A realist perspective of a disability sports programme in South Cheshire: A case Study.

Introduction

Sport England, the strategic lead for community sport recently acknowledged a decline in the number of disabled people playing sport once per month (Sport England, 2016). In their Active People Survey, Sport England reported almost 20,000 less disabled people taking part in sport this year, compared to last year. In their words:

"...there is more to be done as a disabled person is still half as likely to play sport as a non-disabled person" (Sport England, 2016: online).

There have been a number of national initiatives that aim to increase participation in disability sport: for example, the Inclusive Sports Programme designed to increase the number of disabled young people (aged 14+) and adults regularly playing sport as part of Sport England's wider commitment to increasing regular sport participation by disabled people. This funding stream supported over 40 local disability sports projects across England, most of which are currently being evaluated. Such local efforts are pivotal in providing rich and rewarding experiences if the current trend in participation is to be reversed. The current government has made targeting 'hard to reach' communities, including disabled people, a priority in its latest strategy for sport (Department of Culture, Media and Sport, 2015, p. 14) stating that they will '...distribute funding to focus on those people who tend not to take part in sport'.

Previous evaluations have focussed on the medical and health outcomes of disability sports programmes. Whilst such research is useful, it does little to inform practice. Interestingly, the current government has said it will support the more consistent use of measurement tools to build the evidence of '...what works at project level' (DCMS, 2015, p. 72). This paper, taken from a much broader community sport evaluation, represents a single case and records the perceptions of two leading disability coaches responsible for the delivery of a disability sports project.

Disability sport: a brief history.

According to Wilson and Clayton (2010) formal programmes for those with disabilities can be traced back to the late 1880s when the first sports programmes for the deaf were started in Berlin. Individuals with disabilities were often viewed as non-productive members of society (Wilson and Clayton 2010). A major cause for this discrimination and neglect was society's demonstration of Social Darwinism and the concept of survival of the fittest (Lynch, 2015). A major turning point to this attitude which changed the perception of individuals with disabilities within society was the increasing numbers of injured war survivors (Wilson and Clayton, 2010). According to Wedgewood (2014) the need for individuals with physical disabilities to participate in sporting activities in the UK was first instigated during the second World War by Dr. Ludwig Guttman who used physical activity as part of the rehabilitation phase for injured soldiers at the Stoke Mandeville Hospital.

Due to the popularity and medical success of physical activities amongst patients the Stoke Mandeville Games evolved. This later became the International Stoke Mandeville Games in 1952 when German athletes also participated. (Anderson, 2003; Wilson and Clayton, 2010; Webborn, 1999). It was the work of Dr. Ludwig Guttman that led to the first conceptualisation of disability sport in the 1960's when the first Paralympic Games were held in Rome (Gold and Gold, 2007; Brittain, 2010).

Current trends

For various reasons, disability sport has become more visible during the 20th and 21st centuries despite early misconceptions. This is due to many factors such as the advancement of media coverage, improved educational opportunities and a greater understanding of people with disabilities (Griffiths and Smith, 2015; Craig and Bigby, 2015). As disability sport has gradually gathered momentum, the research of academics has primarily focused upon the medical or physical benefits of participation such as increased neural efficiency and improved mobility, which both potentially decrease the effects of a physical disability (Brunelli et al. 2010; Zwinkles et al. 2015).

Since its original conception, disability sport has witnessed the growth of many new supporting organisations and community events (Black et al. 2015; Smith, 2016). In 2013, Sport England announced that £2.6 million of funding would be made available in order to improve the quality and inclusiveness of grass roots disability sport projects (Sports Coach UK, 2013). A further £18 million of National Lottery funding has been used to get more disabled people playing sport (Sport England, 2016).

A question of evidence

Regardless of the growth of disabled sport and the increasing amounts of funding invested into grassroots disability sport each year, very little is understood about the impact of community sport interventions and the social benefits they generate for participants (Kay and Bradbury, 2009). Coalter (2007) and Delaney and Keaney (2005) emphasise that due to the complexity of communities and civil institutions, community sports programmes on their own are not capable of having positive impacts on issues such as social inclusion. Further, Coalter (2007) explained that we will never be able to establish causal links between sport and such outcomes. Therefore, in order to activate change in social behaviour sports clubs need to be supported by other means. However, previous policy led attempts to tackle social issues have promoted the value of sport and its efficacy as a tool to integrate communities (DCMS, 2002). These values sometimes cause friction between academics and practitioners as researchers often adopt a more critical stance towards sport and research findings may not match practitioners' perceived needs (Coakley, 2011).

These conflicting values exist due to the lack of general research regarding the impacts of individual community sports clubs (Coalter, 2007), evidence which could be accessed utilising concise evaluation processes within social programmes. This factor is acknowledged by Coalter when identifying that the issues with previous research that have attempted to seek the benefits of community based projects is the '... general lack of robust research-based evidence on the outcomes of sports participation' (2007, p. 26).

Due to the apparent disregard for evidence-based evaluations, a main focus of this research is to discover the best possible way to create an evidence base to evaluate the purpose and effectiveness of community sport interventions and their value to participants. This systemised approach was developed by putting theory into practice to evaluate the effectiveness of a disability sports programme and its related activities.

The role of evaluation research.

It is important to completely understand the purpose of evaluation and its significance and value to any successful community sport intervention. In its simplest terms, evaluation is a systematic procedure used to assess how well something is working (Green and South, 2006; Clarke and Dawson, 1999). For professionals working in both the public and voluntary sectors the process of evaluation is now a fundamental requirement (DCMS, 2015; Davies and Nutley, 2008; Hills and Maitland, 2014). This is due to the increasing pressures applied by the stakeholders of organisations who are requesting an evidence base for the success within interventions before delegating funding.

The process of evaluation is a way for a programme to explain its value and purpose and to also demonstrate that funds have been used effectively (Green and South, 2006; Davies and Nutley, 2008). Importantly, evaluation is also used by organisations as a tool to identify how to deliver the most effective and efficient service using minimal time and resources which in turn saves an organisation money (Green and South, 2006). The consistent focus of achieving a successful evidence base for community sport interventions can be closely related to economic rationalism and the guarantee that public funds are being used in the best possible way (Raphael, 2000); a factor increasingly important during difficult economic times when the public sector have experienced significant budget cuts (Collier, 2012; Arestis and Sawyer, 2009).

Consequently, the limitations set by the government and the strong competition of other projects makes it increasingly difficult to successfully bid for the funding needed to run a disability sport intervention. Such factors challenge community disability sport interventions to adequately demonstrate effectiveness. These pressures do not favour social programmes as often evaluations focus on quantitative or harder outcomes such as participant numbers and demographic metrics. Coalter (2007) suggested that evaluations of social programmes need to move beyond the focus of commercial targets and instead work towards goals that seek to understand needs and experiences of the target audience. This is a real challenge, particularly for disability sports programmes targeting young people with profound intellectual and physical impairment. However, such action could reduce the degree of inaccuracy and unexplainable division in the effectiveness in evaluations of previous social programmes (Hills and Maitland, 2014). Therefore, in order to improve the effectiveness and participant experiences within community sport interventions, the variations in programme effectiveness

needs to be addressed. However, due to the vast differences between individual programmes, the process of evaluation needs to be flexible and designed carefully considering each individual programme's outcomes. Consequently, it is not possible to create a universal approach for all programmes to use in order to complete an evaluation of their performance. By creating a unique but systemic evaluation process, each programme will be able to create a more accurate and valuable evidence base to address the effectiveness of their sports interventions as a whole and discover their impacts upon the participants.

Brief description of the disability sports programme

The disability sports programme was one of a series of sport development initiatives that successfully received funding from Sport England's Community Investment Fund (Sport England, 2006). The funding stream was part of a broader government agenda and aligned to a Public Service Agreement - PSA3 (DCMS, 2005), which challenged sport to:

- increase individuals participating in sport 12 or more times per year by 1% per annum and,
- increase participation from priority groups who engage in 30-minutes of moderate intensity sport at least 3 times per week by 1% per annum.

Two areas were identified through a local consultation group (Community Sport Network). Access for girls to disability football and disability gymnastics. Both activities would target the under 16 age group. The football programme would include one session per week at a central location in Crewe, Cheshire.

The gymnastics programme would focus on children with profound sensory and physical disability. Sessions would run three times per week at the same location as the football activities. Both programmes would be supported by specialist coaches and equipment. The overall aim of the projects was to encourage wider participation and create opportunities for disabled participants in the borough.

Methods

This study used an evaluation research design (Rossi et al. 2004; Clarke and Dawson, 1999) and a realist synthesis advocated by Pawson and Tilley (1997). Their framework, illustrated in figure 1, recognises that programme outcomes (O) can be explained by key mechanisms (M)

such as the workings of a disability sports programme. Importantly, the oval in the framework acknowledges that such mechanisms will only explain programme outcomes in a given context.

<< insert figure 1 about here>>

For example, increases in sports participation and social cohesion (O) through a local disability football programme (M) are only triggered when the activities are supported by well qualified and experienced coaches (C). The philosophy of the realist framework is to determine:

...which individuals, subgroups and locations might be benefit most readily from the programme, and which social, cultural resources are necessary to sustain the changes (Pawson and Tilley, 1997, p. 85).

Two disability sports coaches were interviewed in this case study approach (Yin, 2013). While other coaches were involved in the programme, the sample chosen was based on Pawson and Tilley's (1997, p. 160) 'divisions of expertise' philosophy. The two coaches were purposefully sampled based on their greater experience of coaching disabled children and their involvement in developing and delivering the disability sports programme under evaluation. This way the study is, according to Pawson and Tilley (1997), best able to determine what works (M) for whom it works and under which circumstances (C).

Of note is the exclusion of the participants involved with the disability sport programme. This decision was based on the programme leader's concern about the very limited capacity of the participants to effectively communicate their thoughts about the respective programme activities. Further, the programme leader was concerned about child protection issues and only two of the parents or guardians consented to give their perspectives on the workings of the disability sports programmes such were the vulnerabilities of this group. Consequently, the two senior coaches, who were both administrators and deliverers of the disability sports programmes, gave their explanations of programme outcome patterns.

Findings

Initial discussions from the semi-structured interviews evolved around the theories of promoting sport in hard to reach communities and what it was that might make such sport programmes work. Figure 2 illustrates the two overarching themes and the related subthemes from the interviews with the two coaches responsible for leading and delivering the Disability

Sport Programme. Using the Realistic Evaluation framework, these themes, represented in the ellipses, illustrated the discussion of contexts within which the mechanisms could trigger outcome patterns. The mechanisms are represented in the boxes on the map. These configurations are discussed in relation to key outcomes of the programme and included:

- I. widening access and increasing participation,
- II. creating safer and stronger communities
- III. providing opportunities for all to participate and develop skills, and
- IV. improving health and wellbeing, and developing education and skill (CSN, 2007).

The literature is replete with reference to disability sport improving indices of physical health and fitness (Zwinkles et al. 2015; Anttila et al. 2008; Kotte et al. 2014). This literature is often limited to improving mobility or components of physical fitness such as strength, speed and flexibility and rarely considers wider health outcomes such as social health, relationships with others and being able to adapt comfortably to different social settings. However, such findings are important, as reduced fitness is an indicator of reduced participation in sport (Tsang et al. 2013) and further isolation from mainstream activity for the disabled participant.

<<Insert figure 2 about here>>

Participant development and progression

During the interview, the coaches were asked what impact the programme had on the participants involved. Initial responses and discussion were limited to the impact on the coaches themselves but are included here as they help develop an understanding of the impact on the disabled children involved in the gymnastics sessions:

Some children have progressed so much that we've had to create a separate session, had to change sessions quite drastically to suit the needs of the children...because in the smallest group, that's the really young children, the under fours, they had come on so well, we felt that...that now needed to be split into two classes...and we've done it on ability (Wendy).

There were specific references made to age and physical development in the interviews. Younger participants seemed to gain more, in terms of physical ability than the older children involved in the programme. Further, the coaches suggested that they were not prepared for the extent of development observed with the younger children. This suggested both a lack of experience with this age group and affirmed the distinctiveness of the programme and its attempts to widen access. According to Laskowski and Lexell (2012), very little is known about the rate of physical development in disabled children of pre-school age.

Active participation has previously been shown to enhance motor development in children with intellectual disabilities (ID). For example, Westendorp et al. (2014) compared the gross motor skills of children with ID with that of typically developing children all aged between 7-12 years. Across all groups, the study found that those participating in more organised sport had higher levels of locomotor skills. Similarly, Fotiadou et al. (2009) demonstrated improved dynamic balance ability in children with ID who followed a 12-week programme of rhythmic gymnastics.

More recently, Bianca (2013) demonstrated that a "Gymnastics for All" programme measured new motor abilities specific to artistic gymnastics in a group of children with both intellectual and physical disability. The study concluded that these new skills could help them access competitive gymnastics thus sustaining their participation in sport. However, little is known about the way in which such impacts were measured for this study other than observations by the researcher. Further, Macphail et al. (2003) explained that competition should be approached with caution, particularly with very young children and that emphasis should be placed on encouraging the children to try a variety of activities as this was found to be more enjoyable.

Nevertheless, how do these positive outcomes develop? What mechanisms are at play? In this research, one coach for the Disability Sports Programme offered the following explanation:

It's quite surprised us with the tiny ones, the children, you know, age about 2, really surprised us. But I think it was that they all had one to one support at the beginning (Simon).

Of interest is the coach's realisation of context. In this case, the rate of physical development of the younger children was faster than initially expected. The important mechanism was explained as the individual support given to the children when they started the programme. This one to one support allowed the coaches to tailor activity to' the individual participants' needs. According to the literature (Michaud, 2004; Rubin et al. 2014; Tuffrey, 2013) individual levels of support are important if programmes are to improve outcomes for this group of participants.

One coach stated that the one to one support remained in place but the activities for the group in the additional sessions had changed to reflect their ability:

All but two of the group, they've now moved to a class on Saturday. But they've still got one to one, but we've moved the skill level...higher. You know, we've upped what we are doing and we've really changed what we are doing with that group (Wendy).

There was further recognition of the physical development of the group through their involvement in sport beyond its health benefits and as a structured form of physical activity:

We are actually going to be holding a competition for the Saturday group and they are going to do floor and vault. The parents are so excited. (Wendy)

This transcends the notion of simply participating in sport and suggests that the programme is moving towards its longer term outcomes and participants can progress to a performance level of participation with the opportunity to be successful in their chosen sport.

The role and influence of family

When asked about the impact the programme had at the level of the community there was significant discussion about the children and their families. Several theories of parental involvement and influence are offered in the literature. The most frequently cited are those that reflect on parental role modelling and beliefs (King et al. 2006; Anderson, 2009); particularly parental perceptions of children's competence (Murphy and Carbone, 2008). Bandura (1986) proposed parental influence based on children reproducing the behaviours of their parents based on observational and social learning processes. However, attempts to strengthen such theory have produced mixed results. Some experimental studies have demonstrated a positive relationship between parental influence and physical activity levels of children (Fuemmeler et al. 2011; Oliver et al. 2010) while other studies have shown little or very weak association (Jago et al. 2010; Crawford et al. 2010). Qualitative studies have acknowledged the importance family place on engagement in physical activity and sport as a mechanism for increased parent-child communication, spending time together and enjoyment (Thompson et al. 2010; Inoue et al. 2015). These theories were discussed in the interview with the programme coaches:

I think it's been very successful for the families. Especially the tiny children erm, under four and for the most profoundly disabled children. Because the families have seen their

children achieve things and it surprised us all... It's made the children bonding with those parents nice to see (Wendy).

Again, the coach places emphasis on the extremities of the group in terms of age and this time, on the level of disability. Further, there is the suggestion that the activities help build relationships between the parent and child. This sense of achievement from others, including parents has been acknowledged as a significant outcome in the literature (Hodge, 2014; Taylor and Collins, 2015). McElroy (2002) emphasises the important role of family in sport participation. Underpinning this role is Elkand's (1994, cited in McElroy, 2002) *vital family theory*. This recognises that family members undergo continuous social and physical change. Families with disabled children are not immune to this change. One could argue that change is greater in families with a disabled child; family members must rely on each other for support. This includes healthy behaviours such as participation in sport and physical activity (McElroy, 2002).

Once coach observed that parents became enthused by the sense of achievement and that there was a significant positive response. These important social and individual constructs have been noted previously (Trost et al. 2003; Ornelas et al. 2007) and relate to direct influence through verbal encouragement, positive reinforcement and watching the activities (Voorhees et al. 2005). In the interview, it was suggested that this helped develop the parent and sibling relationship and beyond this, it was suggested that parental involvement may help sustain participation:

And then when the children have moved on and they are not with the parents like in the higher level session. They [parents] are very, very excited to make sure that the children get here. So there hasn't been the drop off rate. Whereas with other classes we've run it has not been quite like that (Simon).

The parents' belief in their child's competence is important and a useful motivator for both parent and sibling sustaining their participation in sport and physical activity (Yao and Rhodes, 2015). However, Buffart et al. (2009) suggest that this belief and encouragement will only be realised if the parent is satisfied that the coach is knowledgeable and experienced, the facilities and sessions are perceived as safe and the parents being well informed of the activities and goals of the sessions.

Such theory was confirmed when the one of the coaches was probed as to how this outcome occurred. The coach discussed the importance of parent involvement in the programme in its

initial stages and despite the coach being uncertain about parent involvement when planning the programme:

The parents were so excited to see them learn something, however simple it is, erm and we, I think what was good was, I think the tiny class, we did things where the parent did it, with our assistance, with their child (Wendy).

Family involvement and interest in leisure activities such as sport is an important indicator in the child's participation in sport (King et al. 2006). The coach was asked about the parents that were no longer involved in the activities. Earlier, it was suggested that when the child's ability progresses, more advanced activities exclude the parents from physical involvement in the programme activities. The coach had observed that the parents would socialise:

The nice thing is now that in the corridor they all chat with each other. And what's funny is, they now go over to McDonalds' next door and have a coffee and a chat and come back. That's very, very nice. So the whole of the, every one of those parents go together. So they're using it as a social thing (Simon).

Parents of children with disabilities are often overlooked by peripheral intervention such as community sports programmes. Relative to parents in typically developing children, they are in poorer emotional and physical health (Murphy et al. 2007). Such issues are according to Murphy and Carbone (2011 p. 795) '...best addressed through strong partnerships among parents, providers and communities'. The coach's observation suggests a strong companionship between people who share their complex medical, developmental and habilitative needs.

Outcome patterns for the Disability Sports Programme

The theories put forward and discussed in the interviews with the disability sports coaches allowed for some useful discussions about the observed impact on the programme participants. Moreover, the programme was observed to have had a significant impact on the parents and carers of the children. The disability sports coaches provided some useful insights as to how and why these effects happened. This logical reasoning has highlighted that the programme can contribute to improving health directly and physically in the case of the participants; and indirectly in the case of the parents and their emotional wellbeing through social interactions with other parents and engagement in initial learning experiences. These outcomes are dependent on particular circumstances or contexts which help trigger specific mechanisms. For

example, for this programme, mechanisms such as the one-to-one support and the inclusion of parents in the activities were dependant on an adaptable and experienced coach who could 'keep-up' with the children's development. Further *context-mechanism-outcome* relationships will now be discussed for the Disability Sports Programme and are outlined in Table 1.

This programme extended the coaches remit to children under four years of age. Very few specialist centres in the area do this. While this presented some challenges to the coaches, having never delivered sessions to such young children, it also provided an opportunity for an overlooked group of young disabled children who clearly have the potential to develop through structured sport programmes. The parents of the children became a close group according to the observations of the coach. This has implications for communities normally isolated by the demands of caring for a disabled child (Waldman et al. 2010).

<<Insert table 1 about here>>

The programme provided a mechanism for both parents and siblings to get together and socialise with each other. However, important contexts such as the rate of the child's development within the programme activities limited the time this group of parents would have been involved in the sessions alongside their child. As the children's physical development progressed, the programme excluded the parents from this active involvement. Instead, there was a more passive role and the parents could observe their child's development. These levels of parental involvement were perceived to be an important mechanism for the sustainability of the programme and the participants' long term-involvement.

The interaction of the parents with the activities provided a *mechanism* for reassurance that the children were in safe hands, the activities were suitable and the facilities appropriate and safe. Such mechanisms are essential in these programmes as parents can isolate and overprotect children with a disability (Verhoof et al. 2012). In this research, there was initial involvement by the parents. Over time, the parents were happy to leave their children suggesting they did not want to overprotect or isolate them after seeing the progress that they had made. Another important *mechanism* was having the support of other parents in similar positions and the guidance from the coaches involved in the programme activities. This helped explain strategic outcomes related to building safer and stronger communities and providing opportunities for all to participate and develop skills.

Concluding comments

This evaluation offered explanations or theories for the outcomes of a disability sports programme. The coaches observed improvements in social and physical aspects of health and the development of physical skills in the programme participants. For the disability sport programme, these benefits were explained through increases in self-confidence, self-efficacy and the timely interaction of family support within the programme delivery.

Perhaps the most profound outcome of the programme was its capacity to bring people together at all levels of programme delivery. Implicit in the disability sport programmes was the creation of a safer and stronger community for the disabled children and their parents/ guardians. One of the unexpected outcomes of this activity was that the parents became a tight-knit group. This was because of *mechanisms* that allowed for a timely interaction of the parents with the programme and their children and contextual challenges such as the rapid progress made by the programme participants.

This research demonstrated that disability sports programme can develop the education and skills of those communities it targets. Despite the significant experience of the coaches interviewed there was always some notion that the coaches were still learning. The younger age group of the participants challenged the approach to activity delivery. The coaches overcame this by differentiating the group based on their capability and speed of development. This was helped by the supporting role of the parents and guardians of the children and limiting the size of the classes.

This research gave a wealth of information about the adaptability and survivability of a disability sport programme. The interplay between programmes and people in community sport deserves more attention than this evaluation could give it. Initially, Eady (1993) and more recently Hylton (2013) and Mackintosh (2011) have given some thought as to what typifies current sport development practice from a theoretical perspective. However, to better understand relationships with this practice, further socio-psychological perspectives may illuminate the varied interpretation and realities of community sport at the level of delivery particularly for under-represented groups such as the disabled. This would provide important theories to test in future 'realistic evaluations'.

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