# CASE STUDY



# The use of the Solihull Approach with children with complex neurodevelopmental difficulties and sleep problems: a case study

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# Accessible summary

- A lot of children have trouble sleeping, especially children with disabilities.
- Sometimes sleeping does not get better with advice about behaviour or medicine alone.
- We helped a mother, who has a little girl with problems sleeping, to think about her worries and their relationship, before offering advice.
- People can use the same steps to help other children who are not sleeping well. We think it might even work for problems like not eating and not doing as you are told.

## **Summary**

The following article introduces the Solihull Approach, a structured framework for intervention work with families (Douglas, *Solihull resource pack; the first five years*. Cambridge: Jill Rogers Associates, 2001) and aims to demonstrate the usefulness of this approach in working with school-age children with complex neurodevelopmental difficulties in a community Child and Adolescent Mental Health Service (CAMHS) setting. More specifically, it aims to show the efficacy of this approach in intervening with sleep problems, which are prevalent amongst children with learning disabilities. The authors hope to achieve these aims through the use of the qualitative case study method, which allows for a rich account of the intervention and therefore facilitates a detailed understanding of the psychological phenomena and processes involved in the approach (Dallos & Smith, *Clin Psychol Forum* 2008; **182**, 18). The three theoretical concepts central to the Solihull Approach – containment, reciprocity and behaviour management – are used to describe the intervention, which resulted in a positive outcome. Implications for clinical practice and future research directions are discussed.

Keywords Attention Deficit Hyperactivity Disorder, children, Down's Syndrome, learning disabilities, neurodevelopmental disabilities, sleep, Solihull Approach

# Introduction

# The Solihull Approach

The Solihull Approach (Douglas 2001) is an integrated model of working based on three theoretical concepts: containment (Bion 1959), reciprocity (Brazelton et al. 1974) and behaviour management (Watson 1930). The model arose from the practice of Health Visitors who requested support in response to a proportion of cases where common mental health difficulties in under fives (sleep, eating, toileting, etc.) appeared resistant to behavioural approaches to change. This approach encourages professionals to understand the process of change in three stages. Firstly, considering and listening to a parent's anxieties and concerns and by doing so, restoring the parent's ability to think about and manage emotions in their child (containment). Secondly, considering the interaction between parent and child and the extent to which they are in tune with one another (reciprocity). Thirdly, helping parents work with their children's behaviour using ideas derived from learning theories of behavioural change (behavioural management). The approach provides professionals with a common framework and language for thinking about children's behaviour and emotional well-being and aims to support early intervention and consistency in approach (Douglas 2001).

Because of the development of the approach with an under fives population, there has been an emphasis on preventative and early intervention work. The majority of research has focused on changes to the practice of professionals (Douglas & Ginty 2001) and little has been written about the direct impact of this approach on children and families. What has been published is encouraging. Findings show outcomes including: significant decreases in parental anxiety related to the problem; reduction in problem severity (Bateson et al. 2008; Douglas & Brennan 2004); and significant reductions in parent stress along with improvements in the parent-child relationship (Milford et al. 2006). In these studies, the relationship between parental anxiety related to the problem, perceived severity of the problem and symptom reduction is attributed primarily to parental experiences of containment. Douglas & Brennan (2004) call for further research to look more at 'the effectiveness of this approach and on elucidating how it works' (p. 105).

The Solihull Approach has been marketed as an early intervention approach for work with under fives. Through the presentation of the following case study, we argue for the approach as a helpful framework for intervention with more complex CAMHS work and with school-age children. Specifically, we demonstrate its effectiveness with a child with learning disability and chronic sleep problems and in doing so, hope to go some way in demonstrating how it works.

## Sleep in children with learning disabilities

Within the field of child learning disability, sleep difficulties are common (Doran *et al.* 2006; Quine 2001; Richdale *et al.* 2000) and are suggested to occur in up to 86% of children (Bartlett *et al.* 1985). The literature describes sleep difficulties around settling, night-time awakening, early morning arousal, shortened sleep duration and unusual behaviours during the night.

The implications of a child's sleep difficulties on the individual as well as the entire family are multiple. Previous research has demonstrated a link between sleep problems and daytime problem behaviours (Quine 1991; Wiggs & Stores 1996). Furthermore, children's sleep problems often result in increased need for parental attention at night (Roberts & Lawton 2001; Wiggs 2001), leading to disrupted sleep and an added burden on parents (Wright et al. 2006). It is suggested that sleep problems are one of the main reasons for parental stress in families with children with disabilities (Ouine 2001), but often go untreated because of a belief that these difficulties are an inevitable result of learning disabilities (Stores 1996), are seen as a 'developmental problem' to be grown out of, or are not always recognised by professionals as core mental health work (Mindell & Owens 2003).

Despite their prevalence, effects on the wider family and impact on daytime behaviour, the management of sleep difficulties is not covered by the National Institute for Health and Clinical Excellence (NICE, London) guidelines. A review of the literature shows that the management of sleep difficulties in this client group is based mainly on prescription of medication (Khan *et al.* 2011) or behavioural approaches (Richman *et al.* 1985). A recent study by Turk (2010) suggests that although some medications are effective, they are of most use in combination with behavioural approaches, attending to family functioning, social environment and sleep hygiene.

Evidence for integrated approaches suggests that the combination of behavioural strategies with ideas from attachment theory (Bowlby 1980) can result in increased effectiveness compared with behavioural intervention alone (Sterkenburg *et al.* 2008). This provided a starting point for thinking about the possibilities for intervention in the following case.

# Design

A single-subject case study design was chosen to enrich understanding of the psychological phenomena and processes (Dallos & Smith 2008) involved in the intervention, add strength and depth to previous research and to innovate this treatment approach (Roth & Fonagy 2005) with a different client group.

# The case study

## Referral

Anna is a ten year old girl with a diagnosis of Down's Syndrome and co-morbid Attention Deficit Hyperactivity Disorder (ADHD). She presents with moderate learning disability, speech and language difficulties that particularly affect her expressive language and physical health problems. She attends mainstream primary school in an inner-city London borough. Anna was referred to the neurodevelopmental team by her paediatrician for an assessment of her difficulties with attention, concentration and over-activity, following a full paediatric assessment. During the assessment, it transpired that Anna's difficulties with attention and concentration, although troublesome, were for the most part being managed well at school and at home. Instead, Anna's mother Deidre named Anna's difficulties with sleep as being a particularly distressing problem. Three intervention sessions were offered to explore these difficulties further.

## Getting to know Anna and her family

Anna is a delightfully expressive little girl who loves to socialise and enjoys being the subject of others' attention. She is the third child of Deidre who has two older children in their late teens and a younger daughter. The family are of Black British Caribbean origin and were born in Britain. They live together in over-crowded council accommodation in a neighbouring borough to CAMHS. Anna's dad has not lived with the family since Anna was six years old. He left the family home during a period when he was experiencing acute mental health difficulties that prompted child protection concerns about the family's safety. He now lives abroad and is sometimes in contact with the children by telephone. Anna's speech and language difficulties make it difficult for others to understand her, which frustrates her and has affected her ability to form positive relationships. She is described by her mother and school as being over-active and determined, the combination of which can challenge those around her.

## Description of the problem

Anna's mother described three main areas of difficulty with Anna's sleep. These included: (i) waking approximately every two hours throughout the night, from 9 pm when Anna goes to bed to 5 am, when she wakes for the day; (ii) upon waking, getting out of bed and compulsively completing routines including going to the bathroom and turning on taps and lights before returning to the bedroom; and (iii) sleeping in her mother's bed. Deidre said that Anna had always had difficulties sleeping, but the compulsive routines had started a couple of years ago. The current problems were mainly defined by Deidre as individual, but had a significant impact on everyone in the family. Deidre spoke particularly about the impact of sleep deprivation on her own ability to be a patient and resourceful parent. She also showed concern for Anna's sister's ability to concentrate at school because of tiredness.

Part of Deidre's own understanding of how Anna's sleep problems had been maintained came from a time when Anna's father was experiencing acute mental health difficulties. At this time, Deidre worried that her husband posed a risk to the family's safety. He was often up at nights and Anna's sleep problems had a helpful function in ensuring she remained awake to keep her family safe.

The context of Anna's dual neurodevelopmental diagnoses was essential in beginning to understand the history and current presentation of Anna's sleep. It is well evidenced that sleep onset difficulties are prevalent in children presenting with attentional and over-activity problems. Compounding this, physical health problems associated with Anna's condition make sleep particularly problematic and can, in some cases, lead to sleep apnoea (Stores *et al.* 1998).

#### **Outcome measures**

At our first meeting, Deidre sets goals for our work together and rated them on a scale of 1–10 (where 10 represents a goal being fully achieved) at the beginning and end of the intervention. In accordance with the CAMHS outcomes protocol, the authors utilised the principles of Specific, Measurable, Attainable, Realistic, and Timely (SMART) goals (Doran 1981), using the Goal Based Outcome Measure (CAMHS Outcome Research Consortium; Wolpert *et al.* 2007). Deidre set two goals. The first of these was 'for Anna to be able to sleep for at least three and a half hours at a time without waking', which she rated at 2. The second was 'for Anna to be able to sleep in her own bed', which she rated at 0. Deidre expected to see some improvements, but did not expect to go past 5 on either goal.

## **Previous intervention**

Previously, Anna had been prescribed melatonin, a naturally occurring hormone involved in the regulation of circadian rhythms and particularly effective in treating sleep onset latency (Buscemi *et al.* 2004). Because falling to sleep was relatively problem-free for Anna, it followed that melatonin was unsuccessful in ameliorating the difficulties described above.

In addition, a brief (four sessions) previous episode of intervention with CAMHS had a focus on psycho-education about sleep in the context of disability, alongside the use of behavioural techniques. This led to a small, but significant success over one weekend, but was not sustained.

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Despite the fact that things had not improved, this previous intervention evidenced that Anna's sleep problems were responsive to psychological intervention. Importantly, we noted that the use of behavioural approaches alone in managing Anna's sleep was not enough. We did not wish to simply replicate this work with the risk that a similar outcome might add to Deidre's felt hopelessness about the possibility of change. At the time we started seeing Deidre, the team had recently been trained in the Solihull Approach and we were naturally excited about the prospect of applying it.

## **Current intervention**

### Containment

At our first meeting, Deidre presented as a mother who was exhausted. She was often late to sessions and when she did arrive, she appeared hassled and seemed impatient with Anna. Fredman (2007) posits that the way we present ourselves physically – our 'emotional posture' – can be an important expression of what we are feeling in that moment. Deidre's emotional posture was one of weariness. It communicated to us that she was tired and struggling with emotions or anxieties that were overwhelming her ability to think and respond to Anna's sleep difficulties in a helpful way.

Deidre told us that she had a lot on her mind at the moment. As well as Anna's chronic sleep difficulties, financial worries and single parenthood, she talked about her frustration with the family's housing situation; factors that have all been shown to be significantly related to high levels of maternal stress (Sloper et al. 1991; Stores, Stores, Fellows & Buckley, 1998). Two years ago, the family had needed to be re-housed urgently, but no suitable property was available in their home borough (A). Consequently, Deidre and her children were moved to a neighbouring borough (B), which meant that she travelled a four hour round trip on several buses to get the younger children to school and back every day. This was incredibly tiring for Deidre, who also worked whilst the children were at school. In an effort to help Anna tire enough to sleep at night, Deidre had gone to lengths that included walking part of this journey. Anna's energy levels were such that this made no difference to her, but simply served to exhaust Deidre further.

Deidre explained that because two years had passed since their move, borough B's education department would now adopt responsibility for Anna's statement of special educational needs. This was a great worry for Deidre who was aware that as a consequence of the change, she would be asked to send Anna to a secondary school in borough B that she disliked. We reflected back to Deidre what we had heard and acknowledged how difficult it must be to think about Anna's sleep while this was on her mind. In separating out Deidre's worries, they took on a more manageable form, helping her to focus on the sleep work.

As we listened to Deidre talk, we were struck by the usefulness of systemic ideas in contributing to containment. She described her efforts to keep Anna at school in borough A as a 'fight', connecting with connotations of conflict and a sense of her position as opposing that of statutory services. We were aware of the importance of taking an impartial and nonexpert position on her story. We hoped that this stance would not only give Deidre an opportunity to feel heard and understood, but would be the first step in encouraging a relationship to help (Reder & Fredman 1996) that felt more positive than the one she was describing.

Starting the work by listening to Deidre allowed time for her to talk. She was able to air her worries and anxieties about Anna's sleep and other issues concerning her. Through the therapists' engagement in person-centred, active listening and refraining from offering solutions, suggestions or techniques, Deidre had the opportunity to process concerns that had felt overwhelming. Her worries were digested and transformed, restoring her ability to think and moved our work forward at a pace that suited her. It was also an important time for forming our therapeutic relationship, which is widely considered to be the most robust predictor of change across different therapeutic traditions (Gilbert 2007).

## Reciprocity

Reciprocity refers to the two-way process of communication between a parent and a child and has been described as a 'fundamental building block for our relationships' (Beebe & Lachman 1998). The concept of reciprocity in the context of learning disability was of particular interest to the authors. Ordinarily, reciprocity is disrupted when parental ideas about a child's behaviour are coloured by previous experiences, by a lack of knowledge about the trajectory of typical development, or both. This has an impact on parental understandings of their child's behaviour and therefore their responses. In children with learning disabilities, the uncertainty of how or whether the child will develop adds another layer of meaning to behaviour for parents to decipher.

Deidre's uncertainty about which aspects of Anna's behaviour could be explained by her difficulties and which were attributable to Anna's temperament was a strong theme throughout our work. In introducing the perspectives of others that knew Anna well (i.e. teachers) and in discussing psycho-educational material about children with learning disabilities, it seemed that her expectations of her daughter did not always fit. For many families, this sense of uncertainty can be strongest around the time of transitions. It is common for any family to struggle with life transitions (Carter & McGoldrick 1999) and for parents, seeing their child develop through different stages can bring a complex mixture of emotions. Goldberg *et al.* (1995) suggest that families that include individuals with disabilities may find transitions particularly challenging, becoming 'stuck' in a particular life cycle stage. Oswin (1991) suggests that for a family affected by learning disability, the transition to each life stage presents as another stage of grief, where the anticipated images of what a child should be doing at this age become evident, leaving parents with memories of previous grief, such as the time of their child's diagnosis.

Thinking more about Anna's transition to secondary school had sparked a connection for Deidre with her daughter's transition to adolescence and the growing independence and sexual awareness this life stage brings. She described how lately she had begun to worry more about Anna's vulnerability, how she might cope growing up and whether she would ever truly achieve independence from her mother.

We were curious about how Anna's transition to adolescence had begun to show itself. Deidre explained that it had not and that this was the problem. Anna had little awareness of risk and was inclined to approach, touch and talk to strangers. She also had little awareness of her developing body and the inappropriateness of, for example, being unclothed in front of her brother.

We explored what this transition meant, not only for Anna, but also for Deidre and Anna's relationship. Deidre said that Anna's getting older had made her realise the inappropriateness of sharing a bed, but that asking Anna to sleep alone had felt like she was pushing her daughter away. She reflected on how this feeling had been different for Anna than with her other children, because of the special relationship they had forged that had come from parenting a child with special needs.

We were interested in Deidre's observation that the transition to adolescence had not shown itself in Anna and explored what steps Deidre had taken to support Anna's development into adolescence. Deidre described how she had been naming body parts for Anna, teaching her about ways of ensuring privacy, such as closing her bedroom door. She described with amusement Anna's interpretation of the names of body parts and noticed how Anna had begun to use them.

## Behaviour management

We thought with Deidre about what had made the separation through sleep manageable during the weekend of success she had experienced before. Deidre recalled the use of a 'transitional object' (Winnicott 1953), letting Anna sleep with her dressing gown. She described how motivated Anna was by incentives and how well she had responded to a reward chart.

Having had the opportunity to reflect on Anna's transition to adolescence and to notice her progress in development, Deidre began to generate ideas about how rewards could be adapted to fit with Anna's interests now. She thought of buying computer games. She also described how for some time she had hoped to teach Anna to knit and wondered whether this might also provide an alternative opportunity for closeness with her daughter.

In our final session, Deidre reported seeing some results with regard to Anna's sleep and both were feeling better rested and less tired. Deidre described how a run of good sleep had boosted her patience and ability to listen to Anna. As a result, she felt that they had spent more quality time together during the day. She thought that spending more time with Anna during the day had meant that she needed her mother less during the night. Deidre told us how she had also used this renewed patience and energy to observe Anna and had begun to see her in a different light. We began to see the emergence of a new understanding of Anna; that Anna is a girl who can learn and develop and that despite her difficulties with over-activity, she is capable of being restful, calm and positively responsive to others at these times.

## Outcome

Deidre attended two of three intervention sessions over a period of five weeks. At the end of our second and final session, we revisited the goals that Deidre had set at the beginning of our work together. Deidre rated goal one ('for Anna to be able to sleep for at least three and a half hours at a time without waking') at 10 and goal two ('for Anna to be able to sleep in her own bed') at 10.

Given her original hopes for what she might achieve through this work, Deidre was surprised at the amount of change, which had surpassed what she had imagined could be possible. She told us that around this time she had found a special needs secondary school that she felt fit well with Anna and that this school was in Borough B, an option to which she was originally resistant. Making a decision she was happy with had freed her up to be able to give her attention to the intervention.

At a one month telephone review, we heard how Anna had slept on her own through the night every night since we last met. Deidre told us how our work together had not only had an impact on the identified problem (sleep), but that this change in sleep had made a significant difference to Anna's day time behaviour and progress at school as well as Deidre's own sense of well-being and their relationship.

# Discussion

This case study aimed to give a detailed account of how the Solihull Approach can be used for intervention with a school-age child with a complex neurodevelopmental presentation and sleep difficulties, to positive ends.

The Solihull Approach views containment and reciprocity as the essential foundations of an intervention on which behaviour management is built. Having the space to reflect on and process her worries about Anna (containment) gave Deidre an opportunity to notice how Anna was developing. This new understanding enabled different interactions between mother and daughter, bringing them more in tune with one another (reciprocity). Re-attuning with Anna made it possible for Deidre to see her strengths more clearly, helping her to tailor generic behavioural techniques to fit with her daughter (behaviour management) and set their relationship on a different course. Through the experience of being contained in therapy, Deidre was able to provide containment to Anna by offering re-assurance and setting boundaries around bedtime behaviour.

We acknowledge that this case study is from the perspective of the authors as psychologists, who as younger, White European (British and Finnish) women without children are likely to have viewed this work through a different lense. We were interested in Deidre's reflections on what it felt like to work with clinicians informed by the Solihull Approach. Box 1 presents Deidre's responses to questions we put to her about her experience of the work.

The positive change described here reflects that of previous findings with under fives that show how Solihull-informed interventions lead to a reduction in problem severity (Bateson *et al.* 2008; Douglas & Brennan 2004), parent stress and an improvement in the relationship between parent and child (Milford *et al.* 2006). The latter findings are based on standardised and validated measures and yet entirely mirror the changes that Deidre described to us in her own words. This suggests that the relationship between the Solihull Approach and these types of outcomes is a reliable one across more and less complex presentations and with a larger age-range than has been evidenced previously.

With regard to 'elucidating how (the Solihull Approach) works' (Douglas & Brennan 2004, p. 105), throughout the process, we reflected on the extent to which the structure of the Solihull Approach – which essentially defines a beginning, middle and end to therapy – is containing in itself for clinicians. We were interested in previous research that names parental experiences of containment as being at the heart of change (Douglas & Brennan 2004) and wonder whether an awareness of the nature of containment as a parallel process, operating at a number of levels, is the starting point to understanding why this approach is successful.

**Box 1:** Our questions and Deidre's answers about our sessions together

Q: What was it like to come and see us for those two sessions?

A: It was brilliant. I needed someone to hear me. I felt that there was someone there when I needed it. When I finished the sessions I felt great and really positive. Q: What do you think helped? Why?

A: You listening and working with me to talk through ideas. Having somebody to back me up and keep me on the right track. It helped sharing and going through the difficult experience and emotions with someone.

Q: What did you notice you were able to do differently as a result of what we talked about?

A: I noticed that I was much calmer and approached Anna in a different way, without getting anxious or upset. I was taking it calmly. It let me stop and think.

Q: Did you notice any differences in your relationship with Anna? Have you been able to maintain them?

A: Oh yeah, it was much easier. We sit down and have more time together. We have a much better relationship now and I understand her more. I continue to learn about her every day. I often take a back seat and think where she is coming from, for example, with making new friends in secondary school. I have been able to maintain the good relationship with her, even at the moment, when she is going through the ups and downs with settling in at the secondary school.

Q: What was your hope for this case study?

A: I hope that other parents whose children have disabilities and sleep problems can get help. I think it is important that you have included our ethnicity because there is still a lot of shame in ethnic communities and in my community around children with learning disabilities. I also hope that by including Anna's ADHD diagnosis people will realise that children with Down's Syndrome can also have extra needs that are not always recognised.

# **Clinical implications**

To our knowledge, this is the first published example of how the Solihull Approach can be applied to CAMHS work with school-age children with neurodevelopmental disabilities. Whilst we do not claim that this is a completely new way of working, the approach provides a helpful structure that allows for flexibility to integrate multiple theoretical understandings. This case study, which has utilised ideas from neurodevelopmental, systemic, psychoanalytic and behavioural theories, has certainly demonstrated this. Its flexibility as a model enables it to be adapted and tailored as needed.

Given the flexibility of the model and the evidence in the under fives population for the usefulness of the approach with a wide range of difficulties (Douglas & Brennan 2004), the Solihull Approach may also be efficacious with a similar range of presentations in school-age children and with those with neurodevelopmental disabilities.

Finally, it is important to publish such work as we are in economic times where 'simple' behavioural programs by practitioners trained in one therapeutic model only are desirable to commissioners.

We hope that others working with children with learning and/or neurodevelopmental disabilities have gained some practical ideas about ways of intervening with sleep difficulties that provide an alternative to medication and behavioural approaches alone.

## Limitations

It should be noted that the outcome of this intervention was particularly positive, resulting in the resolution of the problem. In everyday clinical practice, this is rare. Instead, CAMHS clinicians might expect to see some movement towards positive change, such as improvements in coping, understanding and symptom reduction. With this in mind, we acknowledge that such a positive outcome did contribute to our reasons for selecting this case, as is true for published case studies in general. However, it is of note that in this case, previous generic sleep intervention had been unsuccessful and this contributed to our interest in publishing this particular example.

Despite a positive outcome, attributing change to the independent variable (the Solihull Approach model) using a case study design is difficult. This was summed up by Moore (2004) in a critique of his own case study when he wrote that 'before and after measures of behaviour are only useful to an extent, in that they can indicate the existence and direction of change, but cannot unravel the effects of multiple variables upon change'. Although the authors agree with Moore's statement, it is partly because of the existence of these 'multiple variables' that the case study design was chosen. Presented here is a classic example of an inner-city CAMHS referral with regard to the presence of co-morbid difficulties and socio-economic pressures that influence the scope and complexity of psychological intervention. No doubt readers with experience of working in similar settings will recognise these multiple contextual factors as widening the gap between the interventions evidenced by randomised controlled trials (RCTs) and the reality of everyday clinical practice. Indeed, Dallos & Vetere (2005) argue that case studies can be more meaningful and relevant to clinicians' work than the more traditional evidence of RCTs. Therefore, through the use of this method, we sought to acknowledge, rather than control these variables and by doing so, demonstrate the usefulness of the Solihull Approach in real life and the ecological validity of our findings.

The relevance of our findings to the wider population of children with sleep problems in the context of disability could also be questioned. A sample of one certainly limits the generalisability of our findings. However, in line with our aims, the case study allowed for a rich account of the use of the approach here and we invite further exploration of how our findings can be relevant for sleep difficulties in general.

# Implications for further research

Given the positive results reported here, further research is warranted. Such research might aim to investigate the efficacy of the Solihull Approach framework over treatment as usual with children with neurodevelopmental disabilities and their families. In this case, the authors support a more systematic and quantitative approach, including a larger sample of children and the presence of a control group to innovate this treatment approach with a new population.

# **Ethical statement**

Written, informed consent for this paper was obtained from the mother. Anna and Deidre are fictitious names to protect the anonymity of this family.

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# References

- Bartlett L., Rooney V. & Spedding S. (1985) Nocturnal difficulties in a population of mentally handicapped children. *Br J Ment Subnorm*, **31**: 54–9.
- Bateson K., Delaney J. & Pybus R. (2008) Meeting expectations: the pilot evaluation of the Solihull Approach Parenting Group. *Community Pract*, **81**: 28–31.
- Beebe B. & Lachman F. (1998) Co-constructing inner and relational processes: Self and mutual regulation in infant research and adult treatment. *Psychoanal Psychol*, **15**: 480–516.

Bion W. (1959) Attacks on Linking. In Bion W.R., editors. Second thoughts. London, Karnac: 1967: 93–109.

Bowlby J. (1980) Attachment and loss: Volume 3. Loss. New York, Basic Books.

Brazelton T., Koslowski B. & Main M. (1974) The origins of reciprocity: the early mother-infant interaction. In Lewis M., Rosenblum L., editors. The Effect of the Infant on its Caregiver. London, Wiley.

Buscemi N., Vandermeer B., Pandya R., Hooton N., Tjosvold L. *et al.* (2004) Melatonin for treatment of sleep disorders. Evidence Report/Technology Assessment: Number 108 (Review). U.S. Department of Health & Human Services, Agency for Healthcare Research and Quality. Available at: http://www.ahrq.gov/ clinic/epcsums/melatsum.htm (last accessed on 18 October 2011).

Carter B. & McGoldrick M. (1999) The expanded family life cycle: individual, family and social perspectives, 3rd edn. Boston, Allyn-Bacon.

Dallos R. & Smith J.A. (2008) Practice as research and research as practice: how the qualitative case study can invigorate clinical psychology. *Clin Psychol Forum*, **182**: 18–22.

Dallos R. & Vetere A. (2005) Researching psychotherapy and counselling. Maidenhead, OU Press/McGraw Hill.

Doran G.T. (1981) There's a S.M.A.R.T. way to write management's goals and objectives. *Manage Rev*, **70**: 35–6.

Doran S., Harvey M. & Horner R. (2006) Sleep and developmental disorders: assessment, treatment, and outcome measures. *Ment Retard*, **44**: 13–27.

Douglas H., Editor. (2001) Solihull resource pack; the first five years. Cambridge, Jill Rogers Associates.

Douglas H. & Brennan A. (2004) Containment, reciprocity and behaviour management: preliminary evaluation of a brief early intervention (the Solihull Approach) for families with infants and young children. *Int J Infant Observ*, **7**: 89–107.

Douglas H. & Ginty M. (2001) The Solihull Approach: changes in health visiting practice. *Community Pract*, **74**: 222–4.

Fredman G. (2007) Preparing our selves for the therapeutic relationship. Revisiting 'Hypothesizing Revisited'. *Human Syst: J* Syst Consult Manage, 18: 44–59.

Gilbert P. (2007) Evolved minds and compassion in the therapeutic relationship. In Gilbert P., Leahy R., editors. The therapeutic relationship in the cognitive behavioral psychotherapies. New York, Routledge: 106–43.

Goldberg D., Magrill L., Hale J., Damaskinidou K., Paul J. et al. (1995) Protection and loss: working with learning disabled adults and their families. J Fam Ther, 17: 263–80.

Khan S., Heussler H., McGuire T., Dakin C., Pache D. *et al.* (2011) Melatonin for non-respiratory sleep disorders in children with Neurodevelopmental disorders. *Cochrane Database Syst Rev*, **5**: 1–10.

Milford R., Kleve L., Lea J. & Greenwood R. (2006) A pilot evaluation study of the Solihull Approach. *Community Pract*, 79: 358–62.

Mindell J.A. & Owens J.A., Editors. (2003) A clinical guide to pediatric sleep: diagnosis and management of sleep problems. Philadelphia, PA, Lippincott Williams & Wilkins, USA. Moore P. (2004) The use of social stories in a psychology service for children with learning disabilities: a case study of a sleep problem. *Br J Learn Disabil*, **32**: 133–8.

Oswin M. (1991) Am I allowed to cry? A study of bereavement in people who have learning difficulties. London, Human Horizons.

Quine L. (1991) Sleep problems in children with severe mental handicap. J Ment Defic Res, 35: 269–90.

Quine L. (2001) Sleep problems in primary school children: comparison between mainstream and special school children. *Child Care Health Dev*, **27**: 201–21.

Reder P. & Fredman G. (1996) The relationship to help: interacting beliefs about the treatment process. *Clin Child Psychol Psychiatry*, 1: 457–67.

Richdale A., Gavidia-Payne S., Francis A. & Cotton S. (2000) Stress, behaviour, and sleep problems in children with an intellectual disability. J Intellect Dev Disabil, 25: 147–61.

Richman N., Douglas J., Hunt H., Lansdown R. & Levere R. (1985) Behavioural methods in the treatment of sleep disorders: a pilot study. J Child Psychol Psychiatry, 26: 581–90.

Roberts K. & Lawton D. (2001) Acknowledging the extra care parents give their disabled children. *Child Care Health Dev*, **27**: 307–19.

Roth A. & Fonagy P. (2005) What works for whom? New York, USA, Guildford Press.

Sloper S., Knussen C., Turner S. & Cunningham C. (1991) Factors related to stress and satisfaction with life in families of children with Down's syndrome. J Child Psychol Psychiatry, 32: 655–76.

Sterkenburg P.S., Janssen C.G.C. & Schuengel C. (2008) The effect of attachment-based behaviour therapy for children with visual and severe intellectual disabilities. J Appl Res Intellect Disabil, 21: 126–35.

Stores G. (1996) Practitioner review: assessment and treatment of sleep disorders in children and adolescents. J Child Psychol Psychiatry, 37: 907–25.

Stores R., Stores G., Fellows B. & Buckley S. (1998) A factor analysis of sleep problems and their psychological associations in children with Down's Syndrome. *J Appl Res Intellect Disabil*, 11: 345–54.

Turk J. (2010) Sleep disorders in children and adolescents with learning disabilities and their management. *Adv Ment Health Learn Disabil*, **4**: 50–9.

Watson J. (1930) Behaviourism. New York, Norton.

Wiggs L. (2001) Sleep problem in children with developmental disorders. J R Soc Med, 94: 177–9.

Wiggs L. & Stores G. (1996) Severe sleep disturbance and daytime challenging behaviour in children with severe learning disabilities. *J Intellect Disabil Res*, **40**: 518–28.

Winnicott D.W. (1953) Transitional objects and transitional phenomena. A study of the first not-me possession. *Int J Psychoanal*, 34: 89–97.

Wolpert M., Cooper L., Tingay K., Young K. & Svanberg E. (2007) The CORC Committee. CAMHS Outcome Research Consortium Handbook version 2.0. Available at: http://www.corc.uk.net (last accessed on 29 September 2011).

Wright M., Tancredi A., Yundt B. & Larin H. (2006) Sleep issues in children with physical disabilities and their families. *Phys Occup Ther Pediatr*, 26: 55–72.