Randomised, double-blind, controlled trials are few and far between in studies of interventions for specific learning difficulties. Those of us working with today’s orthodox treatments are well aware of how few of them are based on evidence that meets the ‘gold standard’ of the randomised controlled trial. Therefore we have to sit up and take notice when a trial of an ‘unorthodox’ approach is published in The Lancet. The study reported in this paper is based on the theory that persistence of primary or primitive reflexes beyond the first year of life interferes with subsequent development and, furthermore, that it is possible to do something about it by using a specific movement programme that replicates the movements of the primary-reflex system and reduces the persistence of the ATNR.

McPhillips and colleagues recruited 60 children aged 8–11 years, matched for age, sex, verbal IQ, reading ability and persistent asymmetrical tonic neck reflex (ATNR). The children were randomly allocated to three groups of 20. The experimental group received a specific movement sequence, a placebo control group received non-specific movements, and a control group received no movement sequences.

The experimental group showed a significant improvement, during the 12 months of the study, in the Neale analysis of reading ability (19.6 months) compared to the placebo control group (7.3 months) and the control group (6.9 months). The experimental group also showed a significant decrease in the level of persistent ATNR.

The research appears to have been well designed and achieved 100% follow-up at one year, which is very commendable. The results may appear counter-intuitive but the study certainly invites attempts to replicate it.

People with Down syndrome are more vulnerable to a large range of physical illnesses, ranging from hypothyroidism to Alzheimer’s disease. There has been considerable interest in whether at least some of their increased risks may be due to increased exposure to oxidative stress and there has been burgeoning enthusiasm for nutritional supplementation to counteract this.

Oxidative stress is defined as an imbalance between oxygen-derived free radicals and their removal by antioxidants. The annotation gives a detailed analysis of the theoretical basis for increased oxidative stress in Down syndrome and concludes that there is reasonably strong evidence for this and for an excess of free radicals playing a role in some of the complications of Down syndrome. There is therefore a good theoretical basis to consider that people with Down syndrome might benefit from antioxidant nutrients like vitamins C and E, carotene and selenium. Unfortunately, after an extensive review of the literature, the authors were unable to find any satisfactory trials of the use of antioxidant supplementation in Down syndrome and concluded that there is an urgent need for well-conducted trials.

Relative to children in the control group, neonatal intensive care unit (NICU) survivors demonstrated 25% more memory errors on the spatial working memory task. Their use of strategy on this task was similar to a group of 5-year-olds. Planning times on ‘Tower of London’ problems were long relative to those of term controls. NICU survivors demonstrated poorer pattern recognition as well as a shorter spatial memory span. The groups did not differ in
visual-discrimination learning or in spatial recognition memory.

Further work is needed to decide whether these data reflect a developmental delay in brain maturation in the NICU survivors or the presence of a more permanent information-processing deficit. Some school aged children with histories of pre-term birth, especially those who were very pre-term, are likely to need specific strategies to support their working memory problems.

Archives of Disease in Childhood (1999)

Munchausen’s syndrome by proxy is uncommon and often involves very young children suffering serious and covert abuse. Earlier literature has painted a gloomy picture of the chances of rehabilitation, particularly in families where the abuse has been at the more severe end of the spectrum of factitious illness by proxy. This paper comes from the Park Hospital, Oxford where they have shown that it is possible to treat at least some of these families successfully. The authors emphasise that the small group that they describe were highly selected but, nevertheless, the paper is important because it demonstrates that treatment may work in selected cases.

Berg and Jones report on 17 children from 16 families who had been admitted to the Park Hospital between 1992 and 1996. Twelve children had suffered direct induction of illness, one tampering with samples to mimic illness and four fabrication of illness. None of the children had been subjected to smothering. The biological mother was the abuser in all cases. Four of the 17 families were assessed for factitious illness by proxy. This paper comes from the Park Hospital, Oxford where they have shown that it is possible to treat at least some of these families successfully. The authors emphasise that the small group that they describe were highly selected but, nevertheless, the paper is important because it demonstrates that treatment may work in selected cases.

The follow-up period was a mean of 27 months and some would argue that this is a relatively short period of follow-up in such cases. However, the paper is a useful addition to the literature on this subject and reminds paediatricians and others that one should ‘never say never’ (consider rehabilitation in severe factitious illness abuse). Careful assessment by specialist teams will help to decide in which families rehabilitation should be considered. The rehabilitation process described is intensive and difficult and should not be undertaken lightly.

EDUCATION SELECTION
Compiled by Sally Beveridge

The three articles from Volume 14 that are reviewed here are linked by a common theme: the social interactions of children with special educational needs. The countries involved, the target group of pupils and the methodology vary but each one draws attention to the complexities of the social dimension of inclusion and suggest that physical proximity alone does not ensure positive social interaction.


Based in Israel, this research focused on children in the 2rd to 6th grade. The objectives were to study the social experiences (loneliness, sense of coherence, friendship qualities, reciprocal friendships and reciprocal rejection) of pupils with learning disorders (in UK terminology, specific learning difficulties) and to compare them with the social experiences of their school peers. The relationship between pupils’ positive and negative reciprocal friendship choices and their perceptions of their social lives at the start and the end of the school year were also assessed. The study involved 213 children all of whom were being educated in a mainstream setting.

At the start and end of the year the students with learning disorder (LD) reported higher levels of loneliness and lower levels of social cohesion than their peers. For example, at the start of the year 31% of pupils with LD said they had no friends compared with 20% of their peers. By the end of the year, the gap had widened with the group percentages being 39% and 17% respectively. The evidence also indicated differences in the levels of reciprocal rejection. The children with LD started with a higher percentage (50%) which increased slightly during the year (56%), whilst the percentage of their peers who experienced reciprocal rejection fell from an initial 41% to 27%.

These findings are of particular interest since they do not confirm earlier research by Vaughn et al. (1996), who reported that children with LD dramatically increased their number of friendships in an inclusive classroom. The authors suggest a number of possible reasons for this discrepancy. However, they draw attention to the evidence ‘that many students with LD, who have not been “labelled” and removed from the regular classrooms, experience social rejection and are at a high risk of its aversive consequences’ (p. 45). They suggest that a complex, interactive relationship exists between loneliness and social adjustment and suggest that further research is needed to understand the socio-emotional difficulties of pupils with learning disorders.

Reference


This piece of research looked at the social marginalisation of children with disabilities in nurseries in Norway. The data were obtained by observations in four nursery schools which were supplemented by interviews with children, staff and parents. About 80 children, aged 3 to 7 years, were involved in the study and nine of them had some type of disability (intellectual, physical or a combination of intellectual and physical). On a positive note, there was ample evidence of peers taking the initiative to play with disabled children and of children adapting their play to ensure participation. However, there were examples where the links broke down–as they may with any group of children.
The breakdowns were not seen as exclusively the result of attitudinal factors. Rather, the authors also identify a number of other factors that may contribute, including: relational factors, which are most likely to affect children with intellectual disabilities and locational factors, which are most likely to affect children with physical disabilities. They also noted differences in the children's relationships that could be associated with visible and non-visible disabilities, which they likened to the old distinction between the 'deserving' and the 'non-deserving' poor.

The evidence suggested that children are willing to redefine or modify a situation to promote the inclusion of a physically disabled child. There was some ambiguity in their response to children with intellectual disabilities: they showed consideration and care, but also instances of deliberate rejection.

The authors are at pains to stress that 'Kindness, exclusion, generosity and ruthlessness occur side by side. The tension between generosity and competition was part of the everyday life of all children at the nursery schools, not just those with disabilities' (p. 167). However, the situation may be doubly problematic for children with intellectual disabilities since these may make it more difficult for them to interpret behaviour but yet they are confronted by ambiguous reactions from their peers.

The authors suggest that the problems could be reduced if there were more adaptations to the physical environment and more awareness of the social consequences of educational practice. They speculate about the potential impact in later life of the early experiences of children.


This study, which took place in the Netherlands, used observation schedules, sociometric scales and teacher questionnaires to explore the social contacts of Grade 1 mainstream pupils with Down’s syndrome and the social position they occupy in the classroom. Twenty-three schools, each with a child with Down’s syndrome in Grade 1, were involved. The mean age of the children with Down’s syndrome was 7 years 10 months: that of their class peers was 6 years 8 months.

The social interactions of the pupils with Down’s syndrome were compared with the social interactions of both low-performing and average-performing pupils. Although there were significant individual differences, the findings indicated that the pupils with Down’s syndrome worked and played less with other pupils than either of the other two groups. These findings are of significance given that, in the view of the authors, social integration was the main motive for the parents to send their children to a mainstream school. Schools are not yet required by law to accept pupils with Down’s syndrome although it is a growing trend and the staff involved are relatively positive.

Interestingly, the sociometric evidence showed a significant discrepancy between the teachers’ perceptions and those of the pupils. Teachers were asked to allocate a category for each child from the range: popular, neglected, controversial, average and rejected. Their ratings were then compared with the sociometric scale based on data from the pupils themselves. None of the teachers rated any of the children with Down’s syndrome as neglected and yet the sociometric data identified 12 (out of 23) as such. Have the teachers a romanticised view of social interactions in their classrooms?

The authors do not suggest that their findings provide evidence that the integration of children with Down’s syndrome has ‘failed’, but rather of the need to pay attention to fostering positive relationships in terms of both quantity and quality.


Some people are born storytellers and may even earn their living by doing so. Most of us are adequate storytellers. This article reports a case study of the use of computers to support story-telling in a group of pupils with learning difficulties.

The group consisted of two 5-year-old and two 6-year-old pupils who had been assessed as having moderate learning difficulties. They were taught by the class teacher and the sessions were observed by a non-participant researcher and audio-taped for transcription. The children told stories under three different conditions: without prompts, with a single colour picture and with a software programme entitled Story-Book Weaver (The Learning Company, 1996).

The author rightly acknowledges the small sample size and draws attention to a number of variables that might have influenced the outcome. However, the findings clearly indicate that use of the computer programme supported pupils in developing longer and more complex stories. For example, the average length of their stories with no prompts was 35 words, with a single picture prompt 31 words, and with the computer programme 165 words.

This is a valuable case study in that it invites a reappraisal of the use of computers with children with learning difficulties. Often this is principally considered as a means of access to the curriculum. Turner’s article highlights the potential value of computers for scaffolding pupils’ work. Given the significance of story-telling to the way in which individuals scaffold their internal world, the author’s call for further investigation in this area seems appropriate.