn,2003). These assumptions made IPA a suitable method for me to explore experiences of a unique programme of activity about which generalisation, or the development of broader theory, would be premature. While IPA is not the only method suited to this purpose, it was able to satisfy the aims of the study reported here.

Appendix D: Letter granting ethical approval

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T: +44 115 84666 26
F: +44 115 84666 25
E: i-who@nottingham.ac.uk

Director
Professor Tom Cox CBE AcSS FBPSS
Hon FFOM (Dublin) Hon FERG FRSH FRSA

3 December 2007

Dear Gareth

I-WHO Ethics Committee Review

Thank you for submitting your proposal on "A study of coaches experiences of working on an exercise referral scheme with young people who have special health needs". This proposal has now been reviewed by I-WHO's Ethics Committee to the extent that it is described in your submission.

I am happy to tell you that the Committee has found no problems with your proposal and is able to give approval.

If there are any significant changes or developments in the methods, treatment of data or debriefing of participants, then you are obliged to seek further ethical approval for these changes.

We would remind all researchers of their ethical responsibilities to research participants. The Codes of Practice setting out these responsibilities have been published by the British Psychological Society. If you have any concerns whatsoever during the conduct of your research then you should consult those Codes of Practice and contact the Ethics Committee.

You should also take note of issues relating to safety. Some information can be found in the Safety Office pages of the University web site. Particularly relevant may be:

Sections 6.9, 6.10, 6.11, 6.14 of the *Safety Handbook*, which deal with working away from the University.

<http://www.nottingham.ac.uk/safety/>

Safety circulars:

Fieldwork P5/99A on <http://www.nottingham.ac.uk/safety/publications/circulars/fieldwk.html>

Overseas travel/work P4/97A on

<http://www.nottingham.ac.uk/safety/publications/circulars/overseas.html>

Risk assessment on <http://www.nottingham.ac.uk/safety/publications/circulars/risk-assessment.html>

Responsibility for compliance with the University Data Protection Policy and Guidance lies with all researchers.

Ethics Committee approval does not alter, replace or remove those responsibilities, nor does it certify that they have been met.

We would remind all researchers of their responsibilities:

- to provide feedback to participants and participant organisations whenever appropriate, and
- to publish research for which ethical approval is given in appropriate academic and professional journals.

Sincerely

Dr Nigel Hunt BSc (Hons) PhD CPsychol AFBPsS
Associate Professor
Chair, I-WHO Ethics Committee

Appendix E: Participant information sheet

Trent Doctorate in Clinical Psychology

The University of Nottingham
Institute of Work, Health & Organisations
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**The University of
Nottingham**

Supervisors: Dr Jennifer Clegg
jennfier.clegg@nottingham.ac.uk
0115 823 0251

Dr Thomas Schroder
Thomas.schroder@nottingham.ac.uk
0115 846 8181

A study of coaches' experiences of working on an exercise referral scheme with young people who have special health needs.

Information sheet for coaches and instructors invited to take part in interviews

You are being invited to take part in our research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish before deciding whether or not you wish to take part. Ask us if there is anything that is not clear or if you would like more information. Thank you for taking the time to read this.

What is the purpose of the study?

This study focuses on the experiences of physical activity instructors and coaches who have participated in Gedling Borough Council Leisure Services Young Peoples Positive Moves (YPPM). Specifically, we are interested in coaches' experiences of working with the young people in the physical activity programmes offered by YPPM. This study aims to:

- Understand what the challenges of working with the young people, who are often excluded from mainstream sport and physical activity, are.
- Identify how the coaches meet these challenges and enhance young people's opportunities to participate in physical activity in the community
- Discover if there are any ways that health services staff could provide additional support to the YPPM coaches

Why have I been chosen?

You have been invited to take part in the study because you are a coach or instructor involved in YPPM. All of the YPPM coaches are being invited to take part in this study. The researcher would like to speak to the coaches in order to understand their views and experiences of coaching young people who have special health needs and are excluded from mainstream physical activity and sport in the community.

Do I have to take part? – NO

It is entirely up to you to decide whether or not to take part in this study. Should you agree to do so, you will be given this information sheet to keep and be asked to sign a consent form. If you do decide to take part, you are still free to withdraw at any time and without giving a reason. Deciding to withdraw at any time, or deciding against taking part in this aspect of the study, will not disadvantage your status as a YPPM coach or instructor.

What will happen to me if I take part?

If you agree to join this study, this will involve a tape recorded interview of about one hour in which we would like to ask you about your views about working on YPPM. If you agree to join this study, you can choose to be interviewed either at offices belonging to Gedling Borough Council Leisure Services, offices belonging to the University of Nottingham, or a convenient

venue of your choice. If you agree to take part, interviews can be conducted on a day and at a time that is convenient to you. If you agree to take part, we will contact you to arrange a place, day and time to conduct the interview.

What do I have to do?

If you agree to be involved in this study, we will first ask you to sign the consent form. You will receive a copy of this to keep, along with the information sheet.

What are the possible disadvantages and risks of taking part?

There are no foreseeable disadvantages or risks associated with taking part. We might wish to quote what you say during interview in the final research report, but no-one will be able to identify these as your words. You also have the right to stop the tape recording at any point, and to have the tape wiped clean, without giving any reason. Whatever you tell us will be treated as confidential, unless you wish otherwise. The only exception to this will be if you tell us something that indicates a risk to you or someone else. If this happens, we will discuss it with you before taking any further action.

What are the possible benefits of taking part?

These are no immediate personal benefits to be gained from taking part in the study but your views will contribute to our understanding of the way that YPPM is developing and will help us to think about further ways of supporting YPPM if this appears relevant from the interviews.

What if something goes wrong?

If you wish to complain about any issue that arises in connection with the research, you can talk to Dr Jennifer Clegg or Dr Thomas Schroder, who work at the University of Nottingham and are supervising this study (contact details above) or to Helen Sugden at Gedling Borough Council Leisure Services.

Will my taking part in this study be kept confidential?

All information collected from or about you during the course of the research will be kept strictly confidential. Any stored information will have any means of identification removed so that you cannot be recognised from it. The only exception to this will be if you tell us something that indicates a risk to you or someone else. If this happens, we will discuss it with you before taking any further action. All information from the study will be carefully stored, in compliance with the Data Protection Act.

What will happen to the results of the research study?

The results of the study will be published as a report to Gedling Borough Council Leisure Services and to Nottingham City Primary Care NHS Trust who jointly fund YPPM. We also plan to present the results at a conference and to publish findings in a journal. The study will also be submitted to the University of Nottingham as a piece of coursework by Gareth Foote towards a Doctorate in Clinical Psychology.

Who is organising and funding the research?

The research is being conducted by a student at the University of Nottingham and is supported by Gedling Borough Council Leisure Services.

Who has reviewed the study?

The University of Nottingham Institute of Work, Health and Organisations Ethics Committee approved the study on 3rd December 2007.

Contact for Further Information

Gareth Foote
0115 846 6646
lwzglf@nottingham.ac.uk

Helen Sugden
0115 901 3661
Helen.sugden@gedling.gov.uk

Thank you for considering taking part in this study

Appendix F: Consent Form



Trent Doctorate in Clinical Psychology

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Research Supervisors:
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0115 823 0251

Dr Thomas Schroder
Thomas.schroder@nottingham.ac.uk
0115 846 8181

Researcher: Gareth Foote
lwzglf@nottingham.ac.uk

Consent form for: A study of coaches' experiences of working on an exercise referral scheme with young people who have special health needs.

Please make sure that you have read the accompanying study information sheet and had the opportunity to ask any questions that you might have about this research.

Please read points 1 to 3 carefully and write your initials in the space next to each to show you have read and understood them.

1. I confirm that I have read and understood the accompanying information sheet and have had the opportunity to ask any questions about the power map study.
Initials.....

2. I understand that my participation is voluntary and I am free to withdraw at any time without giving a reason.

Initials.....

3. I understand that my words can be used in any report and that my identity will not be revealed.

Initials.....

4. I agree to take part in the study.

Name of interviewee
(Block capitals)

Signature

Date

Researcher
(Block capitals)

Signature

Date

Appendix G: Semi-structured interview

Involvement with YPPM

- Can you describe your experience of working with Young Person's Positive Moves?
- Before you became involved with YPPM, what were your thoughts about children with special health needs, like those in YPPM?
- What did you feel about coaching children with special health needs?
How has this changed, if at all, during your time with YPPM?
- Can you describe your experience of coaching children with special needs?
- How, if at all, does your experience coaching on YPPM differ from your experiences coaching elsewhere?
- How do you think YPPM affects the children and families involved?

Self and others

- What do you think about the children that attend YPPM?
- How do you feel about the children that attend YPPM?
- What do you think it means for the young person to be involved in YPPM?
- How do you see yourself as a coach?
How, if at all, has this changed since being involved with YPPM?
- How do the children in YPPM see and behave towards you?
- How do the parents in YPPM see and behave towards you?
- How do the children on YPPM see and behave towards each other?
- How do you think coaches in other contexts (e.g. school and mainstream community groups) see and behave towards the children that attend YPPM?

Understanding and dealing with the children's special needs

- How do you understand the needs of the children on YPPM?
- *Prompt:* what does ADHD, autism, dyspraxia, low self esteem and anxiety mean to you?
- How do you deal with or respond to these needs?
Prompt: do you have particular ways of managing behaviour problems, lack of confidence, withdrawal? Any practical methods?
- How do you see the future for the children in YPPM?

Appendix H: EXTENDED RESULTS

This results section is presented to further illustrate the analytic process. Due to limits on space, Participant 1 is used to illustrate a stage of analysis in which ideas about themes were developed. An audit trail from a reading of Participant 1's transcript at a late stage of analysis is provided. This was based on re-reading transcripts following the organisation of themes at each stage numerous times. Complex combinations of themes developed across the series as additional themes were identified. A variety of potential relationships were identified between themes along the way.

Space does not allow the provision of audit material for all participants. As can be seen in the headings in the audit trail, there are mild differences between the organisation of themes at this stage for Participant 1 and the final themes that are presented and discussed in the main paper and the supplementary analysis later in this section. This is because at this stage in the analysis, the other transcripts were yet to be reread a final time and the final organisation of themes based on selected accounts from the transcripts as a whole had not yet been arrived at. It is included here as an example of analysis in transition.

The stages of analysis in the IPA procedure used here are now described in more detail. Interviews were transcribed verbatim and tapes were listened to again. Transcripts were read through for familiarity prior to making notes in response to the accounts therein. Having gained familiarity with the transcript material in this way for Participant 1, initial themes were noted by word processor. Having experimented with the insert comments function, it was decided that these notes would be typed in separate files. At

this early stage of analysis ideas were listed chronologically and line numbers were not included as attempts to do this disrupted the analytic flow. Several more readings followed and the initial notes were developed into themes. Once an initial or intermediate set of master themes had been developed for this transcript, a similar process was followed for each subsequent transcript. Analysis of subsequent transcripts differed in that pen and paper were resorted to in order to speed up the process as word-processing the initial responses and notes for the first transcript had been experienced as somewhat stilted and laborious. Once interim master themes were developed for each transcript, they were listed together on paper in various combinations and with references to the variety of accounts in the transcripts.

The combination of pen and paper was experienced as a medium conducive to the analysis as it allowed a certain playfulness and creativity with the interpretation of themes that was absent when word-processing. When this was trialled with the word processor, a sense of congestion developed around the number of files generated. The use of pen and paper allowed more freedom to combine and deconstruct themes in order to be able to develop a narrative structure involving a manageable number of themes consistent with the aims of the project. Red, blue and black inks were used for purposes of emphasis. A variety of spatial combinations of themes could be achieved in quick succession as themes were placed on different pages and in different relationships to each other. Interim master themes for the combined analysis were developed in this way by collecting themes under several different headings in various combinations. At this stage working titles were interchangeable as master or subordinate themes.

The next significant stage of analysis involved re-reading each transcript and selecting and extracting accounts that represented or related to the interim master themes. These accounts were cut and pasted into a separate file for each transcript. At this stage, any interesting passages that did not relate directly to an identified theme but were felt to have importance were also extracted. After this process had been completed for each transcript, each corresponding file of quotes was read through in turn and consideration given to the relationships that transpired with the themes identified earlier.

On a subsequent reading, attempts to match each separate account to a theme or themes were made and most themes were re-located into a master-file of themes and corresponding accounts. As this exceeded 14,000 words of quotations without commentary it was clear that a further process of analysis was required to refine the accounts to be used in the paper. This had the purpose of creating space to develop a narrative that could account for the project findings, in relation to its aims, within the required format. This process also led to a further reorganisation of the master themes and their finalisation as a coherent account of the analysis was developed. The master and subordinate themes are shown in Table 1.

Table 1: Themes representing coaches' experiences of Young Person's Positive Moves

Master theme	Subordinate themes
<ul style="list-style-type: none"> • Accepting and accommodating children's limitations in sport 	<ul style="list-style-type: none"> • Concentration and attention • Enjoyment • Engaging the child • Finding meaning in behaviour • Being responsive v. planning • Time • Patience and tolerance • Focusing on individual development • Small groups
<ul style="list-style-type: none"> • Communication and relationships 	<ul style="list-style-type: none"> • Talk nice and calm • Trust • Parents as triggers for behaviour problems • Communication between coaches and parents
<ul style="list-style-type: none"> • Development and values as a coach 	<ul style="list-style-type: none"> • Respect and empathy for children and families • Focus on children's developmental v. attainment/competition • Learning and transfer of skills • It is very rewarding

Supplementary analysis

Communication and relationships

Talk nice and calm

Verbal communication was important to coaches experiences and they appeared to engage in self-monitoring in order to be effective communicators. Maintaining a calm and encouraging presence, and distraction and changes of activity were used to help children participate as fully as possible

Talk nice and calm, never raise your voice, you shouldn't do that on coaching anyway. Just, you know, talk calmly to them and just keep on saying oh what's this here, what've I got here, you know, and just move on to something different. And then you can go back to what it was you wanted to do. (Participant 1)

In addition to not shouting and being calm, avoiding commands was also a strategy that was experienced as promoting participation and the prevention of difficulties. Maintaining composure as a coach and using positive commands as opposed to focussing on what children should not do were crucial to verbal communication.

I think these kids don't like sitting down and again, being told behave, sit still you know its all commands to 'em. When they're with me at football I don't do it in a command sort of way if you know what I mean. (Participant 2)

I would talk to him from a football coach perspective. I want you to come and do this. I will talk about what I want him to do, not what I don't want him to do if you understand me. (Participant 2)

Being open to learning from experience and feedback from others represented a means by which to develop as a coach and improve practice. Participant 5 was able to develop their skills by becoming aware of verbal communication styles that help and hinder the effectiveness of verbal communication.

The first block that I did, the parents were a bit critical. Because fair enough I'd never really worked with children like that, I didn't really know what to expect and...I sort of used my voice far too much and sort of shouted at them and then they got annoyed and didn't come back. (Participant 5)

Trust

The need to treat children as unique individuals appears again in accounts of building coaching relationships based upon trust. This involves subordinating a group identity and not approaching individuals based upon their diagnosis. Trust, friendship and understanding can be developed through forming and maintaining relationships with the children.

You've got to get to know 'em more, you can't just judge them all as a group, ah he's got this and this and you can't, you can't just say oh right he's got this wrong with him, as I say you've got to treat him, you've got, I personally erm get to know

'em a lot more better, erm that way they, the trust builds with ya, you become a lot more friendly and understanding. (Participant 4)

Developing trust was experienced as benefiting children's self esteem.

One thing I've found more than anything, especially the guys with low self esteem, which you find in ADHD kids or autistic kids, erm, once you get to trust 'em and they trust you, self esteem just come on leaps and bounds. (Participant 3)

As relationships developed children were able to make eye contact and approach the coaches where prior to this formation of trust there appeared to be distance between the coaches and children.

They'll come to you and they'll tell you everything, everything that they've been doing, you know, normally sometimes like I say sometimes you can't get a sentence out of them and then all of a sudden they're chatting away, you know really inquisitive, asking what's happened and where you've been and what they've been doing, and and for that to come out of a guy that wouldn't look at ya, you know a year ago or whatever or even a term ago some of them. (Participant 4)

Some coaches' experiences included representations of needing to develop relationships with parents. Coaches and parents needed to develop trusting relationships in order for parents to feel confident about children participating. In order for parents to support their children's participation parents might need to see the development of a positive

coaching relationship with their child. Parents needed be able to trust that coaches would deliver safe and effective sessions through knowledge and experience of how to respond effectively to challenges presented by the children.

I don't think it's just down to the coaches, it is down to the parents at the end of the day, 'cos some parents will not put their children into mainstream activities, because they know that if the coaches don't have training or they're not very competent with that sort of, those sort of issues, then they won't be able to deal with the child. And you need that sort of relationship build up between you and the child to get the most out of them. (Participant 3)

Parents as triggers for behaviour problems

Mixed views and feelings about parents were evident across and within accounts of coaching on YPPM. The presence of parents at sessions was associated with tension or conflict in some accounts. A prominent experience in some accounts was that the presence or actions of parents could cause children to have difficulties in sessions. Meaning was given to the difficulties some children presented by explaining them within the context of children's relationships with their parents. In some cases this was because difficulties between children and parents outside of sessions influenced children in the session. In others the immediate presence of a parent was a trigger for difficulties with discipline and performance.

I find that sometimes when they've had, like the parents have said 'oh I'm going to bring him today because he's been really bad at school and he's not done this at

home or he's done this at home and he shouldn't have done and I was going to punish him and not come'. So then they're resenting it already you know, they're not happy about the situation so they're already all wound up because of the parents. Rightly or wrongly, I mean I'm not in that situation. So I find it quite hard then for 10 minutes or so to get that kid to do anything, but then eventually you do get them down, again you just try different things (Participant 1)

Some participants framed children's difficulties as manifesting in the home, or arising in response to the developmental environment. The following account resonates with an account from Participant 3 regarding children being able to 'get away with it' under the theme *finding meaning in behaviour* in the journal paper. Participant 2 searches for meaning here, they question their own experience and understanding and are unsure about how this compares to other coaches.

Because with me, I don't know about the other coaches but with me I don't see that this misbehaving and problem, but you take them back home and all of a sudden there's a problem. So is it that that the home environment that they're brought up with, I don't know I don't know. (Participant 2)

The issue of parents as triggers of problems and the search for meaning is amplified here by Participant 2. This issue was addressed by encouraging parents to leave the coaching environment and this was experienced as resolving a child's difficulties. Again, the reflective process in which the coach searches for meaning in response to their surprise at this phenomenon is evident.

I don't quite understand why they would kick off when their parents are there. You may expect them to kick off when they're not there. Maybe they haven't got that reassurance, or is it the fact that, I I don't know. I don't know what the answer is. All I know is we took the parents out the equation and all of a sudden the lad was fine. (Participant 2).

There were alternative representations of parents supporting their children to be active and of parents gaining satisfaction and enjoyment from observing their children in sessions and seeing them develop skills. This led to a tension between wanting parents to be included and managing difficulties that appeared to be contingent upon their presence. In order to resolve this tension, parents are represented as being able to derive enjoyment indirectly through becoming aware of the benefits to children following the session.

I think the enjoyment the parents get out of it is if they can't see them, because it affects the session, they can enjoy it by the fact of how the kids are when they come out of the session. (Participant 2)

Communication with parents

Parents could provide important information about responsivity factors and developmental aims.

The parents erm, talk to me about what they can do and what they're finding really difficult, like if it's their attention or if it's their motivation, or if it's

confidence, things like that they can tell me what needs to be worked on and then we can sort of highlight those areas and improve on them really. (Participant 5)

I always start with the parents. Like if, I always have a little chat to them at the start of the session, if it's their first session, to see what they enjoy, what they don't enjoy, how they respond to this sort of thing, what's the best way to get them motivated and things like that. (Participant 5)

Opportunities to communicate with parents about children's needs and progress appeared to offer a unique experience for this coach to identify coaching strategies. This is contrasted with the experience of coaching in school situations where there is less support to meet SHCNs.

Well in school they don't get as much support I don't think. Erm and I suppose you don't get to meet their parents whereas in this scheme you get to talk to their parents and you get to like, find out where their areas of weaknesses are and they can like inform you of a particular needs and how they adapt to each situation whereas in schools it's sort of trial and error. (Participant 5)

The account from Participant 2 at the end of the previous theme emphasising parents' enjoyment of children's participation is supported below. Parents' enjoyment is observable and at times marked when they see their children developing skills. This also represents parents as engaged with the scheme and happy because there are no problems. It appears that some coaches are receptive to parents' indirect or non-verbal

communication and infer much from this. Participant 4 finds this type of communication reinforcing.

They'll sit down, watch, watch the kid enjoying it and even sometimes you can see the parents as well, a massive smile on their face just 'cos they can watch their kid improving (...) it shows that the parents are interested in it, they're happy that their kids are there, they're happy that you're coaching it and they haven't got no complaints and that's, that's very important, pleasing as well really. (Participant 4)

Relationships between the adults around the children are seen to be important to the development of the scheme. In the following extract it is clear that this coach invests in their relationship with the parents. A separate meaning about parents misunderstanding their children and lacking appropriate understanding about their conditions is evident. Parents need to listen and seek information in order to understand what might otherwise be understood as merely bad behaviour.

I think it's important that the parents build a bond between the paediatrician, the coaching staff, the guys who are organising the sessions, and things like that. It's got to be a thing where they've all got to listen and learn as well. They can't... I don't think half the, half the parents understand what the problem is with the guys, with the kids. Erm people just automatically ADHD bad behaviour and that's not it, bad behaviour is not what it is. Its part of it but its not the whole 9 yards kind of thing. It's important that they try to listen and take in a step at a time more than anything. I think they've got to try and get some more information. (Participant 4)

By cultivating relationships and keeping communication open, drop out from the programme could be prevented. It appears in the following extract that absence of communication about problems and parents' concerns in sessions has been experienced as contributing to drop out. Related to the theme of *patience and tolerance* in relation to some children's slow progress, it appears that communication is necessary to help parents maintain enthusiasm and realistic expectations for their children's participation.

You do get one or two that do drop out 'cos like I say they don't see the miracles happening that they thought might happen straight away, but again I think it's the most important thing is that we keep everybody in a loop where we're saying look, you know don't, let's not give up. (Participant 3)

Respect and empathy for children and families

Experiences of the energy and activity levels of children at YPPM enabled this coach to represent parenting them as very tiring and energy consuming. This empathic response denoted a need to support parents, resonating with Participant 3's experience that parents need more information about ADHD.

When you've got a kid that's hyper, and most of these are hyper, they're non-stop and they're challenging all the time and you're watching them, you know, safety and all sorts of different things. Those parents must be knackered, absolutely knackered, they need support, not just the kids, they need support. (Participant 1)

Representations of induction into coaching at YPPM were revelatory and forceful in the extent that participants became aware of the challenges that children and families face when a child has SHCNs. Participant 4 appears to have experienced astonishment when they reconciled such understandings with observations of the effort and commitment given at YPPM. The following two accounts provide representations of an experience of revelation in response to becoming aware of the difficulties that could be faced when a child has SHCNs. It appears that these participants developed respect and empathy for the children and their families.

The very first session my eyes were opened up and I thought to myself, wow, you know, these guys are... the problems that they've got, the difficulties that they're having, whether it's not having friends, or not even being able to you know talk to people or or listen to people and to see them coming there and giving everything, it just, it was, it just blew me away. (Participant 4)

So working with the children and families was really new to me and understanding the difficulties, not only around why they don't access physical activity, but some of the other difficulties that they have just generally in day to day really opened my eyes to what some families go through and how much of an impact it has on the families themselves, you know, on the other siblings and on the parents. And also the impact that it then takes on when they're in mainstream school and that kind of thing, so I think it opened my eyes to a lot. (Participant 6)

Focus on children's developmental v attainment/competition

The strategic importance of focussing on individual development was introduced in the journal paper. There it constituted a way of managing sessions and responding to individual need. It was related to having time, patience and small groups in order to work closely with referrals and was crucial to the meaning of successful coaching. The emphasis on meaning in that manifestation of this theme related to direct work and could be considered to be a technique or skill. In the accounts discussed below, the emphasis is on this theme as a value or role frame. Representations of this role frame were often juxtaposed with the meaning of performance climates and competitive focus elsewhere. Coaches and practices were distinguished on the basis of their identification with and implementation of mastery or performance climates. Some coaches objected to the values of performance climates, others viewed it as a legitimate difference arising from context and setting (recall Participant 3's defence of club coaches focussing on the needs of a team under the theme *time* in the journal article).

Now that is, that's why I think coaches like myself in this situation where we try and get wherever we can, and it's not that easy, we do come across these type of kids, whereas your club coaches in clubs, they don't come across them because they don't want them. And they're not accessible. And not only that, but would some of these kids think of joining these clubs? No, because it's not the done thing because they don't seem to be accepted. (Participant 1)

Participant 1 spoke of clubs excluding children with SHCNs because the clubs are focused on winning and will not make extra effort to include or take an interest in the children at YPPM. For Participant 1, values emphasising winning over inclusion and development were a sign of amateurism and inexperience.

Most coaches are we want to win, we want to win at all costs, and if little Johnny there doesn't play a game all season but we win, that's alright. But he's part of the team – no he's not and he knows he's not, and, you know, that's how the majority of the coaches who aren't paid and, experienced and qualified I suppose, well qualification actually hasn't got anything to do with it, it's experience, they're out to win, they're not interested. (Participant 1)

Participant 2 similarly accounts for experiencing contrast between coaching at mainstream clubs and YPPM on the basis of competitiveness but this diverges from Participant 1's account as the location or absence of these values resides in the children.

These kids that have got no expectation of good and bad, you know level of ability, they just do as asked and they try their best whereas there's a competitiveness about mainstream where you've got to be better than the next man (Participant 2)

The following extract echoes the effort represented in accounts of parenting children who are hyperactive in the theme *respect and empathy for children and families*. This extract emphasises that coaches elsewhere might see the children as difficult. However, where Participant 1 juxtaposed the values of winning with inclusion, Participant 6 opposes the expectation that in other settings, the children's difficulties will be seen as

naughtiness and the product of inconsistent parenting with medical discourse. For Participant 6 there is a difference between YPPM and mainstream settings in the understanding and legitimacy applied to the child's problems. In the above account from Participant 1, the central issue determining exclusion was coaches' desire to win. For Participant 6, exclusion is the product of misunderstanding of clinical issues, others blaming parents, and lack of effort to find out about the children's needs. Coaches elsewhere are constrained by time and use this as the basis to reject children with ADHD.

I think [coaches elsewhere] see them as hard work. I think they see a lot of it as, not maybe a mental or a medical type problem or a diagnosed problem, (...) specifically the ADHD type kids, it's a label that's been put on them but actually it's just that they're a naughty kid and that parents haven't instilled discipline and behaviour management in a consistent or supportive way. I think they just see it as we can't deal with this kid so just kick them off type of thing, you know, not prepared to go the extra mile and get a bit of research, a bit of information, a bit of advice or support or training, I think, it's just, you know, we haven't got time and pass them on. (Participant 6)

Learning and transfer of skills

Coaches appeared to approach or become involved with YPPM because of the opportunities for learning and development of their coaching practice through experience of working with children with SHCNs in a specialised setting. Coaching skills developed in this context could be expected to benefit the coaches and their

charges in other settings. Representations of openness to learn through experience were salient.

With this I thought it's more of a challenge for me as a coach, it'll help me out when you go into schools and you've got the odd kid there that's got various problems or needs and that'll help me out with coaching them as well. But I saw it more as a learning curve for me more than the kids because I'm learning more from it, without knowing it I suppose, you know, you're having to adapt. So I saw it as a challenge and something I could learn from to help other kids out as well. (Participant 1)

In order to complement the development of coaching knowledge and practice, value was placed on opportunities to further understand individuals and their specific clinical needs. The focus on responding to individual needs and the creation of a mastery climate can be contrasted with the representation above from Participant 6 of coaches elsewhere being unwilling to make the effort to gather information and develop accommodating practices.

I'd like to get as far as I could understand it, every single condition that comes to me. I don't know anything. I could not write much on paper or tell you much about what each thing means. All I can do at the moment is react to what I see and how can my skills get that out of them better or change it. But my knowledge, my coaching skills would be far greater if I could have more knowledge about each individual. (Participant 1)

Participant 5 provided a narrative of their personal development as a coach through experience coaching at YPPM and the possibilities for transferring the skills gained there to other settings.

As a coach I've got better, erm sort of progressed further and found it, got a lot from it because whereas before I'd never really worked with that, I couldn't understand what like they needed from it whereas now I can sort of change my teaching style to deal with different groups of children. (Participant 5)

It is very rewarding

All of the participants provided representations of finding their work rewarding. This was often related to children's enjoyment or development. In some accounts this related also to the intrinsic enjoyment of learning and the development of new coaching skills.

And at the end of that session I've got a lot out of it, you know, because I think, oh I've really enjoyed watching them think about it and that, and if there's two of them they're working together, so then there's a bit of teamwork coming off and that. (Participant 1)

Making a difference was a source of pleasure for some coaches, although it appeared that this could also cause a tension in other coaches, perhaps because they were uncomfortable with such responsibility.

You can see that, your pride builds up that you know, you've made a difference.

Whether you like it or not you've probably made a decent difference for the kids.

(Participant 4)

Drawing comparisons between children's abilities at the commencement of their involvement and what they go on to achieve was a source of positive emotion and reward.

From the start like to see the difference in what they can do now, what they couldn't do before. I think that's the most heart warming and rewarding tale of the lot really. (Participant 4)

The extent of such reinforcement appeared to be unique to coaching at YPPM. The benefits below are not restricted to the children. Children's participation in YPPM could extend benefits to their families.

You know, the difference that we've seen and some of the changes that we've made to some of the families, not only the kids, it has been really rewarding. We do see that in our other programmes but I think we see it a lot more in this programme than we do in the others (Participant 6)

The possibilities for benefits to children are elaborated in the final extract and it is clear that positive experiences were enjoyed by both coaches and children. Participant 6 is open to a variety of meanings about the personal benefits to children and this appears to bolster their own satisfaction with their work.

The programme is really rewarding in the sense that with a lot of young people you see a real change in whether it be their attitude, their behaviour, their skills, their confidence, their enthusiasm. So I've seen quite a lot of changes in quite a lot of the young people that have been on the programme. (Participant 6)

Audit trail of organisation of extracts from Participant 1 at a late stage in analysis prior to finalisation of master and subordinate themes.

Engaging the child

You try all sorts of different things and see what actually gets them there to start it. I think that's the trick, don't just right come on do this, come on do this, come on do this, the same thing, they don't want to do it. Try something else if they don't want to do one thing. 6.49

In positive moves, the children there, it is very hard to get them to do something if they don't want to do it. But if somebody else does it, one of the other kids, some might want to do it but others will still not want to do it. They don't sort of follow the trend. 7.17

Enjoyment

So you can do things like that and that stimulates, it gets that brain going and all that stuff. 4.38

they're challenging themselves instead of me saying right, can you do this, can you do that, they're challenging themselves, and I think they get far more out of that half an hour than probably, you know, 8 sessions of me telling them what to do. 12.3

And you can ask any kid, you know, what subjects are you good at, what subjects do you enjoy and I bet you they're the same ones. You know, ask my lads, they enjoy certain subjects and they don't enjoy certain subjects. The ones they're good at are the ones they enjoy, so you're probably right I think, yeah. I do enjoy and I'm interested in the fundamentals. 19.31

The two I had last time I gave them those reaction balls, I gave them a reaction ball each because they enjoyed it and, you know, chasing a ball in a straight line is boring for anybody, but with these kids they want something a lot more challenging than that because most of them can do it dead easy. Give them one of these, run around after it, you know what it's like, the ball's going all over. I've said to people have that, they'll play for hours with things like that. 25.44

and it's nice for the child to come home and have something positive to talk about, you know, I did this, I'm looking forward to that, I really enjoyed that, which with these families it sounds like they don't get many of those opportunities 26.21

Finding meaning in behaviour

at the end of the session her mum said I've never seen her move like that. Now that's just one session, it weren't even the one to one it was in a group. And her confidence, you could see the smile on her face, you know, and she said I like moving. You know, she's got a bit of a weight problem, not

massive, you know, but she will have if she doesn't start getting into things. That's self esteem then coming into her though, that's she's got some respect back to within herself, you know, not from me not from her mum, from herself and that's the thing, with her, that's what she needed. Some of the others haven't got it and they won't have it because they don't know about it. You might be able to get it out of them, I don't know, I don't know what their mental state is, but with certain ones it is the self esteem. 15.4

Speak nice and calm

Talk nice and calm, never raise your voice, you shouldn't do that on coaching anyway. Just, you know, talk calmly to them and just keep on saying oh what's this here, what've I got here, you know, and just move on to something different. And then you can go back to what it was you wanted to do. 5.51

Trust

I think, they might, to start off with I think that they probably see me as a teacher. Then I think after a while they realise that I'm not a teacher, I'm a friend, I'd like to, I hope that they see me as a friend who plays with them I suppose, that's what I'd like ultimately. If they can see that, because I'm just

doing games with them, you know, and we'll have a bit of fun and there'll be a bit of a laugh, a bit of messing about, you know. 13.49

It's like I've got a couple now, there's some new ones, definitely one, a girl, she hopefully in a few weeks time will be out of her shell, you know, she'll be oh can I do this can I do that. That's what I'd like, if I've got that, and that's the first thing to do, get it out of her, once she's got a bit of confidence of talking to me within the group as well, then she'll have that confidence of going over these hurdles and down the ladders and balancing and catching and all that stuff. 14.30

Parents as triggers for behaviour problems

I find that sometimes when they've had, like the parents have said 'oh I'm going to bring him today because he's been really bad at school and he's not done this at home or he's done this at home and he shouldn't have done and I was going to punish him and not come'. So then they're resenting it already you know, they're not happy about the situation so they're already all wound up because of the parents. Rightly or wrongly, I mean I'm not in that situation. So I find it quite hard then for 10 minutes or so to get that kid to do anything, but then eventually you do get them down, again you just try different things 6.32

one lad that I know that he plays up to his mum and dad. I'm convinced of it. I think if you got him away, and he's probably one of the worst ones there with regard to challenging behaviour, I think if you got him away from his parents in a different environment he'd be a different lad. I'm not saying he'd not be challenging, he'd be a problem still but I think a lot of the problems would disappear if you could get him away because he gets the attention. 25.23

Communication between coaches and parents

And something that I've always thought also is you've got experts who know far more about these kids than I do, but I've got that practical side of things, and this is why I think this sort of side of things really works because you've got the experts, people who've got a lot more knowledge, and then you've got people who are on the ground as it was. And if these two can work together, then hopefully it will gel together. 5.35

Being responsive to the children v planning

Get their attention away from whatever it is. 5.47

Anything, just to change, get their concentration away from whatever it was they were doing. 6.8

It's mainly getting that attention. If you can get their attention that's the main thing. And with different bits of equipment and the different things you do, instead of just throwing a ball on and saying right off you go and play, you can get their attention with the equipment, bright colours, different things like that, a lot of movement, just things to challenge them, you know. Participant 1 5.19

So you have to try and get their attention back to what you're doing which, you know, sometimes is hard, depends who it is, but generally you can get some equipment about or give them a challenge, 'right look at me I can do this, can you do this', or 'oh no I've fallen off, I bet you can stay on there and not fall off'. Give them a challenge, they love challenges. 6.12

Erm, leave them on their own for a bit and hopefully they'll come in. And you just keep, every so often just try and encourage them to come back in again. Sometimes they do, sometimes they don't and you have to change it round and accommodate them as well. But they've got to then learn that it doesn't revolve around them, unless it's a one to one then it obviously does, but if there's two of them there they've got to realise that you've got to give somebody else a bit of attention as well. Which is all part of growing up, you know, they've got to learn these things I think. 7.26

I don't plan sessions for positive moves. I just go along with equipment, see what sort of moods they're in and just adjust. 11.23

Lucky enough with fundamentals there's lots of equipment, so I just bring a range of equipment for what I want to use for that day and then I can adapt it. You've got stock stuff in your head that you do regularly, but then you should be able to, right what can I do with this, all right we'll do this, you know, you think on your feet, think quick, and, ask them. 11.36

Focusing on individual development

But they also need to be challenged and that's when you, when I recognise when a kid has achieved the best they do within that skill then I push them on because they're getting bored, so can I push them on. 3.10

And that is, the others are going too far too advanced, they're looking at their age and they should be doing this, they should be doing that. They should go straight back down to the early stages. 4.34

So if I can get kids on the positive moves doing this then when they go off and do their football within positive moves or any other sport within positive moves and then at school and then hopefully join a club, whatever sport it is, then, you know, we're winning, we're getting there. But they've got to do the fundamentals. It's no good putting them into a football environment if they cannot kick a ball. 8.2

if you can get a one to one with these kids all their skills would then develop, not just the sports skills but I think skills within the schools situation as well, you know, in the classroom situation. And then I think you could probably bring it within, if you can get them in 2's or 3's or something, working together as well and then the skills would come out. But I suppose if they're doing other programmes, like football or whatever, swimming, then these skills would connect. 12.43

it's that self esteem and I think it's, especially with these positive move kids, it's been knocked out of them, especially those that are aware of themselves, I mean, there's certain kids there, as you probably know, that are probably not aware, you know, they're that different, but some of them know they're a bit different in some way, they might have had the mickey taken out of them, I don't know, hopefully not, but you know it's society isn't it, but if we can build that self esteem back into them, you know, and they can then hold their head up a bit higher. 16.25

Small groups

They do need that one to one because if they're concentration goes within a split second, as soon as your back's turned they're not interested so you've got to really concentrate on them. 4.17

With positive moves kids they do need that one to one because as soon as your back's turn they've got no attention there, they're not interested, they just wander off doing something else in general. They really need that stimulation all that time. 5.9

I had one of the mums say to me can you help him kick a ball because he goes to football and he can't kick a ball, but because they're in a big group he doesn't get that one to one to try and kick a ball. 8.8

I think they benefit from, if it's a one to one, I think they benefit from a one to one. They could probably get one to ones in reading and writing or whatever it is at school and that, but in sport they would not get one to one. 2.33

Inclusion v segregation

so these kids on positive moves, are they going to be included in this type of, some schools only have half an hour or an hour a week. 9.11

you need that support within that system and I don't think it's always there. It's all right saying right, we'll put a ramp in. That's not it, a ramp doesn't solve things, you know, it gets somebody from A to B but you need the infrastructure within the kids in that environment as well. You know, get them involved in everything. 19.2

I see some of them being accepted, some there's no way because their physical condition cannot be changed, well their actions at the moment I don't think they can be changed greatly. 21.40

When I say physical, it's certain kids their movements, you know it's probably more mental, they'd be walking around sticking their tongue out at people, you know, it's things like that, probably a bit of violence or something. I think that they're going to find it very hard but others, like this girl I was on about, there's nothing wrong really, you know, she's just got a bit of help and she'll be fine, you know, a bit of attention without saying you're special, you've got to have attention, it's just working with her, you know, just working with her, just doing things with her. And there's a couple of other lads there, I don't see a problem at all. 21.47

I think it's changed but whether some of these other kids could, or no, I don't think it is them changing I think it's society that's got to change. Society won't change. Within their small environment it'll change and you can probably change little bits around them, you know, if people come into contact with them you can change their ideas about this child, or adult as they get older, but society'll not change. 22.21

Respect and empathy for children and families

when you've got a kid that's hyper, and most of these are hyper, they're non-stop and they're challenging all the time and you're watching them, you know, safety and all sorts of different things. Those parents must be knackered, absolutely knackered, they need support, not just the kids, they need support. 26.33

Focus on children's developmental v attainment/competition

Give it to them, let them go off and play, let them do it. What's the, the worst thing for kids is for a coach to say right you stand there you stand there, now throw it to each other. How boring is that. You say right, here's the ball off you go, throw it to each other. They'll be running all over the place, they'll be 2 miles away from each other to start off with but eventually they'll get closer and closer until they can catch the ball. And you let them explore, let them do stuff. 9.52

I'm really interested in seeing how kids develop within that fundamental side of things. With regard to the elite ones I can get them to a certain stage and then they probably go past me. 20.1

Other club coaches would never come across kids with different abilities as in physical and mental. 23.17

Now that is, that's why I think coaches like myself in this situation where we try and get wherever we can, and it's not that easy, we do come across these type of kids, whereas your club coaches in clubs, they don't come across them because they don't want them. And they're not accessible. And not only that, but would some of these kids think of joining these clubs? No, because it's not the done thing because they don't seem to be accepted.

23.24

most coaches are we want to win, we want to win at all costs, and if little Johnny there doesn't play a game all season but we win, that's alright. But he's part of the team – no he's not and he knows he's not, and, you know, that's how the majority of the coaches who aren't paid and, experienced and qualified I suppose, well qualification actually hasn't got anything to do with it, it's experience, they're out to win, they're not interested. 24.9

Learning and transfer of skills

I suppose my heart's there more than anything really, more than able bodied. But with this I thought it's more of a challenge for me as a coach, it'll help me out when you go into schools and you've got the odd kid there that's got various problems or needs and that'll help me out with coaching them as well. But I saw it more as a learning curve for me more than the kids because I'm learning more from it, without knowing it I suppose, you know,

you're having to adapt. So I saw it as a challenge and something I could learn from to help other kids out as well. 3.48

I'd like to get as far as I could understand it, every single condition that comes to me. I don't know anything. I could not write much on paper or tell you much about what each thing means. All I can do at the moment is react to what I see and how can my skills get that out of them better or change it. But my knowledge, my coaching skills would be far greater if I could have more knowledge about each individual. 17.16

But also I mean, to get higher up in coaching you've got to do courses, and I don't do courses. 19.45

It is very rewarding

And at the end of that session I've got a lot out of it, you know, because I think, oh I've really enjoyed watching them think about it and that, and if there's 2 of them they're working together, so then there's a bit of teamwork coming off and that. 12.13

I'm really interested in seeing how kids develop within that fundamental side of things. With regard to the elite ones I can get them to a certain stage and then they probably go past me. 20.1

Appendix I: EXTENDED DISCUSSION

It appears from the results presented here that youth sport coaches can deliver useful developmental and clinical interventions by promoting mastery climates and using reflective practice to identify and respond to the unique coaching issues experienced when working with children with SHCNs. Some of the themes identified here seem relevant to coaching children in sports and physical activity in general. However, the purpose of this discussion is to emphasise coaching issues associated with working on an exercise referral scheme with children with SHCNs. Themes were replete with accounts of features of mastery climates focussed on individual development, choice and enjoyment. Mastery climates have been shown to increase participation in physical activity among children and adults generally (Biddle & Mutrie, 2008) and have been shown to have promise with clinical populations (Emslie, et al., 2007).

It appears from this study that opportunities for clinical and sport and exercise psychologists would be welcomed by coaches on this scheme. Participants placed value on learning more about the conditions they saw through training and having good links to health care workers. Sports and exercise psychologists and clinical psychologists could provide training and consultation around ways to promote physical activity among children with SHCNs. There was a sense that coaches might find their work difficult as referrals became more complex. Group and individual meetings could be arranged in which psychological consultation could help coaches optimise practice through reflective conversations. It is likely the survival of the profession of clinical psychology will become more reliant on delivery of consultation to groups of workers who have not had the benefit of education and training in the application of

psychological knowledge to real-world challenges (Pilgrim, 2008). The provision of psychological space to reflect with other coaches also appears to have value. Coaches are known to initiate reflective conversations with peers about salient coaching issues and programmes can support this structurally (Gilbert & Trudel, 2001a; 2001b).

It appeared from the participants experiences that they were able to promote physical activity among children who might otherwise be excluded from such extracurricular activity. As the majority of physical activity occurs out-of-school, it is not enough to rely on schools to promote physical activity for children with SHCNs. Physical education has undergone a decline in curriculum priority, particularly in primary schools in the UK (Sport England, 2000). The literature indicates that children with ADHD and ASD may experience difficulties with participation and exclusion in physical activity and sports due to social, behavioural and motor problems that decrease their confidence to participate and lead to other children not involving them, particularly in team-based activities (Attwood, 2007; Lavay, 2005). This reflects inverse care as children who could really benefit from accessing opportunities to be active are excluded. Sports participation is held to be a cornerstone of child development (Department of Health, 2004). In addition to the psychological, social and physical development benefits available to all children who participate in sports, physical activity may represent an important intervention for children with SHCNs in relation to motor skill development, self-concept and social skills (Attwood, 2007; Barkley, 2004; Lavay, 2005; Leroux, 2009; Pan & Frey, 2006). Mental health services have been criticised for being slow to respond to emerging evidence about the protective and reactive psychological benefits of physical activity (Callaghan, 2004; Daley, 2002).

Based on the current analysis of coaches' experiences of delivering an exercise referral scheme for children with SHCNs, it is evident that coaches can develop skills and environments that meet the need to provide opportunities for children with conditions such as ADHD and ASD. Coaches demonstrated the use of reflective practice to set and solve problems and surprises, consistent with previous work on reflective practice in youth sport coaching (Gilbert, Gilbert & Trudel, 2001; Gilbert & Trudel, 2001a; 2001b). The coaches interviewed here appeared to be willing to go beyond established routine or technical rationality by internalising coaching challenges encountered with children with SHCNs. This resonated with Schon's (1983) characterisation of artful teachers who use reflective practice to understand and respond helpfully to learners who have unique difficulties. All coaches presented accounts of considering children's individual needs in order to accommodate their difficulties in sport. They shared the aim of supporting individuals to develop physical and sporting skills. This entailed revising expectations about rates of skill progress, performance and competitive achievement through reflective processes. This ensured that mastery climates were promoted. It appeared that coaches worked with children and parents to enable them to also adopt mastery approaches in relation to YPPM and re-evaluate expectations of the meaning of success and rates of skill development.

A prominent theme within all of the accounts involved the coaches' relationships with the young people on the programme. It was apparent that the coaches were keen to convey respect for the children and their families. The coaches positioned themselves as having responsibility for the children's enjoyment and development through participation in their sessions. This experience of having positive relationships with the young people was demonstrated in a number of ways – speaking not shouting,

negotiation of activities, hoping to be seen as a friend who listens. It was welcomed as a sign of trust and the development of a strong working relationship when children felt able to ask about the coach's day and wanted to tell the coach about their day. Warmth towards the children was evident in the accounts of what coaches valued about their relationships with the children.

Different meanings were associated with agency in relation to coaching issues encountered on YPPM. It was apparent that coaches assumed responsibility for the children's engagement with and enjoyment of activities and for managing problems with attention and concentration. However, some accepted that in some situations there was nothing that they could do to engage a child and accounts included illustrations of withdrawing at times to allow children to return to a task or activity of their own volition. While the coaches appeared dedicated to engaging the children and making activities meaningful and enjoyable, they appeared to accept that they had limited influence over some children at some times.

Participant 2 struggled to reconcile the observation that the manifestation of some children's problems appeared contingent on the presence of parents.

It was also apparent that other participants tried to develop more complex understandings of the difficulties that children had with sport and inclusion, and home and school experiences. Some coaches appeared to resist pathological explanations that internalised difficulties as occurring within the children and used alternative systemic explanations to account for their experiences. Participant 2 reflected upon their own difficulty reconciling expectations and understanding of conditions and observations of children and experiences of coaching sessions. Coaches appeared to search for

explanations to reconcile observations and expectations and to identify coaching issues and responses. Again, reflective practice was a key component.

Some participants provided accounts of developing a profound understanding or empathy for the difficulties that parents and families experienced. Powerful representations of this being experienced as revelatory were identified. This appeared to diverge from accounts of parents as triggers for problems in sessions and elsewhere. There was also agreement that parents and families could benefit from their children participating in YPPM.

Participant 3's empathy and respect for parents was juxtaposed with frustration and criticism relating to some parents lack of commitment to their children's participation. Some coaches also accounted for some children's difficulties within the context of poor relationships with parents. It was evident that some coaches held opposing views of the role of parents in children's difficulties. Parents were variously represented as co-sufferers or victims of the conditions, as not understanding the meaning of conditions, and also as triggers or causes of those difficulties. Given the general complexity of parent-child relationships it is perhaps unsurprising that coaches held a variety of formulations of the role of parents in their children's conditions. The impact of SHCNs on the child and the systems around them, and the interactions between the environment and behaviours associated with the conditions in accounts here are consistent with the wider literature on ADHD (Erdmann, 1998; Harpin, 2005).

A sense of connection and reciprocity with the children was apparent in descriptions of positive coaching experiences and this was associated with experiencing a sense of

reward and satisfaction with work on the programme. However, this could not be taken for granted and some children would avoid eye contact and have difficulty speaking up, particularly early on in the coaching relationship. Attwood (2007) noted that social difficulties arising from ASD can be an impediment to coaching some children as their emotions and internal states can be difficult for coaches to read. Coaches actively sought to respond effectively to these social difficulties and work towards building children's skills, confidence and self esteem, almost as by-products of concentrating on building relationships. Coaches have a significant impact on the way children see themselves (Tofler & Butterbaugh, 2005) and the participants here appeared to approach this with a sense of accountability. There were indications that coaches elsewhere might struggle with such responsibility.

Where coaches could not arrive at a formulation through reflection-in-action of what had bothered a particular child, they used reflection-on-action to search for meaning and develop practice (Schon, 1983). In this way, coaches were able to identify issues relating to the presence of parents and the impact of parent-child relationship dynamics in coaching sessions. Issues relating to managing parental presence and involvement in sessions appear to be common features in youth sport coaching and the ways coaches relate to parents appear central to coaches' effectiveness (Gilbert, Gilbert & Trudel, 2001a; Strean, 1995).

Coaches' satisfaction or sense of reward from this work was directly linked to children's enjoyment or development, and some coaches also described how coaching satisfaction was further linked to parents' pleasure at observing their children develop and demonstrate abilities and skills. Connections between parents and children were

also highlighted here and in some cases coaches relied upon parents to interpret whether children enjoyed the sessions and found developing their skills rewarding.

Coaches appeared to develop their own ways of responding to coaching issues presented by the young people. This is consistent with the wider literature that suggests coaches learn their profession primarily through experience (Jones, 2006). These strategies appeared to be based on interactions with the children and finding what works in each situation. Some coaches also provided accounts of looking elsewhere for ideas and importance was attached to good lines of communication with parents, health workers and of course the children themselves. By taking time to get to know each child and learn about approaches used in other settings, coaches appeared to develop adaptive strategies for engaging each child and optimising their participation.

Coaches' accounts of strategies to manage challenges included distraction and diversion when children engaged in unwanted behaviours, or went off task. This approach appeared not necessarily as an immediate response, and coaches would attempt to direct the child to the intended activity and try to support them to focus on it through verbal persuasion. Effective verbal communication relied on remaining calm and not shouting when things went wrong. Alternatively, coaches described taking an experimental approach or using trial and error to search for an activity that the child would be motivated to participate in and using this as the basis to develop and maintain their engagement.

Intrapersonal difficulties demonstrated by children at YPPM included problems with attention and concentration, boredom and limits on ability associated with clinical

conditions. Interpersonal processes that accounted for children's difficulties in sports and physical activity included the influence or presence of parents, interactions with other children and the values, skills and experience of coaches elsewhere. While the coaches spoke of both intra and interpersonal explanations of difficulties, some also acknowledged that it was difficult to account for some behaviours or coaching issues encountered in sessions. There was agreement among the coaches that seeking to understand the effect of each child's condition on their behaviour and ability was crucial to meeting their developmental needs and successfully accommodating them in the sessions.

All of the participants presented their role as being to facilitate each child's acquisition of skills specific to the activity context and to support their development by ensuring children find the activities enjoyable and rewarding. The fulfilment of this role was associated with being open and responsive to the children in the moment. This was associated with the unpredictability of the children's presentations between and within sessions. Some coaches spoke of the futility of planning sessions and the necessity to be flexible and able to adapt to changes in children's presentation and engagement from moment to moment. This depended on the coach developing awareness and understanding of the triggers and signs that children were disengaging from activities. Small groups and individual tuition were clearly experienced as facilitating these approaches.

There was a wider meaning associated with the challenges that would be experienced by coaches in other settings. Some coaches provided accounts of their surprise to find that actual experience of coaching the young people was less challenging and difficult than

they had expected it to be. Others anticipated that as the programme progressed and coaches became more skilled, referrers would in turn be confident to refer more challenging cases and there would come a point where coaches would be unable to support and accommodate some children because of the severity of their conditions. It appeared that the values and objectives coaches bring to their work helped the coaches here to accommodate children at YPPM. Other coaches were understood to exclude children with conditions such as ADHD and ASD because they did not meet the needs of coaches whose role frames are dominated by performance and competition.

This study highlights the enjoyment and benefits that participants derived from working on an exercise referral programme and provides an indication of the challenges that they experienced when working with children with SHCNs. The coaches clearly considered the activities that they led to be beneficial for the children at YPPM. They also identified ways that they had learned to manage sessions and individual needs and were consistent in the view that YPPM offered the children a unique developmental intervention. The small numbers of children in each group and the values of the programme were held to promote opportunities for coaches to accommodate the young people and support them in physical activity and sport at a level that matched their skills development and clinical needs. Issues that coaches and the young people might face in sports elsewhere were also considered. From their experiences, the participants in this study identified barriers that some children with SHCNs could face in extracurricular recreational physical activity and competitive sports.

Limitations and future directions

The journal paper has limitations related to space. Writing in this format did not permit analysis or adequate discussion of the two primary themes in the supplementary results. Furthermore, it is acknowledged that the recommended word limit for the selected journal has been exceeded; however, examination of qualitative explorations of accounts published in that journal often exceed this word limit and this is true of studies using IPA (e.g. Alexander & Clare, 2004; Larkin & Griffiths, 2004)

The social context in which the interviews reported here were conducted may have shaped the accounts and interpretations of coaching experiences that participants gave. This thesis was conducted as part of a doctorate in clinical psychology. The research participants were aware of this and such awareness may have biased the ways that coaches reflected upon their experiences at interview. The participants had clearly thought about the interviews beforehand and appeared prepared to talk about their experiences. They might have formed expectancies about what they should talk about and this could have influenced the accounts of experience they were prepared to discuss. This was unavoidable but it is interesting to consider whether and how accounts could differ if interviews were conducted by other coaches. The shared experience of coaching and familiarity with the practice and language of coaching, might lead to different questions being asked and different types of reflection upon experience. If coaches were to act as researchers they would almost certainly make different interpretations of the interviews because of their own phenomenological grounding in coaching communities and practices.

This study did not explore whether there were any differences in experiences of coaching girls and boys. Masculine and gendered language appears to be pervasive in sport and operates as a significant barrier to girls and women, and males who are less motivated by competition and who identify less with masculine discourse (Allender, Cowburn & Foster, 2006). It would be interesting to consider how, if at all, gender interacts with SHCNs in experiences of coaching. While some coaches did speak of differences between coaching girls and boys, these accounts did not relate specifically to children with SHCNs and were excluded from the analysis for this reason. However, upon reflection here it is regrettable that elaboration on these accounts in relation to experiences at the exercise referral scheme was not sought at interview. It appears that it would be necessary in future to consider the possibility of interactions between gender and SHCNs in participation in sport and in experiences of coaching.

As a piece of clinical research in psychology, it could be argued that in order to strengthen the findings here it would be necessary to focus upon the implications of specific diagnoses for the coaching experience. While there might be common challenges and barriers to sports participation for children diagnosed with ADHD or ASD, there are also possible differences that might translate into coaching experiences specific to working with a particular condition. Readers who value diagnoses in practice might have found it helpful if this project sought to delineate more clearly about any coaching experiences specific to discrete conditions.

The contribution this study makes to theorising about coaching children with SHCNs is perhaps limited given the restricted focus of the study which aimed to explore experiences of coaching on one specific scheme. Interviews conducted within a

grounded theory framework could potentially make more valuable contributions in this regard. Furthermore, observations of coaching practices and children's behaviour could strengthen theory in this area as it would permit greater empirical and theoretical insight into what actually occurs in sessions.

Reflections on the method

The extent to which IPA differs from careful thematic analysis has been questioned (Collins & Nicolson, 2002). While the search for and organisation of themes in IPA shares characteristics with thematic analysis, it is considered here to be sufficiently distinct to warrant separate consideration as a method because of the emphasis on understanding informants' accounts of experiences (phenomenology) and the use of the double hermeneutic to search for meaning in those accounts. Thematic analysis involves a search for themes more generally and a lesser emphasis is placed on the search for meaning within the themes of interest. Thematic analysis is useful for explorations of matters of psychological importance, but is perhaps less revealing about participants' direct experiences of phenomena and the meanings of the accounts that individuals give.

Thematic analysis appears to be a useful approach to examine the experiences of people who are less directly involved with a topic of interest; perhaps classroom teachers or clinicians could be interviewed within a thematic analytic framework to explore the topic of children with SHCNs and physical activity further. Interpretative phenomenological analysis would be unlikely to provide more meaningful discussion in such circumstances than thematic analysis. The strength of IPA appears to lie in analyses of participants' reflections about direct experience. During the analysis the

researcher is forced to keep addressing whether themes are based in aspects of experience relevant to the aims and what the meanings can tell us about the experience of interest. It was concluded from a study that used both methods with people who had direct experience of a health complaint that IPA provided greater clinical information and applicability of findings to health care (Warrick, Joseph, Cordie & Ashworth, 2004).

Hamlyn (1970 in Barker, Pistrang & Elliott, 2002) proposed four fundamental epistemological positions to be criteria of truth. The correspondence theory of truth confers truth when a belief matches reality. The coherence theory relates truth to the extent that a belief is logically or internally consistent. The third criterion is pragmatism, and the fourth is the consensus criterion which assumes a belief to be true if it is shared by a group.

As this is a piece of applied qualitative research addressing issues in a novel area of clinical interest, the fundamental epistemological position here is one of pragmatism, or the utilitarian criterion (Hamlyn, 1970 in Barker, Pistrang & Elliott, 2002). This position holds that research findings can be said to have some truth if they produce practical gain, although it is acknowledged that a false belief can be of practical use (Barker, Pistrang & Elliott, 2002). It is contended here that the findings about the ways coaches understand and frame issues, the strategies they developed to address them, the importance of reflective practice, and the need to emphasise mastery climates are of use for the development of exercise referral schemes for children with SHCNs. All epistemologies have flaws and the importance of a pluralist epistemology has been

identified and ideally research in clinical psychology should attempt to meet all four criteria (Barker, Pistrang & Elliott, 2002).

There are indications that the correspondence criteria has been partially met to a very limited extent here in the similarities between the findings reported and the existing literature about coaching issues and reflective practice in youth sports. However, the assumptions that underpin IPA and the work of Streat (1995) and Gilbert & Trudel (2006) make any claim to finding facts about the world difficult. The extent of correspondence to reality is limited by the method and sample. The sample is small and unique and no measurement was made, preventing comparison. In order to be speaking truly about correspondence, rigorous measurement would have to be conducted.

In many instances here there was evidence of themes mutually supporting others and this could be said to be coherent, e.g. themes of time, patience, small groups and individual development appeared across accounts and each theme was closely related to or dependent on the others. Individual accounts were also found to be largely internally consistent and where tensions arose, coaches framed issues in ways that sought to resolve this. In any case, IPA research is not restricted to seeking coherence; divergence of themes and accounts is celebrated in this approach because of what this can tell us about the variety of meanings associated with an experience.

Drawing again on the similarities that were evident in the accounts, there appeared to be some consensus among the participants about what it is like to coach children with SHCNs at an exercise referral scheme. There was also some commonality with previous work on youth sports coaching issues and reflective practice. It would be premature to

suggest these findings point to any universal truth about being a youth sports coach, but it would be expected that some of the characteristics that shape experience in youth sport settings might be commonly experienced in similar ways. The consensus theory can be a meaningful way to think about qualitative research, but beliefs can be shared by many and yet be false.

Beyond the fundamental criteria of truth discussed above and the leaning this project has towards pragmatism, the positions of critical realism and constructionism inform my thinking about research. From critical realism I particularly value the emphasis on replicability of research (Barker, Pistrang & Elliott, 2002). Therefore I would hope that the findings reported here would be broadly similar, or consistent, with other studies in this area should they be done in future. The decision to use IPA was informed by the clarity of guidelines for conducting studies into experiences as it is a more readily replicable qualitative method.

The way I understand knowledge production and claims to truth is also shaped by social constructionist assumptions, particularly about how discourse enables and constrains what can be said according to the practices available at particular places and times (Foucault, 1977). The assumption that the interview is a social process representing a joint construction of knowledge that is limited in its claim to tap any absolute truth was also held here. Furthermore, the analysis and interpretation of interview data involves active constructive processes (Barker, Pistrang & Elliott, 2002). The development of IPA embraced these ideas (Smith & Osborn, 2003). The double hermeneutic is emphasised in IPA and this provides a good fit between my own assumptions about research into experiences of phenomena of clinical interest.

Interviews in psychological research are fraught with issues of power and control (Parker, 2005). By imposing a form of structure on the interview the researcher is seen to be in a position of power and needing to maintain control of the interview in order to meet research objectives. This can be countered by taking a truly co-constructive approach so that participants become confederates and both parties participate equally in the generation of data. These issues presented difficulties in the first two interviews. Having read Parker's (2005) work the night before the first interview this was very present in mind during that interview and the second a day later. Both participants had evidently given their experiences a good deal of thought prior to the interview in order to prepare to be 'good participants'. Both of these interviews approached three hours in length.

Upon arrival both coaches immediately started discussing their work and it was a challenge to rein them in to review the information sheet and gain informed consent. In order to maintain and build upon rapport, I was reluctant to close down the conversations in order to fulfil administrative tasks necessary to begin recording. Both interviews were considerably more unstructured than I had anticipated, but mindful of Parker's (2005) comments about the importance of considering relinquishing power and control to participants, I rolled with it. While the areas from the semi-structured interview schedule were addressed, both coaches talked about their role frames and experiences in coaching generally. These interviews generated a mass of data that was initially experienced as overwhelming. Subsequent interviews were more concise and conformed more closely to the schedule. This was a response to the initial experiences of interviewing and on reflection the transcripts became more concise and to the point

as recruitment progressed. This was counter to expectations as I had anticipated being more rigid in earlier interviews and becoming more relaxed about it as the study progressed. However, valuable learning points about setting up, initiating and negotiating control in research interviews were taken on.

During debriefing all participants indicated that they had found the opportunity to talk about their experiences interesting and enjoyable. Some commented that they had developed their ideas about their work as a result of being interviewed. This was taken to support the notion that reflection-on-action is a way of transforming experience into knowledge (Schon, 1983).

Reflexive analysis

I experienced a number of tensions during the conduct of this thesis. The term special health care needs (SHCNs) was used here in response to such tensions. As a piece of academic work for a training course in clinical psychology it was necessary to refer to diagnostic labels such as ADHD and ASD to frame this research. However, in thinking about this project I was also strongly influenced by critical approaches to labelling such difficulties in these ways and was struck by the harm that such labels can do, the interests that they serve and the arguably shoddy foundations on which diagnoses such as ADHD stand (Newnes & Radcliffe, 2005) . The term SHCNs was used here because of its practicality for framing the research as it reflects the conditions and difficulties experienced by children on the scheme. In order to review the literature it was necessary to use diagnostic labels in order to reflect the empirical and conceptual content of the literature.

While I am drawn to critical and community psychology approaches generally, I have found it difficult to articulate these interests and values in my work here. In part based upon examiners' responses to my interests in these areas as represented in other course work, I felt it would potentially distract from the clinical acceptability and relevance of this paper for some readers and potential examiners.

As a trainee clinical psychologist I identify more readily with representations of the profession as applied psychology than with the current vogue for identifying the practice of the profession as therapy. I am also interested in community-based interventions where psychology as a practice has something to offer while avoiding the adoption of the 'expert' position. This meant that I engaged with the exercise referral scheme reported here as a helper and I engaged with the research in this way. It was necessary for me to complete a research project and the team delivering the scheme were very keen for someone from the local child and adolescent psychology department to become involved to support and conduct evaluation and research into the scheme. At the time I was very keen to develop my curriculum vitae in order to demonstrate commitment and interest in working in children's services and the possibility to engage in applied research into a community scheme was very exciting to me.

My interests in coaching developed from hearing parents talk about difficult experiences relating to their children's exclusion from sports clubs and structured recreational opportunities and the ways that this contrasted with their experiences of the exercise referral scheme. The parents were overwhelmingly positive about the coaches and there was a growing sense that there was something very special about the scheme

and what the coaches did within it, hence the setting of the research topic to focus upon coaches. I believe a strength of this thesis that is not fully articulated elsewhere is the approach taken in forming the research ideas and the analysis. I was completely naïve to the coaching literature and models of motivation in sports prior to the analysis. Only after the identification of group master themes had begun did I become aware of this literature. Such naivety to the literature went some way toward meeting the need to limit the influence of existing literature upon the analysis in IPA (Allen-Collinson, 2009; Shaw, 2001).

However, the need to familiarise myself with a diverse literature was experienced here as a significant barrier to getting the project done. As a complete novice to sports and exercise in mental health, and at the outset having no awareness of the literature on youth sport coaching, it took great effort to gain confidence in my knowledge and awareness of the literature that impacted upon the study here. While it was interesting and worthwhile to search the coaching literature, it also took a great deal of effort to familiarise myself with this aspect of a profession that I had not thought about before and had very limited experience of contact with.

As a child and adolescent growing up in a city whose identity and culture was dominated by football, I had very little interest in competitive team sports and did not participate recreationally. At an early age I rejected what I saw as a brutal mindless tribalism in my peers regarding football and this was to my cost. Because I had no interest in football I could not amass the cultural capital enjoyed by my peers through swapping football stickers. Nor was I able to access the status afforded according to rank of perceived competence, or more accurately I was merrily at the bottom of the

heap. I have always reflected upon this as a product of scepticism about the worth of competition. I chose not to involve myself in football and could therefore observe and reflect upon its culture as an outsider immersed in a community whose highest form of cultural capital centred on football. I can now reflect upon how the relationships between youth sport and social capital described by Bourdieu (1978) resonate with my experience, and how perhaps the masculine and competitive language and culture in the sports I was exposed to as a child contributed to my lack of interest.

There can be little doubt that these experiences informed my interest in the notion of mastery and performance climates that I encountered in the literature on coaching and motivation in sports. I have no recollections personally of being exposed to mastery climates but the descriptions of performance climates resonated with my experiences of sports and structured physical activity as a child and adolescent. I was able to identify with the negative impact of performance climates upon my own participation and this led to considering how different my own experiences could have been if I had encountered a coach or leader who promoted a mastery climate in sport. It was apparent that I was different to the majority of my peers who appeared to benefit socially from their belonging to sports clubs and teams. This reflection shaped my interest in Young Person's Positive Moves as it seemed to offer opportunities for children to enjoy sports who were unlikely to participate elsewhere.

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