

CHANGING BEHAVIOUR

The power of behavioural approaches – we need a revival

Sue Buckley

Behavioural approaches can be used very effectively to teach new skills and to change behaviours that are challenging and not socially adaptive. They have gone out of fashion but should be revived, as the studies discussed here indicate.

When I trained as a clinical psychologist in the UK some years ago, behaviour modification was considered a very powerful approach for changing the lives of individuals with learning difficulties for the better and we were expected to be very competent at applying the approach to both teaching new skills and to changing unwanted behaviours^[1,2].

At the time, I worked in large institutions caring for children and adults with learning disabilities and, using behavioural modification approaches, staff were demonstrating that many of the residents could learn a whole range of practical skills that had previously been thought to be too difficult for them. For example, adult residents were learning to dress themselves, use the toilet independently, make simple meals, and work at a variety of tasks in sheltered workshops when previously they had sat in wards doing very little.

Researchers in the field were also realising that many skills which typically developing children seem to pick up spontaneously with minimum teaching from parents by the time they are five years old, could be learned by children with significant levels of learning disabilities if the skills were broken down into small steps and taught using behavioural principles.

In addition, behavioural principles could be applied effectively to change unwanted and challenging behaviours. It was a time of excitement and optimism in the field but somehow, behavioural approaches went out of favour or perhaps new generations of staff did not receive the necessary training. The approach did carry on in the field of autism and then underwent some-

thing of a revival as applied behaviour analysis^[3].

The behaviour modification approach – now called applied behaviour analysis – is based on the assumption that all behaviours are learned, both the useful ones (new skills) and the ones that are not so useful (challenging or difficult behaviours). We all continue to use behaviours that we find helpful – so children usually enjoy learning new skills which increase their independence and autonomy – these skills or behaviours are intrinsically rewarding. Behaviour modification research demonstrated that behaviours that are rewarded (or ‘reinforced’) are learned and become used more frequently than behaviours that do not provide a reward for the individual.

This principle can also be applied to understanding difficult behaviours. These behaviours, which are distressing for parents, teachers and carers, are likely to be serving a positive function for the person engaging in these behaviours. Some of the most likely benefits are gaining attention and avoiding doing something the person does not want to do. It is not always easy to get parents and teachers to see that they are, in fact, rewarding children’s difficult behaviours and that is why they persist. Persuading teachers, parents and carers who complain about a child’s behaviour that, if they want to change it, then it is the adult behaviour that has to change first, is not always an easy message to sell!

Maybe the greatest strength of the behavioural approach is that it is scientific, with measurable outcomes. If the behavioural approach is applied correctly, then the starting point is to find out what

a child is doing at the time. This may be an observation of his or her current feeding or dressing or counting skills or it may be an observation of his or her particular difficult behaviour such as running away or throwing objects. The observation stage involves measurement – a record of what the child can already do if we are teaching a new skill or a record of how often and when a difficult behaviour occurs. This baseline information means that when we start a programme to teach a new behaviour or to change one we do not want, we will know if things are changing – we will be able to measure improvement. Improvement will be new skills if we are teaching a child or a reduction in the unwanted behaviour if that is the goal.

The proof of the benefit of a behavioural approach is measurable change. Despite the power of the approach, there are very few published studies of its use with children with Down syndrome and most recent books and training programmes focus on the use of behavioural approaches with children with autism. Therefore, I welcome the publication of two papers in this issue from Kathleen Feeley and Emily Jones demonstrating both the strengths of the approach for children with Down syndrome. One paper provides an example of using the behavioural approach to teach new skills^[4] and the other paper demonstrates the power of the approach for changing unwanted behaviours^[5].

In the paper, which focuses on new skills^[4], it is communication skills that are taught using the behavioural approach. The paper reports a case study and illustrates the effectiveness of the approach in increasing the spontaneous comments

made by a young boy with Down syndrome who is 3 years and 9 months of age at the time of the study. The target comments were chosen by his parents based on observations of comments used by children of his age in preschool ('coming' when someone gestured 'come here, 'bless you' when someone sneezed and 'Uh oh' when someone dropped something). The article describes the methods used in detail and the interventions were carried out by his teacher and teaching assistant – both already trained in behavioural methods. The child's progress was measured in detail and the plots of these data illustrate how quickly the intervention worked. In the past, a criticism of behavioural teaching strategies has been that they work in the situation in which they are taught but the child is not always able to transfer the learning to new situations (known as generalising the behaviour). In this case, the child did generalise what he had learned in school to home and to other situations.

Using behavioural approaches to improve communication skills has not yet been widely promoted for children with Down syndrome but this paper suggests that it should be further explored. We all communicate to get a message across and even at the early babbling stages, babies like to get a reaction and to be imitated when they make a sound. For babies and young children with Down syndrome, although their non-verbal communication skills in smiling, making eye-contact and using gestures are often strengths, all aspects of learning to make sounds and to talk clearly are harder for them and need to be encouraged. Training is required to use a behavioural approach to full benefit. It is not difficult to learn but takes time and practice in order to be fully competent. However, in the absence of available training, simply remembering to respond to all the communicative attempts that children make is a practical start – rewarding them by imitating what they do and then providing them with sounds, words and gestures that they can

copy, during natural everyday exchanges at home, in nursery and at school.

In the paper on changing behaviours that are not helpful, Feeley and Jones present 5 case studies – each one illustrating a different application of the behavioural approach and, together, provide the reader with a fuller understanding of the approach^[5]. While the principle that behaviours persist or increase because they are providing the child with a reward applies in all situations, a variety of other factors need to be considered. The authors point out that while careful observation of a child during the day in the situations in which difficult behaviours occur is always the starting point, background factors need to be investigated also.

In a baseline assessment, it should become clear how often a particular behaviour occurs (frequency), what happened just before it occurs (antecedent events) and what happens straight after it occurs (consequences or reinforcing events). All these need to be known as the first step towards developing an effective intervention plan but in addition, it is important to find out if the child has slept the night before, or has been unwell, or had an upsetting experience such as a parent being in hospital to deal with (setting events). When a child is experiencing other difficulties in his or her life, behaviour difficulties may occur more frequently and, rather than focusing too heavily on changing the behaviour, changing the setting event, for example, sorting out sleep problems, may be the first thing to tackle. When the setting event cannot easily be changed, then those around the child can be sensitive to using preventative strategies to reduce the likelihood of difficult behaviours.

All these issues are discussed in the article and a range of effective strategies are illustrated in the case studies. The five case studies describe how to address non-compliant behaviour such as dropping to the floor when asked to do something, how to teach a child not to hug unfamiliar adults, how to stop a toddler from throw-

ing materials or turning away and refusing to join in early intervention activities, how to reduce 'tongue protrusion' and accompanying 'mouth noises' and how to support change for a child with sleep disturbance. Many parents and teachers will recognise the types of behaviours described as they are all quite common among children with Down syndrome.

In fact, research studies show that children with Down syndrome are less likely to show difficult behaviours when compared with other children with similar levels of learning difficulties but not having Down syndrome [see REF 6 for a review]. The behaviour difficulties that they engage in tend to be similar to younger typically developing children matched for mental age and therefore may be considered 'developmentally appropriate'. The behaviour difficulties of the majority of children also improve with age – they grow out of them. While all this information is reassuring, children with Down syndrome do show more difficult behaviours than typically developing children of the same age and this will matter if they are to be fully included in school, preschool and the community. Therefore, in my view, parents and teachers need to encourage age-appropriate behaviour as far as possible and not simply wait for things to improve.

The Feeley and Jones papers demonstrate that change can take place quickly if behavioural approaches are used and that the change will last. More research studies and case studies are needed to extend the work that they report and the biggest challenge is to develop accessible training in behavioural methods for teachers and parents.

Sue Buckley is at Down Syndrome Education International, Portsmouth, Hampshire, UK. e-mail: sue.buckley@downsed.org

doi:10.3014/updates.2038

Published online: 30 April 2008

1. Yule W, Carr J. *Behaviour modification for the mentally handicapped*. London: Croom Helm; 1980.
2. Kiernan C. Behaviour modification. In: Clarke AM, Clarke ADB. *Mental deficiency: The changing outlook*. London: Methuen. 1988; p 465-511.

3. Maurice C, Green G, Luce SC. *Behavioral intervention for young children with autism: a manual for parents and professionals*. Austin, Texas: Pro-Ed; 1996.
4. Feeley K, Jones E. Teaching spontaneous responses to a young child with Down syndrome. *Down Syndrome Research and Practice*. 2008;12(2):148-152.

5. Feeley K, Jones E. Strategies to address challenging behaviour in young children with Down syndrome. *Down Syndrome Research and Practice*. 2008;12(2):153-163.
6. Buckley S, Bird G, Sacks B. *Social development for individuals with Down syndrome – An overview*. 2002. Portsmouth: The Down Syndrome Educational Trust.