



CASE STUDY

Training a family in physical interventions as part of a positive behaviour support intervention for challenging behaviour

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Accessible summary

- Dylan has a learning disability and challenging behaviour.
- He was hurting himself and other people.
- We trained his family to help them cope safely when Dylan was aggressive.
- Now fewer people are getting hurt when Dylan gets angry and his parents know more about how to help him.

Summary

Between 10% and 15% of people with a learning disability have behaviour that challenges others, and half of these people live within the family home (Emerson *et al.*, *Research in Developmental Disabilities*, 2001; **22**, 77). Current best practice in managing challenging behaviour combines person-centred planning, functional analysis, and proactive and reactive strategies, and teaching alternative skills to manage behaviour in a way that keeps both service user and carers safe (positive behaviour support). This study considers the case study of a young man who lives with his parents in their family home. Reactive strategies including physical interventions have been taught to the family which has allowed them to manage their son's behaviour effectively and allowed him to remain living with his family. Frequency and intensity of challenging behaviour reduced, and family confidence in managing challenging behaviour was increased.

Keywords *Challenging behaviour, family training, physical intervention*

Introduction

Between 10% and 15% of people who have a learning disability display challenging behaviour (Emerson *et al.* 2001). Tyrer *et al.* (2006) report that 14% of people with a learning disability in their UK sample show aggressive

behaviour towards other people. Cooper *et al.* (2009) report that 9.8% of adults in their Scottish sample showed physical or verbal aggression towards others or destructive behaviour. Positive behaviour support (PBS; Carr *et al.* 2002) has been identified as the preferred approach for working with people with learning disability and challenging behaviour

(Department of Health 2014; Royal College of Psychiatrists, British Psychological Association & Royal College of Speech & Language Therapists 2007). PBS is fundamentally rooted in person-centred values, aims to enhance community presence and increase personal skills and competence, and places emphasis on respect for the individual being supported (Department of Health 2014). PBS requires all clients have a person-centred plan.

Half of people with challenging behaviour will experience reactive management strategies including physical interventions (Deveau & McGill 2009; Paley 2010). When services or organisations use physical interventions, there is a responsibility for risks to safety to be highlighted and appropriate training, supervision and ongoing management to be implemented. The use of reactive strategies by staff for adults with learning disabilities and challenging behaviour is common place and largely accepted (Adams & Allen 2001).

However, the same practices are not established for children with learning disabilities and challenging behaviour (Adams & Allen 2001), or for adults with learning disabilities who live in the family home. Half of people displaying challenging behaviour live in the family home (Emerson *et al.* 2001). Allen *et al.* (2006) reported that challenging behaviour begins usually in childhood (with children in this study had an average age of 13 years, with a range of 4–38 years), meaning that families frequently have to manage this behaviour. Adams & Allen (2001) interviewed 56 professionals working with a child with a learning disability. They found that 56% of children had been subjected to various physical interventions by their carers although the majority of the carers had no training. The authors highlighted the need for both proactive and reactive strategies to manage such long-standing behaviours. They noted that staff working with people showing these challenging behaviours should receive training, which was not offered to the parents of these children.

A recurring theme through the research was that families had an unmet need for support in managing the challenging behaviours. Training staff in proactive and reactive ways of working with challenging behaviour yields a number of positive outcomes including a reduction in the use of physical interventions and injuries and increased confidence levels (Adams & Allen 2001). Managing a child who has a learning disability and challenging behaviour impacts on the whole family with reports of stress, marital tensions and difficulties managing the needs of the child with the learning disability with the needs of siblings (Adams & Allen 2001).

Adams & Allen (2001) suggest that even with optimal behaviour management from specialists, between 40% and 50% of challenging behaviours will require a form of physical intervention to prevent harm to the individual or

others. Reactive strategies should be planned allowing for the safe management of behaviours. Physical interventions are a form of reactive management where physical force or restriction is used on the individual.

Staff members receive training guided by official legislation as a matter of routine although no such training or support in behaviour management is provided to the families who care for their children at home. A study by Allen *et al.* (2006) looked at 72 parents whose children have a learning disability and challenging behaviour and found 87.5% of respondents had used physical interventions. Only 25% of all respondents had received any form of training in the management of challenging behaviour, meaning that 62.5% of the sample was using physical interventions without any training. Parents reported that without support it is emotionally difficult to manage challenging behaviours within the family home. In the absence of guidance, carers resort to using improvised means to deal with incidents. Examples of improvised interventions included sitting on the child, rolling the child in a duvet cover and locking them in a cupboard. Unplanned or untrained use of physical interventions is more likely to result in injuries to families, the child and others (Allen *et al.* 2006). A study by Ducharme *et al.* (2010) found that in the absence of any training, parents were using coercive behaviour management techniques such as physical interventions, including improvised facedown restraint (i.e. holding the child facedown on the floor with his hands behind his back). This poses a risk of physical injury or death to the person, as well as having the potential to damage the relationship between child and parent.

There is a body of evidence suggesting that staff training improves confidence and reduces incidents of challenging behaviour (Nau *et al.* 2009; Richter *et al.* 2006). Allen & Tynan (2000) found that challenging behaviour can evoke a strong emotional reaction in staff. Staff confidence is an important variable for working with this group of clients. They found that staff training in managing challenging behaviour resulted in less injuries and less reliance on pro re nata (PRN) medication (medication for which the dose schedule is not prescribed but that can be administered as the perceived need arises) and a significant increase in staff confidence and knowledge. The study looked at 109 staff trained managing challenging behaviour, and assessed staff knowledge and confidence before and after training significant improvements in both knowledge and confidence were found. Baker & Bissmire (2000) found similar results, with an additional decline in behavioural incidents following training. McDonnell *et al.* (2008) found that staff training was associated with increased carer confidence and fewer reports of incidents following training, but was not found to affect behaviour management or coping. Shinnick & McDonnell (2003) suggest that it is unclear whether training staff in physical interventions

leads to an increase or decrease in the frequency with which physical interventions are used.

Whilst families are not offered training in physical intervention or behaviour management routinely, there is a growing recognition that this constitutes best practice. Within the United Kingdom, the Department of Health (2014) state that it is important to involve the family/carers in a person's care and management of behaviour and that families should be provided with training that is proportionate to the level of support they provide for the child. Physical interventions should be planned with the individual. Their family should be part of this process. Also they state that physical interventions should only be used to manage a situation which is dangerous and that people subject to physical interventions should have an individualised care plan (a plan that incorporates behaviour support plans with health and social needs assessment, and be created with input from the person, their carers, relatives or advocates) for the use of interventions.

Brend (2006) advocates for a more holistic approach to challenging behaviour, suggesting that challenging behaviour can only be appropriately managed if it is fully understood. Management strategies should incorporate the function of the behaviour, and therefore teach alternative means of getting needs met without using challenging behaviour. Any reactive strategies should be tailored to the individual. This philosophy is found in current best practice in managing challenging behaviour (e.g. PBS) and in models of physical intervention such as 'Positive Range of Options to Avoid Crisis and use Therapy – Strategies for Crisis Intervention and Prevention' (PRO-ACT SCIPr-UK), which is based on being person-centred and managing behaviour proactively.

Elford *et al.* (2010) looked at the effect of using physical intervention on a child living in the family home. Parents felt a tension or 'delicate balance' between a physical intervention being beneficial or damaging for the child and the family. Parents discussed the difficulties they had when trying to work with professionals and the sometimes conflicting roles they encountered as a parent (in being simultaneously carers and advocates for their child, as well as trying to manage challenging behaviour). Also, dignity, consent and respect were explored, and parents reported these issues to be emotionally demanding and difficult to manage. Parents were using their judgement on whether to use physical interventions or not; methods being used were holding, tying up and blocking doors. Joint working between a multidisciplinary team (MDT) and the family was essential in making decisions around restraint that helped parents and professionals. Parents report feeling ignored and isolated when they feel professionals do not work collaboratively with them.

Patients who have received physical interventions may experience this as a form of punishment, and are more likely

to report a hospital stay as being negative (Stubbs *et al.* 2009). This suggests that the use of restraint by parents may impact on their relationship with their child. Sequeira & Halstead (2002) highlight that if physical interventions are not managed properly, the therapeutic relationship with the person could be compromised.

Shinnick & McDonnell (2003) identified the stress that managing challenging behaviour can create for families. They found that 97% of families managing challenging behaviour at home reported problems with coping. Feeling unsupported by professionals increased the emotional upset felt by families. They noted that there appeared to be a fear of teaching management methods to nonprofessionals, such as family members, partly due to concerns around insurance issues (i.e. whilst staff who are members of statutory bodies would be covered for any injuries sustained during training through these bodies, no such cover exists for family members).

In cases where parents and families have received training in the physical management of challenging behaviour, this has been found generally to have positive outcomes. Green & Wray (1999) presented a case study in which the family were provided with breakaway training, which resolved a number of concerns and allowed the child to continue living in the family home. Support continued to be provided to the family and a follow-up took place a year later which indicated continued success. Hawkins *et al.* (2011) trained six pairs of carers in positive behaviour management. Prior to the training, four of the six families were using physical interventions on their child without any training. Inappropriate interventions used without training are more likely to result in injuries to both parties. All of the carers involved were pleased with the training and felt it was beneficial to the child's care, although several of the families said that it should have been delivered sooner instead of having to wait until they were in crisis.

McGrath (2013) examined the effectiveness of PBS plans, and the carer's commitment to these. The author stresses the importance of all involved in care being part of designing the intervention, and that reactive strategies should be designed so that incidents can be dealt with appropriately without reinforcing the behaviour.

Given this body of literature, this case study sought to explore whether a multidisciplinary approach, including training family members in physical interventions, could reduce physical aggression and risk to the individual and their family.

Case study

Dylan is a 19-year-old man with a mild learning disability who exhibits challenging behaviour. He lives with his parents in the local community in the south of England. His older sister is at university and returns to the family home

for the holidays. The family have little extended family in the local area. Both mum and dad are university graduates and work full-time. Dylan has been unable to give informed consent¹ to the interventions from the psychology service, and the service has been provided in his best interests (following discussion with his family and other professionals involved in his care). Dylan is unable to give informed consent for this case study to be written up, and again this has been done in his best interests as the family were keen that the issue of physical intervention training for families be raised at a wider level. Throughout this study Dylan's name and identifying information have been changed to maintain anonymity.

Dylan had been experiencing some angry outbursts which included him hitting out and pushing at other people. On one occasion, this had led to his mother's collarbone being broken and her experiencing severe and extensive bruising to her arms. Dylan had also become upset during his daily commute from college to the family home (a journey of about 40 min), which had resulted in a member of the public phoning Dylan's parents as she was concerned for him. Following this incident, the family contacted their general practitioner (GP) and sought a referral to specialist services. A referral was made to the community team for people with a learning disability (CTPLD), and following initial assessment by a community nurse and social worker, the referral was passed to the psychology service.

The psychologist conducted an extended assessment for Dylan, following the Trust's Integrated Care Pathway (ICP) for PBS. This involved meeting with Dylan, his sister and parents on several occasions. Information about his developmental and educational history was obtained. Further information about Dylan's challenging behaviour was recorded including the intensity, frequency and duration of these behaviours.

Developmental history

Dylan is a year younger than his sister. His mum described the pregnancy and birth as unremarkable. Dylan appeared to develop normally until about 6 months, when he developed severe bronchiolitis which required a hospital admission and for him to receive oxygen for several days. This left him prone to illness and infection for the next couple of years. On return from hospital Dylan had lost developmental skills such as sitting independently.

¹Whilst Dylan has good expressive language skills, his receptive language skills are more limited. When his capacity to consent was assessed, he was unable to weigh up the pros and cons of psychological intervention or writing up this case study in order to give his informed consent.

Dylan was referred to the local child development centre at about 9 months due to his poor muscle tone. No specific cause was uncovered. He had lots of play therapy, physiotherapy and speech and language input from the child development centre. Dylan started walking at about 2 years of age. Dylan went to a mainstream nursery at the age of three and a half. He was seen by an educational psychologist and attended a local school for children with special educational needs from the age of 5–18 years. Dylan then attended at a local college although he started preparing for this transition through travel training whilst still at school, and did well with this.

History of challenging behaviour

Dylan has shown some aggressive behaviour at home since early childhood, although he is generally a happy and friendly person. This behaviour escalated in November 2012, and continued when he returned to college in January 2013. Dylan started displaying these behaviours in the community, which is putting him and members of the public at risk.

Dylan's challenging behaviour can include shouting and swearing at others, pushing others, grabbing and pinching other people, spitting at other people, and throwing and breaking objects in the house.

Assessments

In accordance with the ICP, a number of referrals were made to other professionals in order for a comprehensive assessment to be completed for Dylan. The community nurse was able to liaise with the GP and family to rule out any physical causes of the challenging behaviour, including causes associated with puberty and masturbation, and those associated with toileting and continence.

Referral to speech and language therapist allowed a comprehensive assessment of Dylan's expressive and receptive communication skills and ensured that all services were providing appropriate levels of communication with Dylan.

Dylan was referred to a psychiatrist to rule out any psychiatric disorder. The psychiatrist discussed introducing medication for Dylan, but this was not something the family wanted to consider at the time.

Additional assessments were conducted by the psychologist to consider an autistic spectrum disorder (ASD), and to establish Dylan's level of learning disability and functional skills.

Assessment of features of autism

Dylan's behaviour and history were assessed in the context of autism to ascertain whether his difficulties with changes in routine and special interest in transport may indicate a

type of autism that had been masked by his friendly disposition. This assessment was carried out with Dylan's family, using the National Institute for Health and Care Excellence (NICE) clinical guidance for signs and symptoms of possible autism, and revealed a number of difficulties including the following:

- Reportedly lacking a theory of mind [the ability to explain and predict other people's behaviour by attributing to them independent mental states, such as beliefs and desires (Gallagher & Frith 2003)].
- A number of odd body postures, for example running with his hands in the air, walking on tip toes.
- A special interest in transport including trains, buses and aeroplanes.
- Being very exact about times and becoming distressed if any change or delay occurs.
- A number of sensory issues (dislikes having dirty or sticky hands, very sensitive to light and noise).
- Lacking sensitivity to pain or temperature and not asking for food or drink even when hungry or thirsty.

Whilst the assessment could indicate that Dylan showed signs of an atypical presentation of autism which may fit more with an 'active but odd' subcategory of ASD, his family were unsure whether this diagnosis really captured Dylan's presentation.

Functional/Adaptive assessment

Dylan's level of functioning was assessed to ascertain whether the demands being put on him were appropriate for his level of ability. The Adaptive Behaviour Assessment System Second Edition (ABAS-II; Harrison & Oakland 2003) measures a broad range of adaptive behaviours performed by an individual. Adaptive skills are defined as practical, everyday skills including those necessary to effectively and independently take care of oneself and interact with others.

Dylan's General Adaptive Composite Score of 61 placed him on the 0.5th percentile in the 'Extremely Low' range when compared to the general population. This is equivalent to the mild learning disability range of functioning.

Dylan's family were asked to complete behavioural explorers to record all behavioural incidents and to try to identify the triggers and consequences of the challenging behaviour. These records were analysed and discussed with the behaviour specialist working in the MDT.

Following these assessments, a formulation of Dylan's current difficulties as well as predisposing and protective factors was drawn up and shared with the family. A risk assessment was completed to determine the level of risk Dylan's behaviour posed to himself and others in various settings (i.e. at home, at college and in the community). This highlighted significant levels of risk to both Dylan and his family, as well as others in the community. The MDT considered whether Dylan's access to the community may

need to be reduced or whether Dylan may need to live away from the family home (which is not something Dylan or his family wanted to happen).

Whilst trying to manage Dylan's behaviour, both he and his family were sustaining injuries. For example, on one occasion Dylan became physically aggressive towards his father. His father then pushed Dylan in self-defence, which resulted in Dylan's head being hit against a wall and Dylan was taken to hospital with a bump to his head.

From this functional assessment, a behavioural plan was drawn up to help others manage Dylan's challenging behaviour. Following a consultation with his care manager, Dylan was allocated funding for him to be accompanied by support staff during his travel to and from college. This reduced the incidents of challenging behaviour in the community. However, despite these interventions, there remained frequent incidents when Dylan was physically aggressive to members of his family. These continued to pose a physical danger to his family and risked restricting Dylan's access to the community.

Intervention

Dylan's challenging behaviour was identified from functional analysis as being high intensity and low frequency. The behaviour was unpredictable, with triggers being difficult to identify. The risk of injury to Dylan's family remained high, and after discussion with the MDT and the family, it was agreed that providing physical intervention training to the family would be helpful.

PROACT-SCIPr-UK is a model of proactive and reactive strategies for managing challenging behaviour. This is accredited by the British Institute of Learning Disabilities, and its full title is 'Positive Range of Options to Avoid Crisis and use Therapy – Strategies for Crisis Intervention and Prevention'. This is the model of physical intervention used by the local National Health Service (NHS) Trust and is delivered by the Lodden School. Lodden School were contacted to see whether PROACT-SCIPr-UK could be delivered to the family directly. Whilst family workshops are offered, these did not train the family in the physical interventions that were required for managing Dylan's behaviour. Liaison between the PROACT-SCIPr-UK trainer working in the trust and the Lodden School established that permission to deliver training to the family would be granted as long as an ongoing behaviour support plan and multidisciplinary support was also offered. This ongoing support was accepted by the family and provided by the MDT.

The training session was delivered by the accredited PROACT-SCIPr-UK instructor working in the local NHS trust, and a clinical psychologist. External funding was provided on a one-off basis by the clinical commissioning group. The training was delivered over 1 day to Dylan's

parents and sister. The impact of the training was measured using a feedback form which asked participants to rate their levels of confidence, knowledge, safety and ability to protect themselves regarding challenging behaviour. This was completed before and after the training was delivered. In addition, participants completed a form at the end of training to rate how they will apply what they have learned, how relevant the training was, whether it was useful, and how confident they now feel in using physical interventions.

Results

Before and after the PROACT-SCIPr-UK training, all three participants filled in an evaluation form. This asked participants about their confidence around working with challenging behaviour. Participants rated their skills on 10-point Likert scale with higher scores indicating higher levels of confidence and skills in managing challenging behaviour (Table 1).

In addition, each participant completed a training evaluation form. This asked participants for feedback regarding the specific ways they will apply what they have learned during the training, comments on how relevant and useful the course was, the quality of the course and any additional comments. It also rated the relevance and quality of the training using a five-point Likert scale (Table 2).

Participants commented that they would apply what they have learned 'when Dylan has an outburst, use prevention and intervention techniques learnt to either avoid situation or protect selves', 'in dealing safely with son's aggressive outbursts', and 'to be more confident in handling aggressive outbursts'.

All three participants rated their confidence in putting their new skills and knowledge into practice as 4 on a Likert scale of 5 (where 1 is 'not at all' and 5 is 'totally').

Participants were asked how relevant they found the course, whether the course met its aims and objectives and

whether the course was a worthwhile investment of their time. All participants rated all of the items as 4 or 5 on a Likert scale of 5 (where 1 is 'not at all' and 5 is 'totally'). The qualitative feedback indicated that the course was 'very useful for the situation and allow us to see how to be more effective in our approach to handling Dylan's behaviour' and suggested that 'maybe the development of a specific family-oriented course would be beneficial'. Interestingly, the practical exercises were rated as 3, 4 and 5 respectively on the same Likert scale.

When asked about the quality of the presentation, all participants rated the presenter's knowledge of the subject, their ability to engage the participants' interest and their basic presentation skills as 5 ('very highly'). All participants rated the overall effectiveness of the training as 5 ('fully effective'). General comments suggested that it was a 'very good course' and that it 'should be provided to other families'.

Follow-up

Following the training, the family were encouraged to contact the MDT to report any ongoing incidents or concerns. The clinical psychologist met with Dylan's parents 2 months after the training (his sister was away at university). During this meeting, the frequency and intensity of challenging behaviour episodes were discussed as well as thoughts regarding the training and its usefulness. Parents stated that both the frequency and intensity of the challenging behaviours have greatly reduced. There had been one incident of physical aggression when Dylan was in the community with his mother. This incident took place following a delay in waiting for a train and Dylan became distressed when the type of train he needed to catch was not the type he was expecting. This resulted in an episode of challenging behaviour which included kicking at his mother, shouting, swearing and throwing his shoes in the

Table 1 Feedback from family members on physical intervention training

Questionnaire item	Participant 1 (Sister)		Participant 2 (Mum)		Participant 3 (Dad)	
	Pre	Post	Pre	Post	Pre	Post
How comfortable are you working with an aggressive service user?	6	9	3	7	5	8
How good is your present level of training for handling psychological aggression?	0	8	0	5	1	7
How able are you to intervene physically with an aggressive service user?	2	8	3	6	2	7
How self-assured do you feel in the presence of an aggressive service user?	5	8	3	5	3	8
How able are you to intervene psychologically with a service user?	2	8	5	6	3	7
How good is your present level of training for handling physical aggression?	2	7	1	5	0	7
How safe do you feel around an aggressive service user?	5	7	3	5	4	8
How effective are the techniques that you know for dealing with aggression?	4	7	2	6	1	7
How able are you to meet the needs of an aggressive service user?	4	7	2	5	3	7
How able are you to protect yourself physically from a service user?	4	7	2	6	3	8

Table 2 Feedback from family members on quality of training

Questionnaire item	Participant 1 (sister)	Participant 2 (mum)	Participant 3 (dad)
How confident do you feel about putting the knowledge/skills learned into practice?	4	4	4
How relevant did you feel the course was to you?	4	4	5
Did the course meet its aims and objectives?	5	4	5
Was the course a worthwhile investment of your time?	5	5	5
What was the value of the exercises/practicals?	4	3	5
How would you rate the trainer's knowledge of the subject?	5	5	5
Did the speaker engage your interest?	5	5	5
How would you rate the trainer's basic presentation skills?	5	5	5
How would you rate the overall effectiveness of the training session?	5	5	5

train carriage. Dylan's mother was able to use the reactive strategies she had learned during the training, and whilst it was not possible to prevent this incident, she reported that the incident was much shorter in duration and frequency than similar incidents in the past.

There had been other less intense episodes of challenging behaviour within the home, but these had not escalated to physical aggression and Dylan's family had not needed to use any other reactive strategies. However, they had all used the proactive strategies from the training and were very pleased at how much more manageable they found Dylan's behaviour. The family attributed this change to the increased confidence they felt following the training. In particular, they identified that knowing how to implement physical interventions safely had increased their feelings of competence and confidence. Dylan's father commented that he '[felt] more confidence because I knew I'd got something to cope. . . knowing I knew something'.

Conclusions and reflections

Providing training in physical intervention was an important part of a multidisciplinary approach to working with Dylan and his family. Following on from the PROACT-SCIPr-UK training, additional work is being carried out with Dylan and his family around problem-solving and understanding emotions. This is being delivered by the clinical psychologist and speech and language therapist. The importance of working collaboratively both with other professionals and with Dylan and his family has made this successful piece of work possible.

A specific training programme tailored to the needs and skills of families might be more beneficial than the standard PROACT-SCIPr-UK training. Whilst the researchers endeavoured to make the training as relevant as possible to the family, inevitably parts of the training were targeted at staff rather than families and so may have been less useful.

Training families in physical intervention remains an unusual occurrence, despite research suggesting that

families who do not receive such training will continue to use physical interventions with an increased risk of harm to the families and the individual. Therefore, the procedures for funding and delivering such training are not established, leading to delays and frustrations for all involved. Whilst it was acknowledged that Dylan was at risk of an inpatient or out of county placement, which the local authority were keen to avoid, this did not make the process of acquiring and funding family training simple.

In conclusion, this is a useful piece of work. If developed, it could contribute towards keeping people in their local community or with their families, and more needs to be done to make this more accessible for families who would like to participate in the training.

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