The University Of Sheffield.

How can parents be supported in improving child sleep and is this a role for educational psychologists?

A mixed-methods multiple case study

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Abstract

Child sleep difficulties are a common behaviour problem reported by parents (Wiggs, 2007). Sleep problems have been found to have an impact on cognition, mood, attention and behaviour (Vriend et al., 2013; Dahl,1996; Pilcher and Huffcut,1996; Fallone et al., 2005). Such findings suggest that involvement of educational psychologists (EPs) may be relevant in terms of addressing child sleep issues which could potentially impact on the child's social, emotional and academic development. Existing research supports the effectiveness of behavioural interventions to address child sleep difficulties (Malow et al., 2014; Moon et al., 2010; Reed et al., 2009; Ramchandani et al, 2000; Milan et al., 1981; Adams and Rickert, 1989).

The present research was a multiple case study involving the parents of three children with sleep difficulties who participated in a trainee EP-led intervention designed to improve child sleep. A mixed-methodological exploratory design was used. Intervention materials were created and delivered to parents individually by the researcher during one two-hour session. Skills typically employed by EPs were used to facilitate change. Parents put into action an individualised and collaboratively-created plan supported by weekly telephone calls.

The School Behaviours Rating Scale (Gardon, 2009), the Children's Sleep Habits Questionnaire (Owens, 2000) and sleep diaries were used to gather data to measure pre- and post-intervention scores. Analysis of sleep diaries kept throughout the intervention and a post-intervention questionnaire also provided data about influence. Thematic analysis of pre- and post-intervention parent interviews and of the researcher reflective diary explored stories around sleep and experiences of the intervention as well as the significance of the role of the EP/trainee EP (TEP).

Findings suggest that all parents reported an improvement in child sleep. There were some improvements in teacher reports of child behaviour but this is not considered to be conclusive. Parents reported a high level of satisfaction with the intervention. Methodological limitations of the results are discussed and implications for professional practice in terms of the role of EPs are considered.

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Chapter 1 – Introduction

1.1 Introduction to the Research

Difficulties associated with sleep are of one of the most frequent child behaviour problems reported by parents (Wiggs, 2007). Galland and Mitchell (2010) state that approximately 25-40% of children aged one to five show evidence of having developed some kind of sleep problem. O'Brien (2009) considers sleep problems to be 'frequently under-recognised' (pp.813). Existing research has shown sleep disturbance and deprivation to have an impact on cognition, mood, attention, behaviour and neurobehavioural functioning (Dahl, 1996; Pilcher and Huffcut, 1996; Fallone, Acebo, Arnedt, Seifer & Carskadon, 2001; Sadeh Gruber & Raviv, 2002; Fallone, Acebo, Seifer & Carskadon, 2005; Vriend et al., 2013;). Given the role of educational psychologists (EPs) in working with children and families, the opportunity to pre-empt or ameliorate such difficulties by facilitating improvements to sleep warrants further investigation.

1.2 Background and rationale

During my early work as a trainee educational psychologist (TEP), a number of parents mentioned during consultation that their children were poor sleepers. This was additional information rather than being related to the referral. I began to wonder how often sleep issues were accepted as part of the normal journey of parenting and how much the sleep difficulty was contributing to other concerns. I had a great deal of empathy for these parents. My youngest daughter had periods of illness before the age of two and had related sleep difficulties. I experienced first-hand the debilitating impact of sleep deprivation and also the negative impact on my daughter's daytime

behaviour. I also have experience of how easy it is, under such circumstances, to adopt coping strategies and bad habits which prevent the development of a good sleep routine.

On 27th June 2014 I saw a presentation by Dr Luci Wiggs at The Autism Show in Manchester where she described the effectiveness of behavioural interventions in addressing child sleep difficulties. Following this, Dr Wiggs supported me in terms of providing some relevant research literature, including some of her own research. Reading about the impact of behavioural workshops made me consider the value of adapting such interventions for use by EPs, to work with parents to improve sleep.

As part of my investigations into parent-based sleep education, I was able to attend a 'Sleep Success Workshop' run by 'The Children's Sleep Charity'. This allowed me to see how these behavioural interventions work and to hear parents talk about the impact of child sleep issues. At present there is limited support and it is quite difficult to access. Workshops such as those offered by The Children's Sleep Charity only operate in certain parts of the country and are often fully subscribed. The other option is to be referred to a sleep clinic via the GP, which again is time consuming as there are often long waiting lists.

An exploration of the delivery of sleep interventions by EPs is considered to be beneficial in terms of the capacity that it has to address or prevent ongoing educational issues. This seems particularly pertinent in light of recommendations made in The Children and Families Bill (2014) to work holistically with a view to improved outcomes.

Quine (1997) stresses that research shows that 'sleep improves dramatically when parents are taught new management techniques' (pp.13). Given the potential impact of sleep difficulties on a child's ability to function effectively in school as well as the wider, systemic impact, it would seem that a programme which could be delivered by Educational psychologists (EPs) to parents would be a good use of resources, thus an exploratory investigation into the delivery of such an intervention is justified.

1.3 The unique contribution of this research

There is much research to support the effectiveness of behavioural interventions (Malow et al., 2014; Moon, Corkum & Smith, 2010; Reed et al., 2009; Mindell, Kuhn, Lewin, Meltzer & Sadeh, 2006; Ramchandani, Wiggs, Webb & Stores, 2000; Milan, Mitchell & Bergen, 1981; Adams and Rickert, 1989; Quine, 1993 and 1997; Kerr and Jowett, 1994). The present thesis looks at the impact of a parent-based sleep intervention whilst exploring the role of the EP. There seems to be limited research on the role of the EP in working around child sleep although speaking to EPs anecdotally it is recognised as a relevant issue. Buckhalt, Wolfson & El-Sheikh (2009) reviewed existing literature relating to the importance of sleep for children and adolescents and concluded that school psychologists should receive ongoing training for recognising/assessing sleep problems and in preventative sleep education for children. The development of practice guidelines for assessment and intervention is also suggested for use by school psychologists in a similar way to those used for medical practice (Buckhalt et al., 2009). Some primary care health services use a stepped care model for insomnia to approach paediatric sleep difficulties (Espie, 2009). This model outlines five levels of intervention beginning with self-administered

help such as a booklet. The next step is small group therapy by a trained therapist, then an individual cognitive behavioural therapy (CBT) session with a clinical psychologist and finally the involvement of a behavioural sleep medicine specialist. The idea is that patients can be matched to an appropriate entry step.

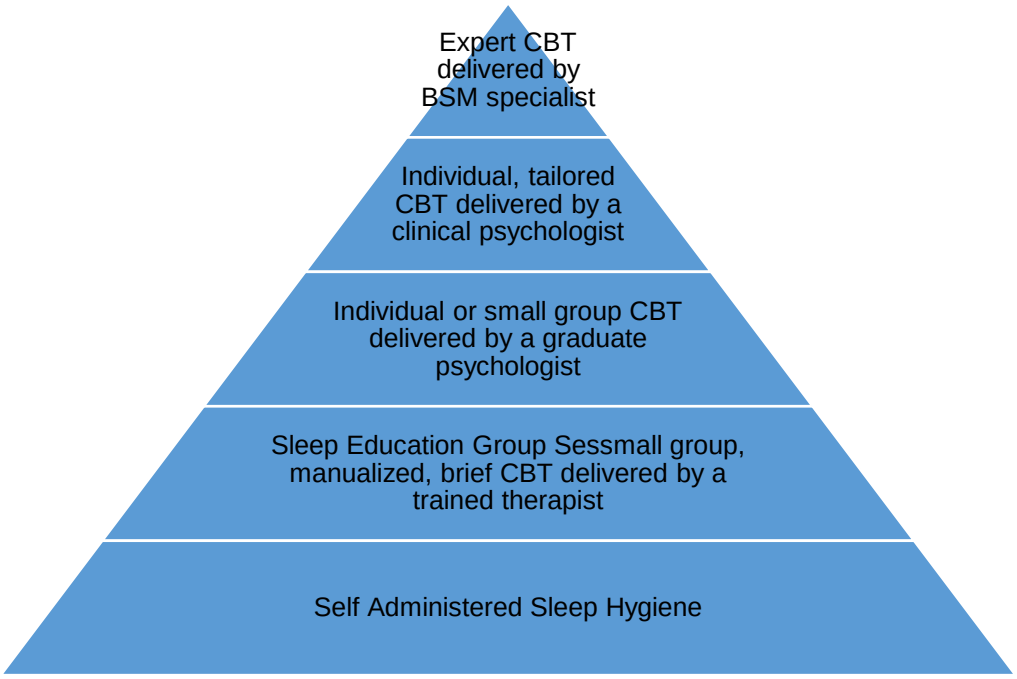

Figure 1. An example of a stepped care model of sleep intervention used in primary care (Espie, 2009)

Buckhalt et al. (2009) suggest that there is a role for school psychologists in contributing to wider policies about child sleep. The more holistic approach to service delivery encouraged by Education Health and Care Plans (EHCs) may provide the context for a more realistic co-ordination of provision between health, EPs and social care which could fit into a model such as that illustrated in figure 1.

EPs have specific skills to contribute to the delivery of parent-based behavioural sleep interventions. Encouraging parents to participate fully requires a commitment to change. Even when parents agree to take part in a workshop they may still be

separating the sleep difficulty from themselves. The principles of Motivational Interviewing can complement parent-based sleep education in helping people move past ambivalence to positive behaviour change (Miller and Rollnick, 2002). This is considered in more detail in Section 3, in light of its intrinsic role in the methodology of the research. EPs would seem to be well placed to work with parents collaboratively and reflectively, using skills and strategies from our professional 'toolbox'.

The majority of research into the effectiveness of parent-based sleep education focuses on children with neurodevelopmental disorders such as autistic spectrum conditions (ASCs) which are consistent with a high rate of sleep difficulties (Stores and Wiggs, 2001). Statistics which estimate the frequency of child sleep difficulties referred to in the first paragraph of this section relate to the general population. It is thought that the rate of sleep difficulties for children diagnosed with ASCs is even higher; as much as 50-80% (Goldman, Richdale, Clemons & Malow, 2012; Couturier et al., 2005). The present research intends to explore a sleep intervention with the parents of children who have no such diagnoses and are thus less likely to have access to support. By targeting children considered to be typically developing it is hoped that addressing sleep difficulties at an early stage may prevent or ameliorate problems associated with poor sleep such as those described in the following literature review. Finally, it is hoped that the use of a mixed methods approach with a strong focus on qualitative data provides a fuller picture of parents' experience of sleep problems and of taking part in a behavioural intervention.

Chapter 2 – Literature Review

2.1 The structure of the literature review

The literature review will firstly examine research into the nature of sleep, sleep problems and sleep deprivation. Secondly, it will consider how sleep is measured and assessed as well as how sleep problems are determined. Thirdly, there will be consideration of how sleep difficulties might affect children's educational progress and how child sleep difficulties can impact on parents. Finally, interventions designed to help improve sleep will be reviewed in detail along with an examination of how existing research can be used to inform work with parents to improve child sleep.

2.2 Critical Literature Review Search Strategy

The purpose of conducting a literature review was to review and integrate information relating to the research questions and to examine as much information as possible in terms of its relevance to the present research. In this literature review I will identify research studies investigating the impact of interventions designed to improve child sleep. It also to looks at research relating to the impact of sleep deprivation (on both children and parents) and into the nature and value of sleep in general. Details of the literature review search strategy can be found in appendix ii.

2.3 The significance of sleep and of sleep deprivation

Scientific knowledge and understanding about sleep is not as comprehensive as may be expected. We know that sleep reinvigorates us both physically and mentally. Tiredness impacts on our ability to function normally. Sleep is not simply the closedown of daytime mental activity. Sleep onset, waking, REM (rapid eye movement) and non-REM sleep are all linked to complex biochemical alterations in different areas of the brain (Stores, 2009). Sleep is an extremely organised process

with two very different states; rapid eye movement sleep (REM) and non-rapid eye movement sleep (NREM). NREM sleep makes up around 75% of sleep and is divided into four stages. Sleep becomes progressively deeper and is accompanied by more slow brain activity with each NREM stage. The deepest sleep, sometimes called slow wave sleep (SWS), occurs in the initial three hours. Disorders such as sleepwalking happen during this phase. REM sleep is where most dreaming occurs. In adults REM sleep comprises 25% of total sleep but for newborns it is 50%, suggesting that it may be involved in early brain development. In normal sleep patterns REM and NREM alternate throughout the night. It is usual for people to wake for brief periods during the night; this may not be remembered but these wakings can become significant if something prevents the child from returning to sleep (Stores, 2009).

Biologically, there are three processes thought to control sleep. Firstly, a homeostatic process which is determined by the amount of preceding sleep and waking. The previous quantity of sleep and waking is directly linked to daytime sleepiness (Roehrs, 2000). The circadian process works independently of the homeostatic process and is responsible for the roughly twenty-four hour cycle. The suprachiasmatic nucleus, situated in the hypothalamus is influenced by the light and dark cycle thereby controlling sleep and wakefulness. The suprachiasmatic nucleus responds to the chemical melatonin which is a hormone produced during darkness. Bright light suppresses the production of melatonin. Thus, melatonin encourages sleep at night and the suppression of melatonin keeps us awake during the day. Melatonin is quite commonly prescribed to children with sleep difficulties though research suggests that behavioural treatments may be more effective both in the short and long term (Ramchandani, et al., 2000).

The fact that children spend so much of their early life sleeping and that they are known to require significant periods of sleep suggests that sleep serves a number of important purposes for the developing child. A lack of sleep is, therefore, a key area of consideration for parents, schools, health workers and Educational psychologists.

2.4 How is child sleep assessed and measured?

Parent report and self-report are the most frequently used methods of measuring sleep though these are often used in conjunction with less subjective measures (described below). The Children's Sleep Habits Questionnaire (CSHQ, Owens et al., 2000), the Pediatric Sleep Questionnaire (PSQ; Chervin et al., 2000) and the School Sleep Habits Survey (SHS, Wolfson and Carskadon, 1998) are some frequently used ways of gaining structured information about sleep. More objective measures include sleep actigraphy where the child wears a watch-like device to measure intensity and frequency of movement. In a clinical situation, greater accuracy can be obtained using polysomnography (PSG) but this is usually only used for the assessment of clinical sleep disorders (Buckhalt et al, 2009). Various configurations of sleep questionnaires, diaries and actigraphy are used for much of the research discussed throughout this review.

2.5 How do we decide if a child has a sleep problem? Individual perceptions and cultural considerations

The decision as to whether a child has a sleep difficulty is, in a sense, largely subjective. This will vary from person to person, what may seem to be an insurmountable sleep problem for one family may be a normal and acceptable part of family life for another. Quine (1997) suggests that sleep difficulties are 'only really a problem if the wellbeing, health or happiness of any family member are compromised' (pp.14). It is possible that parents may be unaware if the child sleep difficulty is affecting them in school which suggests a need for schools to actively seek such information so that it can be used holistically in terms of monitoring progress and development.

The degree to which sleep issues are considered to be a problem is influenced by culture, ethnicity and socioeconomic circumstances (Jenni & O'Connor, 2005; McKenna & Volpe, 2007; Keller & Goldberg, 2004). Many cultures adopt co-sleeping as the most common sleeping practice for a variety of reasons including economics, logistics, ease of feeding or a belief that doing so promotes the wellbeing of both child and parent (Vaughn, 2010). Co-sleeping has also become increasingly popular in Western cultures over recent years due to physiological and social factors (McKenna, 1996). In a study exploring the co-sleeping experiences of over 200 mothers from Canada, the USA, Australia and Great Britain (McKenna & Volpe, 2007), the experience of co-sleeping was described by participants as being 'good for attachment' and promoting 'peaceful bedtimes' (pp. 372) as well as being something which 'just simply feels right' (pp.374). It is interesting to get the perspective of mothers who have experienced co-sleeping, and the study gives an insight into some of the

social as well as the practical elements which mothers may find appealing. The study is, however, a small sample of middle class mothers who volunteered to take part and were all in favour of co-sleeping. McKenna and Volpe (2007) argue that the recommendations against co-sleeping by Western medical authorities should be reconsidered to show a fuller picture and to allow parents to make an informed choice.

Sadeh et al. (2010) draw a distinction between parents who choose to co-sleep due to the aforementioned considerations and those who have developed a habit of co-sleeping as a result of child sleep difficulties. It is particularly important to bear this in mind when addressing the efficacy of parent-based sleep education, as a focus on the latter reasons may be a key element of such programmes. Some research has shown that children who sleep with their parents were likely to have more arousals during the deep sleep phases and tended to stay in the deep sleep phases for less time (Mosko et al., 1997; Mosko et al. 1996). It may also be true that when parents have made conscious decisions with regard to sleeping arrangements (inclusive of whether this is in response to cultural norms) that they are less likely to consider some behaviours such as frequent night waking to be a problem.

Wiggs (2007) notes that, when considering whether children are getting enough sleep, it is necessary to examine individual definitions of ideal sleep patterns and to be aware that people will use different criteria for determining adequate sleep. Researchers use a variety of terms to classify child sleep issues. Galland and Mitchell (2010) note that, in the category of sleep disturbance known as ‘dysomnias’ (disorders impacting on the ability to get to sleep and stay asleep), the most ‘common problems’ are ‘bedtime

resistance, delayed sleep onset and frequent night waking' (pp.850). Examining these factors allows issues to be viewed on a continuum of mild to severe (Wiggs and Stores, 1996a; Montgomery, Stores and Wiggs, 2004). Wiggs (2007) also suggests that it is useful to look for a correspondence between subjective (diaries, interviews, questionnaires) and objective (actigraphy) measures when exploring child sleep problems. Wiggs (2007) cites Acebo et al. (2005) as evidence that there can sometimes be a discrepancy between objective and subjective measures. However, other research findings have suggested that parents are able to monitor their child's sleep problems reliably and that this supports the idea that they are valid indicators of child sleep difficulties (Owens-Stively et al., 1997).

In conclusion, it seems that a degree of flexibility is required in determining whether a child has a sleep issue. Measures such as the CSHQ (Owens, Spirito & McGuinn, 2000) provide a numerical score which gives a cut-off point to indicate whether the child has a sleep difficulty. There are charts which provide an average number of hours' sleep required by children at a particular age (Quine, 1997, pp. 16) and these can be useful when working with parents around sleep, particularly if the parents do not consider there to be an issue. A copy of this table can be found in the Better Sleep Toolkit Booklet developed for the research intervention (appendix iv). It is suggested that children aged four require 11 ½ hours' sleep going down to a recommended 10 ¼ hours for eight year olds (Quine, 1997). However, sometimes such guidelines may be considered too rigid; a more pragmatic approach would seem to be that if child sleep is considered to be a potential problem by parents, professionals, or the child-themselves, it warrants further investigation and support. Parents are often the people who report the behaviour as a problem rather than the child. Understanding parental

conception of sleep issues and how they impact on the both the child and the family may provide useful information regarding the impact of sleep issues and how they can be addressed. The present research is concerned with what Wiggs (2007) terms a 'socially defined sleeplessness' (pp.1), as opposed being biologically defined. Perception of child sleep difficulties is obviously subjective and the present research aims to explore this a little more by looking at parent stories around sleep.

2.6 How do sleep difficulties impact on children in school?

There is existing research to suggest that poor sleep is linked to elements of children's functioning which may lead to difficulties in education. O'Brien (2009) states that sleep disruption and deprivation 'often manifests itself as hyperactivity, inattention, poor concentration, poor impulse control, disruptive behaviour problems….and poor school performance' (pp.813). O'Brien's review of existing research concluded that it may be daytime sleepiness which plays a significant role in occurrence and severity of the aforementioned effects (O'Brien, 2009).

Fragmented child sleep has been linked to increased parental ratings of behaviour problems. Fredriksen et al. (2004), found that in a large sample of 11-14-year-old children, reduced sleep was associated with lower self-esteem, increased symptoms of depression and poorer academic performance. Randazzo et al. (1998) found that a single night of sleep restriction to five hours instead of eleven had an impact on performance of complex memory tasks which involve higher cognitive functions. It may be that examples of reduced functioning following fragmented sleep are a result of a

decreased amount of time spent in the deep, restorative non-rem sleep stages (Philip et al., 1994; Wesensten, Balkin & Belenky, 1999).

Sleep disturbance has been found to be associated with an impact on cognition, mood and behaviour (Pilcher and Huffcut, 1996; Fallone et al., 2001). Studies which examine the effects of sleep deprivation upon children are understandably limited; however, studies using functional magnetic resonance imaging (FMRI) with adults have been able to show a negative impact upon cognitive performance, vigilant attention and memory (Lim & Dinges, 2008; Chee & Chuah, 2008). Fallone et al. (2001), found that significant sleep restriction for one night resulted in increased inattention in children. A further study by Fallone et al. (2005) found that the effect of restricting sleep by as little as two to three and a half hours less than a control time of ten hours for a period of three weeks led to children (aged six-twelve) in the experimental groups showing difficulties related to attention and impaired academic performance.

Wolfson and Carskadon (2003) describe a link between lack of sleep and daytime sleepiness. Wiggs (2007) cites Steenari et al. (2003) who found that increased sleep latency and night wakings were linked to working memory function. Meijer et al. (2000) explored a link between poor quality sleep and children reporting reduced motivation and a more negative self-image. Paavonen et al. (2002) found that self-reports of child sleep issues were correlated with teacher descriptions of behavioural issues, emotional issues, hyperactivity and school attendance. Smedje, Broman and Hetta

(2001) found associations between disrupted sleep and higher ratings of behavioural difficulties in children aged six to eight years. Bates, Viken, Alexander, Beyers &

Stockton (2002) showed a link between parent reports of disrupted child sleep (described in sleep diaries) and teacher reports of poorly adjusted behaviours.

Much research relating to the neurocognitive impact of sleep disturbance upon children is derived from data which measures correlations. It is worth noting that this cannot necessarily be used to imply a causal relationship. More randomised controlled trials focusing on sleep, though difficult due to ethical restrictions, would be necessary to examine the links more empirically. Sadeh et al. (2002) found, through use of sleep actigraphy, that more frequent night wakings and reduced 'sleep efficiency' (pp.405) were associated with reduced neurobehavioural functioning (NBF), although this study did not look at the impact of sleep duration. Sadeh, Gruber and Raviv (2003) examined the impact of small amounts of sleep extension and restriction upon children's NBF. The sample were fourth and sixth grade classes with the exclusion of children with acute physical illness, those taking regular medication and those diagnosed with developmental disorders. NBF was measured via computerised assessment prior to and after arranging for children to extend or restrict their sleep by an hour for the next three nights. The results showed that children who extended their sleep showed significantly improved performance on a digit forward memory test. On a test of reaction time the extended sleep group remained stable, whereas the no change group and decreased sleep group deteriorated. Examining a moderate variation in sleep duration was considered by the researchers to be more in line with situations experienced by parents. The researchers acknowledge that there may be some errors which are associated with actigraphy assessment as opposed to polysomnographic measures. Sleep extension led to an increased number of night wakings; the opposite being the case for sleep restriction. Subjective reports of the sleep restriction group

indicated increased fatigue later in the day and reduced sleep latency (the time taken to go from wakefulness to sleep).

The results of the studies referred to above (Sadeh et al., 2002 and Sadeh, Gruber & Raviv, 2003) contribute to evidence suggesting associations between sleep and neurobehavioural functioning in children, thereby adding weight to the potential educational benefits of interventions designed to address sleep difficulties. One problem with clinical studies of this kind is that they can lack real-life context; when sleep is restricted or extended as part of a real-life situation there may be other interactional factors involved which could also have an impact on the child's subsequent functioning. Nevertheless, the fact that families and children were able to manipulate their sleep schedules does indicate that this is an achievable goal and that it may be possible for parents to be encouraged to experiment with sleep restriction and extension in order to establish the amount of sleep required by their child. Parents are encouraged to do this as part of behavioural workshops such as those offered by The Children's Sleep Charity (Dawson, 2014).

Bernier et al. (2014) concluded that both sleep and experience of caregiving are linked to executive function skills and furthermore that these two factors are interrelated. This evidence has interesting implications for the delivery of sleep interventions and lends support to the idea of working with parents around child sleep.

2.7 Impact on parents and the wider family

Child sleep problems can impact on the entire family, being linked to increased levels of parental stress and even depression (Meltzer & Mindell, 2007, Stoleru, 1997). It is likely that these issues are reciprocal in that the more stressed parents become, the less effective they may be at establishing regular sleep and encouraging the development of positive routines thereby reinforcing sleep difficulties.

Smaldone et al. (2009) found a strong association between parental stress and 'sleep inadequacy' (pp.402). Other studies have also identified a relationship between high levels of parental stress and reported child sleep difficulties (Fiese et al., 2007; Meltzer and Mindell, 2007), although the former focuses on parents of children with asthma amongst which there may be added stressors from having a child with an illness. Adam et al. (2007) examined a large sample of American children and did not find a significant relationship between family stress and children's sleep. Whilst the sample was indeed large (2454 children) and examined the sleep timing of children of different age groups, race and socioeconomic background, there are some methodological issues to be noted. The parenting stress measure used in the study included just three items which the parent rated on a scale of one to five. This measure was taken from one specifically designed for the National Evaluation of Welfare to Work Strategies (NEWWS) Child Outcomes Study rather than being well-established and standardised. The measures of family stress and conflict were based on parent self-report and as such may not be entirely accurate due to the fact that reports are subjective and, as previously mentioned, the measures used were neither reliable nor rigorous. The researchers note that child report of conflict has been shown to have

greater association with sleep behaviours than that of parents (El Sheikh et al., 2006). This is possibly because parents may instinctively present a more positive or at least more sympathetic picture of their own child-rearing practices.

Quine (2001) randomly selected Canterbury primary and special schools to participate in a study which involved the completion of a parental questionnaire. The study found that, for children in mainstream schools, the strongest correlate of settling problems (see glossary-appendix i) was maternal stress. Care must be taken when interpreting this as parents of children who do not sleep are likely to experience greater levels of stress anyway. It should also be noted that studies which rely on parental report of sleep problems alone must take into consideration the fact that results will be subjective and should, ideally, be considered alongside other measures.

In a review of parenting and infant sleep, Sadeh, Tikotzky and Scher (2010) note that 'sleep problems in infancy can be experienced as a major stressor, challenging the well-being of parents' (pp.92). This is likely to increase as the sleep problems extend into childhood. During a 'Sleep Success! Sleep Awareness' workshop by The Children's Sleep Charity (2014), the programme deliverers described their own mental and physical difficulties caused by their experience of child sleep problems. In addition to this there was anecdotal evidence from parents of marital/relationship issues, a sense of embarrassment and generally an inability to lead a 'normal life' (Children's Sleep Charity Workshop, Dawson, 2014). Similarly, research findings report an increase in marital problems caused by child sleep difficulties (Richman, 1981; Quine, 1992). Lozoff et al. (1985) found maternal attitudes of increased ambivalence towards

children with sleep issues. There is also evidence to suggest that this group of parents is more likely to question their own confidence (Morrell, 1999) no doubt contributing to the reciprocal nature of such difficulties in that sleep problems reduce parenting confidence, which can in turn add to sleep and parenting issues. The Children's Sleep Charity workshops include anecdotal evidence from mothers who have experienced an impact on their life and self-confidence caused by child sleep issues. The opportunity to talk encourages parents to feel that they can share and perhaps challenge such feelings. It may even be helpful to explicitly share research findings like those of Morrell (1999) as part of sleep based education workshops.

Stoleru et al. (1997) reported a link between frequency and severity of toddler sleep difficulties and maternal affective illness. It is likely that there is a bi-directional link between infant sleep problems and maternal depression. Hiscock and Wake (2001) found that, although there was a link between maternal reports of infant sleep difficulties and increased reports of maternal physical and mental health difficulties, once the quality of the mother's sleep was controlled this association decreased. Sadeh et al. (2010) recognise that 'separating the "chicken and egg" question' may be impossible to resolve' (pp.93). Awareness of this perpetual difficulty makes consideration of a transactional model (Sadeh et al., 2010, fig. 2), referred to in more detail later in this review, particularly useful when investigating child sleep difficulties.

2.8 Research into Parent-Based Sleep Education

Many studies examining child sleep issues describe the efficacy of behavioural approaches and of parent sleep education. There is much evidence to suggest that such interventions can work quickly and reliably in terms of resolving sleep issues

(Malow et al., 2014; Moon et al., 2010; Reed et al., 2009; Ramchandi et al, 2000; Milan et al., 1981; Adams & Rickert, 1989; Quine, 1993 and 1997; Kerr & Jowett, 1994). Mindell et al. (2006) carried out a systematic review which indicated the effectiveness of behavioural treatment for some sleep issues experienced by typically developing children. A possible reason for such positive findings is that child sleep 'improves dramatically when parents are taught new management techniques' (Quine, 1997, pp.13).

The majority of research into parent-based sleep education workshops focuses on parents of children diagnosed as having autistic spectrum conditions (ASCs). Particularly high rates of sleep difficulties are seen in children diagnosed with Autistic Spectrum Conditions compared to typically developing children (Paavonen et al., 2008). Montgomery et al. (2004) highlight the increased number of reported sleep difficulties for learning disabled children, stating that, in this population, rates of severe sleep disturbance have been estimated to be as high as 81% for six to eleven year olds.

Reed et al. (2009) examined the effectiveness of workshops delivering behavioural sleep strategies to parents of children aged 3-10 years with clinical diagnoses of ASCs. Reed et al. (2009) set up three workshops over a period of three consecutive weeks attended by between 3-5 families. Baseline data were collected prior to the workshop; this included demographic information, sleep, behaviour and parental stress questionnaires. Sleep diaries were completed for a week and actigraphy (see glossary, appendix i) measurements were taken for each child. After each session

parents were asked to keep a daily sleep diary including information about pre-bed routines, food and drink, caffeine intake and napping. Topics covered in the workshops focused on bedtimes, exercise, food and drink, routine, night waking, self-settling, bedtime passes, rewards, illness, medication and the use of visual prompts. The results of the study revealed that such workshops improve measures of sleep for children with varied receptive language abilities, suggesting that this approach could benefit a range of ages and intellectual abilities.

Although Reed et al.'s (2009) sample was small, the results from this study contribute to evidence supporting the efficacy of behavioural workshops to address sleep difficulties. Parents reviewed the workshops positively although there was no significant improvement on the parenting stress index (using a 36 item form which may be a more reliable measure than that used by Adam et al., 2007, referred to in the previous section). It may be that parental stress is reduced over a longer period of time. The researchers suggest that the sample size may have been too small to detect an improvement, that family stress may contribute to sleep difficulties in the first place or that families of children with diagnoses of ASC may have a variety of stressors not all of which are related to sleep.

Malow et al. (2014) looked at whether an individual or group format of parent-based sleep education was more effective for resolving the sleep difficulties of children diagnosed with ASCs. The study comprised of eighty children with sleep onset difficulties. The data was derived from actigraphy and parent questionnaires collected as a baseline and again one month following the intervention. The study found that the parent-based sleep education was associated with improved child sleep, whether

delivered individually or as part of a group. There was no measure of parent stress in this study but the 'Parenting Sense of Competence Scale' (PCOS) was used to assess parents' self-esteem, pre- and post-intervention and this showed small improvements in ratings of parenting efficacy and parenting satisfaction.

Malow et al. (2014) outline some advantages of each delivery method in that a group can benefit from shared interpretations and understandings, whereas individual education can tailor itself to the specific needs of the family. Parents were randomly assigned to one of two conditions. The group sessions included two, two hour sessions and two follow-up phone calls, or one individual session with two follow-up phone calls. It may be that the follow up phone calls themselves were a key factor, showing a sustained and regular interest in the individual problem. The curriculum involved listening to the main sleep concerns, providing information about sleep and reasons why children diagnosed with ASCs do not sleep as well, sleep hygiene and sleep resistance strategies, bedtime passes and visual timetables, sleep amount, sleep timing and sleep regularity, completion of a data sheet for homework and phone calls to review homework and deal with queries. There was no control group for this study, although the same researchers included a control group in previous research which looked at the effectiveness of a sleep education pamphlet. There was no monitoring of how the parents implemented the training other than through feedback. Observing and recording this process would be a lengthy and somewhat intrusive process which would be challenging to put into practice. Group members were volunteers suggesting a degree of motivation and willingness which may not be present across the population. The researchers also suggest that it may be interesting to look at whether

certain parents prefer the support of a group and others prefer individual support along with reasons for this.

In a study with a similar research team preceding that of Malow et al. (2014), Adkins et al. (2012) looked at whether a pamphlet alone could be used to support parents of ASC children with sleep difficulties. The study looked at pre- and post-intervention measures of sleep-onset latency (using actigraphs), total sleep time, sleep efficiency, wake after onset and sleep fragmentation. Researchers concluded that the pamphlet alone was not sufficient to significantly improve sleep patterns. Parents suggested that they found the information in the pamphlet useful but needed support from a trained practitioner to help them to utilise this. This may provide further support for the use of parent-based sleep education workshops although it may also suggest that a key feature is the provision of guidance, encouragement and support from someone considered to be knowledgeable about sleep.

Montgomery et al. (2004) noted that, given the success of behavioural interventions in treating sleep difficulties, it seems worthwhile to examine the possibility of 'effective behavioural treatments which require less time and professional expertise for use in primary care' (pp.125). The hypothesis was that behavioural treatment by booklet would be as effective as an intervention delivered face-to-face, and that both interventions would have an impact compared to the control group. Topics covered in both conditions were: behavioural strategies; normal sleep; monitoring behaviour; good habits; dealing with specific behaviours and rewards. During the face-to-face delivery condition, around 90 minutes was spent with the parent. A sleep-history was

collected in a semi-structured interview and, whilst this is not noted by the researchers, it is possible that this in itself was actually a part of the intervention, as verbalising the difficulties can play a significant role in beginning to address them. Parents are being listened to and have chance to tell their stories about sleep which 'provides ways for individuals to make sense of the past' (Riessman, 2008, pp.8). The study found that results for the efficacy of the face-to-face intervention and the booklet were similar: both resulted in significant improvement to child sleep in comparison to the control group, and parents also rated the booklet highly. However, there was still a 90-minute involvement overall with a researcher to do the interviews and assessment, and this needs to be taken into consideration when examining the use of booklets alone to deliver a behavioural intervention. Research findings regarding the effectiveness of relatively short, behavioural interventions suggests that this is something which could be offered as part of EPs' work with schools and families which is likely to have an impact in a wider, systemic sense.

2.9 Consideration of sleep research relevant to the design of parent-based sleep interventions

In a review of parenting and infant sleep, Sadeh et al. (2010) note that according to Sadeh and Anders' (1993) transactional model see fig.2, the most direct link is between parental behaviours and infant sleep.

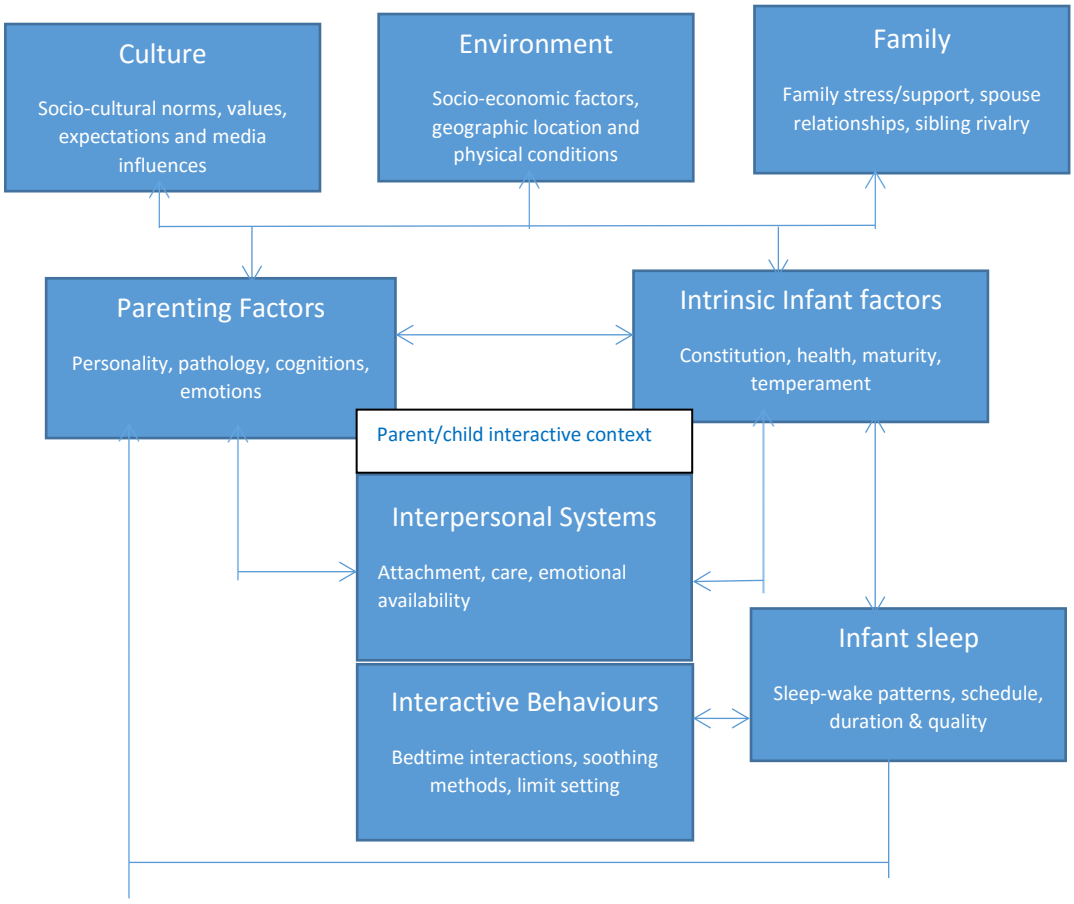

Figure 2. A transactional model of infant sleep and parenting (Adapted by Sadeh, Tikotzky and Scher, 2010 from Sadeh and Anders, 1993)

The above model provides a useful starting point for the design of a parent-based sleep intervention. The model emphasises the importance of working with parents individually where aspects of the parent/child interactive context can be explored in light of the sleep education presented. Individual work with parents allows

consideration of the influences of culture, environment and family; all of which can be used to shape the development of a collaborative sleep plan. Sadeh, Tikotzky and Scher (2010) identify the most frequently occurring link arising from research literature to be the degree of parental nocturnal involvement. This suggests that a key to encouraging successful sleep is to teach the child how to fall asleep independently of external involvement.

Adair et al. (1991) showed that infants who fell asleep when parents were present demonstrated significantly more night waking. Morrell (1999) found that mothers' cognitions regarding more relaxed limit setting (establishing boundaries and regular routines), reports of anger at the child's demands and perceived doubts about parenting competencies were linked to increased infant sleep difficulties. This suggests that there may be value in spending time exploring these beliefs with parents in the context of the presentation of sleep education. Morrell (1999) also found that such issues influenced the degree to which mothers may develop soothing rituals which may later compound the sleep difficulty. The transactional model (fig. 2) serves to illustrate the many complex factors which have an influence on both infant sleep and on parents' self-perception and general well-being (Sadeh et al., 2010).

Parent-based sleep education should ideally include information regarding parenting practices which may contribute to sleep problems. Television viewing, use of computers and mobile telephones have been linked to reduced sleep levels (Owens et al., 1999; Tazawa and Okada, 2001; Van den Bulck, 2004; Van den Bulck, 2003). This is likely to be an increasing issue due to the rise of smartphones and tablets which

can be used easily whilst lying in bed. The Ofcom report 'Children and Parents Media Use and Attitudes Report' (2014) revealed that tablet use has tripled among 5-15 year olds since 2012 (42%, up from 14%), and that a quarter of infants aged 3-4 now use a tablet computer at home. Use of tablets is also increasing swiftly amongst 5-7 year olds (39%, from 11% in 2012) and 8-11 year olds (44%, from 13%). With this in mind, it is necessary to make the links between use of technology and impact on sleep explicit for parents, and to incorporate this knowledge into developing a bedtime routine. Encouraging parents to be aware of research and of how their own actions can inadvertently reinforce sleep difficulties, can arm parents with the motivation, knowledge and sense of control to effect a change.

2.10 Theories of change

Developing and using a parent-based intervention designed to improve sleep involves attempting to collaboratively support parents in terms of changing their thinking and behaviour. As such it seemed logical to consider how I would help to facilitate this process of change in order to make it a positive experience and increase parental motivation. Theories of change can be used to contemplate this in more detail. Lippitt, Watson and Westley (1958) looked at the ways in which various professionals including psychiatrists and social workers define problems and work around change. This information was used this to develop a general framework for the theory of planned change. The practitioner is referred to as a 'change agent'. The theory describes seven steps of change which are: outlining the problem; assessing motivation for change; assessing the resources and motivation of the practitioner/therapist; the development of action plans and strategies; clarification of the roles of those involved in change; change maintenance and the gradual

withdrawal of the practitioner (change agent). This theory includes many elements which are useful when considering the role of change in a parent-based sleep intervention although the use of the term ‘change agent’ suggests that the process is less collaborative than I believe it should be. Lippitt et al stress that change is more likely to be maintained if it spreads to other parts of the system which has interesting implications for the consideration of delivering such interventions to both parents or indeed the whole family.

Social Cognitive Theory of behaviour change (Bandura, 1986) suggests that change in behaviour is influenced by environmental factors, individual factors and by elements of the behaviour itself. Behaviour is a result of consequences. In the case of child sleep difficulties parents can adopt certain behaviours because the consequences are deemed to be positive in that the child does sleep for some parts of the night or that they know that their child is safe. The theory emphasises the role of self-efficacy in learning new behaviours; this can be increased by providing encouragement, modelling the new behaviour, ensuring that the person is as relaxed as possible and enabling the person to experience success. Social cognitive theory stresses that individuals will learn when they are able to relate to a model, particularly if it is associated with something that they care about (attentional processes). There is a need to be able to remember and retain the new information (retention processes) and also need to be able to make the transition from seeing to doing. The individual must also experience positive consequences as a result of changes or learning (reinforcement processes), (Robbins & Langton, 2001). Martin (2004) defines Bandura’s concept of *agency* as being ‘the capability of individual

human beings to make choices and to act on these choices in ways that make a difference in their lives' (pp.135). Martin (2004) suggests the need for educational psychologists to consider the blend of learning and self-regulation which increases motivation. He goes on to describe the implications which Bandura's theory of agency has for approaches to teaching and learning, where teachers encourage 'active, self-directed experimentation' (pp.144). These ideas are useful for consideration in the design of interventions which are designed to support change and wish to increase motivation for change.

Ajzen and Fishbein's theory of reasoned action (1980) is also worthy of consideration here. This suggests that behaviour is guided by intention; this is influenced by attitude and concerns about how the behaviour is perceived by significant. The theory was later adapted to become the theory of planned behaviour. This includes the concepts of perceived control and self-efficacy which are considered necessary for a particular behaviour or behaviour change (Ajzen, 1991).

Prochaska and DiClemente's (1984) theory of change is that which is most closely related to the present research due to its links with motivational interviewing (Miller and Rollnick, 2002 – see section 2.11). An adapted version of the transtheoretical model of change was used with parents as part of the intervention. The model describes stages in the process of change: precontemplation; contemplation; preparation; active change; maintenance and relapse. There has been debate as to how cyclical the theory should be and whether there should be a termination phase

for behaviours which have stopped being a problem for a long period of time (Prochaska, Norcross & DiClemente, 1994). This theory was where my initial ideas regarding supporting parents with the process of change developed. I wondered whether parents would be at the pre-contemplative phase. Even though they had volunteered to participate in the intervention there was a possibility that the sleep problem may be considered to be related to the child's behaviour rather than their own. In this case the preparation phase would be a particularly important part of the intervention. The model can also be useful for encouraging individuals to see that relapse is not necessarily a negative and need not mean giving up but can be seen as part of a process and a valuable learning experience.

The above theories of change share certain core elements, particularly the emphasis on the significance of self-efficacy when supporting change. This became key to the present research and yet there was also emphasis on collaboration which is not necessarily inherent in some of the theories described above. Miller and Rollnick (2002) refer to the influence of the work of Carl Rogers (1951) and an evolution of his 'client-centred approach' (pp.25). Principles of empathy and a non-judgemental approach are of great importance to the present research and also to my work as a TEP in general.

2.11 Motivational Interviewing and Solution Focused Therapy

One of the aims of my research was to explore the role of an EP when working with parents of children with sleep difficulties. In doing so I wanted to consider some ways in which EPs work. Beaver (2011) identifies that, as part of EP work, the collaboration with a number of parts of a system provides 'a unique opportunity with the sense of

the potential to create change' (pp. 210). He also notes that the development of a 'powerful rapport… is crucial in impacting this point of change' (p.210). Motivational interviewing is described by Miller and Rollnick (2009) as 'a collaborative, person-centred form of guiding to elicit and strengthen motivation for change' (pp.137). The spirit of motivational interviewing fits so naturally with my research that it almost became a part of the methodology in addition to being something which is part of the EP toolbox. I was prepared for the fact that parents, despite having sought help for their child's sleep difficulty, may still be ambivalent regarding the significance of their own role in the process of change. It was, therefore, anticipated that motivational interviewing could be used to develop participants' confidence regarding their ability to plan and carry out change.

Miller and Rollnick (2002) describe and provide examples of 'change plans'. This was incorporated into my intervention. The idea of such a plan is to outline desired behaviours and the things which may prevent these behaviours from being maintained. Miller and Rollnick (2002) outline four basic principles of motivational interviewing. These are to express empathy, develop discrepancy, roll with resistance and support self-efficacy. Reflective listening and a friendly, non-judgemental approach are useful in demonstrating empathy when working with parents. The first interview with parents was designed to create some 'cognitive dissonance' – an awareness of the discrepancy between the preferred future and what is happening at present (Festinger, 1957). This can sometimes be used as a basis for future planning and discussing next steps.

I was prepared for parents to show ambivalence or defend their behaviours. Miller and Rollnick (2002) point out that arguing against this is unproductive and may actually force the person in an undesirable direction. Instead, resistance can be recognised and reframed when the opportunity arises. Parents can then be included as joint problem solvers; again developing a sense of self-efficacy. Supporting self-efficacy works on the principle that with motivational interviewing, '"I will change you" is not the intended message. A more appropriate message is: "If you wish, I can help you change"' (Miller and Rollnick, 2002, pp.41). I was careful to ensure that my approach from the outset made the latter clear.

Lewis and Osborn (2004) highlighted similarities between the theory and practice of motivational interviewing and solution-focused therapy. Solution-focused therapy can be used to support children and parents to draw on their own existing resources and skills. This is something which I often utilise in my work as a TEP with teachers, young people and parents. Solution-focused questioning can help to guide individuals through the process of change. With regard to the sleep intervention, I wanted to draw participants' attention to the things which they were already doing well and exploring exceptions is a useful way of doing this. Exploring things that are going well prior to, during and after the intervention could be used to develop feelings of self-efficacy and measures were designed with this in mind. Amesu (2014) carried out research which aimed to 'create an ethos based on the principles of motivational interviewing and solution-focused thinking in which the responsibility for change is left with the individuals. They are treated as the expert of their own situation' (pp.236). This was very much the approach which I wanted to take with participants; as such this guided my research as well as my reflections and very much became a part of the intervention.

Considering a preferred future was also a powerful tool in encouraging parents to use language associated with a reality where sleep issues did not dominate family life, based on the premise that 'actual words can create possible worlds' (Iveson, 1996, pp.28). The idea is that these words can then be used to describe not only 'what exists already but how they can also create experiences which can be lived' (Iveson, 1996, pp.28).

2.12 Measures used as part of the research

2.12.1 The School Behaviours Rating Scale (SBRS) (Gardon, 2009)

This is a criterion-referenced questionnaire used to measure observable behaviours in primary-aged children. There is no intention of assigning a label or diagnosis. I wanted to see whether child behaviour was considered to change following the sleep intervention and the SBRS comprises of 51 descriptors of school-based behaviours. Teachers are required to rate each descriptor in terms of frequency ranging from 'never' to 'very often' over a seven-point scale. The SBRS is reported to be a valid, reliable measure of observable behaviours (Gardon, 2009). The questionnaire was standardised using a sample of 1942 children in Australia. The six subscales are reported to have significant consistency with one another and with the total score. Gardon (2009) reports that stability over a short timescale is good suggesting that test-retest reliability is high.

2.12.2 The Children's Sleep Habits Questionnaire (CSHQ) (Owens, 2000)

This questionnaire is designed with the purpose of screening for the most common sleep difficulties experienced by children. In the abbreviated version used for the

present study there are 33 items split into subscales: bedtime resistance; sleep onset delay; sleep duration; sleep anxiety; night wakings; parasomnias; sleep disordered breathing and daytime sleepiness. The CSHQ has been validated with children aged 4-12 making it appropriate for use with my sample. Parents are required to select the frequency with which their child showed certain sleep-related behaviours over the most recent typical week. Parents select usually (5-7 times), sometimes (2-4 times) or rarely (0-1 times).

2.13 Conclusions drawn from the critical review of relevant literature

This review asked what existing research can tell us about child sleep, the impact of child sleep problems and parent-based sleep education. There appears to be a lack of studies which look at interventions to support parents of typically developing school-age children with sleep difficulties. The prevalence of child sleep issues combined with the impact on children and parents makes this a pertinent issue for EPs. There is little research which considers the role and value of EPs in providing support for such difficulties. There is a growing evidence base for the role of behavioural interventions and sleep education in addressing sleep problems. Many of the studies which compare pre- and post-intervention data do not focus on the parental experience of change or on the role of the professional in supporting change. In exploring this I have considered theories of change as well as the use of motivational interviewing and solution focused therapy to support change. There is then, an opportunity to build on previous research into child sleep disturbance and parent-based sleep education to examine whether such interventions can be effectively delivered by EPs and TEPs in order to improve child sleep. A list of key questions highlighted by the literature review is included in appendix iii.

2.14 The intervention and potential changes

Information about the nature of sleep, sleep hygiene, parent-based sleep interventions as well as the use of motivational interviewing and solution focused therapy when working with parents around change was reflected on and used to design the present intervention. The intervention will include an initial interview followed directly by delivery of the Better Sleep Toolkit booklet (appendix iv) and the PowerPoint presentation (appendix v). At the end of this session a sleep plan, along with a consideration of potential hurdles and how they could be addressed, will be collaboratively completed with parents (see final page of booklet, appendix iv). Parents will then be supported with weekly phone calls to discuss successes and problems. Sleep diaries (appendix iv) are to be kept daily throughout. After 6-8 weeks a post-intervention interview will take place. A further ten weeks after the final interview a follow-up telephone call will be made to check on progress and see whether any further support is required. Potential changes following the intervention period were considered to be an improvement in child sleep (particularly with reference to the main problem), an improvement in parent sleep (according to parent report), a change in parent stories around sleep and a change in teacher and parent reports of child behaviour.

2.15 Research Questions

In an attempt to address questions and gaps arising from the literature review, it was considered useful to have a main research question and a number of sub-questions:

Main Research Question

What is the value and influence of a Trainee Educational psychologist (TEP)-delivered parent-based sleep intervention?

Research Sub-Questions

1. How does the intervention change parent reports of child sleep levels and parental stories around sleep?
2. How does the intervention impact on teacher reports of child behaviour?
3. Do parents consider the intervention to be worthwhile?
4. What unique skills can EPs add to the delivery of a parent-based sleep intervention?

Chapter Three – Methodology

3.1 The aims of the chapter

The purpose of this chapter is to describe the ways in which research questions arising from the critical literature review have been addressed. This chapter will provide a rationale for choosing a multiple case study and for the use of a mixed-methodological, multi-stage, exploratory design. I will also consider the positionality of my research. There will be a reflection upon potential criticisms of my research and chosen methods, a description of how the pilot work shaped certain elements of my procedure, a consideration of ethical issues, a description of the intervention itself and a brief description of the theoretical components which have fed into the choice of methodology: solution-focused therapy and motivational interviewing.

3.2 Procedure

3.2.1 A mixed-methodological case study

The present research examined pre- and post-intervention data in order to explore change. However, it was not intended to be a large randomised control study, partly because time and resources precluded this, but also because of my intention to focus on the experiences of individuals and my desire to understand the process, which calls for an emphasis on qualitative data. The data are from three parents (and the teachers of their children).

Yin's (2014) definition relating to the scope of this methodology is that 'a case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident' (p.18). Behavioural child sleep difficulties are a phenomenon of contemporary relevance; this is evidenced by the prevalence of reported problems,

media coverage and the proliferation of referrals made to organisations such as The Children's Sleep Charity. The blur surrounding context and phenomena is, in many respects, the essence of the present research with the context being parenting, home routine and behaviour in school. Again, taking a critical realist perspective fits in with this approach as there is awareness that reality is influenced by the individual: this is consistently and reflectively taken into consideration.

3.2.2 Why choose a mixed methodological case study?

The research followed a mixed methodological multiple case study design intended to allow comparison within and between individuals with the 'case' being the intervention as a whole. I wanted to explore individual experience of the process of change but also wanted to draw comparisons about this process in order to get a richer picture of the impact of the intervention. Yin's (2014) structural definition of the case study is that case studies rely on 'multiple sources of evidence, with data needing to converge in a triangulating fashion' (p.18). Quantitative measures of change are intended to triangulate the qualitative interview data. One of the key aims of data triangulation is to provide a more holistic picture which will provide useful information for EPs considering such work with parents.

Creswell (2015) defines mixed methods research as an approach in which 'the investigator gathers both quantitative (closed-ended) and qualitative (open-ended) data, integrates the two, and then draws interpretations based on the combined strengths of both sets of data to understand research problems' (p.2). I am aware that quantitative data tend to dominate in mixed-methods research (Bryman, 2006), and,

for reasons referred to in the previous section, I wanted my research to be a more qualitative approach to the use of mixed methods. Creswell's (2015) definition is, however, adequate to describe the design aims of the present research.

3.2.3 A mixed methods Intervention design

Although the research is a multiple case study with a small number of participants, I think that it is also helpful to view it in terms of an exploratory sequential evaluation design as I am looking at pre- and post-intervention data as well as exploring the process in order to evaluate the intervention. The development of this design was informed by and adapted from Creswell (2015). This is illustrated in fig.3 below:

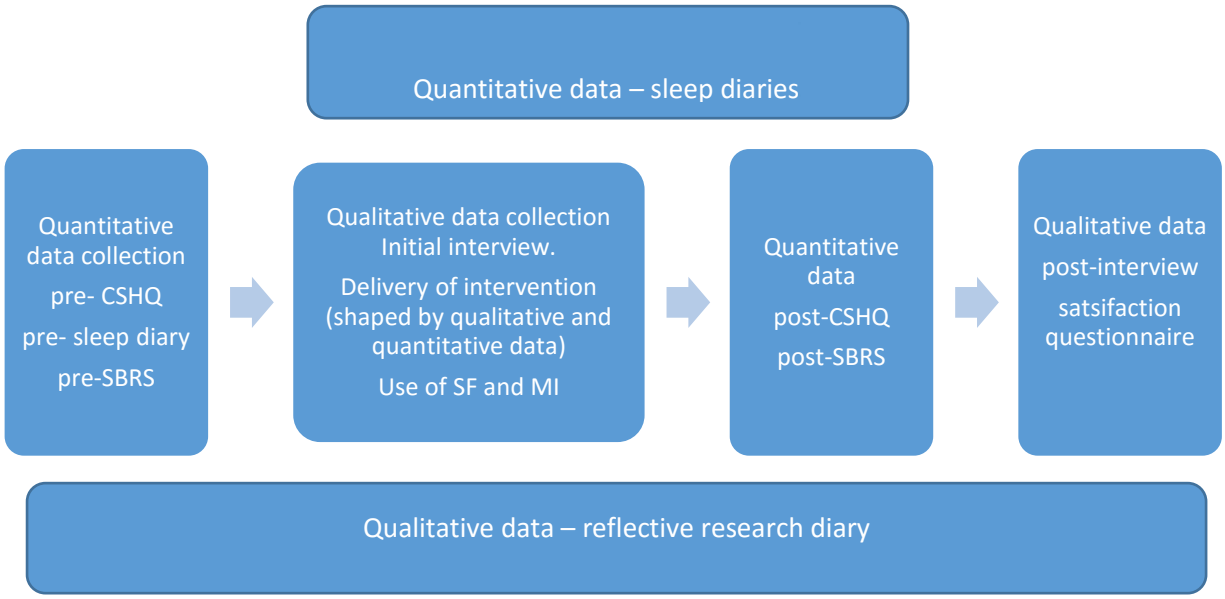

Figure 3. An exploratory sequential design. (A glossary of abbreviations can be found in Appendix i).

The idea is that both forms of data provide different insights into the changes that have taken place with a view to seeing change from multiple angles. This design is suited to the present study because I wanted to examine in-depth personal perspectives of the participants but recognise that there is value in looking at whether change has occurred following the intervention through data which is not solely based on parent

report (i.e. teacher questionnaires). This will facilitate examination of the extent to which qualitative results are supported by the quantitative results and to explore reasons for any differences.

3.2.4 The Parent-Based Sleep Intervention

The intervention was developed from a combination of resources which are available both on the internet and in print, all of which are listed in my references section. I found 'Solving Children's Sleep Problems' (Quine, 1997) to be particularly useful in terms of its practical strategies for parents. My Better Sleep Toolkit booklet (appendix iv) was modelled on a booklet provided as part of The Children's Sleep Charity workshop. This outlined the aims of the intervention, age-recommended sleep levels, information about sleep patterns, a sleep diary, sleep hygiene information, common, problems, suggested strategies and a proforma for developing a plan. Decisions regarding what to include in this booklet were based on previous research and literature describing such work with parents (Malow et al, 2014; Reed et al, 2009; Quine, 1997), information from The Children's Sleep Charity Workshops. Miller and Rollnick (2002) describe the significance of creating a 'change plan' (pp.133) to prepare for potential hurdles; this was included as part of the planning section at the back of the booklet. The booklet included information about trying to naturally stimulate melatonin through 'sleepy foods' and explained that screen time before bed can actually inhibit its release. The PowerPoint presentation (appendix v) was developed from the aforementioned resources but most notably Quine (1997). The intervention was then tailored to parents according to the responses provided in the CSHQ (Children's Sleep Habits questionnaire, Owens, 2000, appendix vi) and issues which arose during the initial interview. Further information about the content and format of the intervention

(individual work with parents designed to improve child sleep) is provided in section 3.9.3.

3.2.5 Design overview

The following provides a more detailed overview of steps in the process of my research:

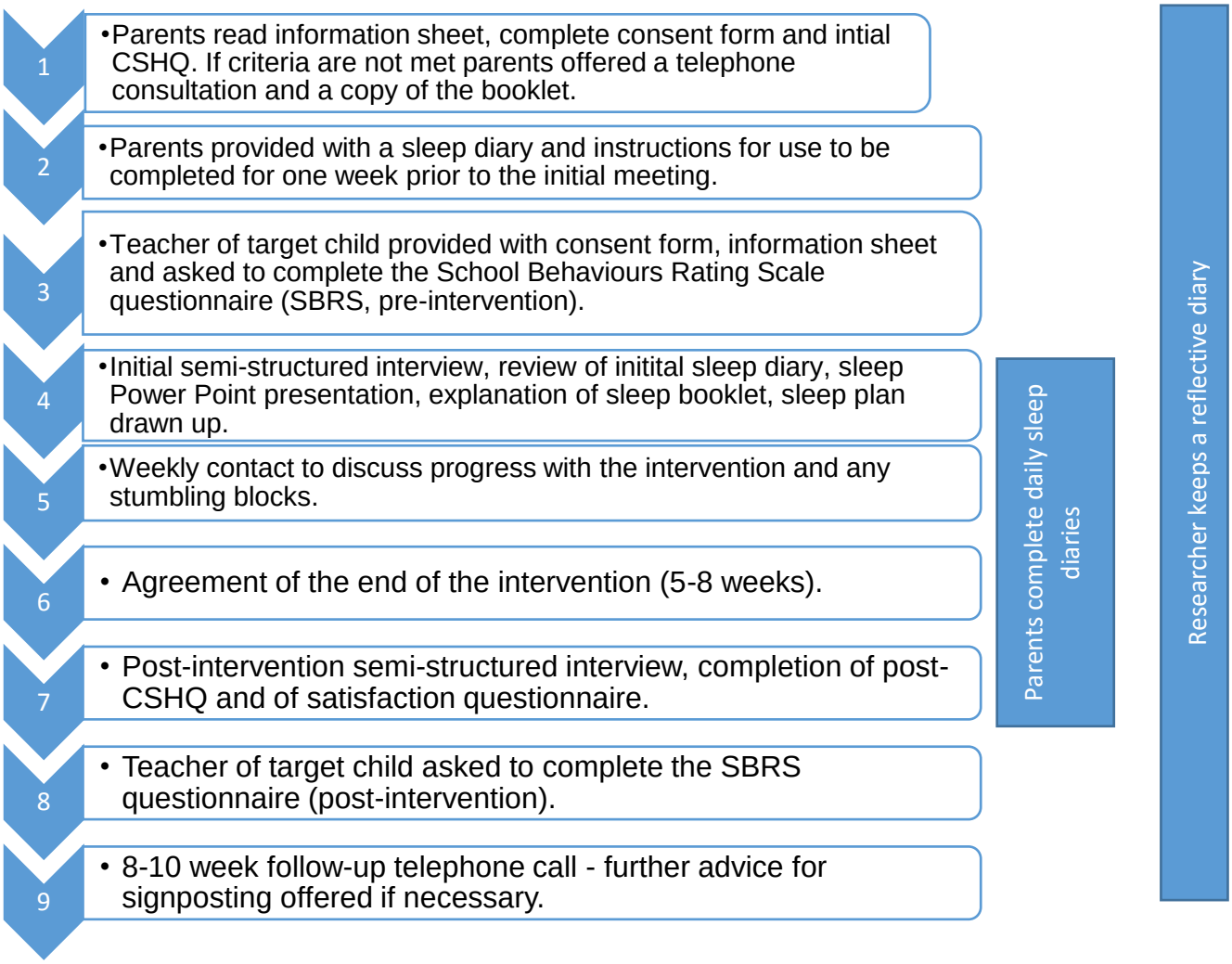

Figure 4. Research Design

3.3 Measures

A reflective diary was kept from the beginning of the study and throughout.

3.3.1 Pre-intervention data collection

- Before commencing the intervention parents were asked to complete an abbreviated version of the **Children's Sleep Habits Questionnaire (CSHQ)** (Owens, 2000). This was to enable me to ascertain the nature of the sleep difficulty and to decide whether it would be appropriately addressed by the intervention. The CSHQ enabled me to calculate a numerical score to be used for pre- and post-intervention comparison– the higher the score, the more severe the sleep difficulty. There was no cut off score as it was considered that if parents felt that their child's sleep was a problem then this was enough.
- Parents were also asked to keep a **pre-intervention sleep diary** (in booklet, appendix iv) for the week prior to the intervention. This was used as a baseline for comparison, and also to provide further information with which to individualise the intervention.
- The pre-intervention **semi-structured interview** with parents was recorded for later analysis.
- All teachers were asked to complete a pre-intervention **School Behaviours Rating Scale (SBRS)** (Gardon, 2009, see appendix xvi) to provide a baseline score for the behaviour of the individual child. This was used to provide ratings of various aspects of the child's school behaviours so that scores could be compared pre- and post-intervention to see whether there had been any impact of improved sleep.

3.3.2 Intervention phase

During the intervention phase (the time between the initial meeting with parents and the final meeting with parents), the family were asked to keep a **sleep diary** (appendix iv) every night. These were provided, along with a pen and folder which could be kept by the parents' bed. The booklet provided clear instructions as to how to complete the sleep diaries. Sleep diaries were the same as the one completed for the pre-intervention week and required information regarding bedtimes, wake times, settling, number of night wakings and total amount of sleep, with the intention of plotting how sleep changed throughout the intervention.

During the intervention period parents were contacted weekly to discuss any potential problems. Calls were recorded with permission from participants so that I could refer to anything which needed my attention or extra input. The content of these calls was not subjected to analysis.

3.3.3 Post-intervention data collection

Parents completed a post-intervention **CSHQ**, the total score and score of sub-sections of which were calculated.

The **SBRS** was completed by the child's class teacher following the intervention. Due to the commencement time of the intervention, two of the post-intervention SBRS questionnaires were completed after the summer holiday. Only one of these was completed by a different class teacher because the other one was completed by the Head of Foundation Stage. Because of this I allowed a minimum of three weeks for the new teacher to get to know the child and suggested that it was completed in

collaboration with the child's previous teacher. Potential difficulties with the validity and reliability of this measure will be considered in Chapter Five.

A post-intervention **semi-structured interview** (appendix ix) with the participant was recorded for analysis. Parents were also asked to complete a **parent satisfaction questionnaire** (appendix x) at the end of the post-intervention interview to help me to evaluate their thoughts on how valuable the intervention was, the most useful parts and how it could be improved.

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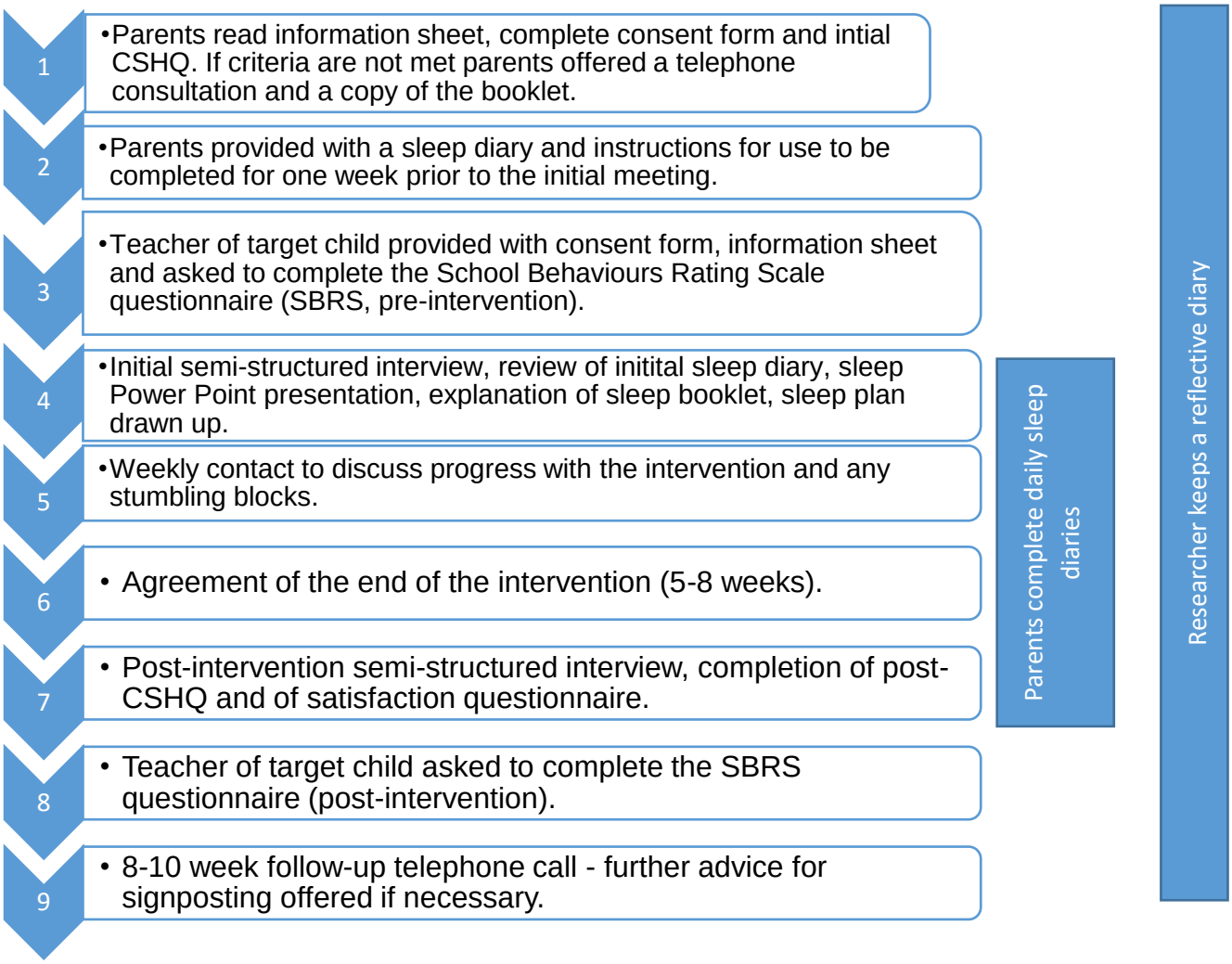

Figure 5. Research Design

3.4 Motivational Interviewing and solution-focused therapy as part of the intervention

The present study intended primarily to explore the impact of a parent-based sleep intervention. However, the study does not only examine data regarding any changes which take place before, throughout and after the intervention, but also considers parents' experience of this change, and the role of the EP in this process. In doing this, it is intended to make explicit the theory, research and tools which have been utilised in order to make this case study useful for other EPs wishing to work with parents around sleep; hence the inclusion of section 2.11 in the literature review to illustrate the theoretical significance of the integration of aspects of motivational interviewing and solution- focused therapy into delivery of the intervention. The semi-structured pre-intervention interview questions (appendix vii) included elements of solution focused therapy such as a discussion of 'best hopes', scaling and exploring exceptions (de Shazer, 1985; Iveson, 1996). My approach throughout was guided by the principles of motivational interviewing such as developing empathy, rolling with resistance, playing attention to change talk and supporting self-efficacy (Miller and Rollnick, 2002).

3.5 Positionality

Critical realism combines a realist theory of being with a relativist theory of knowledge (Isaac 1990). It acknowledges that scientific observations are not infallible because they can be socially constructed and shaped by conceptual frameworks. With this in mind, critical realism is the theoretical position which aligns best with my own research and choice of methodology. Examining the effectiveness of interventions is often associated with a more positivist stance, but I wanted my research to be largely

qualitative with an emphasis on the individual experiences and contexts of both my participants and of myself as part of the research. I am not looking for 'causal explanations' but aim to seek 'plausible interpretations' (Bruner, 1990, xiii). Bruner (1990) expresses concern that looking for causal explanations prevents us from understanding how humans interpret their worlds. The aim is to avoid reducing human experience to something artificial, to engage with individual experience and to view the individual cases within the wider social context. Critical realism sees the production of knowledge as a social practice. In recognising that the content of what we know is influenced by context and social relationships I am able to consider that both my own and my participants' realities are influenced by our unique situation and experiences. (Robson, 2002).

Sayer (1992) asserts that 'when attempting to understand and develop theories about social phenomena critical evaluation is essential' (p.5). I am attempting to understand the social phenomenon that is parental experience of child sleep difficulties and the role of the EP in working with such parents; to remain critical throughout is a necessity of such research. This is of particular importance because parental response to the intervention will vary in accordance with the individuality of participants, the context and their own interpretations of the experience.

3.6 Reflexivity during delivery of the intervention

I kept a reflective diary throughout the intervention to reflect on my interaction with parents and on my role as a TEP. A thematic analysis of my reflective diary is included

in the results section (section 4.5.3). I was able to consider what worked in terms of engaging parents and in terms of making it a collaborative process.

3.7 Ethical Considerations

In light of the fact that my study involved an intervention which placed considerable and regular demands on the time of participants, I had to acknowledge from the beginning that obtaining informed consent would need to be flexible (participants were able to change their minds at any time) and that checking this would be part of the process of the intervention itself (Haverkamp, 2005).

I stressed in the participant consent form and information sheets (appendices xi & xiii) that participants had the right to withdraw at any time and continued to mention this as part of my natural dialogue and relationship with participants throughout the research. I also stressed the fact that even if participants wished to withdraw from the research, they could continue to have my support for as long as they considered the sleep difficulty to be an issue, and if I was unable to help a particular family I would signpost them to the relevant agency.

An ethical consideration highlighted by the University Ethics Board was that I wanted to exclude children with a diagnosis of an autistic spectrum condition (ASC) from the study. My reasons for this were that as there is already a large body of research which has examined behavioural interventions for such children, this group is likely to have more access to specialist support and there are likely to be other behavioural factors which need to be considered when examining the sleep of children with a diagnosis of

an ASC. The panel were concerned that this group may feel excluded. I addressed this concern by ensuring that I was in a position to speak to any parents who were interested in the intervention but did not fit into the sampling criteria. My plan was that these parents could be offered a copy of my intervention booklet (appendix iv). I could also speak with them about their concerns, explain the rationale for my sampling and, if necessary, refer them to another agency. In reality this did not happen, possibly because parents of children with an ASC diagnosis have access to other pathways of support.

The readability level of the booklet was calculated using the Flesch-Kincaid Reading Ease calculator (www.readability-score.com, 2014 - see appendix xii) and was found to be 82.2 (easy to read- approximately Year 7 level). I was prepared to support participants with literacy or language difficulties and asked to schools to inform me if any were known but this need did not arise.

During my initial interview with parents I was realistic about the time demands which would be placed on participants. I explained that I would find their support helpful and emphasised the collaborative nature of the intervention. Initially, I had planned to deliver the intervention as part of a parent workshop. It quickly became clear that I would not have enough participants to hold a workshop and that the geographical differences amongst participants would preclude this. As a result, I delivered the intervention as part of the initial interview. This meant that, although the initial meeting was quite long (on average 90 minutes), the overall time demands were reduced and it was felt that the process was much more convenient for participants. In all cases we met in participants' homes although they were always offered a choice of location.

In my initial interview I made it clear that, whilst I would be discussing some existing research about sleep, I was by no means a 'sleep expert' and that we would be building on participants' own resources to facilitate change. I also emphasised that they would be signposted to other relevant agencies if they considered there to be ongoing sleep issues following the intervention period or at the end of the ten-week follow-up period. All measures were carefully explained to participants and I briefly outlined my plans for data analysis.

3.7.1 Consent

All parents taking part in the study read the information sheet (appendix xiii) before signing the consent form. I asked participating schools to let me know if there were any potential issues with written communication and tried to keep the information sheet concise, accurate and clear. Upon meeting with parents I went through what the intervention would involve and made it clear that they were able to withdraw at any point. As I did not work directly with children I did not gain consent from children but the intervention itself involved parents telling their children that they were starting something new to improve sleep and that this could have positive benefits for the whole family. Other than this it was left to individual parents as to how much information they shared with their children about the research.

3.7.2 Confidentiality

Confidentiality was maintained by following the protocol outlined in the parent information sheet (appendix xiii). To protect identities participants and their children have been given pseudonyms and no geographical locations are referred to. Other

family members are referred to by their relationship to the parent participating (e.g. husband).

3.7.3 Participant Debriefing

The post-intervention interview provided an opportunity for parents to reflect upon change, on the things which had gone well and the things which had been less successful. Participants were also asked to complete a satisfaction questionnaire (appendix x). I informed all participants that I would check up on their progress after approximately eight to ten weeks and that we could address any issues which may have arisen. I also informed participants that they would be welcome to view a version of the finished thesis (all participants said that they would and this can be distributed via schools). Participants were made aware that they could view my transcripts if they wished; nobody accepted this offer although one kind participant said that she would if it would help me!

3.8 Pilot study

In October 2014 I attended a sleep workshop organised by 'The Children's Sleep Charity', a registered charity who run various workshops and training events across parts of the UK. The workshop was designed for parents and professionals. This was a useful experience for me because I was able to listen to the experience of parents as well as gather useful information about how to approach designing a sleep programme for parents. Many of the resources for my own intervention were based on those developed by the charity. The charity remained helpful and supportive of me

throughout my thesis, even helping with my request for participants on their social media sites.

In June 2015 I contacted various local services to find out what work was being done in my local area to support sleep. As a result, I met with a paediatric nurse who works with parents (mainly those of children already referred to the health system). This meeting was very useful in terms of discussing my research plans with another professional. We were able to share resources and discuss cases anonymously. We also considered the need for a more co-ordinated approach to addressing child sleep difficulties; this is referred to as part of the literature review and in the discussion section.

I had initially planned to use a full case study for my pilot study. At this point I was still anticipating delivery of the intervention via a workshop but felt that I would be able to deliver it individually for the purpose of the pilot. My pilot study was planned to begin after spring half-term, 2015. As it happened my pilot participant unexpectedly moved to a different county before we could arrange the first interview. Fortunately, the parent had completed the CSHQ (Children's Sleep Habits Questionnaire, appendix vi) and the FISH (Family Inventory of Sleep Habits, Malow et al., 2009, appendix xiv), so I was able to use this information to see how these measures worked. I was then able to try out parts of the intervention with one of the parents from my daughters' school. I did not want to know the participants for my actual study but this was a helpful process as I was able to get quite frank feedback on some of the measures. I had noticed that the FISH questionnaire resulted in repetition of some of the information requested in the CSHQ and my pilot participant pointed this out. She also said that she did not like the

FISH as it felt a little intrusive and judgemental. I had similar concerns and so decided to drop this measure.

I was able to give the pilot participant a copy of the intervention booklet to review and comment upon, she made a few comments about layout which were considered when designing the final booklet. I asked a colleague to critically evaluate the booklet and again made several adjustments to design and content. In light of how much importance my pilot participant placed upon the booklet design, I commissioned a professional design company to edit the booklet in terms of design and format. The booklets were professionally printed to make them appealing and usable. I have also been able to offer the booklet to EP colleagues in my service if they have had a case which involves sleep issues.

Throughout my pilot work I discovered how difficult it would be to gather the number of participants required to complete the full intervention and how impractical it would be to assume that they would all be ready at the same time to attend a workshop. This would be a much more realistic proposition as part of normal EPS work but within the boundaries of my research schedule it was not. As such I decided to work individually with parents using the booklet and a presentation about sleep, I also had to abandon my initial intention to enlist a control group as this became unfeasible due to the number of participants available.

My attendance at The Children's Sleep Charity workshop and discussion with my pilot parents allowed me to develop my initial interview schedule and to think about how I would organise individual delivery of the intervention.

3.9 Research Design

3.9.1 Sample

The sample initially consisted of three parents (all mothers) of children aged 4-8. In two of the cases schools had approached parents in response to my request for participants. School were aware that these were parents of children who experienced sleep difficulties. Parents were not pressured by school; in both cases, attention was drawn to the intervention by school office staff. Parents immediately agreed to complete the consent form. The third parent asked school to contact me and pass on her details having seen a poster displayed in school (appendix xv).

I decided that my sample would include the parents of foundation stage/ primary age children (4-11) who considered their child to have a sleep problem. I was interested in this age group as this is the age where sleep issues will start to interfere with wider aspects of a child and family's life; sleep is less likely to be interrupted by feeding, teething, napping and toilet problems. Within this age group it is likely that parents still have control or the potential to have control over the child's sleep routine, which is necessary as the intervention is centred on parent-based sleep education.

In all cases the child with sleep difficulties was male. I would have liked a mixed-gender sample but there were only two parents of girls who showed interest in the intervention. One of these could not take part as the mother was admitted to hospital long-term and the other did not get back in touch with me following an email conversation and provision of the information sheet.

I decided to exclude children with neuro-developmental conditions such as those diagnosed with autistic spectrum conditions the reasons for which are discussed in section 3.7.3.

3.9.2 An overview of participants

Pseudonym of parent	Gender of child	Child pseudonym	Age of child at the start of the intervention	Total no. of children	Major sleep concerns
Kate	M	Harry	4	3	Poor sleep associations – needed parent present to fall asleep and woke for milk in the night. Frequent night wakings. Getting in bed with parents.
Alice	M	Andrew	7	1	Sleep onset delay and getting in bed with parent during the night.
Eve	M	Brandon	4	3	Occasional sleep onset delay. Frequent night wakings. Getting in bed with parents.

Table 1. Participant details

Initially I sent out emails to a number of schools requesting participants. I had some interest but many parents were reluctant to commit to the research, and so I sent out the email to all of the schools in my district. At this point I also asked for help from The Children's Sleep Charity who placed some information about my research on social media. I had some posters made (appendix xv) which I displayed in schools, local support team offices and in the local medical centre. All parents who showed an interest were sent an information sheet (appendix xiii). There were six parents (in

addition to the sample) who expressed interest but did not take it any further, possibly because of the time demands or due to other things happening in their lives.

I initially had four participants which I felt would provide enough data for me to be able to answer my research questions. However, due to circumstances described below, I only had a full set of data for three participants. The fourth participant was excluded from the research for a number of reasons which are elaborated on in the discussion section. Ideally I would have liked to include this case as what happened is part of real-world research and particularly part of the normal casework experience of TEPs and EPs.

The initial four participants completed the CSHQ which suggested that their child's sleep difficulty could potentially be helped through a parent-based sleep education intervention, as the difficulties described related to sleep onset, sleep latency or night wakings. Once parents had read the information sheet, signed the consent form and completed the pre-intervention CSHQ, I contacted them via telephone to arrange a time and place for the initial meeting. Prior to this meeting I contacted the relevant schools, provided consent forms and information sheets for teachers (appendix xi/xiii) and asked them to complete the pre-intervention School Behaviours Ratings Scale Questionnaire (Gardon, 2009, appendix xvi). Teachers were provided with my contact details to enable them to ask for clarification or further information if necessary.

3.9.3 The intervention in more detail

In addition to the booklet and presentation a number of other resources were used as part of the intervention. A bedtime pass was provided to all parents (Moore et al.,

2007). This is a laminated piece of card (example in booklet, appendix iv) which is given to the child and can be exchanged for brief parental attention. The child is told that if they do not use the pass they can exchange it in the morning for a small reward. Age appropriate pound shop toys were provided so that parents could get started straight away if they wanted to. Parents were also given a laminated figure of a superhero (this was suggested at The Children's Sleep Charity workshop). The idea is that the reward could be left next to the bed with the superhero if the child stayed in bed all night. I also gave all participants a decorated cardboard box with a hole in the top designed to be used as a 'worry box'. Instructions on how and why to use these were provided. These were used by all parents as part of the intervention although the decision to use them was left to the individual.

The PowerPoint presentation information was delivered alongside the booklet following the initial interview. I used a semi-structured format for my interview questions which were devised using my pilot data and intended to explore participants' best hopes, describe the existing sleep issues in further detail to that already provided by the pre-intervention CSHQ, and to think about motivation for change (appendix vii). These were used as a guide but the interview was largely led by parents. For the first case I used my lap-top to show the presentation but I found this a bit cumbersome and unnecessarily formal and so for all other cases I used printouts of the slides. Nevertheless, the PowerPoint presentation would be useful if the intervention was delivered as a workshop.

During the initial session (which lasted on average 90 minutes) a plan was developed collaboratively using information from the initial interview, the CSHQ and the pre-

intervention sleep diary. This plan was written in the table provided on the final page of the Sleep Toolkit the booklet (appendix iv). Throughout the initial interview we discussed readiness for change; the booklet includes a section for potential hurdles. With several of the participants I used a version of the trans-theoretical model of change adapted by Sheffield Educational Psychology Service (appendix viii) based on the work of Prochaska and DiClemente (1984). Participants were asked to think about where they were in terms of readiness for change; the usefulness of this is referred to in the discussion section.

Following the initial session and the collaborative development of a sleep plan, participants were asked to keep a daily sleep diary. Advice on how to keep sleep diaries was provided in the Better Sleep Toolkit booklet (appendix iv). Participants were contacted weekly to establish progress and discuss any concerns. This contact took the form of a text, phone call or email. Sometimes contact was brief, sometimes longer, and this was led by the participant. I had initially planned six weeks for the intervention but found that, due to circumstances (such as holidays or child illness), this was usually longer or shorter, and that having a prescribed length was unrealistic. When participants had between four-six weeks of sleep diaries and I felt that my involvement was no longer needed, a post-intervention interview was arranged. Again, this was semi-structured (appendix ix) and was designed to explore change, the process of change, positive and negative experiences of the intervention and advice for other parents. During this session, participants completed a satisfaction questionnaire (appendix x) and a repeat of the CSHQ (appendix vi). Approximately 8-10 weeks after the end of the intervention participants were contacted via telephone to check progress.

3.9.4 Measures used

Measures used in relation to each research question are outlined in the diagram below:

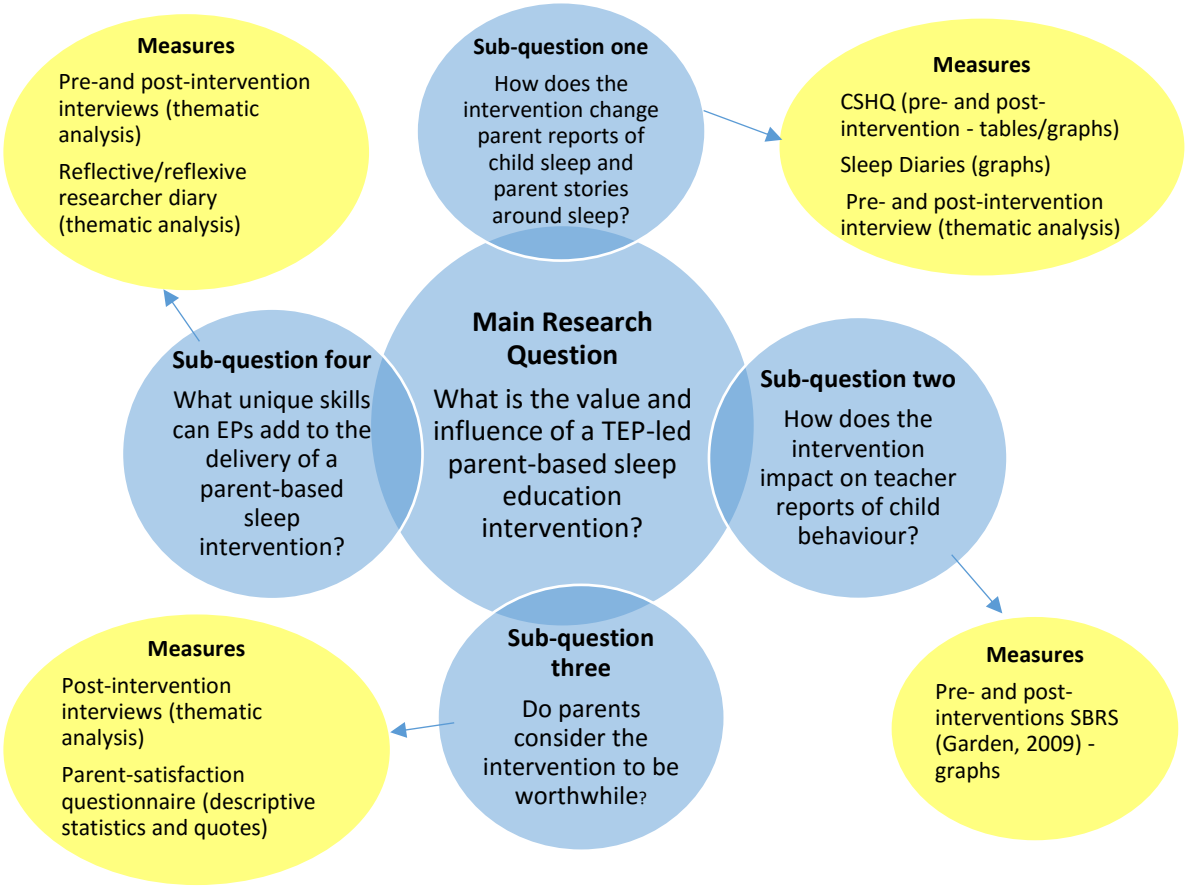

Figure 6 Diagram to illustrate measures and analysis

3.9.5 Specific details about quantitative measures used

3.9.5.i The School Behaviours Rating Scale (SBRS) (Gardon, 2009)

I used this measure as it is a comprehensive questionnaire which is easy to administer. The intention was to see whether child behaviour was considered to change following the sleep intervention. The SBRS includes descriptors of school-based behaviours. Teachers were asked to rate each descriptor in terms of frequency ranging from

'never' to 'very often' over a seven-point scale. A more detailed description of this measure is included in the literature review (section 2.11.1)

3.9.5.ii The Children's Sleep Habits Questionnaire (CSHQ) (Owens, 2000)

This questionnaire is designed with the purpose of screening for the most common sleep difficulties experienced by children. It is considered that a score of 41 or more indicates a sleep difficulty which requires intervention (all participants exceeded this). Copies of the questionnaire were downloaded online (see references). A more detailed description of this measure is included in the literature review (section 2.11.2).

3.9.5.iii Sleep diaries

These were adapted from the sleep diaries included in the booklet provided by 'The Children's Sleep Charity' (Dawson, 2014) as part of their 'Sleep Success! Sleep Awareness Workshop'. I chose to use this format because it is clear and easy to complete whilst providing all of the key data required regarding sleep time, sleep duration, self-settling and night wakings.

3.9.5.iv The parent satisfaction questionnaire

I designed this questionnaire to provide data about how useful parents considered the intervention to have been and how they felt it could be improved. There was some overlap between questions included in this questionnaire and those included in the post-intervention semi-structured interview but I felt that it would be useful to have both measures in order to include concise questions which I not ask face-to-face, possibly allowing participants to be more honest.

3.9.6 Qualitative analysis

Thematic analysis is a method of identifying, analysing and reporting themes within data (Braun & Clarke, 2006). Data were subjected to a 'theoretical thematic analysis' (Braun and Clarke, 2006, pp.12); coded with specific research questions in mind. Themes identified are essentially 'semantic' (Braun and Clarke, 2006, pp.13), from which data are later summarised and interpreted. Attempts were made to keep the interpretation 'in' the data, avoiding the influence of pre-existing assumptions, knowledge and reading, but it is recognised that this is largely impossible. This approach to analysis is considered to be consistent, epistemologically, with critical realism in that it allows acknowledgement of the ways in which individual participants and the researcher make sense of the experience.

1. Familiarisation with the data

All interviews were audio recorded and transcribed verbatim either by the author or by an academic transcription company. Use of a transcription company was employed due to the volume of audio data collected. Once transcripts were completed they were compared to audio data for purposes of accuracy and familiarisation. Relevant notes with regard to tone or significant pauses were made. Finally, the transcripts were read through a number of times to ensure immersion in the data. At the final reading, notes of anything of interest were made in the form of a list.

2. Generating initial codes

Codes are used to represent features of the data considered to be of interest (Braun and Clarke, 2006). Transcripts were re-read in order to make note of potential codes. These codes were developed from the initial areas of interest – by adding to this list and removing similarities and repetitions (see appendix xvii). Following this, initial codes were colour-coded and were tentatively placed into more meaningful groups according to similarity (see appendix xviii). This process was repeated for each research question to which interview data contributed relevant evidence. For some research questions pre- and post-intervention interview data was used, and for some questions only pre- or only post-intervention data was appropriate. In the initial stages there was considerable repetition of coded data extracts; this was either reviewed and addressed at a later stage, or just considered to fit into more than one theme or sub-theme which is recognised by Braun and Clarke (2006) as acceptable practice during such analysis (pp.19).

3. Searching for themes

The next stage of the process involved looking at codes in more detail and beginning organisation into coded data sets. The codes were organised into groups (appendix xviii) and coded data extracts were tabulated according to these groups (appendix xx for the final version). Once this had been done the data extracts were cut up and placed into envelopes according to group. Data was coded inclusively (leaving some of the surrounding information) so that participants' meaning could be fully understood. Once cut up coded data was moved around and sorted to look for potential themes and sub-themes. This information was then used to create initial thematic maps

(appendix xix). The themes were still not completely formed at this stage and were continually revised and amended.

4. Reviewing themes

With a view to refining the preliminary themes, each coded data extract was checked to ensure that that it formed part of a coherent pattern. Any themes not considered to be coherent at this stage were either removed, reassigned to another theme or used to create a new theme. Checks were carried out to ensure that all themes were adequately substantiated by data.

5. Defining and naming themes

Themes were checked for clarity, coherence, and that they were an effective summary of extracts taken from the data. Data extracts were tabulated in a Word document under each theme and sub-theme which made it easier to carry out a holistic review (see appendix xx). Final thematic maps were then ready for inclusion in the results section.

6. Writing up

Reliability of codes and themes was checked in accordance with guidelines recommended by Joffe (2011). It is suggested that the accuracy of coding application is checked using a data sample of 10-20%. One of the data sets was randomly selected. This represented 19% of the data. An inter-rater check was then carried out by an experienced EP colleague. The inter-rater was asked to match individual codes to themes and subthemes. Agreement of allocation to sub-themes was reached for all except four extracts. Following discussion, two data extracts were kept in their

originally allocated sub-themes, one was added to the preceding part of the extract and kept in the same sub-theme and the fourth was removed entirely as it was considered that it did not clearly address the research question. This process provided experience for a further review of allocation to themes by the researcher (see appendix xxii).

Chapter Four – Findings and Results

4.1 Qualitative data analysis

Qualitative data provided by pre- and post- intervention interviews was subjected to thematic analysis with a view to providing answers to the main research question and sub-questions, with the exception of that relating to teacher reports of child behaviour. A detailed description of how this was done is included in Chapter 3.

A reminder of participant details and a more detailed description of their circumstances is included below:

Pseudonym of parent	Child pseudonym	Background and major sleep concerns
Kate	Harry	Harry is four years old. He lives at home with both parents and two siblings. He is asthmatic and was very ill when he was a baby. Harry does not like to sleep alone. There are poor sleep associations. Kate usually sits on his bed every night until he fell asleep. Harry regularly wakes in the night for milk which he is given by Kate. Harry often gets in bed with parents.
Alice	Andrew	Andrew is seven years old. He lives at home with his mother. His father works abroad for long periods and Andrew misses him. Andrew often takes a long time to fall asleep, he is afraid of the dark and sometimes has nightmares. He sometimes gets anxious at bedtime. Andrew frequently gets into bed with his mother. Sometimes Alice does not consider this to be a problem although it is not possible to do this when his father is at home.
Eve	Brandon	Brandon is four years old. He lives at home with his parents and two siblings. He sometimes has difficulty falling asleep and he often wakes more than once in the night. He sometimes gets in bed with his parents.

Table 2: A reminder of participant details

4.2.1 Thematic analysis of pre-intervention interview data for the main research question and sub-question one.

Parents were interviewed prior to and following the intervention using a semi-structured interview format (see appendices vii and ix). Following use of the stages of thematic analysis suggested by Braun and Clarke (2006) various final themes and sub-themes were identified. These are illustrated in figure 6 below. Research question one '*How does the intervention change parent stories about sleep and reports of child sleep levels*?', is addressed with thematic maps from both pre- and post-intervention interviews:

Pre-intervention data:

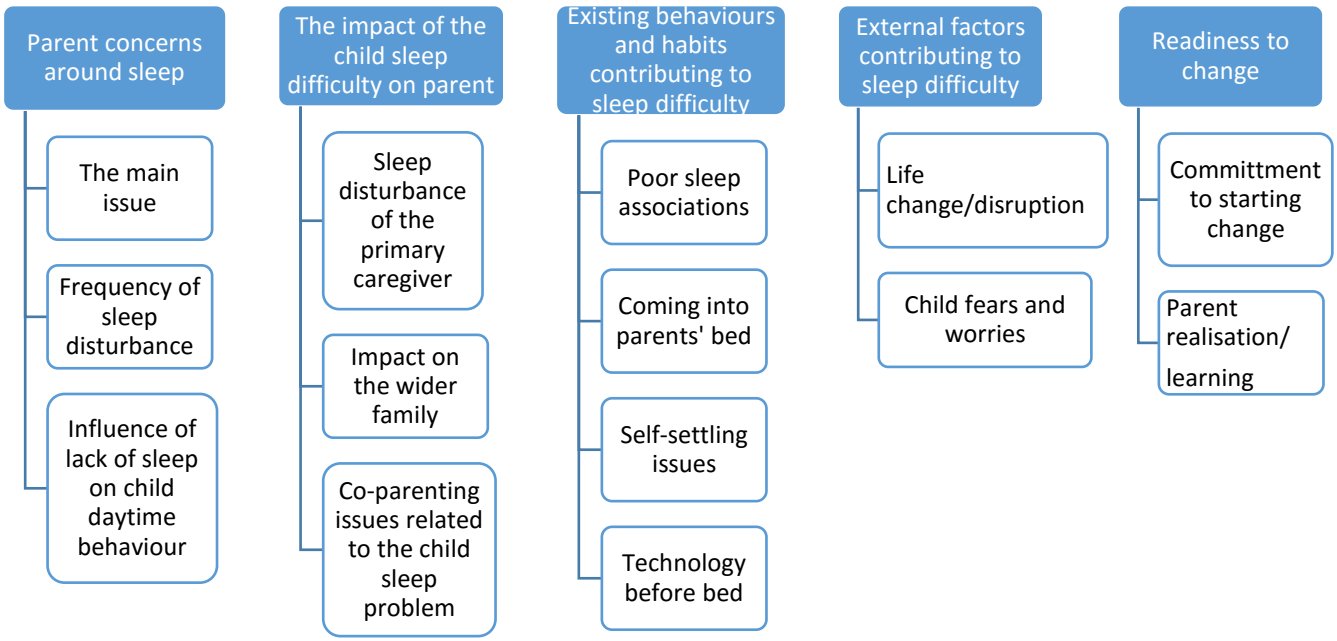

Figure 7. Identified themes and sub-themes from pre-intervention interviews relating to the main research question and to sub-question one.

Five overarching themes were identified: Parental concerns around sleep; the impact of the child sleep difficulty on the parent (main caregiver); existing behaviours and habits contributing to the sleep difficulty; external factors contributing to the sleep

difficulty and readiness for change. These themes and sub-themes will be explicated with examples taken from interview data.

Parental concerns around sleep

This was considered to be an overarching theme because part of the pre-intervention interviews understandably involved parents describing the child's current sleep levels and the main issues. Although the spirit of the interviews was intended to be solution-focused, the fact was that parents needed to outline the main sleep difficulties in order for us to develop a plan. An important part of the intervention was allowing parents to tell their story and to feel listened to. This discussion of the main sleep issues was coded into three related sub-themes: the main sleep issue; frequency of sleep disturbance and influence of lack of sleep on child daytime behaviour.

- ***The main sleep issue***

Parents were guided to clarify the main sleep issue. Some information about this had already been provided on the CSHQ, but most parents wanted to begin here anyway. These were repeated in different ways and reflected back by the researcher:

> "…*he won't settle on his own*" (KATE, pp.6)
>
> "*I need him to be able to be confident in myself that when I say, 'It's bedtime, get into bed and settle down' he will do that and that he will stay in his own bed"* (ALICE, pp.5)
>
> "*It's just the waking*" (EVE, pp.6)

All participants were able to establish the main sleep problem and thus what they wanted to address. There is further reference and discussion to clarification of the

main sleep problems in data used to address research sub-question 4 about the role of the EP.

- ***Frequency of sleep disturbance***

This was mentioned frequently and encouraged by the researcher as it enabled participants to articulate and therefore acknowledge the extent of the problem and to quantify it so that improvements could be noticed:

> "*And then he woke up about half one, quarter past one again and then he was up at five past five this morning*" (KATE, pp.2)
>
> "*And then it was 2 am, 4 am in my bed, put him back 6 am, up 7:15. So he's still waking up at 7, isn't he, just before 7. Yeah, he didn't sleep very well*" (EVE, pp.10)

- ***Influence of lack of sleep on daytime behaviour***

One of the strategies of the sleep intervention was to show parents what existing research can tell us about the impact of lack of sleep in order to strengthen motivation. In light of this, parents were encouraged to describe how they felt lack of sleep affected on their child during the day:

> "*..when he's had a good night's sleep, if he's gone all the way through the night, the next day he's quite good. But when he's had disturbed sleep, by the afternoon, he's evil*" (KATE, pp.17)
>
> "*And I say.....Got to get up now.' And he doesn't want to because, obviously, he's had broken sleep just as well as I have. His probably more so because he's doing the journey twice, isn't he, to my room and back. And he doesn't … some mornings he doesn't want to do anything*" (EVE, pp.1)
>
> "*I, after parents' evening, became aware that he was tired in school and I think that was when I realised that he'd got to start going to bed earlier and it frightened me really……..well, he wasn't coping with that because he's a child that needs his sleep*" (ALICE, pp.2)

<u>The impact of the child sleep difficulty on parents</u>

This theme included lots of coded data; some emerging themes were later merged because the sleep difficulties seemed to impact on parents in a number of different ways:

- ***Sleep disturbance of the primary caregiver (the parent being interviewed)***

There is existing research about the impact of child sleep problems on parents and how this can have reciprocal effects (Sadeh et. al., 2010, Bell and Belsky, 2008); this was reflected in some comments made by parents:

> "*and I'll admit, I'm a mum, I get tired towards the end of the day and eventually it'll probably end up with me being shouty - the more shouty I would get that would just inflame the situation even more*." (ALICE, pp.2)
>
> " *… in your heart you know they're tired but you're annoyed at them because they're tired because they've made you tired and then it's a vicious circle, isn't it*?" (EVE, pp.14)

Parents also described other ways in which the disturbed nights impacted on their own sleep and wellbeing:

"*I would ideally like him to sleep in his own bed because he shouldn't really be sleeping with me and I don't sleep properly when he's there because he's a very, very restless sleeper*". (ALICE, pp.5)

"*I'm shattered and when it comes to get up in the morning, I can't get up. Because I'm up two, three times a night.* (KATE, pp.27)

"*It's had an effect on me*." (KATE, pp.27)

It is not just the broken sleep and tiredness which appear to be an issue. Alice described how she is unable to do normal things like watch a TV programme because her son keeps coming downstairs.

In addition to the tiredness, two parents described how unsettling it is when you go to bed expecting to be woken up:

"*So I…. finally drift off and they wake you up anyway*." (EVE, pp.2)

"*…I'll just start going back into a sleep and I'll hear him again. It's like, 'Oh God' <chuckles> and I'm up again*." (KATE, pp.27)

- ***Impact on the wider family***

All parents mentioned how child sleep difficulties impacted on the rest of the family including siblings or partners:

"He does try to do it [get into parents' bed] *when dad's home but [dad] always puts him back because there just isn't room, it's just uncomfortable, we all have a shocking night's sleep*." (ALICE, pp.3)

"*I've then gotta try and calm him down 'cause of him waking the other kids up. My daughter, she's what, year five now, year six so she's gonna be doing her SATs soon*." (KATE,pp.4)

" *The broken sleep, it doesn't do me very good and it doesn't do him very good and it just can upset [older sibling] as well, wake [older sibling] up"* (EVE, pp.1)

"*We weren't having family time. By the time we'd got the kids to bed, me and hubby were absolutely shattered. We were coming down here for half an hour and then we were in bed ourselves.*" (KATE, pp.6/7).

- ***Co-parenting issues related to the child sleep problem***

This was a theme which arose in both pre- and post- intervention interviews. It is not possible to say whether such issues are related entirely to the sleep difficulty as opposed to the general challenges of co-parenting but it did seem to be an area of concern which, for the most part, exacerbated rather than helped the problems. All parents seemed to feel that the main responsibility to get up in the night or settle the child fell to them rather than their partner:

"*No, it's not a problem; it's a problem just for me, singly."* (ALICE, pp.15)

"*And it's only me who can do it. [husband] tries to but Harry just plays up for him so then I have to go and take over*." (KATE, pp.2)

"*His excuse is he earns the crust so he gets away with it*." [husband sleeping with earplugs], (EVE, pp.5)

There were also issues related to different roles taken on by parents and the conflict that this could cause:

" Dad's a lot stricter than I am because obviously there's two of you then, it's easier to deal with it and dad is more strict than I am, I let him get away with more….." (ALICE, pp.4)

"[husband]'s always worked, he's off long-term sick at the moment so I've always been the disciplinary. And dad's always been the fun one." (KATE, pp.2)

"*But [partner], he's quite a disciplinarian* …." (EVE, pp.9)

In terms of implementing the intervention co-parenting was an issue: one parent felt that her husband would not be very supportive; the husband of another parent was rarely there as he is in active service; the third, however, was confident that dad would be supportive in implementing the intervention:

> "*Yeah, he will help me 'cause he doesn't work now so … he doesn't expect me to do the parenting, he's hands-on. He tries to be as hands-on as he can but yeah, he will help me, he'll step up and help me*." (KATE, pp.10)

Existing behaviours and habits contributing to the sleep difficulty

- ***Poor sleep associations***

Poor sleep associations refer to anything on which the child has developed a reliance in order to get to sleep. These can develop from an early age and usually need to be addressed in order to enable the child to self-settle and thus stay asleep. Parents described various types of associations:

> "*He would sleep, classic way to get him to sleep was just put him in the car, that would be the answer to everything, 20 minutes in the car and that would be it but there were nights when I perhaps did that to get him to sleep to take him to bed*." (ALICE, pp.13)
>
> " *The only heating we properly had was the fire downstairs so I used to keep him downstairs with us 'til we went to bed*." (KATE, pp.2)
>
> *"He's been so used to sleeping with us that going in his own room, he will sleep but like I say, he's not all the way through the night and he has to have us there to sleep"* (KATE, pp.34)

It seems that Harry and Andrew came to rely on parental presence and/or a high level of parent intervention from an early age. This appeared to be considered acceptable when the child was young, but increasingly became a problem as the child got older:

> "*I've … if he's been up two or three times and he won't sleep then what I'll do is give him his bottle and then I lie on the bottom of the bed. So then sometimes I end up waking up 'cause I fell asleep on the bottom of his bed*." (KATE, pp.9)

- ***Coming into parents' bed***

In some ways this is also an example of a poor sleep association; however, as it was mentioned frequently, by all participants and is known to be a common child sleep issue, it was allocated a sub-theme of its own.

> "*Now he will still come into my room, particularly when my husband's away, it's a regular thing, sometimes I don't even notice he's done it so therefore I can't really do much about it.*" (ALICE, pp.3)

It became clear that Alice did not really mind her son getting into bed with her in some ways and it took time to help her to see that it was affecting both of them in terms of sleep quality and general wellbeing:

> "*So yes, most mornings now I am waking up and finding he's there and he's asleep,but he is there, he's asleep, he's resting so I'm just letting it go on*." (ALICE, pp.3)

The above statement was really a form of resistance to change. The intervention provided research which helped Alice to see that really he was not getting consistent sleep and so the 'rest' was not of the quality which it should be:

> "[the thing that bothers you most?] "*Yes, it's coming into my bed and not getting him to sleep early enough so that he's getting his full quota*." (ALICE, pp.21)

But this was not without some remaining ambivalence:

> "*- if I can be bothered… sometimes it's easier just to… get in, snuggle down* <chuckles>." (ALICE, pp.30)

Eve also suggested that her son getting into her bed was not such a big issue at the beginning of the interview:

> *"But he doesn't cry or anything, he just gets up, comes in, 'I'm cold,' go and put him back in, wrap him up. Things like that. And sometimes he'll want to get in my, 'But Mummy, your bed's comfier*.' (EVE, pp.1)

But she quickly discovered during delivery of the intervention that this was creating bad habits and poor sleep associations:

> " *Like this morning where I said, 'Oh you've got to get up now, Brandon,.' and he climbed into bed and then he fell asleep. And that's bad because I'm thinking it's time to get up now, he can have a cuddle. And that's where I'm doing wrong, isn't it, because I should be just, 'Come on then, let's get up.*'" (EVE, pp.35)

- ***Self-settling issues***

Again, self-settling issues are in some ways linked to the previous two sub-themes but are such an important factor in establishing good sleep that they were included as a theme alone. Two parents had issues with self-settling and the third had already tackled this issue:

> "*Sometimes he'll say, 'Can I have a cuddle? Can I have this?' Yeah, I will do that if that will help settle him, but sometimes that can go the other way 'cause then we'll start having conversations about anything that's in his mind*" (ALICE, pp.4)
>
> "*Harry, he's never been able to do that [self-settle]. He's always had to have you there 'til he's asleep*." (KATE, pp.3)

Parents also described strategies which the child would use to avoid settling:

> "*Like you said earlier about trying not to engage, he'll try and engage conversation. And half the time it won't make much sense*". (EVE, pp.43)
>
> "*that's one of his really good tricks, 'Can I have something to eat? Can I have a drink?' Any excuse under the sun, 'Can I come down the stairs*?" (ALICE, pp.2)

- ***Screen time before bed***

Discussion of how screen time can inhibit melatonin release helped parents to realise the importance of this in terms of creating a good settling routine:

> ***I:** **"***The only thing with TV is, and I know that it doesn't affect all children the same, but the blue light from it does inhibit melatonin, whereas we're trying to increase it.*
> **P:** *OK, maybe that is something that I'm doing wrong"*. (ALICE, pp.24)
>
> *I = Interviewer P = Participant

External factors contributing to sleep difficulty

There were some life experiences or incidents which were beyond the control of parents and may have contributed to the sleep issue. It was important that parents described these as they needed to be considered as part of an individually designed intervention:

- ***Disruption/life incident/change***

> "*That started a couple of months ago. Since hubby's been off*" [coming into parents' bedroom]. (KATE, pp.1)
>
> "*At the age of ten months he was hospitalised for croup, which they said he was very young to have croup. Then he was hospitalised so many months later again with it. He's had a febrile fit, he's had asthma attacks*". (KATE, pp.13)
>
> "*But when he started at Reception his behaviour went downhill very rapidly…… And at that point his dad, who he's very close to, went on a very long deployment and everything sort of… we started having problems right, left and centre*". (ALICE, pp.2)

- ***Child worries and fears***

This sub-theme was placed in the 'external factors' theme because for all parents the night fears were not directly influenced or reinforced by parental behaviour:

> "*I think he does, I think a lot goes on in his little head, things that he can't articulate to me, whether it be something that's happened at school but things do worry him, things that he sees*." (ALICE pp.10)

The dark was also described as an issue for the children of all three parents.

> "*We have the bathroom light on and he has a little plug-in light which he's not really fussed about….but the bathroom light does stay on*." (EVE, pp.16)
>
> "*He does settle a lot more easy when it's light than when it's dark. He likes lights on and I don't know what the reason for that is*" (ALICE, pp.1)

Parents were told that darkness stimulates melatonin release and were also shown REM and non-REM sleep stages in order to illustrate the importance of having the same level of dim light throughout the night as opposed to going to sleep with a light on and waking up in darkness, as this change can then rouse a child in an REM sleep stage.

<u>Readiness for change</u>

Throughout and particularly at the end of the first interview, following delivery of the intervention, attempts were made by the researcher to encourage change talk and to look for signs of readiness for change:

- ***Commitment to starting change***

> *"Yeah. I'll probably do it with [younger sibling] as well 'cause she's a bugger in the night for milk……. So I'll do it at the same time for both"*. (KATE, pp.25)

Note use of "I'll do it" as opposed to "I'll try" or "I could".

> **I:** "*But it sounds to me very much like you're at the stage now where you're ready to make some changes*".
>
> **P:** "*I am 'cause I'm shattered and when it comes to get up in the morning, I can't get up".* (KATE, pp.27)
>
> "*See, I'm quite a stubborn person so if I put my mind to it, I will do it*". (KATE, pp.33)

Alice was slightly less emphatic, but still expressed a desire to try which was progress considering that she did not really see it as a problem at the beginning of the intervention:

"*I'm not saying I'm not prepared to try it, I'm just saying that's why I've not tried in the past"*. (ALICE, pp.15)

"*but yeah, I will definitely have a bash with him*". (ALICE, pp.18)

There was still a degree of ambivalence with Alice so attempts were made to evoke a more decisive desire to make some changes:

I: **"***I don't want to push you"*.
P: **"***No, let's do it".* (ALICE, pp.21)"

Eve had the most instances of decisive change talk and commitment to change:

"*That's it, not in my bed*". (EVE, pp.34)

"*Yeah, I've decided to change*". (EVE, pp.37)

"*Well, might as well start now. That means I'll have had him for a solid week and a half. Oh no ... week. If I do it from now I'll have had a solid with him then before* [dad] *takes over on the Friday. That's great*." (EVE, pp.48)

- ***Parent realisation/learning***

Delivery of the intervention was incorporated into the pre-interview so that it could be tailored to individuals' needs and was time-efficient. This meant that parents showed evidence of recognising mistakes or habits which had been created and the content of the intervention was guided by this to a degree:

I: **"***What could you do*"?
P: **"***I'll go and put him back".* [note: I'll instead of I could] (ALICE, pp.26)

"*So he's not getting enough sleep"* [reference to table on ideal sleep amounts in booklet]. (EVE, pp.33)

4.2.2 Thematic analysis of post-intervention interview data for the main research question and sub-question one - *How does the intervention change parent reports of sleep levels and parental stories around sleep?*

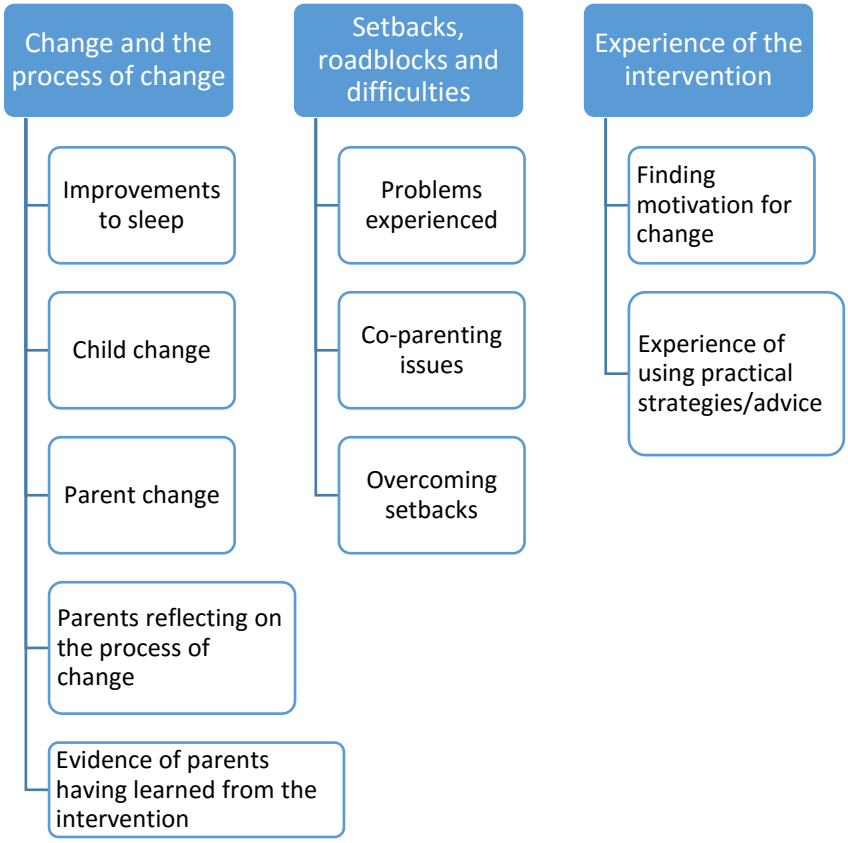

Figure 8. Identified themes and sub-themes from post-intervention interviews relating to the main research question and to sub-question one.

Three over-arching themes were identified: change and the process of change; setbacks; roadblocks and difficulties and experience of the intervention. Each of these themes and sub-themes is explored below:

Change and the process of change

In attempting to answer research sub-question one, it is important to look at change and the process of change following the intervention. This also provides answers to the main research question with regard to considering the value of the intervention.

- ***Improvements to sleep following the intervention***

All participants described improvements to child sleep following the intervention:

> ***"****Oh yeah, it's very much better*" (EVE, pp.4)
>
> **"***Yeah, this was awesome, what a week. I had a really good week that week*". (EVE pp.5)
>
> **"***Well, generally it's a lot better [child's sleep]* ". (EVE, pp.7)
>
> **"***The first night, since the first day we started it I've not sat on the bed*". (KATE pp.1)
>
> ***"****Yeah, that's been turned down [milk] as well from the first night"*. (KATE, pp. 1)

Alice was more reticent in terms of describing improvements; nonetheless, some progress was noted following the intervention.

> "*so yeah, it's going OK at the moment, it's not perfect, it's not as serene as I would like it to be, it's not without its faults but it's a heck of a lot better than it was a month ago"*. (ALICE, pp.2)
>
> "*And I felt really harsh doing it [sticking to rewards] but it worked and it's worked since, so he's had every night in his own bed since last Wednesday I think*". (ALICE, pp.1)

Eve described how the improvements to sleep had impacted on the family:

> "*I know his issues probably aren't as big as some, but it helps us all sleep*" (EVE, pp.17)

- ***Child change***

This was quite mixed, Alice felt that any changes were mainly due to the fact that Andrew had been on the school holiday during the intervention (although the 10 week check phone call indicated that these changes had been maintained). Kate and Eve both described an improvement in behaviour at school following the intervention:

> **"***It is. So when he was at school his behaviour was a lot better*". (KATE, pp.5)
>
> **"***Yeah, but she said his behaviour at school's been fine and he's settling more at school so he's not being so disruptive*" (EVE, pp.4)
>
> **"***So I think we're getting a more settled Brandon"* (EVE, pp.5)
>
> …"*I think when he sleeps through he's just generally more malleable in the morning, I can get him to do what I need him to do without having to raise my voice or threaten him to take toys away*" <laughs> (EVE, pp.8)
>
> "*so now he realises he doesn't need me*". (KATE, pp.9)

- ***Parent change***

Parents described some very positive changes to their own life and wellbeing:

> "*But I think because I know it's starting to work I'm a lot calmer with him, not as fraught and I think how you're behaving, it really does have an effect on them, doesn't it?"* (ALICE, pp.6)
>
> **"***I needed it, I needed it because if I hadn't I was slowly losing the plot, being up four times a night it was getting quite bad*" (KATE, pp.8).
>
> **"** *…….. at least I know now if he wakes up, within ten minutes he's back off asleep, well, nine times out of ten within five minutes he's back in bed asleep"* (KATE, pp.8).
>
> ***"****I've got a life"* (KATE, pp.3) .
>
> ***"****…….so I've got a bit more control*". (EVE, pp.19)

- ***Parents reflecting on the process of change***

During the post-intervention interview participants were encouraged to reflect on change. This suggests that the intervention caused participants to actually consider the process of change:

> **"***And when it's at home it's different because it's your home, it's your family, you just get into this lull of… or routine of doing what you do, it's hard to see the changes that should be made because you're in it, if you know what I mean, if that makes sense*"? (EVE, pp.14)
>
> **"** ……*you know, when you're getting on with your daily life and you're knackered and you haven't got any sleep and you can't think straight you can't see the pattern, you can't see the change, you can't see how to develop it or change it. The simple things like the snack, I mean it's so obvious but we weren't doing it, so why weren't we doing it? Because it wasn't obvious to us, so doing this makes it obvious."* (EVE, pp.13)
>
> **"***Well nothing's ever easy, is it? Particularly when you decide you're going to do it and you've got to stick to it, it'd be very easy to give up. It's been quite challenging, it has, and I knew it would be but it's just finding the appropriate time to find the strength to say I am going to deal with this, 'cause in the middle of the night it is easy just to let him flop into bed and snuggle back down, isn't it*?" (ALICE, pp.6)

- ***Evidence of having learned from the intervention***

There were a number of examples of parents having taken on board and used information and planning from the intervention:

> **"***Yeah, not at night time [electronic items], no they've been doing it in the morning* (EVE, pp.9)
>
> "*So he did and he would bring it and put it on my side and try and climb into my bed, I'm like, 'No, no, no, no go back to bed*. (EVE, pp.11)

> **"***You said that to me and I've kind of stuck with it [keeping a dim light consistent through the night]….. if you change the way he's gone to sleep it does seem to upset his pattern*" (ALICE, pp.2).
>
> "*Two of those nights he did come in and have a cuddle but I was adamant, no, jumped straight up, 'Yes, come on, cuddle' and then 'right, go on' <chuckles> 'on your way, toddle off back to your bed.' And he did so, but no, it's been quite challenging, particularly at bedtime and trying to get him into bed for a decent time and following through with not letting him have the iPad, on your advice, and letting him colour."* (ALICE, pp.6)
>
> ***"****He knows he's not having milk at bed*." (KATE, pp.9)

Setbacks and difficulties

Whilst the post-intervention interviews were generally very positive, there were still some ongoing issues, some of which were new problems and some of which posed potential difficulties for the future:

- ***Problems experienced***

Kate made a breakthrough in terms of the fact that Harry began self-settling, but there were remaining issues about his behaviour in the run up to bedtime:

> **"***But nine times out of ten he might have a little bit of a tantrum when he goes to bed because he wants his dad because he's still clingy for dad, but once he's in bed he's fine, he self-settles straightaway".* (KATE, pp.1)

Alice's post-intervention interview seemed quite contradictory in places. She appeared to feel that progress had been made but there was still a lack of consistency:

> **"***He's still nervous about sleep in his own bed but it is getting better, it's taken a while to use the strategies that you've given me because he was adamant he… for some reason he just suddenly decided he was adamant he wasn't going to sleep in his own bed and it's only just recently it's got really bad with him coming in and getting in with me. The first few nights he wanted to earn his treat but he just couldn't seem to have the courage to settle down with it, but gradually he did*" (ALICE, pp.1)

- ***Co-parenting issues***

Interestingly, this was a theme in the pre-intervention interviews which may have implications for the development of future interventions when working around sleep with families.

The intervention seems to have made Alice wonder about how much her child's sleep issues are to do with the interaction/relationship between herself and her child:

> "*I'd be interested to know what he'd be like if I wasn't here and dad was here <chuckles> if I had a night out I wonder what he'd do then. I think he just feels a lot more secure when* [husband] *is home*" (ALICE, pp.7)

Eve seemed to question her partner's supportiveness in terms of implementing changes:

> **"***Yeah, so then I'd changed it and I said, '[partner's name], right, this is what's happening…..Which I've struggled to implicate* (sic) *with [partner] because [partner]'s… not been very helpful with it <chuckles> to put it nicely." (*EVE, pp.3)

The intervention almost seems to have further highlighted a lack of cohesion in their parenting which was referred to in the pre-intervention interviews:

> "*Which is another thing that worries me because I don't think we can be firm enough 'cause our parenting needs to be more together, do you see what I mean?..... Because I can say one thing,* [partner] *will say another and then… yeah there's a lot of issues in that structure that this has made very apparent to me".* <Laughs> (EVE, pp.8)

Perhaps there would be value in having both partners present for the intervention in which case a workshop may be a useful alternative.

- ***Overcoming setbacks***

Participants described incidents where things had not gone to plan but they changed something and got back on track. This is important, as it is key to long-term change and highlighting this reinforces self-efficacy:

I: **"***So they'd been late at bedtime*"?
P: "*Yeah, so then I'd changed it*" (EVE, pp.3)

"*Yeah, it's not been too bad, obviously there's been times when we've been out and he's falling asleep at his nan's or something, but I've put him straight to bed and he's been fine, he's fallen asleep in the car, straight out of the car, straight into bed, fine"*. (KATE, pp.1)

"*But obviously because dad's not been very well, dad has given into him a little bit in the day, but now I've said, 'You can't keep doing it' and he's stopped it now*" (KATE, pp.5)

"*So for about a week or so he earnt three or four treats and then he did get a little bit bored with that……But nevertheless we seem to have got back into it*" (ALICE, pp.1)

Experience of the Intervention

- ***Finding motivation for change***

This sub-theme could have been incorporated into the 'reflecting on change' sub-theme but I felt that finding motivation for change is an important part of the intervention itself. Parents were asked what they thought gave them the final push to make some changes:

P: **"***I think it's you, 'cause I <chuckles> I want to do it for you so, well, not for you but*" –

I: **"***Right, OK, so knowing that somebody else is monitoring it and that kind of thing*"?

P: **"***Yes, I think that makes a massive difference*" (EVE, pp.12)

All participants referred to having had enough and knowing that it was time to get some support and make some changes:

I: **"***So thinking about change, do you think you were ready for the change when you met me*?"

P: **"***Yeah, because I think when I saw that letter I was like I need to ring you…..Yeah, I don't think you can be pushed into it*". (EVE, pp.13)

"*Well, it was just deciding that I'd had enough of having my sleep completely interrupted and just decided…"* (ALICE, pp.7)

- ***Experience of using practical strategies/advice***

Parents seemed to find use of the bedtime pass a good starting point but noted issues about phasing it out as it is not feasible to provide rewards indefinitely:

"*….obviously the reward strategies were good. I think the worry box was good because although he only used it a couple of times I think I will try and get him to use it perhaps once or twice a week" (*ALICE, pp.6)

"*Oh the exchange pass thing was good as well, 'cause in the first week that was really good….. I've phased it out, yeah, costing me a fortune* <chuckles>" (EVE, pp.11)

"*No. I didn't really* [refer to the booklet much], *I just remembered what we said and I tried to stick to it the best I can*". (KATE, pp.4)

[reference to the sleep stages diagram in the booklet] "*Yeah, so if he goes to sleep what I do now, if I think right he's gone to sleep I won't go into his room, I'll leave him, where if I'm coming up and he hasn't woke up in the night I'll put my head round the door because I know that if he's not woke up he's probably in a deep sleep*" (KATE, pp.9)

Eve referred to finding keeping the sleep diaries to be particularly helpful:

"*Yeah, and actually having physical evidence, I guess, of how it's… 'cause we have got evidence, haven't we, of how everything's worked and what's not worked….. It helps you paint the bigger picture and without that you're kind of stuck in a lull, aren't you*"? (EVE, pp.12)

4.2.3 Quantitative analysis to address the main research question and sub-question one

4.2.3.a CSHQ results

The CSHQs were given to parents before starting the intervention and after the post-intervention interview. A lower score indicates an improvement in child sleep. The CSHQ provides a total score as well as sub-scores for eight different aspects of sleep difficulty: bedtime resistance; sleep onset delay; sleep duration; sleep anxiety; night wakings; parasomnias; sleep-disordered breathing, and daytime sleepiness. Parasomnias are sleep disturbances such as night terrors, sleep talking and sleep walking. These usually occur during slow wave sleep and are not remembered the next day (Quine, 1997). Most parasomnias disappear with age but it is useful to be aware of them when examining child sleep difficulties as issues such as head banging or teeth grinding may warrant a referral to the doctor or dentist.

All parents rated their children as having a lower score following the intervention which is suggestive of some improvements to sleep:

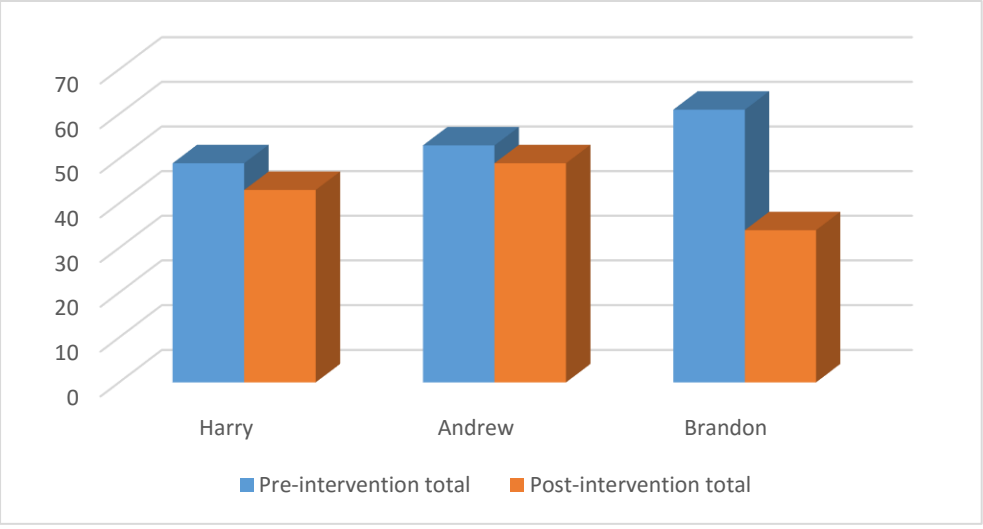

Figure 9. Bar chart to show CSHQ summary data pre- and post-intervention

As can be seen in figure 8, Brandon saw the greatest reduction in sleep difficulty score between pre- and post-intervention ratings.

The pre- and post-intervention scores for each child are presented in the tables below:

Case 1 – Harry

CSHQ Subscale	Pre-Intervention	Post-Intervention	Change Better sleep	Change Worse sleep
Total Score	49	43	6	
Bedtime resistance	11	6	5	
Sleep onset delay	2	1	1	
Sleep duration	7	5	2	
Sleep anxiety	9	6	3	
Night wakings	5	6		1
Parasomnias	9	7	2	
Sleep disordered breathing	5	4	1	
Daytime sleepiness	9	8	1	

**Some questions are scored in more than one sub-scale which is why the sub-scale scores do not equate to the total.*

Table 3. CSHQ sub-scale data for Harry

These scores need to be analysed within the context of the child's sleep problem. Harry's main difficulty was self-settling and as such a 5 point reduction from pre- to post-intervention score for bedtime resistance is very positive. Although there is only an improvement of 6 for the total sleep score, the better scores for sleep onset, sleep duration and sleep anxiety are also indicators of improvements to the initial sleep difficulty targeted by the intervention. Harry's night wakings score actually increased although only by a raw score of one which is just one rating point so probably not too much of a concern.

Case 2 - Andrew

CSHQ Subscale	Pre-Intervention	Post-Intervention	Change Better sleep	Change Worse sleep
Total Score	53	48	5	
Bedtime resistance	9	8	1	
Sleep onset delay	2	1	1	
Sleep duration	6	4	2	
Sleep anxiety	7	7	0	
Night wakings	7	5	2	
Parasomnias	11	11	0	
Sleep disordered breathing	4	3	1	
Daytime sleepiness	10	12		2

Table 4. CSHQ sub-scale data for Andrew

Andrew's scores showed the least improvement overall and this concurs with other evidence presented to answer research question one. The main areas of concern were night-wakings for which he showed an improvement of two rating points, sleep duration which also improved by two rating points, and sleep anxiety which was rated the same pre- and post-intervention. Qualitative data also suggests that, whilst there were acknowledged improvements, anxiety and worry remained an area of concern.

Case 3 – Brandon

CSHQ Subscale	Pre-Intervention	Post-Intervention	Change Better sleep	Change Worse sleep
Total Score	61	34	27	
Bedtime resistance	9	6	3	
Sleep onset delay	2	1	1	
Sleep duration	4	3	1	
Sleep anxiety	5	5	0	
Night wakings	8	3	5	
Parasomnias	13	7	6	
Sleep disordered breathing	3	3	0	
Daytime sleepiness	19	8	11	

Table 5. CSHQ sub-scale data for Brandon

Brandon's main area of concern was night wakings for which there was a post-intervention reduction of five points which is positive and suggestive of the possibility

that the intervention did have an impact on the targeted areas. There was also some improvement to bedtime resistance, sleep onset, sleep duration and a large reduction in the daytime sleepiness rating (11 points).

CSHQ Subscale	Pre-Intervention Mean score	Post-Intervention Mean score	Mean Change
Mean Total Score	54	42	12
Bedtime resistance	10	7	3
Sleep onset delay	2	1	1
Sleep duration	6	4	2
Sleep anxiety	7	6	1
Night wakings	7	5	2
Parasomnias	11	8	3
Sleep disordered breathing	4	3	1
Daytime sleepiness	13	9	4

Table 6. Mean summary scores for CSHQ sub-scales

Mean change scores suggest improvements in all areas of sleep difficulties.

4.2.3.b Sleep diary data

The graphs below are provided to illustrate a comparison of changes to sleep plotted over the period of the intervention which are a useful summary of the intervention for the purposes of answering the main research question and sub-question 1.

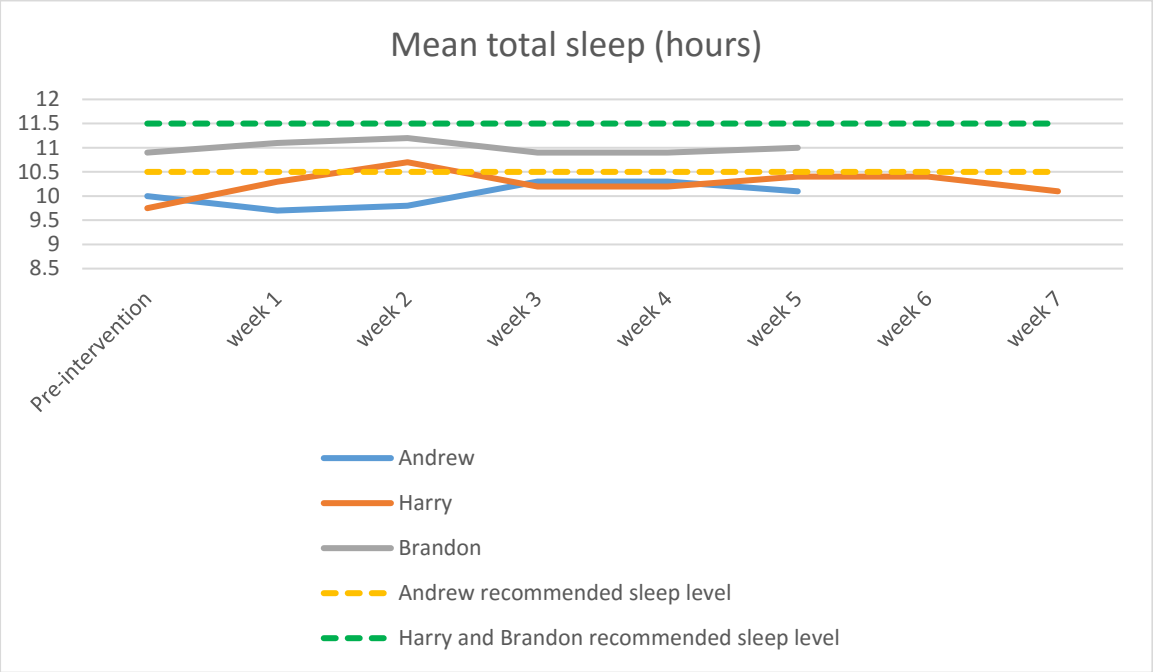

Figure 10. Mean total hours of sleep for all children throughout the intervention

As indicated by the graph above, the total amount of sleep for all children varied throughout the intervention. Brandon's sleep level was fairly high and fairly consistent – his main issue was really frequency of night waking which is not indicated by such data. Brandon seemed to be getting the recommended amount of sleep for his age (11-11.5 hours) following the intervention. Both Harry's and Andrew's mean amount of sleep increased from pre-intervention levels but did fluctuate throughout the intervention. The recommended nightly sleep for Andrew (10.5 hours) is close to being reached for the latter half of the intervention period. Harry did not reach the recommended sleep level of 11.5 hours for his age but sleep levels did seem to

improve and it may be reasonable to assume that they would continue to do so now as he no longer required a parent to settle and did not wake for milk.

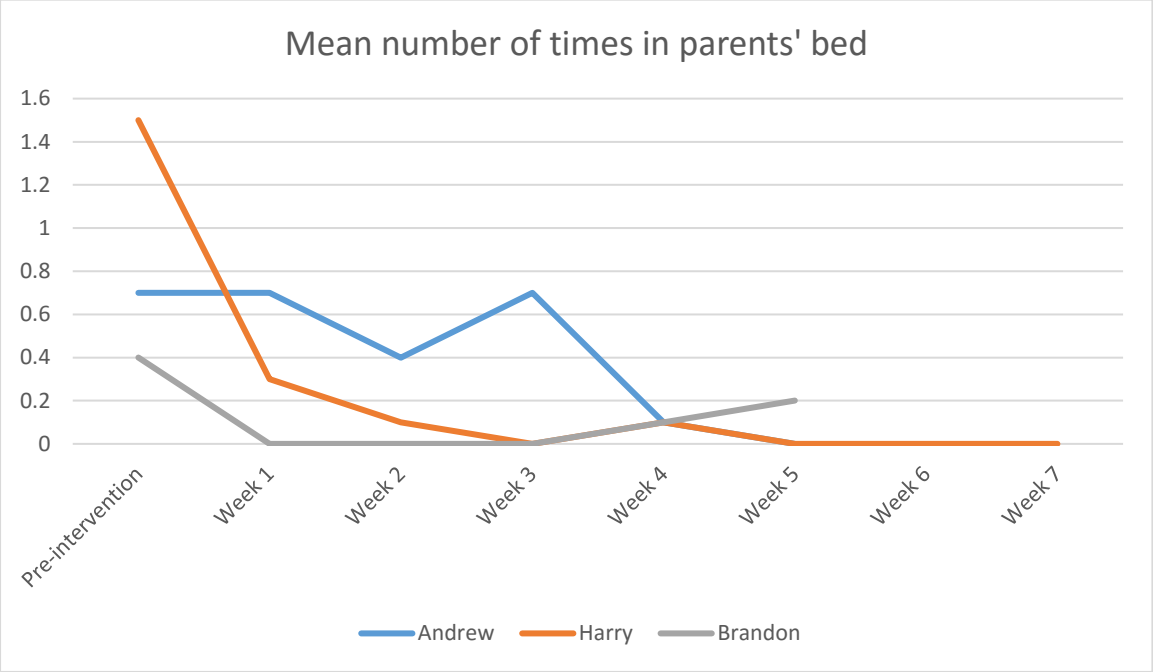

Figure 11. Mean number of times in parents' bed for the children throughout the intervention

Getting into bed with parents was an issue for all three children. The above graph indicates that, for all children, this became less of a problem throughout the intervention period and with Harry seemed to have faded out completely by the end. NB. Harry's high number for the pre-intervention is skewed by the fact that there was only two nights' worth of data for the pre-intervention week.

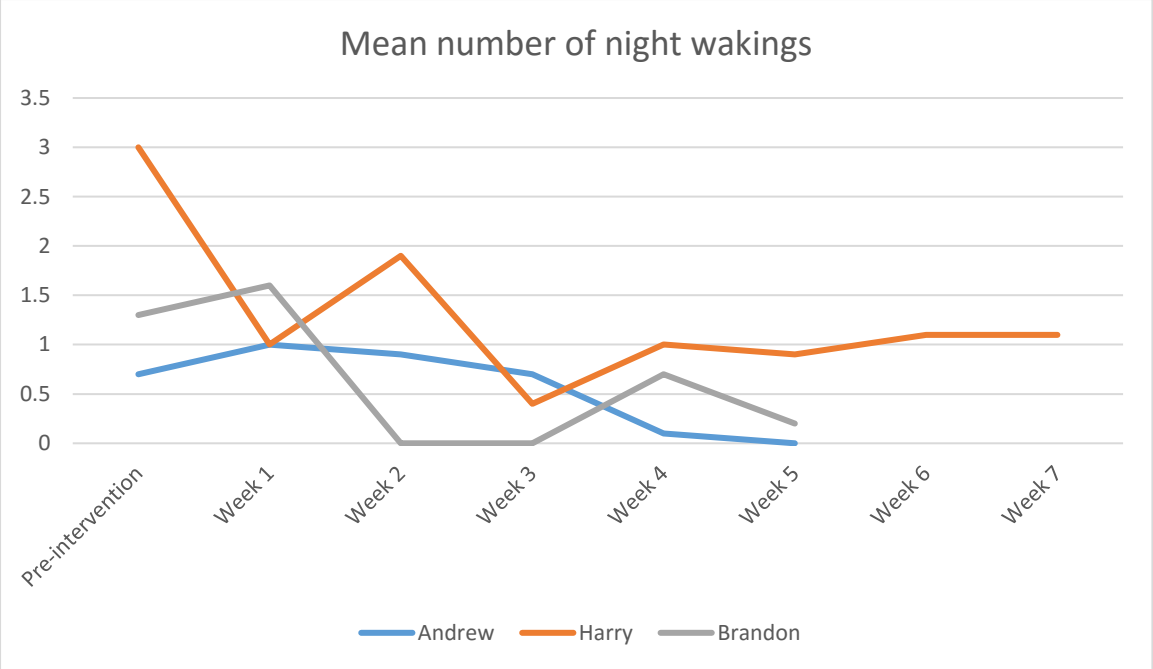

Figure 12. Mean number of night wakings for all children throughout the intervention

The pre-intervention interviews and CSHQ results suggested that night wakings were an issue for all children. For all children the number of night wakings decreased throughout the intervention although this was by no means straightforward with ups and downs throughout.

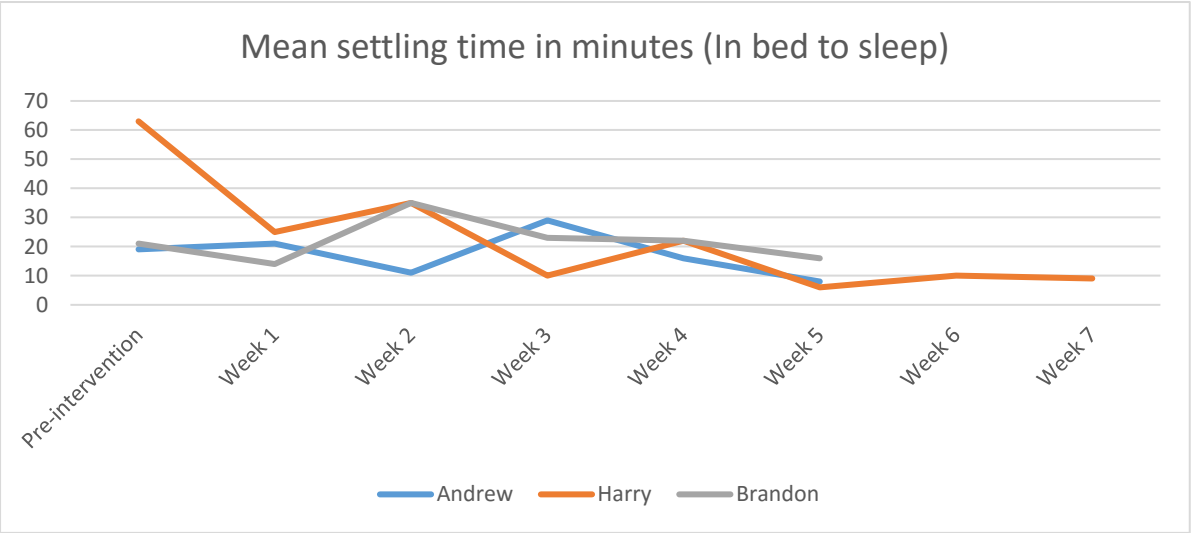

Figure 13. Mean settling time for all children throughout the intervention

Mean settling time for all children was quite erratic and there are a number of possible reasons for this. In some ways a better routine would be indicated by a reduction in settling time, although this is something which may come over time when the key areas of concern have been tackled.

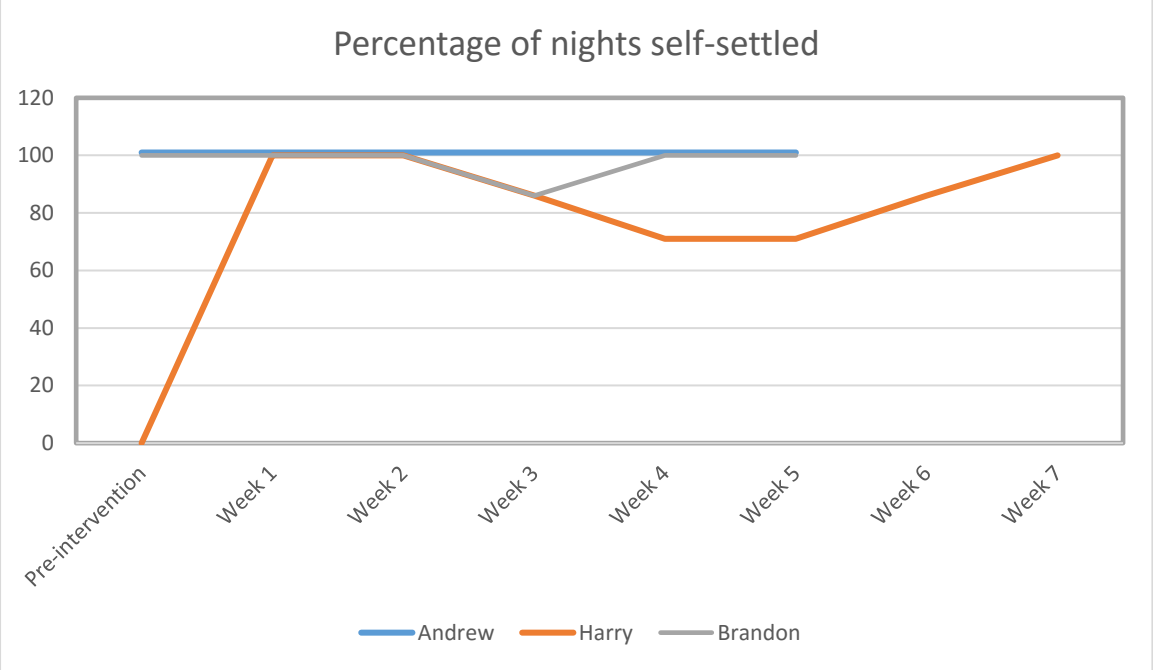

Figure 14. Percentage of bedtimes all children self-settled throughout the intervention

As can be seen from the figure 13, self-settling was not an issue for Andrew and Brandon. As the graph suggests (although again bearing in mind that I only had two nights of pre-intervention data), Harry began to self-settle immediately after the intervention and despite a few ups and downs this improvement was largely maintained.

4.3 Quantitative data to address the main research question and sub-question 2 – *How does the intervention impact on teacher reports of child behaviour?*

Results of the SBRS (Gardon, 2009) were included in an attempt to determine whether the intervention had an effect upon teacher reports of child behaviour and to contribute towards ascertaining the value and influence of the intervention. Quantitative analysis involved a comparison of pre- and post-intervention questionnaire results. The SBRS provides six subscale scores. These are: General Classroom Behaviour; General Playground Behaviour; Getting Along with Other Students; Development of Social Skills; Attempting Tasks Presented and Aggressive Behaviours.

Each subscale score is converted into a competence score. A higher score indicates a more desirable behaviour rating. The highest score possible for each subscale is 7.

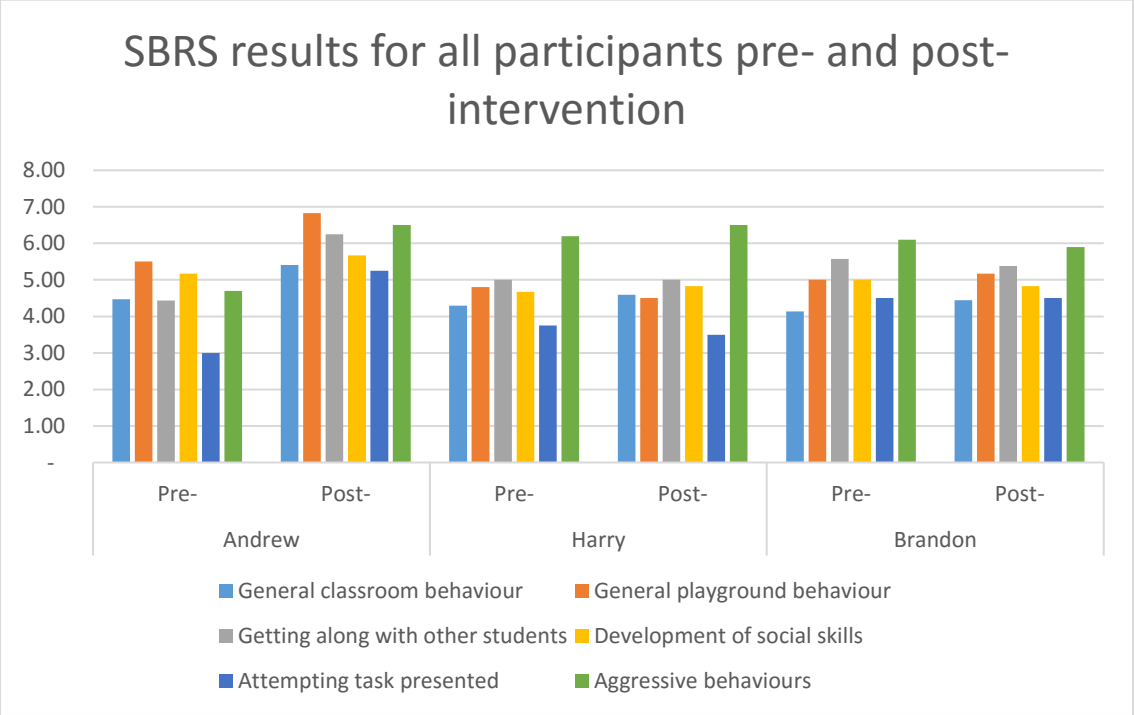

Figure 15. Pre-and post-intervention sub-scale competence scores according to teacher ratings of behaviour using the SBRS

Figure 14 illustrates that teacher ratings present a mixed picture. For a raw data table see appendix xxi. Andrew's ratings were made by two different teachers prior to and

following a summer holiday. Harry's ratings were made by the same teacher (Head of Foundation Stage) but were also made prior to and following a summer holiday. Brandon's ratings were made by the same teacher as part of the same school year. Ratings of Andrew's behaviour showed improvement in all areas. Teacher ratings of Harry's behaviour showed improvement in general classroom behaviour, development of social skills and aggressive behaviours; other sub-scales either stayed the same or reduced slightly. Ratings of Brandon's behaviour showed improvement in terms of general classroom behaviour and general playground behaviour but all other sub-scales either stayed the same or showed a slight deterioration. There are many potential reasons for this which are examined in Chapter Five. It is generally considered that SBRS data alone is insufficient in terms of its ability to answer sub-question two.

4.4 Analysis of qualitative data to address the main research question and sub-question three – *Do parents consider the intervention to be worthwhile?*

4.4.1 Thematic analysis of post-intervention interview data for sub-question three.

Although evidence to establish whether parents considered the intervention to be worthwhile comes predominantly from the post-intervention satisfaction questionnaires; there were a number of themes in the post-intervention interviews which also contribute towards answering this question:

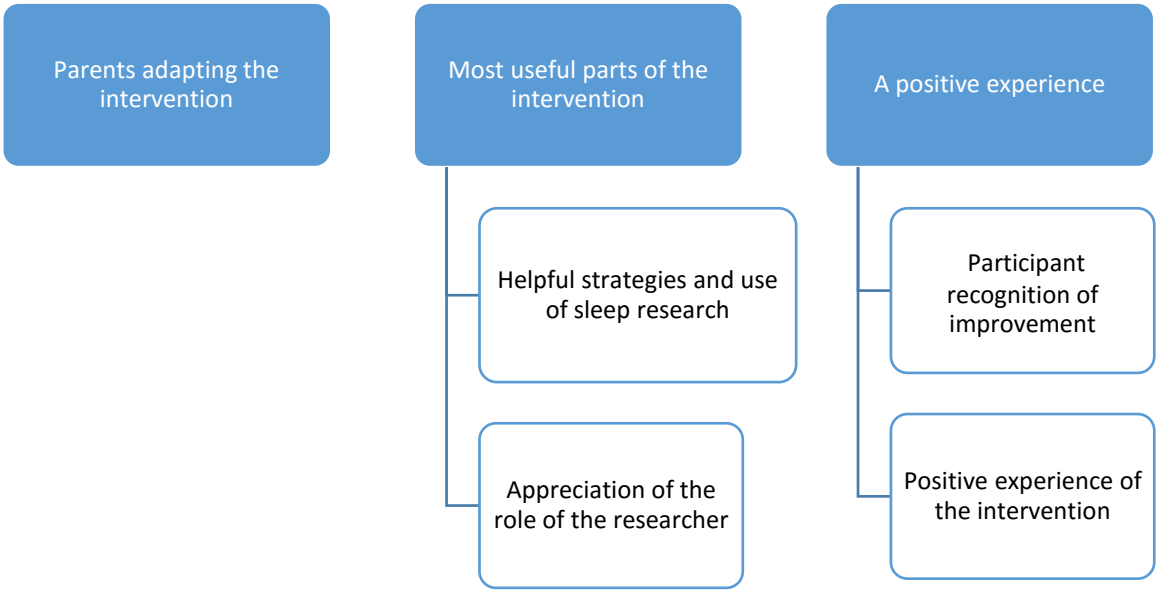

Figure 16. Identified themes and sub-themes from post-intervention interviews relating to the main research question and to sub-question three

Need to adapt the intervention

This arose as a theme because parents mentioned times when they had needed to make changes to the intervention. This is worth considering when assessing whether the intervention is worthwhile but is not necessarily negative. Alice pointed out the need to adapt some strategies to suit individuals and said that she had made slight changes to the advised use of the bedtime pass (pp.7/8). Eve also talked about how she adapted the use of rewards, explaining that she used the laminated superheroes and stickers rather than a small toy as a reward (pp.19). This information can be used to adapt the design of the intervention or to share with parents in the future.

Kate described adapting the actual plan:

> "*No, sometimes if we're running a bit late sometimes he'll take his milk up but then I take the bottle off him, but as long as it's empty he won't get no more in the night*" (KATE, pp.2)

This was technically not ideal but in terms of the improvement from allowing him milk in the night and staying with him whilst he fell asleep, it was considered unnecessary to pick up on this. Real life circumstances have to be acknowledged and respected. This is effectively summarised by Alice:

> *"But I think from my point of view it's taking on board the advice and strategies but working out how best to use them and if you do need to make any changes, to suit you, then you've got to find them"* (ALICE, pp.7).

Most useful parts of the Intervention

- ***Helpful strategies and use of sleep research***

Participants referred to various parts of the intervention which they found to be particularly helpful. Eve found keeping the sleep diaries very useful:

> "*I like having them around though, just to look at <chuckles> just so it reminds me, ah keep on the path thank you, don't deviate*". (EVE, pp.17)

It seems that, rather than just being a way of monitoring progress throughout the intervention, sleep diaries can be an important part of the change process.

Eve also found the section about pre-bedtime food helpful. When asked which bits of the intervention she found most useful she said:

> "*I think the snacks and stuff. Although it's quite an obvious thing*" (EVE, pp.11)

For Kate, the actual booklet was not as useful as the personal delivery of the advice.

Perhaps it is useful to take learning preferences into account when working with parents!

Alice and Kate found the information about sleep stages to be useful in terms of keeping things consistent throughout the night so that children are not roused from REM stages of sleep by the fact that something is different to when they went to sleep. Referring to keeping a dim light present through the night rather than turning it off:

> "*you said that to me and I've kind of stuck with it….if you change the way he's gone to sleep it does seem to upset his pattern*" (ALICE, pp.2)

Alice also found the worry box a useful strategy and planned to use it as part of her ongoing routine (pp.6).

- ***Appreciation of the role of the researcher***

In considering whether parents felt that the intervention was worthwhile, it is necessary to explore what it was that they valued. All parents expressed appreciation of the role of the researcher for various reasons. When asked what helped her to make the changes Eve said:

> "*I think it's you, 'cause I <chuckles> I want to do it for you so, well, not for you but –"* (EVE, pp.12)

Similarly, Kate said:

> *Yes, very helpful, because if I look at the booklet I think, well, how do I….? But with you coming out and speaking to people you get that friendliness and it helps because then if you……and approach if I've got any problems* (KATE, pp.7).

Parents seemed to appreciate the tangible presence of somebody offering support and monitoring their progress rather than being left alone with a booklet.

A positive experience

This theme has been addressed through pre- and post-intervention interview data in answering the main research question and sub-question one. However, in considering whether parents considered the intervention worthwhile, it is necessary to highlight their perception of how things have improved and whether they considered the experience to be a positive one.

- ***Participant recognition of improvement***

Numerous comments made by parents summarise the above theme and suggest that parents found the intervention to be worthwhile:

> "*Oh yeah, it's improved him loads, hasn't it*? (EVE, pp.18)

- ***Positive experience of the intervention***

> "*It's been absolutely fantastic*" (KATE, pp.10)
>
> " *your approach was very positive and empowering really cause it made me realise that I can do this and we will do this and this is going to be good if that makes sense*?" (EVE, pp.19)

When asked whether it was ok for me to use the interviews in my thesis Kate said:

> "*Yeah, that'd be great. Yeah, yeah feel free. It's helped you as much as you helped me*". (KATE, pp.10)

4.4.2 Post-Intervention satisfaction questionnaire data

NB. The researcher was present when all of the participants completed the questionnaire and this may have impacted on the results – see Chapter 5 for further discussion of this.

A copy of the post-intervention satisfaction questionnaire can be found in appendix x.

- All parents gave the intervention a maximum score of ten in terms of how much it had improved their children's sleep.
- All parents reported that they found the booklet helpful. For one parent it was the act of going through the booklet with me, for another it was the strategies outlined in the booklet and for another the diagram showing REM and non-REM sleep. This variation is interesting when considering how EPs can deliver sleep interventions.
- All parents reported an improvement in their child's behaviour following the intervention.
- All parents reported that their own sleep had improved. One parent added that this is because she is not as worried about him waking, another said that she had found the REM sleep patterns chart useful in terms of organising her own sleep in that it made her realise how important it was for her to go to sleep at a reasonable time and how important it was to avoid night-wakings.
- The things which parents found difficult according to this measure were making the change, getting a partner involved and leaving their child alone in the dark. These could be things for consideration in the design of future interventions and in work with parents in general.
- Only one parent felt that something could be improved and this was to do with getting their partner and siblings on board with the intervention. It was not

- implied that should this come from me but that it is an important element of success and would make the intervention easier to implement (see Chapter 5 for further discussion of this).
- All parents felt that they were involved in the planning of the intervention which is important as it was intended to be collaborative.
- All parents said that they would recommend and/or have recommended the intervention to other parents.

The results of the post-intervention questionnaire were resoundingly positive implying that parents did consider the intervention to be worthwhile. The questionnaire also provides some information which may be useful in the design and implementation of parent-based sleep interventions.

4.5.1 Thematic analysis of pre-intervention interview data for sub-question four- *What unique skills can EPs add to the delivery of a parent-based behavioural sleep intervention?*

Sub-question 4 looked at the unique contribution of EPs to parent-based sleep interventions. Themes in this section were, to some extent, influenced by strategies which I was consciously using such as asking questions or making comments using the principles of solution-focused therapy (SFT) or motivational interviewing.

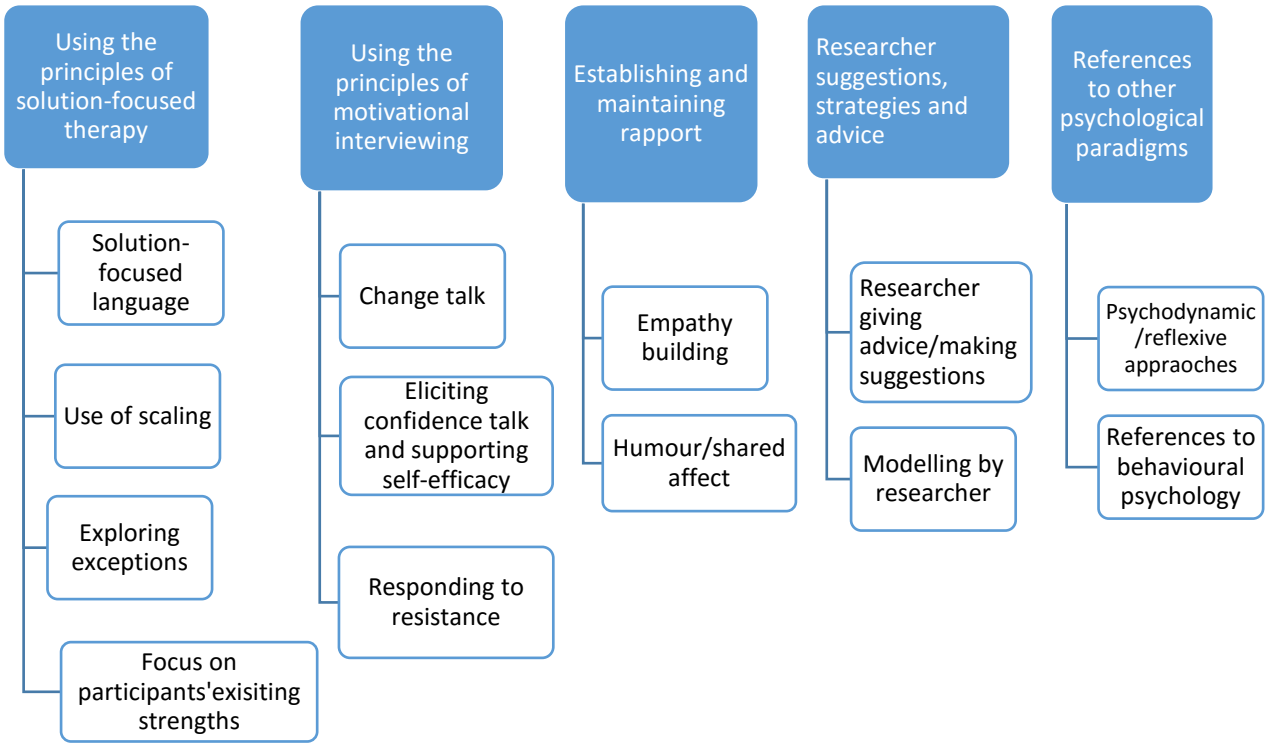

Figure 17. Identified themes and sub-themes from pre-intervention interviews relating to the main research question and to sub-question four

The five overarching themes identified were; using the principles of solution-focused therapy; using the principles of motivational interviewing; establishing and maintaining rapport; researcher suggestions; strategies and advice and references to other psychological paradigms.

Using the principles of solution-focused therapy

Whilst I considered that there was much to be gained from utilising some approaches taken from solution-focused therapy; I recognised that problem talk was unavoidable as I also wanted to get parental stories around sleep, and this would inevitably involve a discussion of previous and existing problems.

- ***Solution-focused language***

During the interview, there is evidence of language and phrases associated with SFT. This is something which has become a regular feature of my work as a TEP with both children and parents because of the responses which such talk elicits. I encouraged Eve to describe what she would notice about herself and her son if he were to have a full night's sleep:

> ***I:*** *"So what would it look like if the sleep problem stopped? How would that be? How would it be different in the morning? What would you notice?"*
>
> ***P:*** *"Oh, I think he'd be much more alert in the morning. He doesn't want to get up in the morning".* (EVE, pp.1)

The purpose of the above was to enable Eve to visualise an alternative future. Participants were also encouraged to outline their 'best hopes' for the intervention.

- ***Use of scaling***

Scaling was used with all three participants as a way of encouraging them to look at what was already working and for deciding what would be an acceptable improvement:

> **I:** **"***So if you would rate it on a scale of 1 to 10 where a 10 is perfect, sleep is fine, it's not a problem at all, what would it be at the minute*?"
>
> **P:** **"***He's about a 7 now*". (ALICE, pp.4)

This was really because, at this stage, Alice did not perceive Andrew coming into her bed as being a problem, nevertheless, it still enabled me to encourage her to talk about how this could be improved.

The exchange below with Eve provides an example of how scaling was used to move away from a general sense of negativity and hopelessness:

I: "*So, if it was on a scale of one to ten, what would you say at the minute?"*

P: "*I'd say it's probably a three, isn't it? It's bad, ain't it, really? Although it could be worse*".

I: "*So why is it a three and not a two or a one"*?

P: "*Because he does go to sleep by hisself and he's quite good"*

I: "*And what would you find acceptable out of ten, on a scale of one to ten, if he's a three to five at the moment"*?

P: "*I would like it if he would just … I'd be happy with a six if it was like once month waking up <chuckles>. I don't know if there's an answer. That's the thing. I don't know.*"

I: "*What does six look like if he was a six"*?

P: "*Just wake me up at five thirty in the morning and I'll just get up straight with him".*

I: "*Rather than waking you up in the night"*? (EVE, pp.7/8)

Kate rated her son's sleep as a five:

I: "*How come it's a five and not a four or a three*"?
P: "'*cause he will have the odd night where he'll go all the way through*" (KATE, pp.5)

This then opened up the possibility of exploring exceptions.

- ***Exploring exceptions***

I:	"*So what's different when dad's here do you think*"? (ALICE, pp.3)
I:	"*So there are times when you just put your foot down and you say 'Right you're going to sleep now'and that's it*"? (ALICE, pp.4)
I:	*So it's about … do you know what happens on those days when he sleeps through; is there anything different, can you think*? (KATE, pp.5)

These questions were used as a pathway to exploring self-efficacy and, in the initial stages, were useful in terms of moving the sleep difficulty away from being a 'child-centred' problem.

- ***Focus on existing strengths***

This is not exclusive to SFT but is a useful strategy in terms of moving participants away from problem talk and making the plan more collaborative.

I:	"…*But you have made some changes haven't you*"?
P:	"*Oh yes*" (ALICE, pp.15)
I:	"*So you can, you've done it quick..effectively*". (ALICE, pp.15)

<u>Establishing and maintaining rapport</u>

- ***Empathy building***

Empathy was demonstrated by showing understanding of the experience of parenting, reflective listening and agreement that things can be hard:

P: *"…… and he's said, 'Can I go and get in your bed?' and there are times when I have agreed to that. If it would mean he would be asleep, yes, I have agreed to that.*"

I: **"***I understand that".* (ALICE, pp.10)

I: **"***He's not one of those children who doesn't need so much sleep. It's more that he's worked out that he can… he knows what the rewards for him messing around are, that he will get to be with you and he'll get the comfort, which isn't a bad thing, it's nurturing, it's"* – (ALICE, pp13)

Although not done consciously, 'we' was used as opposed to 'you':

I: "*Yeah, OK. So **we'll** think about how **we** can deal with that*". (KATE,pp.6)

I: "*So, a lot of **our** focus just for this time while **we're** trying to get him sleeping through the night, will be on* … (EVE,pp.21)

Showing understanding and empathy for life experiences seemed to be an important part of establishing rapport.

I: "*Yeah, I bet that was terrifying, wasn't it?"* (KATE,pp.4)

I: "*Yeah, it's harder when you're on your own as well, isn't it, I think"*. (ALICE, pp.15)

At times it was also necessary to encourage parents to be kinder to themselves.

It was also useful, in terms of building rapport, to reinforce that fact that it is not possible to expect perfection:

I: **"***So the same thing, just try and keep it very calm and the same every night if you can, although I know it's not always possible*". (ALICE, pp.17)

- ***Humour/shared affect***

I think that this was a useful strategy in building rapport and establishing a relationship with parents. Again, this is something which I use as part of my normal casework as I feel that helps to make parents feel more comfortable and helps to even out any perceived power imbalance. Once this was established I was even able to use a degree of humour to broach contentious topics:

> **I:** "*The thing I'm gonna say to you <chuckles> is we need to get rid of the milk*".
> **P:** "*Yeah, we've got to".* (KATE, pp.12)

We talked around this issue for a while as I realised that this was a big change and wanted to make it feel like the decision was collaborative and by this time we had established rapport.

The principles of motivational interviewing

- ***Change talk***

Miller and Rollnick (2002) refer to the importance of change talk. The idea is that increased change talk is suggestive of greater commitment and thus increased likelihood of change. There were numerous examples of change talk during the pre-intervention interviews:

"*Shall we make that a job to do this afternoon*?" [remove toys from bedroom] (EVE, pp.25)

I: **"***But what you'd have to think is, at the end of it …*

P: *"It's gonna be a lot better"* (KATE, pp.5)

[note use of 'gonna' as opposed to 'might be' or 'should be'].

I: "*Yeah 'cause they don't need it, they don't physically need it".*

P: "*No they don't".*

I: "*In fact if anything, it's stopping them eating in the day*".

P: "*And I think, to be honest with you, that's what they're waking up for".*

I: "*Yeah, it is, yeah. I think so. I think you might be right".* (KATE, pp.25).

The above exchange with Kate refers to milk which started out being an area of resistance as it was considered to be an important comforter. I dealt with this very carefully until, at this point, it becomes part of Kate's change talk with her suggesting that this is the main reason why her son is waking in the night. Her change talk seemed to gain momentum from this point:

"*See, I'm quite a stubborn person so if I put my mind to it, I will do it*. (KATE, pp.33)

In contrast to Eve and Kate, the change talk from Alice was less frequent and generally had to be elicited by me which may suggest less intrinsic motivation for change:

"No, let's do it". (ALICE, pp.21)

- ***Eliciting confidence talk and supporting self-efficacy***

Miller and Rollnick (2002) view discussion of potential obstacles as a type of evocative questioning which can be used to support confidence and self-efficacy. As part of creating a change plan (Miller and Rollnick, 2002, pp.137), parents were asked to consider potential obstacles and think about how they could approach them:

I: **"***That's great. So that would be what you would do*?" (ALICE, pp.23)

I: **"***What else might happen; what might happen with the milk going?"*
P: "*He'll scream, have a tantrum*"<chuckles>.
I: "*So what will you do?"*
P: "*Just remind him of his reward if he doesn't have it and just give him water*". (KATE, pp.32)

I: "*Anything else; can you think of anything else that might go wrong*?"
P: "*I end up giving up*" <chuckles>.
I: "*What could you do*?"
P: "*Get straight back onto the routine again".*
I: *"Yeah, just try it again. And let him know that you mean it"*. (KATE, pp.32)

P: "*Yeah, that'll be the worse one, the too tired to not do anything about it*".
I: "*So what can you do to prevent that*?" <Chuckles> (EVE, pp.46)

Self-efficacy was also supported by encouraging parents to talk about examples where they have been successful and praising effective strategies:

"*I've done that in the past. I think I've just lost my tether and I just say, 'I'm just not talking to you. I'm going to take you back to bed again'*." [participant able to highlight that she has done this before for herself]
<Laughter>

"*Is that really awful*"?

I: "*No, that's brilliant, that's perfect*."(EVE pp36)

I: "*Right, OK. So it sounds like you've been pretty good at making some changes and seeing those through, with the naps and things"*. (KATE, pp.4)

- ***Responding to resistance***

How we respond to resistance is important, stating that a good general principle is 'to respond to resistance with non-resistance' (Miller and Rollnick, 2002, pp.100).

P: **"***No, we keep tea to the same time but I don't know whether that could affect on Sundays because actually … It could be lifestyle change needed*". [concern that the participant is seeing the potential changes as too big]

I: "*I don't think you need to change your weekend, it's just about preparing him, I think, more for that".* (EVE, pp.9)

P: "*But I'm struggling. I've been told, 'Oh, just dilute the juice and get 'em on …' But when you've got two screaming kids, it's hard*".

I: "*It is hard, yeah*".

P: "*And they will go on and go on and go on and in the end, you end up then just giving 'em milk because you've got a raging headache. And I'm not one of these that like giving in to 'em but sometimes I have no choice. Especially if it's the middle of the night, I can't have 'em waking everybody up".*

I: "*No, that's right. It takes between a week and ten days to break a habit*". (KATE, pp.5)

The above is an example of agreeing with a twist. This was preparation for broaching the subject of night-time drinks later in the intervention. It would have been non-productive to disagree here.

P: "*But I know then just to leave him quiet, ignore him. Say, 'Right go to sleep, Harry' and then he'll go off. But even though he's starting to relax, I still can't go out the room 'cause then he's up*".
I: "*Yeah, OK. We'll think about that in a sec*". (KATE, pp.7)

This was not the right time to make suggestions – I wanted to present Kate with the intervention and wait for the solutions to become more collaborative.

P: "*Then he'll come home from school and he'll be, 'Mmm', then by the afternoon, he's evil. And then by the time bedtime*…"

I: "*So he is a child who needs his sleep, isn't he*"?

P: "*Yeah, he needs sleep"*. (KATE, pp.18)

The conversation was starting to become negative again so rather than making suggestions at this stage I tried to go with that resistance by reframing it.

Kate was very resistant to the suggestion of a bath as part of the night-time routine as she thought that this makes him 'hyper' (this had been suggested to her by another professional towards whom she had a negative attitude). I reassured her that it was not necessary to introduce this to his routine.

I had the idea that it would be helpful for Andrew to speak to his father as part of the bedtime routine as this seemed to be a cause of anxiety for him:

> **P:** **"***I don't let him speak to [dad] very close to bedtime, we do it prior to six o'clock".*
>
> **I:** **"***Maybe at the beginning of that half-an-hour might be good"*.
>
> **P:** **"***That will spark him off 'cause then he'll realise that he's not here and he'll use that as… he will play up.*" (ALICE, pp.19)

Alice was very resistant to the idea that he should speak to his father before bed. I used this information to change tack and plan the routine without mention of Andrew's father. I tried several ways of creating cognitive dissonance in order to move Alice away from the initial ambivalence:

> **I:** **"***That's good. So then there's the impact on the family because obviously he's coming into your bed and it's not ideal long term, I mean I know it can be quite nice, especially if your husband's away – sometimes if my husband's away I like to have my kids in bed with me, it can be nice, can't it*"?
>
> **P:** **"***Yeah"*.
>
> **I:** **"***But in the long term it probably isn't ideal, is it"*?
>
> **P:** **"***No it's not*". (ALICE, pp.9)

Researcher suggestions, strategies and advice

- ***Researcher giving advice/making suggestions***

There was no advice-giving until the latter half of the first session. Time was taken to build rapport, gently begin to highlight cognitive dissonance and explore the nature of

the sleep difficulty so that the intervention could be adapted to the individual which Jin, Gregory and Beaulieu (2013) suggest is more 'socially valid' (pp.163). Some of the advice sounds quite directive and as such would not have worked well if delivered before a relationship had been established:

> **I:** **"***So if he goes to sleep with the nightlight on you need to leave it on or if he goes to sleep in the dark you need to leave it dark, it just needs to be the same that's all*".
>
> **P:** **"***OK"*. (ALICE, pp.29)
>
> **I:** "*So you'd be better off with this one, which is a graded step so gradually getting out of the … so your goal is to distance yourself gradually"* (KATE, pp.18).

Advice giving was often interspersed with recognition of existing positives to support self-efficacy:

> **I:** "*So night wakings. If he wakes up, don't make … you sound like you do this anyway actually, to be honest, Kate. Don't make eye contact, don't get into a conversation, keep the lights dim, straight back into bed"*. (KATE, pp.25)
>
> **I:** "*So, a lot of our focus just for this time while we're trying to get him sleeping through the night, will be on … you've got a good routine anyway in that he goes to bed but a very, very rigid routine as much as you can…*" (EVE, pp.21)

- ***Modelling by the researcher***

This was a technique which was generally used during the creation of a plan once a strategy or phrase had been agreed. It was intended to help participants to imagine how it would go almost like a rehearsal:

I: "*So when he comes back into your bed, take straight back, re-settle, say goodnight but try and… and this is the hardest bit, isn't it, try and not do the cuddling and he'll say to you, 'But mummy I'm really scared and I'm worried.' 'OK, but you are really safe here, night, night.' So it's just not getting into that conversation and they're absolute experts at it, aren't they?.....So you have a specified time. And we use the bedtime pass if we need to, so obviously don't shout, don't get angry, keep yourself quite like a robot, 'OK, night, night you're really safe, nighty night'* ". (ALICE, pp.19)

I: *"Just explain. He can accept it, he's old enough … 'None of your friends, Harry, have a bottle in the night. You can have some water before you go to bed or you can have a nice big bottle of milk before you go to bed, then go for a wee. And then you don't need your milk in the night and then Spiderman will be there and you can have milk in the morning*." (KATE, pp.29)

Although this sounds a little didactic, because I had taken time to build up a relationship and provide information about sleep, the participant doesn't feel defensive as she may have done if I'd said this earlier in the intervention.

Eve was able to pick up on this modelling and add to it:

I: "*And, you know, explain it to him while he's awake. So you won't be kind to him in the night but you can be really nice to him while you're explaining.*
<Laughter>
'You're a big boy,' you know, 'and I'm really proud of you."'

P: "'*You don't need Mummy's bed anymore*.'"

I: "*That's it*". (EVE, pp.34)

Reference to other psychological paradigms

- ***Psychodynamic/reflexive approaches***

It may be argued that psychodynamic approaches do not have a place alongside a solution-focused approach. I did not want to be tied to a particular paradigm as I wanted to maintain a degree of flexibility. I found that varying my approach worked well and that I was able to be guided by the parent's response:

Kate described in detail a very painful experience when Harry was very ill and almost died. I wondered whether this played a role in the fact that Harry was the only one of her three children with a sleep problem:

I:	"*I wonder whether, without even thinking about it, you've become quite protective of him*.
P:	"*Probably why I … I don't like seeing … if he gets too upset that he's coughing and that, that scares me and obviously this weather can affect his breathing as well. So I think maybe as well, I've done it as peace of mind that he's asleep, he's safe"*.
I:	"*Yeah, yeah that's right*".
P:	"*Like you say, probably subconsciously, not even thinking about it, I'm frustrated thinking, 'Oh he won't go to sleep on his own' but maybe subconsciously, I'm thinking, 'Well …*'"
I:	"*You want to be there"*.
P:	"*So I've sort of put off trying to do it even because I know he's safe. Maybe subconsciously, you're right"*.
I:	"*Yeah, yeah. Which is worth thinking about and it's totally understandable, totally understandable*". (KATE, pp.16)

This felt like quite an important moment for Kate and I think it allowed her to think more hopefully about why her previous attempts to solve the problem had failed.

I mentioned something similar during my discussion with Eve, at first she did not comment but later mentioned it. Eve was asking me why one of her sons was a good sleeper and the other struggled:

I: "*I think it's a mixture of personality. It might be subconsciously how you've treated him because maybe you knew he was your last baby. I'm not saying you did but it could be any of these things.* (EVE, pp.32)

P: "*I did breastfeed for far too long I think, really, but I think that was more me because I didn't want to lose my baby, like you were saying earlier".* (EVE, pp.37)

- ***References to behavioural psychology***

Use of behavioural psychology to bring about change is a big part of sleep interventions and so this was a clear theme and it was helpful to help parents to understand behaviour in terms of beginning to avoid reinforcing unwanted behaviours:

I: "*…..so as well as taking away the reinforcers for the behaviour we don't want, which is you giving him cuddles and security in your bed, we'll be reinforcing the good behaviour with positive reinforcement*" (ALICE, pp.16)

I: "*So what we're gonna do is we're gonna be taking away the things that reinforce the behaviour we don't want, which is milk and you <chuckles>. And then we're gonna be reinforcing the behaviour that we do want, which is sleeping all through the night and staying in his bed".* (KATE, pp.18)

I: "*It would be about giving him control. So it's going to be a mixture when we do it, of not rewarding the things that we don't want, as in the night-time waking, but rewarding the behaviour that we do want*". (EVE, pp.31)

4.5.2 Thematic analysis of post-intervention interview data for sub-question four.

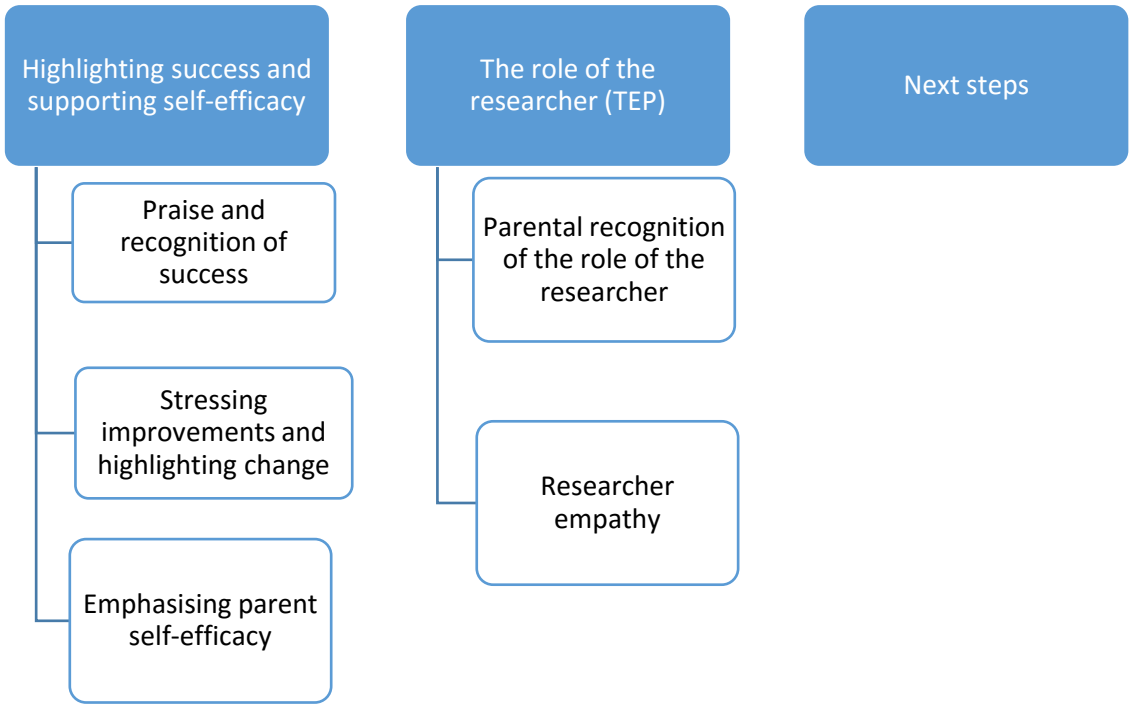

Figure 18. Identified themes and sub-themes from post-intervention interviews relating to the main research question and sub-question four

Highlighting success and supporting self-efficacy

- ***Praise and recognition of success***

In the post-intervention interview, there are numerous examples of where I simply praised parents for the successes which they described. This may seem obvious but, as Miller and Rollnick (2002) stress, 'focusing on their successful activity, reaffirming their decisions and helping clients make intrinsic attributions of success…. can bolster clients' self-efficacy evaluations' (pp. 212):

I:	**"***Oh, you are so good at organising this…"* (EVE, pp.4). [confidence building]

- ***Stressing improvement and highlighting change***

Again this is linked to supporting self-efficacy and thereby increasing the chances of long-term success:

I: "*..you got good sleep*"

P: "*Yeah it was great"*! (EVE, pp.5)

P: "*but I don't know, somehow I've lost my… authority with them I suppose, in a way I think*"

I: **"***I think you're being a bit hard on yourself*".

P: **"***Yeah, maybe*".

I: **"***But I think if you feel that you're more in control then that's a positive thing*".

P: **"***Yeah, it is, it's a good thing*". (EVE, pp.10) [reframing to support self-efficacy]

I: ***"- it will be ongoing, won't it"***?

P: **"***Yeah, and he seems to be settling a little bit better now*"

(ALICE, pp.1/2)

- ***Emphasising parent self-efficacy***

This was given a sub-theme of its own despite the fact that all of the sub-themes in this main theme are geared towards supporting self-efficacy; the examples below show the researcher (TEP) overtly highlighting participants' self-efficacy in a number of ways. One of the key strategies here was asking parents *how* they had made the changes.

This shifted them from being in the role of a parent seeking help to the role of an expert; in a position to help other parents:

> **I:** "*You were willing to make the changes straightaway, weren't you*"?
> **P:** **"***Yeah, yeah*".
> **I:** **"***You put it into action straightaway so you're very motivated*". (EVE, pp.12)

> **I:** "*Aw, you'll be the resident sleep expert now, won't you*" [with the other mums]? <Laughter> (EVE, pp.18)
>
> **I:** "*That's good, so he knows, you've changed his expectation, haven't you, I suppose"*.
>
> **P:** "*He knows he's not having milk at bed*".
>
> **I:** *"Fantastic*" (KATE, pp.9)

The role of the researcher (TEP)

- ***Parental recognition of the role of the researcher***

This sub-theme covers references to the actual role and style of the researcher (TEP) made by parents. This is important in terms of establishing the unique skills which EPs and TEPs can add to a parent-based sleep intervention because many of the things mentioned suggest strategies which are covered as part of EP training courses and are mentioned in both motivational interviewing and solution-focused therapy literature such as empathising and solving problems collaboratively:

P: [I had to get Eve to repeat this as she said it when I had stopped recording] "*God oh yeah you didn't tell me what to do, it's the way you worded it..structured your sentences so that I felt that it was…oh god I can't remember what I said…that it was…yeah we were talking about this weren't we? The way you approached the wording of change was very subtle and effective and if I'd h'gone…if somebody'd come up to me and said "you need to do this and you need to do that and you need too…and this won't work if you don't"…that would be negative… your approach was very positive and empowering really cause it made me realise that I can do this and we will do this and this is going to be good if that makes sense?"* (EVE, pp19)

When asked what advice she would give to other parents Eve said: **"***Phone you <laughs>! I already said to one [other parent] that you need this girl, she'll help you out".* (EVE, pp.12/13)

It also seemed that maintaining contact throughout the process of change was important to Kate:

P: *I just remembered what* ***we*** *said and I tried to stick to it the best I can*". [*Echoing my use of we in the pre-intervention interviews – this emphasises the collaborative nature of the intervention]* (KATE, pp.7)

I: **"***Brilliant. What were the most helpful bits*"?

P: **"***All of it really because obviously the advice you give, the way you've said to do it so all of it really…"* (KATE, pp.7)

Conversely, Alice suggested that it was more about '*taking on board the advice and strategies'* (pp.7) from the intervention, utilising and adapting as needed, as opposed to the role of the researcher.

- ***Researcher empathy***

In many ways it was easy for me to empathise with parents because I have two young children and have personal experience of sleep problems; I purposely avoided talking about my own children as far as possible but I do think that this genuine empathy helped.

> **P:** **"***No, it's just absolutely… you know as a parent you get shattered, don't you, you don't think straight*".
>
> **I:** **"***No, that's right*".
>
> **P:** **"***And when it's at home it's different because it's your home, it's your family*.."
>
> **I:** **"***Yeah, it totally makes sense*". (EVE, pp13)

Alice reflected on how the sleep difficulty began; this in itself is enough in terms of preparing her for the future so what I thought that she needed here was a little empathy and kindness to avoid her placing any blame or guilt upon herself:

> **P:** **"***….I think I should've just nipped it far sooner than*" –
> **I:** **"***But that is what you're doing now though, isn't it, and it's easy to say that but really at the time you just think, well, it won't hurt for one night*".
> **P:** **"***That's it, that's it"*.
> **I:** **"***You can see how it's happened*".
> **P:** **"***Yeah, yeah you can. Sometimes you just do anything to sleep as a parent"* <laughs>.
> **I:** **"***Yes, of course, you've got to survive, haven't you*"?
> (ALICE, pp.8)

<u>Next steps</u>

During the post-intervention interview participants were encouraged to think about any ongoing or future problems:

I: **"***So I think the only thing to get rid of that one last wake up might be to, like I said, phase out the juice because if you think about it he's still getting rewarded, in a way, for waking up because juice is a reward really. If you can phase that out really gradually and make it weaker and weaker until it's basically water and then he won't bother for it probably*". (KATE, pp.4)

I: **"***The odd nights. Can we see a pattern to that, is it getting cold, is it when something's happened that's out of the normal routine*"? (EVE, pp.7)

4.5.3 Thematic analysis of the reflective research diary to address sub-question four

A reflective research diary was kept throughout the entire research process. The parts of the research diary reflecting on work with parents were subjected to thematic analysis using the same methods described in section 4.1.

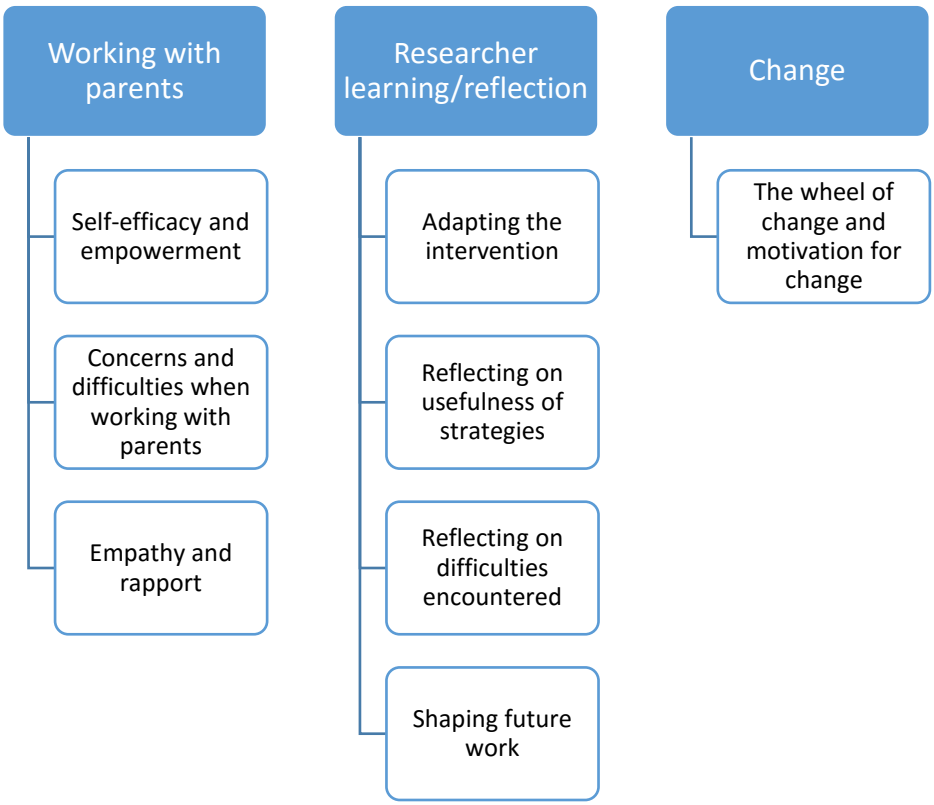

Figure 19. Identified themes and sub-themes from the researcher reflective diary relating to the main research question and to sub-question four

Five over-arching themes were identified: working with parents; researcher learning/reflection and change. The themes and sub-themes are explicated below:

Working with Parents

This was a major theme of the entire research; the experience of working with parents.

- ***Self-efficacy and empowerment***

This theme has arisen at various points of data analysis. It was referred to in the reflective research diary a number of times. The research diary details how this developed from an awareness that this was a useful approach to the realisation that it was actually an important part of the intervention itself:

> *'tried to remind her of her strengths and successes' p2*
>
> *'MI [motivational interviewing] strategies of affirmation and praise worked really well' p3*
>
> *'by affirming, using praise and highlighting her own effective strategies and characteristics she changed throughout the conversation' p3/4*
>
> *'it felt quite empowering for her' p4*

There was recognition of the fact that this can be a part of making the intervention collaborative:

> *'..it needs to be collaborative and I think a way to do this is to listen to the parent – reflective, affirming – offer the information – facilitate understanding of how this can fit in with some changes' p6*
>
> *'she said that she found going through the booklet with me and drawing up the plan together was important – useful knowledge for the future of the intervention – focus on collaborative' p16*

- ***Concerns and difficulties when working with parents***

The diary outlined a number of my worries through the process of working with parents. It was helpful to look back at and reflect on these as part of the ongoing process:

> '*I hope that she did not feel under pressure or criticised'* p1
>
> '*At some points in going through information, I had to disagree with her'* p1
>
> '*there were a few contradictions in statement about sleep – roll with the resistance – felt that this was part of defending some of her choices'* p2
>
> '*at the start I felt that [participant] was sceptical and doubted her own abilities as well as those of others to help her'* p3

- ***Empathy and rapport***

This is another theme which has arisen throughout the research and again it is something which developed from being a part of my general approach in working as a TEP and which fits in with the principles of solution-focused therapy/motivational interviewing to being something which formed an integral part of the intervention:

> '*thought that we built up good rapport which I have found to be key to the intervention'* p19
>
> '*I didn't feel that my approach was patronising and perhaps part of that was my genuine admiration for both parents. Both were willing to admit their fearfulness and to describe their situations with honesty and to consider the factors which may have been involved in the development of the sleep problem*' p6

Researcher Learning/reflection

Part of the role of an EP involves constantly learning from experience and this is assisted by reflecting on these experiences. Working with parents provided many opportunities to learn and to reflect.

- ***Adapting the intervention***

A number of adaptations were made to the intervention in light of what I had learned following my reflections on my own delivery:

> '*I decided to dispense with PowerPoint which I felt was a bit clumsy – it was much easier going through the printed slides and going through the booklet in detail*' p4
>
> '*I was able to refer to some other cases as examples I found this helpful – also helpful for Eve to know that she is not facing such a large battle as [her child] already self-settles and this is very important'* p19

- ***Reflecting on the usefulness of strategies***

> '*didn't feel I used scaling very effectively'* [Case: ALICE] p2
>
> '*scaling this time was quite useful…. Gave her time to think about some exceptions to the problem'* p3
>
> '*SF does not recommend looking back, however I think our conversation about Harry's past illnesses was useful, Kate was quite upset when talking about Harry's febrile convulsion and described the incident in detail'* p4

I reflected on creating cognitive dissonance as a strategy for increasing motivation to make some changes:

> '*highlighted/created cognitive dissonance during the initial interview - Milk habit/nurturing/anxiety over Harry's health v's need to get sleep! This dissonance already existed but the booklet and the interview helped to make this overt'* p16
>
> '*used this with Eve, talked about how easy/nice it is to cuddle and know that he'll go back to sleep in her bed and how hard it is to get up and return him and how cute it was when he fell asleep on the landing – I tried to gently juxtapose this with what her aims were and with her acceptance of the value (for her and Brandon) of sleeping through the night'* p 20

- ***Reflecting on difficulties***

I found it helpful to reflect on the difficulties experienced as I went along as this information could be used to inform ongoing practice. Some of these concerns addressed in the discussion section:

> '*I was worried that I sounded a little didactic'* p2
>
> '*at one point I heard myself talk when I don't think that Kate had finished speaking – I checked this and returned to what she was saying – it's quite hard when you have the information and advice to impart not to interrupt or contradict but this is a necessary part of encouraging the parent to have control – it needs to be collaborative'* p5
>
> '*is it too relationship dependent? Have I put more into building relationships and emphasising my availability because it is my research*? P16
>
> '*Kate said that she would like to stay in touch – again this made me reflect on the intensity of our relationship and the role which this plays in the intervention*'p16
>
> *'Eve then returned to this later in the conversation - did I control this as a theme*?' p19

- ***Shaping future work***

This was a large sub-theme as a lot of the coded data extracts belonged in this sub-theme. Shaping future work refers to ongoing delivery of parent-based sleep education and also to future EP work with parents:

> '*this is the value of working individually rather than in a workshop – it was an opportunity to tease out the unique factors of the family situation'* p2
>
> '*feeling very positive about this case and think it could be useful to apply strategies from this to other cases*' p7
>
> *'have realised that I don't need to rigidly stick to same amount of support for each parent as they have different needs and this has to be intuitive to a certain extent- does this mess with case study protocol*?' p9
>
> '*the most important part seems to be the initial discussion/the education after that it is probably knowing that somebody is there*' p10

Feedback from parents is also reflected on in terms of ongoing development of the intervention:

> '*she described how she had developed a routine for completing the diaries and felt that this was important for the intervention*' p15
>
> '*now that this is my fourth case I feel more confident about working with parents to talk about sleep – find it helpful to explain in terms of behavioural psychology – rewarding the behaviour we do want and not rewarding the behaviour we don't want'* p.18
>
> '*I think it's appropriate to be guided a little by instinct and the flow of discussion in terms of which strategies to use'* p4

Change

- ***The Wheel of Change and motivation for change***

Awareness of change and of supporting change became a large part of the intervention. I had planned for this and this was why I had decided to use the principles of motivational interviewing but it was still useful to reflect on this as part of the ongoing process:

> '*….felt right to deliver intervention following discussion to capitalise on willingness to change*' (p.1)
>
> '*there was quite a lot of change talk especially towards the end – we looked at the wheel of change and I think that this was useful – it linked well to our discussion of things which might go wrong*' p4
>
> '*Eve professed a desire to change we talked about change motivation and the wheel of change – deciding where she was and discussing the importance of getting back to it after relapse*' p20
>
> '*found it helpful to refer directly to change – are you ready? Quite a light-hearted question but encourages the parent to articulate (reminder to self about Bruner quote about words shaping real worlds*) p6

4.6 Ten-week check

All participants were contacted approximately ten weeks after the intervention ended by telephone or email. This was done to check that there had been no major problems and that the results had been maintained. These calls were not recorded and were not subjected to analysis. All parents said that things were going well on the whole and that they did not need any further support.

4.7 Summary of the results

Quantitative and qualitative data were gathered to address the main research question 'What is the impact of a TEP-delivered parent-based sleep intervention? and four research sub-questions. Evidence from all sub-questions is designed to contribute towards answering the main research question. A brief overview of the results is provided.

1. How does the intervention change parent stories around sleep and reports of child sleep levels?

Analysis of the pre-and post-CSHQ results showed an improvement in parent reports of child sleep levels following the intervention. Analysis of sleep diaries throughout the intervention indicated improvement to various aspects of child sleep over time although this was by no means linear.

Thematic analysis of qualitative data showed that parents perceived there to be improvements to sleep following the intervention. Having put the intervention into practice there was much less talk about problems around sleep, parents talked about change and were able to reflect on the process of change.

2. How does the intervention impact on teacher reports of behaviour?

Quantitative data of teacher ratings of child behaviour pre- and post-intervention showed a slight improvement for all children in terms of the sub-scales of general classroom behaviour. Andrew's teacher rated him as having made improvements in all areas of behaviour but for Harry and Brandon it was more mixed with some post-intervention scores showing slightly less positive behaviour ratings. It is not possible to use this data to draw conclusions regarding how the intervention impacted on

teacher reports of behaviour as changes were mixed, relatively small and subject to a large number of variables which may account for any changes.

3. Do parents consider the intervention to be worthwhile?

Thematic analysis of post-intervention interviews suggests that parents did find the intervention worthwhile as there was an acknowledgement of improvement to child sleep, recognition of helpful strategies and appreciation of the role of the researcher. The post-intervention satisfaction questionnaire results were emphatically positive suggesting that parents valued the intervention and that they would recommend it to other parents experiencing similar difficulties

4. What unique skills can EPs add to the delivery of a parent-based behavioural sleep intervention?

Thematic analysis of both pre- and post-intervention interview data was revealing about the type of skills, strategies, theory and techniques which were used during delivery of the intervention. In some ways the themes were guided by theory, particularly solution-focused therapy and motivational interviewing. This seemed to be an overt feature of the pre-intervention session, possibly because this incorporated the actual intervention. In the post-intervention interview there was more of a focus on strategies common to many approaches designed to guide work around change such as empathy and supporting self-efficacy. It is possible that the experience which TEPs and EPs have of working with parents in this way makes them well placed to deliver interventions which support change. Thematic analysis of the research diary also highlighted the significance of such skills. The act of reflecting on the delivery of the

intervention throughout contributed towards its ongoing development in action as well providing information which will be useful for future work with parents.

Answering the main research question

The summary of analyses described above contributes towards evaluating the value and influence of the intervention. It can be concluded that parents viewed the intervention positively, considered it to be worthwhile and perceived there to be improvements to both their own sleep and that of their child. In this way, the results support existing literature which demonstrates the value of parent-based sleep education. It is difficult to draw any conclusions regarding teacher perception of improvements to child behaviour following the intervention for reasons considered above and in Chapter 5. The research highlights numerous skills and strategies used in the delivery of the intervention which may reasonably be considered to be part of an EP's 'toolbox'.

Chapter 5 – Discussion

5.1 Introduction

The aim of the study was to carry out a mixed methods exploratory evaluation to examine the value and influence of a TEP delivered parent-based sleep intervention. This research generated a quantity of complex data used to answer each of the four sub questions relating to the main research question (fig.5). In order to coherently consider the findings from this research, I will discuss the data relating to each research question individually. The chapter will then be summarised by drawing the findings together to answer the main research question.

The objective of the present research was always to investigate impact rather than attempt to make causal claims. The fundamental intention was to 'improve, not prove' (Stufflebeam, 2001); there is no aim to generalise to other populations. This chapter will discuss findings and implications of the research within the context of both the research questions and the literature review. Methodological limitations of the research will be examined as well as implications for EPs and TEPs undertaking similar work with parents. There will also be consideration of the potential for further research.

5.2 Main research question – What is the value and influence of a TEP-delivered parent-based sleep intervention?

Sub-question one– *How does the intervention change parent stories around sleep and reports of child sleep levels?*

5.2.1 Qualitative findings

The qualitative findings detailed in section four (fig.6/7) to address the main research question and sub-question one include thematic analysis of pre- and post-intervention data. The overarching themes of the pre-intervention interviews (fig. 6) are: parental concerns around sleep; the impact of the child sleep difficulty on the parent (main caregiver); existing behaviours and habits contributing to the sleep difficulty; external factors contributing to the sleep difficulty and readiness for change. Interestingly, the results of the thematic analysis corroborate with research detailed in the literature review in terms of the impact on parents. (Sadeh et al., 2010; Smaldone et al., 2009; Quine, 1993; Richman, 1981). All parents described how the sleep difficulty impacted on their lives and that of their family.

Themes from the pre-intervention interviews focused on the sleep issue and the impact of the sleep issue, factors contributing to the difficulty as well as readiness for change. It was important to the research that parents were able to articulate their main concerns so that we could collaboratively plan for change. All participants described the regularity of the sleep problem and how lack of sleep impacted on their child's behaviour. Parents described in detail how the child sleep difficulty affected them. This was an important part of the intervention because I wanted to access parent stories around sleep and wanted them to articulate these difficulties in order to strengthen motivation for change.

Bell and Belsky (2008) attempted to explore the reciprocal effects of sleep issues, predicting that whilst family stress may cause sleep problems, the sleep problem itself can have an impact on the family though recognising that 'the direction of effects cannot be separated' (pp.591). Several parents in the present study alluded to this 'problematic cycle' (Bell and Belsky, 2008, pp.591). Parents also described numerous ways in which the child sleep difficulties impacted on their own wellbeing and their ability to lead a 'normal' life. I think that this is important as articulating these difficulties rather than accepting them as being part of parenting can strengthen motivation for change.

It is difficult to unpick some of the issues described in relation to co-parenting in that it is hard to ascertain whether they are simply a normal part of co-habiting and family life. Are co-parenting disagreements exacerbated by the sleep issue or does the sleep issue compound them? This suggests that there may be value in both parents attending delivery of the intervention although this would increase logistical and organisational difficulties.

The intervention was initially planned to be a workshop. For various reasons related to acquiring participants, time constraints and the geographical location of participants, this became impossible. It therefore made sense to deliver the intervention immediately after the initial interview. This meant that the two could not be differentiated, as the intervention was guided by information provided by participants as part of the pre-intervention interview. Parents started to show evidence of preparation and motivation for change throughout this first session; there were various

examples of ‘change talk’ (Miller and Rollnick, 2002) as well as parental realisation of behaviours which acted as reinforcers for the sleep difficulty. There has been, however, acknowledgement that motivation for change was not as strong for all participants. Alice showed more signs of ambivalence, but did assert that she was ready to make some changes. Interestingly, this case saw the smallest sleep improvement in terms of pre- and post-intervention CSHQ scores perhaps suggesting that amount of change talk at this stage is linked to degree of change. It is not possible to draw such conclusions given the present sample size but this may provide an interesting area of future study.

Qualitative data from the post-intervention interviews also contributes towards addressing the main research question and research question one. Thematic analysis of this data concluded three overarching themes (figure 7). These are: change and the process of change; setbacks, roadblocks and difficulties, and experience of the intervention.

Change and the process of change

In attempting to examine the value and influence of the intervention, change became a key theme. As previously mentioned, emerging change and motivation for change were a feature of the pre-intervention interviews. The changes described in this overarching theme, however, relate to participants’ experience of having put the intervention into place. All participants reported improvements to child sleep, though Alice was more tentative. Parents seemed to describe changes to themselves with more certainty, pleasure and insight. Alice referred to being ‘a lot calmer’ (pp.6) with

her son following the intervention. This is a change from the beginning when Alice described how she would become '*shouty*' and this would '*inflame the situation*' (pp.2). This provides evidence which suggests the value of the intervention and bodes well for the future, even if only because she is more aware of this.

Parents were encouraged to reflect on the process of change and this was a sub-theme arising from the data. Some interesting points were raised such as the observation that when people are directly involved in a situation it is not always possible to see how to change things but that doing the intervention '*makes it obvious*' (Eve, pp.13). The idea that logic becomes clouded by being 'inside' the situation is worth consideration; not just in terms of sleep education but in terms of parenting programmes in general. If parents feel this way they are less likely to see the approach as something condescending or patronising.

Setbacks and difficulties

Discussion of problems experienced during the intervention is part of the ongoing process of change; overnight perfection cannot be expected and so it is useful to explore such issues in terms of what has been learned already. Participants described incidents where things had not gone to plan, but they were able to change something and get back on track. This is a change from the pre-intervention interview stories which were focused on the child and the sleep problem. Participants' acknowledgement of their ability to deal with setbacks is important as it is key to long-term change and highlighting this reinforces self-efficacy. Eve considered how the

intervention had prepared her in terms of being able to avoid future problems stating that '*by doing this…. I'll be aware of it*' (Eve, pp.17)

Experience of the intervention

A sub-theme here was finding the motivation for change. All participants had volunteered for the intervention which may indicate a willingness to change, although it is possible that prior to the intervention parents saw the problem as 'within child' to a degree. The themes of both interviews differed in that post-intervention interviews were generally more confident, including descriptions of positive change and further reflection on change itself. It did seem that participants who used more 'change talk' in the pre-intervention interviews (Eve and Kate) described more positive improvements in the post-intervention interviews. This was also backed up by the improvements to sleep suggested by the CSHQ data.

It is not, however, possible to pinpoint accurately where all of the realisations and changes occurred; whether it was a process which began in the initial session or whether by doing the intervention things gradually started to fall into place. Alice certainly described it as more of an ongoing process of "taking on board the advice and strategies but working out how best to use them" (Alice, pp.7).

Parents were able to critically describe practical strategies provided by the intervention. Opinions about the most useful elements varied; most parents used and had success with the bedtime pass, supporting the findings of Moore et al. (2007) that

parents find this to be an effective strategy. However, this was only considered useful as a short-term measure because of the rewards required. Behavioural strategies are often a key feature of interventions described in the literature review but, whilst these seem to be helpful to a certain extent, they are only a small part of what made the present intervention valuable. Eve found it particularly helpful to use the sleep diaries because 'it helps you paint the bigger picture' (Eve, pp.12) and intended to maintain this habit in the future. This is useful information for the design of future interventions.

5.2.2 Quantitative data to answer the main research question and sub-question one

5.2.2a CSHQ data

This provided pre- and post-intervention quantitative information about parent reports of the sleep difficulty. All parents described improved levels of sleep in terms of total CSHQ score. The biggest improvements were seen by Eve (fig.8). Although change talk was not explicitly measured as this was considered to be a rather subjective, arbitrary measure, Eve did seem to be the participant who indicated motivation for change and reflected on change the most (see section 4.2 and appendix xx). It is interesting to look at the changes of the sub-scale scores of the CSHQ and reflect on these in light of the child's main sleep difficulty. Kate reported quite a large improvement in bedtime resistance which was considered to be the main problem. All of Harry's sub-scales showed some improvement except for night wakings, which is interesting as this was an area of concern, the intervention was designed to address this and the sleep diary data (see below) did indicate a slight improvement in this. It may be that when completing the post-intervention CSHQ, Kate had not recalled the information as accurately as it was presented in the sleep diaries. Accuracy of recall

may be improved by encouraging parents to look through their sleep diaries as they complete this measure.

The largest area of improvement to Andrew's sleep according to Alice was sleep duration and night wakings. These were areas of initial concern but so was anxiety which remained unchanged. This was also reported in the post-intervention interviews although Alice professed an intention to continue to use the worry box (see glossary – appendix i) in an attempt to address this. Eve's CSHQ ratings indicated the biggest improvement, particularly for night wakings (the main issue) and for daytime sleepiness which would presumably be affected by fewer night wakings. Eve was very positive about the intervention and was committed to it throughout; it is possible that her enthusiasm, or perhaps her self-confessed desire to want to please me, is reflected in these results. Interestingly, there was a six-point improvement in the score for parasomnias which was not explicitly mentioned, however, things like restlessness, teeth grinding and talking in the night were given a much lower score which may simply have been due to the fact that night waking reduced and therefore Eve remained asleep and was not observing these behaviours! This illustrates one of the difficulties with using only parental measures of child sleep.

5.2.2b Sleep diary data

There are a number of problems with this measure despite which it is still considered to be a valuable source of data. Firstly, the completion of sleep diaries involves a high level of commitment from the parent which can be a lot to ask, particularly when parents are busy, tired and have numerous children to attend to. The one participant

who was eventually excluded from the research for various reasons (see section 5.7) expressed a desire to make some changes but was never able to provide me with any sleep diaries, possibly due to aforementioned factors. As such the data is not a perfectly completed picture. Eve and Alice's data only includes part of week five and I only had two nights' worth of information for Kate's pre-intervention week. As a result of this mean totals have been calculated and this may skew the results slightly. Nonetheless, it is interesting to see how various aspects of sleep changed throughout the intervention according to the sleep diary data.

Use of such data in existing research is rare, with the exception of studies such as that of Montgomery, Stores and Wiggs (2004) who used sleep diary data to create a composite sleep disturbance score. It was not felt appropriate to calculate a similar score in the present study because of the small sample size and due to the fact that the sleep issues manifested themselves in different ways. Lack of use of sleep diary data in existing research may be because most research looking at pre- and post-intervention sleep levels uses a measure of sleep actigraphy (child wearing a watch to measure sleep) which is a more objective way of acquiring such information. However, this was not an option for the present research due to restrictions of budget, access and ethics approval.

The sleep diaries showed a slight improvement in total sleep from pre-intervention to the end of the intervention (fig. 8) although this generally increased and fell throughout. This was not strictly related to anything which was happening with the intervention but rather due to particular circumstances during one week. It was, however, useful to go

through this data with participants during the post-intervention interview in order to explore exceptions and to plan for the future. These variations may illustrate the importance of monitoring sleep levels over an extended period of time when evaluating sleep interventions, suggesting that it is useful and valid to carry out detailed case studies in this area.

All cases showed a general improvement in the mean number of times in parents' bed (fig. 10) which was positive given that this had been a universal concern. Harry's dramatic looking graphic representation is skewed by the fact that there were only two nights' worth of data for the pre-intervention week. Andrew's data spikes in week three (following his father's home visit from his post in the forces). The mean number of night wakings (fig. 11) showed a large number of fluctuations but universally showed improvement from pre-intervention to post-intervention. Mean settling time (fig. 12) was also mixed; some reasons for this were clear, such as grandparents babysitting. This was also influenced in a misleading way for Harry because if the family were out at the weekend he may have fallen asleep at 21:00 and then have been put in bed at 23:00 whilst asleep; this then scores a zero for settling time but was not necessarily ideal in terms of the routine recommended. It was, however, acknowledged that the intervention should be adaptable and could fit into the parents' lifestyle!

In conclusion, the sleep diary data is useful in that it mostly concurs with parent stories and reports of sleep levels and that it is useful to see a picture over time. The data showed some improvements which can be used to answer the main research question in terms of considering value and influence. The data can also be used to answer sub-

question one in terms of looking at how parent reports of child sleep change following the intervention. Sleep diary data was also helpful in that it facilitated discussion of successes and difficulties and made parents more aware of what they were doing throughout the intervention. However, it is noted that it would be difficult to rely on this measure with a larger sample due to the demands placed upon participants; particularly when the sample are likely to be those who are already finding the demands of parenting to be a challenge. If this data were collected rigorously and consistently as part of a larger sample, it may be interesting to carry out a trend analysis. However, the lack of homogeneity in terms of the present sleep diary records limits the usefulness of this to the present study.

5.3 Main research question – What is the value and influence of a TEP-delivered parent-based sleep intervention?

Research sub-question 2 – *How does the intervention impact on teacher reports of behaviour?*

5.3.1 Quantitative findings

Quantitative data was gathered and collated using the SBRS (Gardon, 2009). The SBRS questionnaire (appendix xvi) was used to measure changes in class teacher perceptions of behaviour. Only Andrew was rated by a different teacher pre- and post-intervention, although teachers were asked to collaborate with one another in completion of the post-intervention questionnaire.

The results of this measure present a mixed picture and it is difficult to establish their usefulness in terms of addressing the research question. The improvements to general classroom and playground behaviour could be accounted for simply in terms of

developmental maturation. Measures such as the development of social skills and attempting tasks may change over time as the child settles into school.

O'Brien (2009) suggests that deprivation and disruption of sleep 'often manifests itself as hyperactivity, inattention, poor concentration, poor impulse control, disruptive behaviour problems….and poor school performance' (pp.813). General behaviour and willingness to attempt tasks may be the best measure of these abilities. It should be noted that all participants were rated as showing an improvement in the former and for the latter Andrew improved, Brandon stayed the same and Harry was only rated 0.25 points lower. It is also interesting to be aware that none of the pre- or post-intervention scores indicated behaviour to be a concern which would warrant intervention from school above its normal behaviour provision. The intentions of the inclusion of this measure are sound but there are so many possible variables involved that it is very difficult to use the data to provide a full and reliable answer to the research questions posed. Given that there were no behaviour problems considered to warrant intervention beyond the normal school behaviour policy for any of the participants prior to the intervention, it may not be unreasonable that no significant improvement to behaviour was noted. It may also be possible that because the children in the study are relatively young, addressing sleep difficulties will pre-empt later behaviour problems from arising. Methodological issues will be given further consideration in section 5.7.

5.4 Main research question – What is the value and influence of a TEP-delivered parent-based sleep intervention?

Research sub-question 3 – *Do parents consider the intervention to be worthwhile?*

5.4.1 Qualitative findings

5.4.1 a Thematic analysis of post-intervention interview data to address research sub-question three

A thematic analysis of post-intervention interviews and a parent satisfaction questionnaire were used to ascertain whether parents had considered the intervention to be worthwhile; this data in turn is useful when considering value and influence. Three overarching themes were identified from the post-intervention interviews (see fig. 15). These were: parents adapting the intervention; most useful parts of the intervention, and a positive experience.

- **Need to adapt the intervention**

This was identified as a theme because all parents mentioned changes which they had made to make the intervention and sleep plan work for them. This is not considered to be negative as it emphasises the collaborative nature of the intervention.

- **Most useful parts of the intervention**

The fact that parents were able to identify and elaborate on aspects of the intervention which they had found to be useful is both helpful in terms of the design and use of similar future interventions and in terms of providing proof that the practical advice and strategies were considered to be valuable. Participants also referred to the tangible role of the researcher and the significance of this rather than simply being provided with the booklet. Further information on the role of the researcher is discussed in relation to research question four.

- **Positive experience of the intervention**

In general parents seemed to enjoy participating in the intervention which is good, as it is far less likely to be successful if it is considered to be a chore. This was summarised in the words of Kate who said that '*it's been absolutely fantastic*' (pp.10) and is also referred to in the results of the satisfaction questionnaire described below.

5.4.1 b Post-intervention parent satisfaction questionnaire

The idea for a parent satisfaction questionnaire came from a combination of considering ways in which to evaluate whether parents considered the evaluation to be worthwhile and from the parent survey described in Reed et al. (2009). All parents gave a maximum score of ten to describe how much the intervention had improved their child's sleep. This is interesting as it was clear that none of the children were sleeping perfectly at the end of the intervention. This score seems to indicate that parents were happy in terms of the improvements that they had seen. Parents outlined the different parts of the intervention which they found to be valuable and this information could be used in the design of future programmes. All parents reported an improvement to their own sleep and to the daytime behaviour of their children. All parents felt that the intervention was collaborative and said that they would recommend it to other parents. The questions regarding the things which parents found difficult were interesting – one parent referred to the difficulty in getting her partner on board. This has implications for further interventions – it may be that workshops in the evenings could provide the potential for both parents to be involved, or it may be helpful to specify that both parents attend the initial session if done on an individual basis.

5.4.1 A summary of findings relevant to answering the main research question and sub-question 3

Thematic analysis of the post-intervention interviews and the results of the parent satisfaction questionnaire do seem to suggest that parents considered the intervention to be worthwhile in terms of improvements to their child's sleep, child daytime behaviour, their own sleep and the general experience of the intervention. A major factor in considering the reliability of this data is that I was present both during the final interview and during completion of the questionnaire. There is likely to have been an element of parents wanting to please and support me or at least to be conscious about saying anything negative. This is discussed in further detail in section 5.7 and these factors must be taken into consideration when determining an objective answer to sub-question 3. It is possible that use of sleep actigraphy to back up parental reports would be the best and most realistic way of making the results less subjective. However, it may also be considered that parental report of sleep is the most appropriate measure 'since parental report is the main way in which child sleep problems come to light in primary care' (Montgomery, Stores and Wiggs, 2004, pp.126).

5.5 Main research question – *What is the value and influence of a TEP-delivered parent-based sleep intervention*?

Research sub-question 4 – *What unique skills can EPs add to the delivery of a parent-based behavioural sleep intervention?*

Data from the thematic analysis of all parent interviews as well as the thematic analysis of the researcher reflective diary were considered in terms of answering the above research questions.

5.5.1 Qualitative findings from pre- and post-intervention interviews

5.5.1a Pre-intervention interview findings

A thematic map of the pre-intervention data analysis to answer the above sub-question can be found in section four (fig.16). The overarching themes identified were: using the principles of solution-focused therapy; using the principles of motivational interviewing; establishing and maintaining rapport; researcher suggestions; strategies and advice, and references to other psychological paradigms.

It is essential here to emphasise the fact that there is a lot of overlap between the themes identified. The principles of solution-focused approaches were consciously used alongside motivational interviewing as it is felt that they complement one another when working to facilitate change. Both approaches are collaborative, both approaches work to elicit and encourage self-efficacy and both approaches seek to encourage talk around change (Burke et al, 2001). This similarity means that some of the sub-themes placed under 'the principles of solution-focused therapy' could fit just as easily under 'using the principles of motivational interviewing'. I felt it useful to separate the two because *I* was aware which approach was consciously being used

and considered this separation to be more useful in terms of informing future work of this kind with parents. It is possible that there is a little more exploration of the problem than would usually form a part of a SFT session: this is because the intention was to elicit parental stories and feelings around sleep to inform future work. However, these were listened to and acknowledged with the intention of keeping one foot in possibility (O'Hanlon and Weiner-Davis, 1989).

- **Using the principles of solution-focused therapy**

Participants were asked to share their best hopes for the intervention, firstly to highlight their goals in terms of planning for change and secondly to encourage participants to find the language to describe this different future, thereby seeing this as an achievable possibility. Scaling was used with all participants as a strategy to explore exceptions and to find out what would be considered an acceptable degree of change for participants (see section 4.5.1).

A focus on what parents are already doing well is a good starting point for supporting self-efficacy and for developing a plan. Exploring exceptions is a route towards making the process more collaborative and towards moving away from the role of the expert. In this way we were looking at parents' existing resources to address the child sleep difficulty (de Shazer, 1985).

A further solution-focused sub-theme was an emphasis on existing strengths. There is some overlap with supporting self-efficacy and this strategy is obviously not exclusive to solution-focused therapy. It was included here because it formed the basis

of giving ‘constructive feedback about anything the client is doing, thinking or feeling which might contribute to a resolution of the problem’ (Iveson, 1996, pp.29).

- **Establishing and maintaining rapport**

This is a feature of many forms of therapeutic work and I consider it to be a central part of my role as a TEP. This theme arose through strategies used to develop rapport, such as showing empathy and using humour. ‘BRIEFER: A Solution Focused Manual’, stresses the importance of recognising that there is ‘a *person* sitting in the room rather than just a *problem*’ (George, E., Iveson, C. and Ratner, 2013, pp.2). Miller and Rollnick (2002) describe ‘accurate empathy’ (pp. 7), referring to the Rogerian notion of reflective listening which ‘amplifies the person’s own experiencing and meaning’ (pp.7). This is a skill which is developed over many years of practical experience, and is an area of continuous professional development. All parents were aware that I have young children and this sometimes came into our discussion although I avoided this where possible. Reflective listening did seem to be an effective strategy in developing rapport (see section 4 for examples) and it has been noted that I referred to future actions and planning using phrases such as ‘we can’ and ‘our focus’ (see section 4), again emphasising the collaborative nature of the intervention. Humour and shared affect are also considered to be important strategies in the development of relationships with parents; again this is something which I use in my work with parents and find that it helps to reduce nerves and any sense of power imbalance.

- **The principles of motivational interviewing**

This was considered to be an overarching theme when examining the unique role of the researcher because of principles and theory consciously utilised from my learning and reading about motivational interviewing. My interest in developing an intervention to work with parents around child sleep difficulties arose from the number of parents mentioning this as an issue; however as soon as I started to explore the nature of such interventions and the need for parents to commit to change, the links to motivational interviewing became obvious. Miller and Rollnick refer to 'enhancing intrinsic motivation for change' (2002, pp.25): I wondered whether this was something which EPs could add to such interventions.

Opportunities were taken to identify and build upon change talk (see section 4). Miller and Rollnick (2002) describe four categories of change talk. Disadvantages of the status quo; advantages of change; optimism for change, and intention to change. Eve in particular expressed a sense of optimism and willingness to make changes straight away, whereas Alice seemed to retain a degree of ambivalence. It is possible that this difference is reflected in the pre- and post-intervention quantitative data ratings.

Supporting self-efficacy was an important part of the intervention. Self-efficacy is considered to be 'an important predictor for treatment outcome' (Lakin, 2014). Miller and Rollnick (2002) refer to negotiating a 'change plan' (pp. 133). Negotiation and use of this plan became a key part of the intervention (appendix iv). This was completed with the parent at the end of the intervention when motivation for change had been established. This plan included a section which asked the parent to consider what

might happen and what could be done to prevent this becoming a barrier. This is considered to be a form of responding to confidence talk (Miller and Rollnick, 2002), the idea being that making such plans can actually lead to further change talk. This certainly seemed to be the case (see section 4.5.1).

Responding to resistance was also a key area where information provided by motivational interviewing was useful in terms of engaging effectively with parents. Resistance from parents (and children) is often encountered in the work of EPs and how this is dealt with can be the difference between success and failure. Miller and Rollnick (2002) emphasise that 'if resistance is increasing…it is very likely to be in response to something that you are doing' (pp. 99). With this in mind, I found it useful to be aware of resistance and of how to respond to it either by reflecting on it, reframing or agreeing with a twist (Miller and Rollnick, 2002). Kate had experienced interventions to help with Harry's sleep from another healthcare professional and this had been a negative experience for her. This meant that I took things very slowly so that eventually suggestions for change came from her (see section 4.5.1). With Alice, I tried to generate more cognitive dissonance in response to resistance. This occurs when the individual holds two, inconsistent cognitions; in this case Alice did not want Andrew coming into her bed because of the disrupted sleep but on the other hand she quite liked it when her husband was working away and also felt the need to comfort her child for the absence of his father.

References to other psychological paradigms

This was considered to be a theme when investigating the unique role of the EP. As part of the intervention, and in general work with parents, I tend to draw on different aspects of psychological knowledge according to what I consider to be most helpful and appropriate. Some psychologists may disagree with such an eclectic approach but I consider this degree of flexibility helpful. The sleep intervention involves the use of behavioural psychology; quite simply looking at what is reinforcing the non-sleeping behaviours and using reward to reinforce the desired behaviours. This is the premise behind much existing research into work around sleep with parents. I found it useful to make the psychology behind this quite overt and found that parents were quick to take this on board. I also used some more psychodynamic approaches on several occasions and considered these worth referring to because of how parents responded to them and seemed to find them helpful. I noticed that all three parents conveyed a feeling of being particularly protective of their child. Harry was asthmatic and Kate had experienced a very frightening situation when he was young where he nearly died. I gently suggested that a possible reason for Harry's sleep issues was centred around her reaction to this experience. She was very interested in this idea and referred to this being a possible reason why she 'put off' doing anything about it. This seemed to be a key point in moving forward for Kate.

5.5.1b Post-intervention interview findings

Three overarching themes were identified as part of the post-intervention interview data for sub-question four. These are highlighting self-efficacy (discussed in the

previous section); the role of the researcher, and next steps. It is interesting that a focus on self-efficacy was a consistent theme. This was done through highlighting success and change and emphasising what the parents had done for themselves. The idea being that this would strengthen motivation for sustained change. The role of the researcher was referred to a number of times by parents. Comments included, “the way you worded it” (Eve, pp19), “very positive and empowering” (Eve, pp.19) and “with you coming out and speaking to people you get that friendliness” (Kate, pp7). This focus on the role may suggest that parents valued a personal one-to-one experience as opposed to the alternatives of a booklet or a workshop. The post-intervention interview also encouraged parents to think about next steps and what they would do if they encountered any problems with a view to supporting long-term confidence and self-efficacy.

5.5.2 Thematic analysis of the reflective research diary

A research diary was kept throughout and the part of the diary relating to the intervention period was thematically analysed with a view to answering research sub-question four. The three overarching themes identified were working with parents, researcher learning/reflection, and change. Again the sub-theme of parent self-efficacy and ways of encouraging this arose as a key feature, although it should be recognised that it is particularly difficult to be objective when identifying themes in relation to this sub-question because of the extent to which myself, my judgements and reflections encompass the ‘role of the EP (TEP)’. Analysis of the research diary is considered to be useful because it details my thought processes, such as how I had consciously sought to make the intervention collaborative. The research diary also refers to some of the difficulties and insecurities experienced when working with parents. Changes and adaptations made to the intervention and were included as a

sub-theme; some of these are referred to in the methodological limitations section below.

The reflective diary highlights possible concerns related to delivering an intervention such as “I was worried that I sounded a little didactic” (p.2). I also considered how much I had put into the development of relationships, given that the intervention formed part of my doctoral research. If this is the case does it mean that the findings are neither realistic nor representative of normal work with parents? Does this make it difficult to evaluate the value and influence of the intervention in isolation? I think that it is better to recognise the fact that the development of relationships is key to the work of EPs. This is effectively summarised below:

> ‘*At a very simple level it would seem quite obvious that no matter how valuable the hypotheses the psychologist’s model provides, nor how potentially effective their proposed intervention strategies, if they are unable to develop the degree of rapport in their relationship with the client, these insights and suggestions will not be heard, or acted upon, and consequently will have little influence*” (Beaver, 2011, pp.38)

The theme of change was again a key feature of the research diary. I used an adapted version of the transtheoretical model of change (Prochaska and DiClemente, 1982) with two parents and reflected on this. Whilst I found it helpful to encourage parents to see change as a process and to talk briefly about movement between stages, I used this simply to illustrate the idea that we can move between stages and that this is perfectly acceptable. I had initially felt that this would be a bigger part of the intervention but in a practical sense I did not find it to be particularly useful. Miller and Rollnick (2009) state that it is ‘neither essential nor important to explain the TTM stages when delivering MI’ (pp.130) although a user friendly, adapted wheel of change like

the one used in the present intervention (appendix viii) has been positively evaluated when used with young people (Kittles and Atkinson, 2009). This may warrant further investigation (see section 5.8.2).

5.5.3 Parent satisfaction questionnaire

The parent satisfaction questionnaire raises some interesting points with a view to answering the main research question, sub-question one and sub-question four. When asked about the most useful parts of the intervention one parent said 'all of it'; another said 'diary keeping, sleep pass and rewards', and the third described the positive outcome as being the best part. All parents felt that they were involved in the planning of changes, with one parent stating that this was done with 'ideas of change gently offered'. When asked how the intervention could be improved, two parents could not think of anything, but the third suggested that it would be better 'getting everyone to fully commit – partners, siblings'. This has interesting implications for the possibility of more systemic work (see section 5.8.2). One parent made an interesting comment at the end of the questionnaire:

> *'Everyone is afraid of change. But once you allow change to happen you are left wondering why did I not change this years ago?!'*

This may be because she had picked up on the language of change and had been encouraged to reflect on the process of change. If this was the case it feels positive to have encouraged this type of reflection and would seem to bode well for maintaining the changes made. This has implications for the role of the EP in working with parents around change.

5.5.4 Summary of findings and answering the main research question and sub-question four

Qualitative evidence from the interviews, reflective diary and the parent satisfaction questionnaires provides lots of useful data regarding the role of those working with parents to elicit change. Whilst there is no implication that such approaches are exclusive to EPs, it does seem that principles which are central to the role, such as empathy and rapport building, as well as knowledge of a range of therapeutic and psychological theories can be used to enhance the motivation and engagement of parents in such an intervention. It is therefore considered that skills and strategies which may be used by EPs contribute to the value and influence of sleep interventions.

5.6 Overall summary of the findings

The present multiple case study considered the value and influence of a TEP delivered parent-based sleep intervention. This was measured by pre- and post-intervention questionnaire data, analysis of pre- and post-intervention interviews and analysis of the researcher's reflective diary. A critical realist epistemological stance guided the research using both qualitative and quantitative evidence to explore the complexities of individual experience and understand the impact of the intervention within a real world context.

The results of the thematic analysis of pre- and post-intervention interviews suggest evidence of change in terms of participants' learning, understanding, feelings of self-efficacy and attitude towards change. From stories which contained references to failed efforts and negative experiences at the beginning of the intervention, parents

were able to make changes, overcome setbacks and reflect on the process of change. Post-intervention data analysis highlights positive changes described by parents in terms of their own sleep and that of their child. The results of the CSHQ questionnaire details some improvement in parent reports of child sleep from pre- to post-intervention. Data provided by sleep diaries is less straightforward but also shows some improvement from pre- to post-intervention. This is by no means linear but does illustrate some major changes to the main sleep difficulties of each child. These graphic representations also reflect how real-life circumstances can affect the implementation of the intervention. Triangulation of qualitative and quantitative data from a number of sources provides a bigger picture of the sleep difficulty which is considered to be more useful for professionals wishing to explore child sleep problems and/or deliver similar interventions.

The SBRS data was used to ascertain whether the intervention had an impact on teacher reports of child behaviour. There was some increase in scores (indicating behaviour improvement) for general classroom behaviour and general playground behaviour for all children. However, the scores for the other sub-scales were mixed and there are numerous variables which may have had an influence. For this to be a reliable measure it would be desirous to have a control group and a larger sample.

Analyses of post-intervention interview data and of the parent satisfaction questionnaire suggest that parents did consider the intervention to be worthwhile. Parents reported positive experiences of a number of the strategies suggested by the intervention as well as a positive response to the role of the researcher.

When considering what unique skills EPs can add to the delivery of such an intervention, analysis illustrated how the researcher had developed rapport and conveyed information in addition to utilising the principles of motivational interviewing and solution-focused therapy to facilitate change. Analysis of the reflective diary raised some key considerations for EPs when working with parents as part of an intervention. In conclusion, the intervention certainly seems to have led to a number of positive outcomes and improvements according to parent reports. However, the nature of the case study is more about exploration and learning from experience. It is hoped that using a variety of methods to triangulate data provides and fuller insight into the delivery of parent-based sleep education and that the findings summarised above address fully the main research question with regard to determining the value and influence of the intervention.

5.7 Methodological limitations and implications

I have not felt it necessary to include here a lengthy discussion of all known drawbacks of the case study method and of mixed methodological research but will instead focus on those aspects which I considered to be of particular relevance to my own design. Generalisability and subjectivity are usually mentioned in any criticism of case study research. The ways in which I have addressed both of these issues are detailed in the sections below. In taking a critical perspective of case study research it is necessary to clarify once again that the ‘case’ is the intervention and the intervention involves three parents (and indirectly their children). Flyvbjerg (2006) points out that the case study provides ‘context- dependent knowledge that research on learning shows to be

necessary to allow people to develop from rule-based beginners to virtuoso experts' (pp.221). I have already made it clear from my epistemological stance that I consider there to be nothing other than 'context-dependent knowledge'. Using a case study has enabled me to get close to a real-life situation in which many EPs may find themselves. As such it is not perfect; circumstances and occurrences along the way can affect data collection – the large human element of the research must be acknowledged. Participants agreed to keep records as part of the research and the research protocol clearly outlines the methods of data collection. Nevertheless, participants were busy parents with numerous worries facing life's daily challenges whilst participating in my research. In my opinion, this real life context and a description of the challenges of working with parents is part of the usefulness of the research.

One limitation of mixed-methodological research is that neither qualitative or quantitative data are used to their full potential: most importantly that qualitative data is often only seen as being an exploratory addition. I have tried to ensure that the qualitative element of my findings is not simply 'the sprinkling in of some vignettes to provide narrative examples of conclusions already reached by quantitative methods' (Hesse-Biber, 2010, p. 457). I aimed to develop a more qualitative approach to the use of mixed methods looking at individual experience of the process of change and my own experience as a TEP working with parents around change. The quantitative measures of change are intended to triangulate the qualitative interview data. The key aims of mixed methodological data triangulation are to provide a more holistic picture of the process of change and to verify the findings of the research.

5.7.1 The quality of my research – validity, reliability, generalisibility and reflexivity

Yin (2014) argues against the idea that case studies 'cannot be used to describe or test propositions' (p.6). It may be suggested that reliability is not a concern for case studies (Thomas, 2011), however, Yin outlines a number of case study tactics which can address validity and reliability. It is important to consider reliability and validity because I am attempting to explore whether it is possible for EPs and TEPs to deliver useful sleep interventions, thereby inherently implying that my research will provide a useful indication of this.

5.7.2 Construct validity

In considering construct validity, it is necessary to define change in terms of specific concepts and identify the measures which match these concepts. These measures are: The Children's Sleep Habit Questionnaire; sleep diaries; interviews and the School Behaviours Rating Scale Questionnaire (SBRS) (Gardon, 2009). Yin (2014) suggests that it is useful to cite existing research which has made these matches. There are a number of studies which evaluate the effectiveness of behavioural sleep interventions, and those which only use parent report recognise this as a threat to validity. Yin (2014) outlines three tactics to increase construct validity. The first is 'multiple sources of evidence' which is addressed in the present study through triangulation of data. The second is 'a chain of evidence'. The purpose of this is to allow readers to see clearly how evidence collected to answer the research questions leads to the final conclusions. The study has been designed so that data collection is clearly linked to research questions (see fig.5). Clear cross-referencing of methodological procedures with evidence procured ensures that this is a transparent

process. Yin (2014) also stresses the need to have the draft reviewed by participants. Because I made rather large demands on parents in terms of keeping daily sleep diaries and taking part in two interviews, I decided not to ask them to go through the final transcripts, but did explain to them that they could have the option of doing so if they wished and that they could have access to the first draft of the written thesis, in which case I would be able to make changes in accordance with any amendments. The style of the intervention has involved lots of reflective listening, regular phone-calls and taking feedback from participants, and so I feel that there has been ample opportunity for parents to make themselves clear and for me to check that my understanding of their comments is correct.

5.7.3 Internal validity

I have tried to be aware of the alternative influences which may have brought about change. There will be a possibility that simply being involved in an intervention was instrumental in any changes observed; that it is parenting support rather than the intervention which is key, or that simply having the involvement of an external person is enough to support change. All three of my participants reflected on this either without prompting, or when asked about the most helpful parts of the intervention. It has been difficult to ascertain which aspects of the process have been most influential – is it the interview, keeping a sleep diary, the workshop, the 'Better Sleep' booklet or the 'phone calls? I initially planned to have a control group which would have enabled me to explore certain aspects of the intervention in more detail. The satisfaction interview has been useful in examining what parents considered to be most helpful but this is obviously a rather subjective measure. Because parents completed the questionnaire and took part in the post-intervention interview in my presence there was likely to be an experimenter effect in that parents were grateful and wanted to please me. Further

examination of the key factors involved in bringing about change are included in the discussion section and may be a consideration for further research. The reflexive diary is a useful data source as it includes my reflections as a professional working with parents.

'Pattern matching' (Yin, 2014, p.132), involves comparing data to predicted outcomes. Due to the fact that I designed an intervention for the purpose of facilitating and supporting change, my research questions naturally led to a number of predictions about outcomes. Firstly, that the intervention would impact on parent reports of sleep levels. Secondly that the intervention would impact on teacher reports of behaviour for the children of parents involved in the intervention who were considered to have sleep difficulties. Thirdly, that there would be a change in the content of parent reports before and after the intervention and finally that the process would reveal themes and topics which are informative and relevant for EPs working with parents around sleep issues. It has, therefore, been possible to use pattern matching as an indicator of validity to some extent. There are some exceptions to the fulfilment of these initial predictions, and possible reasons for this are examined in further detail in this chapter.

5.7.4 Generalisability

It is often considered that case studies with a small number of participants are not able to be generalised. Yin (2014) points out the distinction between 'statistical generalisation and analytic generalisation' (p.21). The latter refers to generalising results to a broader theory. One theory (based on previous research) is that parent-based behavioural interventions improve sleep, the results will also be related to

broader theory in considering motivational interviewing and readiness for change. This theory can then be tested by replicating the findings in another case. This 'replication logic' (Yin, 2014, p.65) is of relevance to the present research because of the fact that there were multiple cases within the overarching case which was the intervention. Therefore, generalisability may be increased to an extent. However, I would also like to consider whether generalisability needs to be a goal. A more appropriate goal is to consider whether the research is accurately and richly described so that EPs who may wish to use such an intervention are able to decide whether it will be of use to them as part of their professional casework.

Guba and Lincoln (1982) state that 'generalisations are impossible since phenomena are neither time- nor context-free' (p.238) and suggest replacing the concept of generalisability with that of 'fittingness'; analysing the degree to which the situation studied matches others of interest. I was not interested in removing the context from the behaviour – quite the opposite in fact. Helping other researchers to establish 'fittingness' can be done by including clear and detailed depictions upon which to base conclusions regarding the extent to which results from one study are applicable to another. This should include a clear description of epistemological stance and the details of the research. Having a clear 'Case Study Protocol' (Yin, 2014, p.84) is a crucial part of this process. The format and content of the present thesis are considered adequate provision of such a protocol as described by Yin (2014). This can be viewed and utilised by those examining the relevance of the study to their own research or those seeking to replicate the findings.

5.7.5 Reliability

The aim of reliability is to be sure that, if other researchers followed the same procedures they would obtain the same results. The case study protocol referred to above is the main tool used to strengthen reliability, although contextual variation must be considered as is the nature of the case study. In terms of assessing reliability of the qualitative data, particularly with reference to sub-question four, the researcher's 'self' forms an integral part of the analysis in which case the possibility that the results would be replicated by another researcher is probably very small. However, it is hoped that detail contained in the present thesis which forms a case study protocol (Yin, 2014) has been developed in such a way as to enable other researchers to see the decisions and influences throughout the research process. It is also considered that the research diary adds to this data, thus increasing dependability (Lincoln and Guba, 1985).

5.7.6 Reflexivity

Reflexivity 'requires an awareness of the researcher's contribution to the construction of meanings throughout the research process' (Willig, 2003, pp.10). A focus on reflexivity is important to my research on a number of levels. Firstly, because of the degree to which I am actually involved in the research; I bring to the role of Trainee Educational psychologist (TEP) my own history and culture (Moore, 1999) which is likely to shape to some degree my delivery of the intervention and my interaction with my participants. The fact that I am a parent myself and that I have experience of child sleep issues is something which I have had to be critically aware of throughout the research. Secondly, I intended to examine what TEPs and EPs can contribute to parent-based sleep interventions. It was therefore important for me to reflect on the role in general and on my own interpretation of the role. Schön (1983) refers to knowledge which is inherent in practice; I think that this was something which I became

more aware of throughout the research process. Certain comments made by participants about my style during the post-intervention interviews were quite revealing about a way of dealing with parents which I consider to be an inherent part of my own role and of the role of the EP, such as being collaborative and non-judgemental.

Moore (1999) refers to the fact that reflexivity provides a 'contextualisation function' (pp.132). In this way being reflexive allows us to consider why certain things were said and certain choices were made, which should be practical and useful for EPs undertaking this kind of work with parents. This also fits in with a critical realist approach in that the active contextualisation of one's own understanding is recognition of the individual nature of knowledge and experience.

5.7.7 General limitations and variables

The ideal method of accurately evaluating the impact of an intervention would, for some, be a large randomised control trial. However, the present research was a case study carried out in a realistic context and as such was not concerned with seeking causal explanations. Use of a control group was initially planned and would have been ideal, as this would have made it easier to ascertain the usefulness of the results of the pre- and post-intervention quantitative data. As it is there are numerous possible alternative explanations for any improvements observed. These include general maturation and development. Two of the children moved up to a new school year following the intervention although only one of these involved a different teacher. It is possible that factors were involved which affected the lives of families other than the intervention which were not known to the researcher.

It is necessary to consider the possibility of an experimenter effect or demand characteristics; participants may have said things that I wanted to hear. One of the participants even reported that she wanted to 'please' me. In some ways this may be a positive part of the intervention but it is impossible to know whether information provided in the interviews was an authentic reflection of opinions or a true account of the experience. The possibility that parents wanted to please, or at least not offend me cannot be ignored. Reed et al. (2009) refer to 'a tendency of parents receiving any intervention to report improvements' (p. 944).

A further potential variable is that all of the participants in the study were committed enough to volunteer, to be involved and to see it through to the end, which may indicate a biased sample and also suggest that parents were already motivated to change to a large degree. I started out with four participants but had to exclude the fourth from the study due to the fact that none of the requested data had been completed (e.g. the sleep diaries); in addition to this parents frequently altered appointments and did not stick to the plan. This alone would not have excluded them from the research: on the contrary, parents who are more difficult to engage are exactly those with whom I wanted to work. However, during the study an incident occurred with the fourth child where other professionals became involved and this meant that the case was firstly, no longer a sleep issue and secondly required the involvement of other agencies who had resources to support the family more consistently. Nevertheless, this incident effectively illustrates one of the practical difficulties in working with parents. This also illustrates an issue for EPs in terms of the complexity of some cases. Professional judgement and multi-agency liaison should be used in terms of deciding when the delivery of an EP-led sleep intervention is appropriate. It may be that such strategies

are less likely to be effective when there are more global problems affecting the family. On the other hand, this level of complexity may also warrant the involvement of a professional who can work with parents around change rather than simply providing advice and education.

There were some inconsistencies such as incomplete sleep diaries, which may have skewed the data in places. Unfortunately, this is a feature of real world research – time demands on participants were quite high and I could not expect them to complete everything perfectly. It was not possible to control the time at which the intervention began and this may have influenced the results. Two of the participants carried out the intervention over the summer holiday which means that things were different in terms of routine. Ideally, all participants would have completed the intervention within the same timeframe and at the same time but this was simply not possible in practice.

The SBRS is considered to be suitable as a measure in the evaluation of interventions (Gardon, 2009), however, in one case there was a different teacher completing the post-intervention questionnaire and they may have interpreted the scales differently. Data gained from the SBRS questionnaires were based on a Likert scale. White and MacKay (1973) outline a number of difficulties with such scales particularly when the respondent is aware of the purpose of the ratings. It is also suggested that ratings may be influenced by how ‘dogmatic’ the respondent is in which case they are likely to choose more extreme values. This warrants consideration when the child is being rated by two different teachers as in the case of Andrew. All teachers knew that children had been involved in a sleep intervention. It is possible that a longer period

should be allowed to see the true impact on behaviour – perhaps taking a further measure after another term. It may also have been useful to complete a child behaviour questionnaire with parents at the pre- and post-intervention stages.

All interviews were audio recorded, the framework for thematic analysis provided by Braun and Clarke (2006) was followed in all instances and an inter-rater reliability check was carried out with an experienced EP colleague. The issues and variables arising as part of carrying out a thematic analysis are included for purposes of transparency and to increase dependability.

5.8 Power Imbalance

The issue of power imbalance is something which I am aware of in all of my work as a Trainee Educational psychologist. It is particularly significant when working with parents, especially in a situation which may lend itself to being cast in the role of expert because I am delivering an intervention which offers advice. I have reflected on this as part of my research diary, a thematic analysis of which contributes to my qualitative data. Miller and Rollnick (2002) note that there are times when it is appropriate to offer knowledge and expertise, but recommend that you ask whether you have 'elicited the client's own ideas and knowledge on the subject' (pp.131). With this in mind, I wanted to place emphasis on working collaboratively, building upon participants' existing successes and resources. Power imbalance appears to have been reduced somewhat by the very fact that I was carrying out research – in one of the post-intervention interviews I thanked the parent for her help with my research and she said that she was happy to help me because I had helped her. This made the process more

reciprocal in nature. I became aware of this during my pilot research activities and took care to thank participants at the beginning; explaining how useful it was for me, and potentially for other parents. Parents were offered a choice of venue for the intervention and it is possible that the relaxed environment of parents' own homes also serves to reduce any power imbalance. Using the principles of solution-focused therapy and motivational interviewing such as a non-judgemental, empathic approach was also helpful in terms of considering power imbalance.

5.9 Implications of the findings

5.9.1 Implications for EPs delivering parent-based sleep education

The results lend to support for the role of EPs and TEPs in the delivery of sleep education. Our training and experience in working with parents and skills in rapport-building mean that we are well equipped for such work. The ethos of the work in terms of empowering parents also fits well into the role of an EP. Use of the principles of motivational interviewing and solution-focused therapy when working to strengthen motivation for change can be extended to all kinds of involvement with parents and wider systemic work.

Aspects of motivational interviewing such as responding to resistance are of general use when working with parents. It is easy to see resistance as an unwillingness to engage. Taking time to work with and around resistance became a useful part of the intervention and I found that my own skills in this area developed as part of this process. Use of solution-focused language combined with the principles of motivational interviewing are considered to work well together in therapeutic practice

(Lewis and Osborn, 2004). The present study lends support to this idea. Exploring exceptions and describing a future without the problem serve to build self-efficacy and allow the collaborative construction of 'possible worlds' (Bruner, 1986). In this way the intervention became much more than behavioural sleep education.

Participants referred to the fact that the approach of the researcher (TEP) was 'gentle', 'friendly' and that suggestions for change were 'subtle'. Keeping a reflexive research diary did help in terms of reflecting on how to approach delivery of an intervention with parents, care must be taken to avoid telling the participants what they should be doing. I felt, and described this in the diary, that my approach improved and developed across the four cases and keeping a diary makes this process a more conscious learning experience. Participants in the present research indicated that the sleep booklet designed by the researcher was useful but that they benefitted from the actual involvement and support of the researcher in addition to this. EPs are busy and resources are often thin, however given the potential benefits to the child and the family as a result of early intervention, this may be considered to be a good use of resources. The influence of sleep deprivation on learning and family equilibrium as referred to in both the literature review and by parents in the present study may suggest that this is an issue for which the relevance to EPs is currently under-acknowledged.

5.9.2 Implications for future research

Initially, I had planned to have a larger sample where parents attended a workshop after the initial interview. I had also planned to have a control group which would have

made some of the measures (particularly the CSHQ and the SBRS) more useful in terms of drawing conclusions. In terms of future research, a similar study with a control group where parents only received a copy of the booklet would be very interesting. It would also be useful to compare attendance at a workshop with the present, individual intervention.

Co-parenting was an issue in the pre- and post-intervention interviews and one parent suggested that the intervention could be improved by getting the partner and siblings involved in the intervention. There is certainly scope to explore a more systemic way of working to support children as such an approach moves away from a 'within child' view towards a more holistic approach. It is possible that such work could be approached through providing training events or open evenings about sleep where families are invited to come together, listen to research and have the opportunity to develop a sleep plan in groups.

Further investigation of the roles of EPs in dealing with sleep issues and the level at which EPs enquire about sleep issues as part of their problem solving frameworks seems justified. It may be interesting to use a specific measure of parenting self-efficacy pre- and post-intervention. This could be measured using or adapting an existing measure such as the PSOC (Parent Sense of Competence Scale, Malow et al., 2014).

Reed at al. (2009) found no significant improvement on the parenting stress index following involvement in a parent sleep education workshop. It would be interesting to

measure the improvement in parent stress at several periods following parent-based sleep education with children who do not have a diagnosis of an ASC or a similar condition. I feel that the research has implications for EP work with parents in general. It is possible that there is much to be gained from consciously using and reflecting on ways of supporting parents with the process of change. This has the potential to be beneficial for the parent, child and for the ongoing professional development of the EP.

5.10 Theories of change, therapeutic alliance, empowerment and agency

The literature review examined different theories of change in order to provide a critical context for the decision to use a combination of motivational interviewing and solution-focused therapy and to enable evaluation of the key factors involved in change. Martin's (2004) ideas about the implications arising from Bandura's conceptualisation of agency are interesting in terms of the implications for educational psychologists working around change. The emphasis should be on the collaborative, with a focus on motivation. Martin (2004) cites Woolfolk, Winnie and Perry (2000) who refer to the need for learners to 'have the *skill* and the *will* to learn' (pp.384). The present intervention focuses on both of these elements.

Motivational interviewing was inspired by the client centred approach of Rogers (1957) but with a more 'agenda-driven, directive style while maintaining a non-confrontational approach' (Lakin, p.124). The creation of a person-centred, empathic collaborative process is a key element of motivational interviewing as described by Miller and Rollnick (2002). This focus on conveying empathy, rolling with resistance

and supporting self-efficacy naturally leads to the development of a therapeutic alliance. Therapeutic alliance refers to the collaboration, connection and agreement between the practitioner and the client (Gaston, 1990). Boardman et al (2006) found that high ratings of the empathic, collaborative approach which embodies the spirit of motivational interviewing were significantly associated with greater levels of engagement. It is useful to reflect on the development of a therapeutic alliance in this section because the results suggest that this became a part of the intervention. One participant explicitly referred to my approach as being 'empowering'. Supporting self-efficacy, exploring exceptions, showing empathy and responding sensitively to resistance seemed to create a therapeutic alliance which may have increased participants' engagement. This may be one of the reasons for their positive responses and the positive outcomes thereby suggesting that adopting the principles and spirit of motivational interviewing and solution-focused therapy formed a key element of the intervention.

5.11 Overall conclusions and closing thoughts

This study examined the use of a TEP-delivered parent-based sleep intervention with three families. The research attempted to build upon the limitations of previous studies by using a mixed methods case study to explore the intervention in detail and by carrying out an intervention with a sample of typically developing children.

Quantitative findings show that parents perceived an improvement to child sleep following the intervention and that this improvement was maintained ten weeks after the intervention ended. Quantitative data also showed improvement in teacher rating

of general classroom and playground behaviour for all children following intervention although validity and reliability of this measure has been questioned in the previous section.

Thematic analysis of pre-and post-parent interviews revealed useful information about parental experience of child sleep difficulties and how they impact on the family as a whole. This data also details parental perceptions of improvements to child sleep, satisfaction with the intervention, difficulties experienced along the way and experience of the process of change. Thematic analysis of parent interviews and of the research diary highlighted strategies, theories and approaches which were found to be useful when carrying out an intervention to improve sleep and when working with parents around change. It seems that a therapeutic alliance was created and that this may have enhanced participant satisfaction and engagement. These results address the main research question in terms of considering the value and influence of this kind of work. It is hoped that consideration of these findings will be relevant to other professionals engaging in similar work with parents and that the research illustrates the fact the EPs are well-placed to deliver such interventions in light of consideration of the potential impact of sleep deprivation on children and families considered in Chapter Two.

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Chapter 7 – Appendices

Appendix i: Glossary and Abbreviations

Actigraphy	Watch-like devices worn to measure sleep
Circadean Rhythm	24 hour cycles of sleep and wakefulness
CSHQ	Children's Sleep Habits Questionnaire
EP	Educational Psychologist
FISH	Family Inventory of Sleep Habits
Melatonin	A hormone produced by the pineal gland which is linked to our sleep/wake cycle and is sometimes prescribed to adults and children who find is difficult to fall asleep.
MI	Motivational Interviewing
NREM	Non-Rapid Eye Movement
Parasomnias	Unconscious behaviours which occur during sleep such as sleepwalking and night terrors.
REM	Rapid Eye Movement
SBRS	School Behaviours Rating Scale
Settling Problems	Regularly taking more than 20 minutes to settle after going to bed
Sleep Hygiene	The conditions and practices which promote effective sleep
Sleep Latency	How long it takes to fall asleep from going to bed to the beginning of sleep
SF	Solution Focused
TEP	Trainee Educational Psychologist

Worry Box	A cardboard box with a slot in for use by children to write or draw any concerns and put them in the box. The idea is that these can be used to enable to child to express any concerns which may otherwise prevent sleep and also to avoid them using the time prior to/during bedtime to talk to parents about worries. All parents were provided with these and instructed in their use.

Appendix ii – Literature review search strategy

Initial searches were carried out to identify potentially relevant papers by using a combination of searches, which included: electronic databases (Psych INFO, ProQuest Education Journals, Taylor and Francis online, Elisevier, Highwire Press, Springer Link Open Access, Scopus and ERIC) which form part of the University of Sheffield Star Plus Library Catalogue and by also utilising general search engines (Google and Google scholar). White Rose Etheses Collection was also accessed via the University Library website to check for any relevant, as yet unpublished research. Several key texts arising from the Google search were purchased and reviewed as well as utilised to form part of the intervention (Stores, 2009 and Quine, 1997). The following search terms were used in a variety of configurations: 'sleep' 'child sleep', 'interventions', 'behavioural interventions' 'benefits', 'deprivation', 'parents', 'children', 'behaviour', 'learning', 'educational psychologists' and 'psychologists'. The references sections of all articles and books read were reviewed to widen the search for relevant research. Titles of possible studies were read and where the theme or focus was ambiguous the abstract was subsequently considered. Research determined irrelevant to the study and duplications were excluded.

Appendix iii – Key Questions arising from the literature review

The literature review highlighted a number of questions which appear to merit further investigation. These include:

- What is the parental experience of taking part in sleep-based education interviews?
- How do parents' stories and feelings about their child's sleep difficulty change following an intervention designed to improve child sleep?
- What should be included in parent-based sleep interventions? What is helpful?
- How and why do parent-based sleep interventions work?
- Does child sleep improve during and after such interventions?
- Do parents value such interventions?
- Should interventions be delivered individually or as part as workshops?
- Should Educational Psychologists be involved in the delivery of parent-based interventions to support child sleep?
- What can Educational Psychologists offer to such interventions which cannot be offered by other services?
- Is there a place for delivery of parent-based sleep interventions to 'typically developing' children who may otherwise find it difficult to access such support?
- Do interventions designed to improve child sleep have an impact on teacher reports of child behaviour?

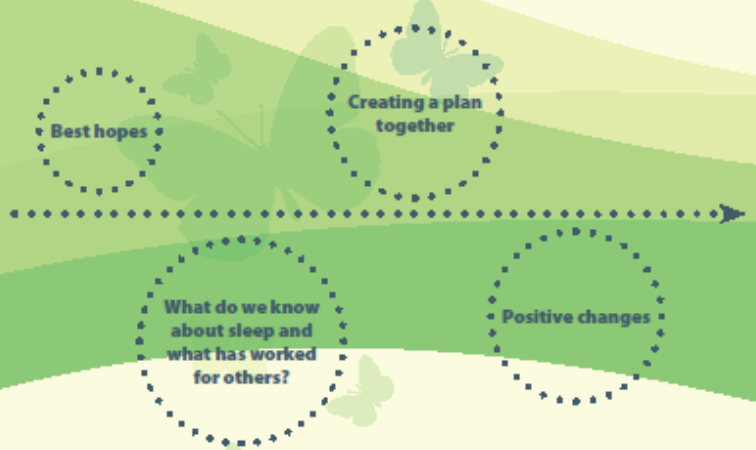
Appendix iv – Better Sleep Toolkit Booklet

WHY IS SLEEP SO IMPORTANT?

Reduced or disturbed child sleep has been linked to problems with memory, concentration, anxiety, behaviour problems and childhood obesity.
Child sleep problems can affect the health and wellbeing of the whole family.
Sleep helps our bodies to repair, grow and supports out immune system.

AIMS OF THIS PROGRAMME

- To provide an opportunity for parents to talk about their children's sleep issues
- To talk about some of the research into sleep and things which have been shown to improve sleep
- To work together to think about the changes that we would like to see
- To work together to put into place an individualised plan for sleep improvement
- To evaluate how well the programme is working and to deal with any problems as they arise
- This programme is not about making judgements or offering expert advice. It is about working together to explore your thoughts and feelings in relation to your child's sleep problem. It is about offering some information, based on research and the experiences of others which will help us to come up with a plan together. You will then be supported in putting this plan into place.



DOES MY CHILD HAVE A SLEEP PROBLEM?

If you feel that your child is not getting enough sleep on a regular basis and if you consider sleep to be a problem – it is. You may recognise some of the following:

DOES MY CHILD HAVE A SLEEP PROBLEM?

Some of these may also be familiar...

HOW MUCH SLEEP DOES MY CHILD NEED?

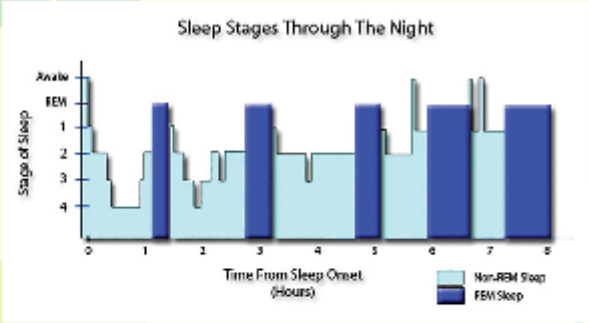
The table below is a suggestion. Some children simply need more or less sleep than others.

Age	Average Number of Sleep Hours Needed		Age	Average Number of Sleep Hours Needed	
	Daytime	Night-time		Daytime	Night-time
1 week	8	8 1/2	7 years	-	10 1/2
4 weeks	6 3/4	8 3/4	8 years	-	10 1/4
3 months	5	10	9 years	-	10
6 months	4	10	10 years	-	9 3/4
9 months	2 3/4	11 1/4	11 years	-	9 1/2
12 months	2 1/2	11	12 years	-	9 1/4
2 years	1 1/4	11 3/4	13 years	-	9 1/4
3 years	1	11	14 years	-	9
4 years	-	11 1/2	15 years	-	8 3/4
5 years	-	11	16 years	-	8 1/2
6 years	-	10 3/4			

Fig. 1 Average Sleep Needs (taken from Quine, 1997)

WHAT DO WE KNOW ABOUT SLEEP PATTERNS?

www.end-your-sleep-deprivation.com/stages-of-sleep.html accessed 6.11.14



There are 2 types of sleep REM and non-REM sleep. It seems that we need a balance of the two types to be able to function well. There are also 4 levels of Non-REM sleep.

Non-REM Sleep

In adults this makes up about 75% of sleep. There are four levels getting deeper and deeper. Levels 3 and 4 are called slow-wave sleep. This is a very deep sleep. Breathing slows down and muscles relax. Hormones for growth and development are released and tissues repair. This is where processing of daytime experiences happens.

Most of this deep sleep occurs in the first three hours of the night. This is where sleep walking and other sleep disorders can happen.

REM Sleep

This is also named dreaming sleep as it is when the majority of dreaming happens. Your brain is active but only your eyes and breathing muscles can move. REM sleep is important for development – 50% of babies' sleep is REM sleep and it may play some part in memory. Nightmares may happen during this type of sleep.

Your child is most likely to wake between cycles. It is normal to wake a few times in the night but we need to be able to self-settle. If a child falls to sleep with a light on or with a parent present and then wakes during the night, the fact that things are different from when he fell asleep may cause him to wake and possibly be distressed rather than self-settle and return to sleep.

NAME: SLEEP DIARY DATE:

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Any sleep during the day? Note time and for how long							
Time bedtime routine started							
Time the child was in bed							
Did you stay or did the child self-settle?							
What time did they go to sleep?							
Number of night wakings? How long were they awake? Where did they go back to sleep?							
Time they woke in the morning							
Total number of hours sleep							

Taken from The Children's Sleep Charity Sleep Success Workshop Booklet

INSTRUCTIONS FOR THE USE OF SLEEP DIARIES

- Keep the diary next to your bed with a pen where you are more likely to fill it in and get the details right.
- Don't worry about which day you start the diary on just fill in day one and move on.
- Remember to put the date when you started the diary.
- If there isn't enough room use the back of the sheet.
- Please be honest – the diary is not looking to see whether you did the right or the wrong thing, the information is simply to help us to record improvements and to try out new strategies.

STRATEGIES FOR SLEEP SUCCESS

SLEEPY FOODS

It is often thought that the answer to child sleep problems is drugs prescribed by a GP. In fact research has shown that although melatonin can assist in the initial falling to sleep it is actually only likely to be effective in the long term if used with a programme like this.

Tryptophan is an amino acid which occurs naturally in some foods.

It can be converted into serotonin which is then converted into melatonin.

Tryptophan occurs naturally in some of the foods listed below.

Almonds – contain magnesium which promotes sleep and muscle relaxation.
Bananas – contain tryptophan and also magnesium.
Dairy – dairy products such as milk, yogurt and cheese are good sources of tryptophan.
Oatmeal is a good, warm soothing bedtime snack which is rich in magnesium, phosphorus and potassium, all of which support sleep. This can be mixed with hot milk to make a porridge or mixed with an egg and a little water to make a pancake. Sweeten with bananas rather than sugar which is a stimulant or serve the pancakes savory with cheese in the middle.
Turkey is a good source of tryptophan which may be one of the reasons why we feel so sleepy after Christmas lunch! A turkey sandwich with brown bread would make a good bedtime snack as complex carbohydrates also increase levels of tryptophan.
Cherries – have recently been shown to lead to increased levels of melatonin production. A glass of cherry juice or some frozen cherries blended with milk and banana may improve sleep.

A GOOD SLEEP SETTING

- It is important to create a quiet and safe sleep setting. The setting may be a shared bed, bunk bed or own bed but it should be his/her own sleeping space and should be the same every night.
- Make sure that the room is not too hot or too cold.
- The room should be as dark as possible. A dark room will help to produce melatonin. If the child has a night light it should be a dim light. In the summer dark curtains or blinds may be needed.
- Put away or cover toys.
- The room should be a computer and screen-free zone. The light from screens is thought to interfere with sleep.
- Try to limit noise from other children, televisions or music.

CREATING A GOOD BEDTIME ROUTINE

- Think about who will carry out the routine.
- Decide on a time to put your child to bed every night. Does it fit in with other child bedtimes?
- Put a picture time table of the routine in a place where the family can see it (fridge door?)
- Who else needs to know about the routine? Grandparents, sitters, other parent. It is important that you all follow the same routine.
- What is a good time to wake? Anything before this time should be treated as night waking.
- Wake at the same time every day.
- Bath time should be about 30 minutes before you want them to sleep. The fall in body temperature after a bath may help the child to fall asleep.
- Plan for the quiet time before bed. Reading, beading, music, colouring, jigsaws. Things which need hand-eye coordination promote sleep.
- Television and computer games are not a good idea in the hour before bedtime.
- Give water or milk as evening drinks.
- Keep hugs, kisses, stories the same length every night – even keep what you say the same – night, night sleep tight.
- If your child is going to bed at eight o'clock but falling asleep at ten every night, start routine at 9:00 and aim to be ready to sleep at 9:45 and start shifting this back by a small amount every week.

COMMON PROBLEMS

SELF SETTLING – TEACHING YOUR CHILD TO FALL ASLEEP ALONE

Why should we learn how to fall asleep alone?
We naturally wake up several times during the night. When we wake we usually go straight back to sleep and often the wakings are so short that we do not remember them in the mornings.
If your child cannot fall asleep alone they may not be able to go back to sleep after a waking period so their sleep (and yours!) will be disrupted.

HOW DO I TEACH THEM?

- We can often teach children how to fall asleep alone gradually over a few weeks.
- If you usually lie down with your child, change the pattern and sit with them. Move further away from the bed each night until you are out of the door. Try to keep your face and voice tone without expression and try not to make eye contact.
- If your child gets upset go in give them a hug and say – it's time for bed, you are ok night night and leave.
- If you need to go back into the room leave it longer each time. You can use this same method if they wake early in the morning.

THE BEDTIME PASS

A bedtime pass is a card which your child can give to you if he/she wakes at night.
Your child can swap it for something quick like a hug or a glass of water.
Your child will be told that they can only use it once then it will be kept by you and they can have it back the next night.
Teach your child that if they do not use the pass all night it can be traded for a morning present. This can be a small gift or a sticker and when they get five stickers they get a treat.

NIGHT WAKINGS

Decide what time is an ok time to start the day. If this is 6:30 then anything before this should be treated as night waking.
Make sure that the child self-settles.
If your child comes out of their room, use rapid return. Lead them back to bed, tuck them in and use your night time sentence 'you're ok, it's time to sleep, see you in the morning'. Then leave.
Don't give eye contact or get into a conversation.
Keep the lights dim.
If you think the child may be in pain get medical advice.
Look at the sleep diary and see if you can see a pattern to the night wakings.

THINGS TO REMEMBER

- Are you ready? Think about the wheel of change.
- Make sure that you have two weeks where nothing unusual is going on.
- It may get worse before it gets better.
- Let people know that you are starting a sleep programme.
- Keep track of your progress using sleep diaries and celebrate achievements.
- Speak to somebody if you are finding it difficult.
- Always try to be consistent!

MAKING A PLAN

Before we start making a plan we need to think about the things which are important and what we want to get out of this.

The things which bother us the most now:	e.g. he wakes us 3-5 times every night
This is what we want to achieve with our sleep plan:	e.g. to understand and define the problems, create solutions, reduce stress
Our sleep goals are:	e.g. no wake-ups from 10-6

OUR SLEEP PLAN

We will begin our sleep plan for ..... on .....

We will start our bedtime routine at .....

BEDTIME ROUTINE

TIME	ACTIVITY
	Snack and drink given: Activities:
	Bath time
	PJs on Teeth brushed Go to the loo
	Enter the bedroom
	Left to settle to sleep What will you say and do?
	Morning wake time

SPECIFIC SOLUTIONS FOR US

What might happen:	What will we do?
What might happen:	What will we do?
What might happen:	What will we do?
What might happen:	What will we do?

Appendix iii – PowerPoint Presentation

SLEEP

Using research and facts to help you plan to improve your child's sleep

Alex Redfern

Why is sleep so important?

Disturbed sleep has been found to have an impact on thinking, mood, attention and behaviour (Vriend et al., 2013; Dahl, 1996; Pilcher and Huffcut, 1996; Fallone et al., 2001, Fallone et al., 2005).

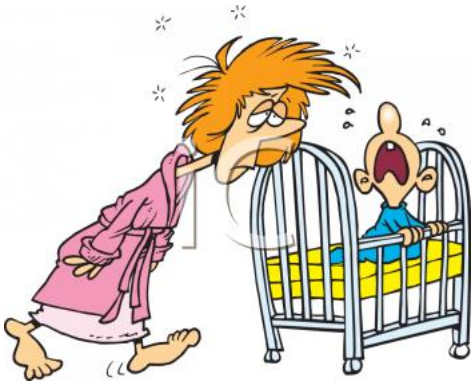
Regular lack of sleep can also show itself as hyperactivity, inattention, poor concentration, poor impulse control, disruptive behaviour….and poor school performance' (O'Brien, 2009)

Fredriksen, Rhodes, Reddy and Way (2004), found that in a large sample of 11-14 year old children, reduced sleep was associated with lower self-esteem, increased symptoms of depression and poorer academic performance.

More reasons why sleep is so important…

- Randazzo, Muelbach, Schweitzer and Walsh (1998) found that a single night of sleep restriction to five hours instead of eleven had an impact on ability to do certain memory tasks. It may be that a decreased amount of time spent in the deep, restorative non-rem sleep stages affects the ability to perform as well on these tasks (Philip et al., 1994; Wesensten, Balkin & Belenky, 1999). Smedje, Broman and Hetta (2001) found associations between disrupted sleep and higher ratings of behavioural difficulties in six to eight year old children.
- Child sleep problems can impact on the entire family and have been linked to increased levels of parental stress and even depression (Meltzer and Mindell, 2007, Stoleru, 1997).
- Recent research using neuroimaging (Xie et al., 2013) has shown that when we are asleep waste products in the brain (a build up which can lead to conditions such as Alzheimer's Disease) are cleared out more efficiently.

What is the impact of sleep deprivation on you and your family?



Common Sleep Issues

My child will only fall to sleep if…I am with them

- they are listening to music
- they are able to play on the ipad
- they are in our bed

My child asks for drinks and/or snacks after going to bed

My child is afraid of the dark

My child lies there worrying about things

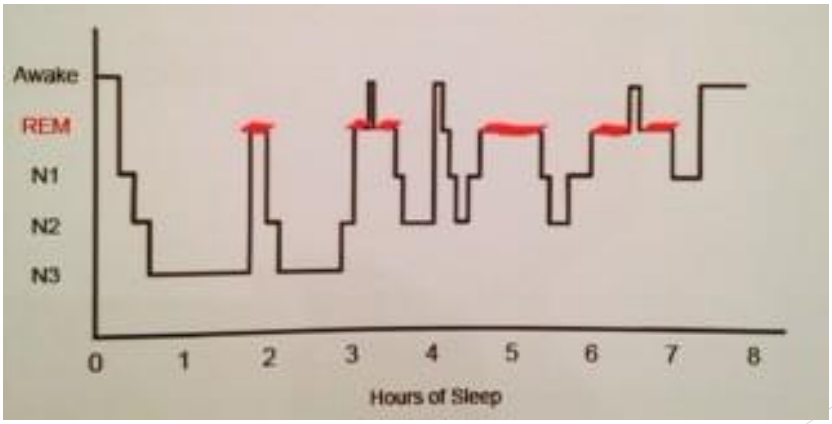
My child has problems falling to sleep

My child wakes several times in the night

My child struggles to fall asleep but has difficulty waking

My child falls asleep ok but wakes too early

Some useful things to know about sleep



Self-settling

If we look at the stages of sleep throughout the night, we can see why it is so important that children learn to self-settle. When a child moves into the light, REM sleep phases – if the things which was present when the child fell asleep is no longer there (parent, music, bottle) they are more likely to wake fully.

Try to think of teaching your child to self-settle as a gift that you can give your child.

Reinforcers

- Try to think about what reinforces the behaviours which you don't want – what is your child getting out of their behaviours?

BEHAVIOUR	REINFORCER	EXTINCTION
Lily wakes in the night and calls for her parents	Cuddles and attention	Check and ignore
Ethan has tantrums when told it is time for bed	Putting off bedtime for as long as possible	Take to bed, settle and leave
Chloe keeps coming into her parents bed at night	Warmth and attention	Take back to own bed
Daniel calls for a bottle/drink in the night	Sugary taste of the drink and attention	Give water and leave

Extinction strategies will be planned to be sensitive and gradual

Quine (1997)

Rules for using extinction

- State clearly and firmly what is required of your child before leaving the bedroom – this can be a phrase ‘it’s time for sleep now nighty, night’.
- You have to carry out the agreed course of action every time the behaviour occurs. If not, it won’t work.
- If you want this method to work you must be persistent. This may involve lots of crying and tantrums in the short term.
- Both parents must be committed to the programme

GRADUATED EXTINCTION

First you sit by the bed holding the child’s hand

Gradually move your chair further away from the bed each night

Or when your child cries you wait a little longer each time before going to check on him

Positive reinforcement (rewards)

- This can be used along with extinction to shape your child’s night time behaviour.
- You can strengthen the kind of behaviour you want by providing rewards.
- Some things which work well – the sleep fairy/superhero is placed next to the bed when the child has slept well.
- The bedtime pass – this is in your booklet it can be exchanged for a hug, water or cuddle but if it is not used all night it can be swapped for a (pound shop) toy in the morning.
- You can gradually fade the reward out – your child may prefer other rewards such as choosing what to have for tea, a film, a morning sweet.

The importance of the bedtime routine

- Get as much exercise as possible during the day.
- Cues and routines can be used to set the scene for bed.
- This should not be done too early.
- If your child understands that this routine is a regular part of going to bed he/she should settle more easily.
- Bedtime should be regular and you should stick to it.
- No screens in the hour before bed – anything which omits blue light is stimulating and will interfere with settling by stopping melatonin release.
- Activities which involve hand/eye coordination jigsaws, threading, even homework are good during this time. Reading.
- A milky drink or water (no caffeine or sugar) and a snack of one of the sleepy foods (see booklet).
- Bath or wash and teeth brush
- Into bedroom – once in bedroom should not go back to living room
- Keep kisses, cuddles and stories to the same length every night.
- Make the routine very calm and try to keep it the same every night even down to what you say when you leave the room.

Setting the scene

- The darker the better as darkness stimulates melatonin – black out blinds.
- A dim nightlight is fine if the child does not like the dark.
- No screens or electronic items
- No pets
- Any tempting toys locked away or in another room – the bedroom is for sleeping in at night time.
- Not too warm
- Turning the duvet width ways can provide added pressure
- Body temperature drops at around 4am so make sure that covers/blankets are available.

Anxieties worries and nightmares

- Listen to your child's worries – don't dismiss them but stress that they are safe and that monsters are not real.
- A worry box or worry dolls can be used in the sleepy time before bedtime
- Try some relaxation exercises such as 'Stretch and Sink' or 'Circle Breathing'
- Make a dream box – decorate a box and fill it full of pictures/photos/words which will be part of a good dream.
- Stick to a relaxing bed time routine.

Faded Bedtime

- Put the child to bed 30 mins to one hour later than start of current sleep phase (the time they fall asleep).
- Gradually move this back 15-30 minutes each night until the desired bedtime is reached.
- Wake child at target wake time regardless of how long it took to fall asleep.
- Once the desired bedtime is reached stick to the same bed and wake time.

Programme for inappropriate sleep associations

Step 1	**Explain to your child that you are going to be making some changes to bedtime to help him sleep better because it's very important that he sleeps all night so that he can be healthy and strong.**
Step 2	Set up a pleasant, relaxing bedtime routine. When you finish the story/chat/music, tuck your child in, say goodnight and leave the room leaving the door slightly open. If your child calls out or cries follow the routine below. ***Your child must fall asleep alone in bed***.
Step 3	If the child wakes, grizzles but does not really cry don't interfere. If you go in you may wake him fully.
Step 4	Allow the child to cry for gradually longer periods. First check, briefly is he is still crying after five minutes. Go in, reassure and leave. Don't cuddle, talk or sit. Be gentle but firm.
Step 5	If the child cries for a further ten minute repeat the intervention.
Step 6	If still crying after fifteen minutes return again.
Step 7	Fifteen minutes is the maximum for the first night. Continue waiting for fifteen minutes until he falls asleep. If he wakes in the night start again at five minutes and repeat. This may take 7-10 days it will be tough and you need to be prepared to stick with it.

A graded steps programme

If you find it too hard to leave your child to cry you may prefer this programme:

STEP 1	**Decide on a bedtime and stick to it to establish a regular sleep/wake pattern**
STEP 2	Regular, relaxing routine
STEP 3	After the routine, say goodnight. Your goal is now to distance yourself gradually. This will take a few days. Your child must learn some new bedtime rules and at first this will be hard. As you gradually move away your child will learn to anticipate this.
STEP 4	Night one – sit (don't lie) on child's bed until she goes to sleep. Repeat for 2-3 nights until this is tolerated without a fuss. Allow her to go to sleep before you leave. When she can do this move to step 5.
STEP 5	Instead of sitting on bed place a chair beside it. Do this for 2-3 nights (gentle touch is ok) until tolerated without fuss.
STEP 6	Sit by bed not touching the child for 2-3 nights.
STEP 7	Sit at gradually increasing distances from the child's bed.
STEP 8	Eventually place the chair outside the door. Do this for 2-3 nights
STEP 9	Leave the room and enjoy your evening! Your response when she wakes should fit with wherever you are in the routine. You can give a teddy to cuddle instead of you and reward the next morning whenever the child settles easily.

If the child comes downstairs or gets into your bed

STEP 1	**Explain that there are going to be some new bedtime rules to help your child to sleep better.**
STEP 2	Do the relaxing routine then say goodnight
STEP 3	When the child wakes and comes to you or gets in your bed take him straight back. Resettle, say goodnight and leave do not give in to requests for cuddles etc.
STEP 4	Do this as often as necessary. Ideally try to return them before they get to your bed. You need to be firm but gentle. Don't feel guilty as you have given your child plenty of attention before bedtime and you are doing this for their wellbeing. Do not shout at your child or get angry but do not cuddle and sympathise we don't want to reinforce the behaviour.
STEP 5	Use the bedtime pass as well if necessary and give rewards/praise in the morning when the child has stayed in bed all night.

Appendix vi – Children's Sleep Habits Questionnaire (abbreviated version)

Name of parent/child_____ Date: _____

Children's Sleep Habits Questionnaire

The following statements are about your child's sleep habits and possible difficulties with sleep. Think about the past week in your life when you answer these questions. If last week was unusual for a specific reason, choose the most recent typical week.

Tick **usually** if the behaviour occurred **5-7** times a week, **sometimes** if the behaviour occurred **2-4** times a week and **rarely** for **0-1** times per week.

- Write in your child's usual bedtime: Week nights _____

  Weekends _____

- Write in child's usual wake time _____

- Write in your child's usual amount of sleep each night (no naps): _____ hours and _____ minutes.

- Child's usual amount of sleep each day (naps): _____ hours and _____ minutes

	1 Usually (5-7)	2 Sometimes (2-4)	3 Rarely (0-1)
1. Child goes to bed at the same time each night.			
2. Child falls asleep alone in own bed.			
3. Child falls asleep within 20 minutes of going to bed.			
4. Child sleeps the right amount.			
5. Child sleeps about the same amount each day.			
6. Child wakes up by him/herself			

	0 Not sleepy	**1 Very sleepy**	**2 Falls asleep**
7. Watching TV			
8. Travelling in the car			
	3 Usually (5-7)	**2 Sometimes (2-4)**	**1 Rarely (0-1)**
9. Child falls asleep in parents' or sibling's bed			
10. Child struggles at bedtime (cries, refuses to stay in bed etc.)			
11. Child needs parent in room to fall asleep			
12. Child is afraid of sleeping alone			
13. Child sleeps too little			
14. Child is afraid of sleeping in the dark			
15. Child has trouble sleeping away from home			
16. Child moves to somebody else's bed during the night (parents'/sibling's)			
17. Child awakens once during the night.			
18. Child awakens more than once during the night.			
Write the number of minutes that a night waking usually lasts _____			
19. Child talks during sleep			
20. Child is restless and moves a lot during sleep			
21. Child sleepwalks during the night			
22. Child wets the bed at night.			
23. Child grinds teeth during sleep.			

24. Child awakens alarmed by a frightening dream.			
	3 Usually (5-7)	**2 Sometimes (2-4)**	**1 Rarely (0-1)**
25. Child awakens during the night screaming, sweating and inconsolable.			
26. Child snores loudly			
27. Child seems to stop breathing during sleep			
28. Child snorts/gasps during sleep			
29. Child wakes up in a negative mood			
30. Adults or siblings wake up child			
31. Child has difficulty getting out of bed in the morning.			
32. Child takes a long time to become alert in the morning.			
33. Child seems tired in the morning.			

CSHQ Results

SUB-SCALE ONE – BEDTIME RESISTANCE	
1	
2	
9	
10	
11	
12	
Total sub score 1	

SUB-SCALE TWO – SLEEP ONSET DELAY	
3	
Total sub score 2	

SUB-SCALE THREE– SLEEP DURATION	
4	
5	
13	
Total sub score 3	

SUB-SCALE FOUR – SLEEP ANXIETY	
11*	
12*	
14	
15	
Total sub score 4	

SUB-SCALE FIVE – NIGHT WAKINGS	
16	
17	
18	
Total sub score 5	

SUB-SCALE SIX– PARASOMNIAS	
19	
20	
21	
22	
23	

24	
25	
Total sub score 6	
SUB-SCALE 7 – SLEEP DISORDERED BREATHING	
26	
27	
28	
Total sub score 7	

SUB-SCALE 8 –DAYTIME SLEEPINESS	
6^	
7^	
8	
29	
30	
31	
32	
33	
Total sub score 8	

*11 and 12 are counted in two sub-scales but should only be counted twice in the final score.

^ 7 and 8 are scored on 0, 1, 2 (all others on 1,2,3)

Appendix vii– Semi-structured Interview questions

Semi-structured interview questions

- What are your best hopes for this intervention?
- If a miracle happened overnight and all of the sleep difficulties were resolved as you have described, what would be the first thing that you would notice about X in the morning?
- Describe what would happen?
- What would they notice about you?
- Tell me about X's sleep in as much detail as you can. (REFLECTIVE LISTENING< SUMMARISING< AFFIRMATION)
- Have there been any occasions when the problem was not there or was less significant?
- What was different about these situations?
- How would you rate X's sleep on a scale of 1-10 with 10 being perfect – just how you'd like it?
- Why isn't it a 1?
- What would an 8 look like?
- The Wheel of change
- Because the intervention involves some changes for the family. It can be helpful to look at the stages which people pass through as changes are made. It's helpful because change is seen as a progression – we can think about where we are at the moment and use it to help us plan for any setbacks.
- Summary and comments, go through plan, arrange first follow-up 'phone call and outline the plan for the post-intervention interview.
- Reminder about sleep diaries.

Appendix viii – Adapted Transtheoretical Model of Change (Sheffield EPS)

Where are you…

Pre thinking
I don't feel like there's a problem

Relapsing
Even though I am trying to change, for some reason, things went wrong recently

The change is made

Thinking
I am starting to think that there are some things which we need to

Deciding
I am deciding if I want to change or not

Decide to change

Doing
We are making changes

Decide not to change

Keeping going
We are trying really hard, and have nearly changed

….on the Wheel of Change?

Appendix ix– Post-intervention semi-structured interview

Post intervention interview

- Can you tell me about X's sleep following the intervention? What is different?

- Have you noticed any changes in X?

- Have you noticed any changes relating to yourself?

- How difficult did you find making these changes? (emotional/practical difficulties)

- Which parts of the intervention did you find most helpful?

- What do you think helped you to make the changes that you did? (not necessarily to do with the intervention but to do with your own resources etc.)

- What advice would you give to other parents who want to make changes to improve their child's sleep?

- Anything else?

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Post-intervention Questionnaire

Did the intervention improve your child's sleep?	**1 2 3 4 5 6 7 8 9 10** **Not at all** **Very much so**
What were the most helpful parts of the intervention?	
Did you find the sleep booklet helpful? *How* did it help?	
Have you noticed any changes in your child's general behaviour following the intervention?	
Have you noticed any improvements in your own sleep following the intervention?	
Which parts of the intervention did you find most difficult?	
Did you feel that you were involved in planning the changes that you would make?	
What do you think could be improved?	
Would you recommend this type of intervention to the parents of other children with sleep difficulties?	

Appendix xi – Participant consent form

The University Of Sheffield.

Title of Project: The impact of a behavioural parent-based sleep education intervention: A multiple case study.

Name of Researcher: Alexandra Redfern

Participant Identification Number for this project:

Please initial box

1. I confirm that I have read and understand the information sheet dated for the above project and have had the opportunity to ask questions. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason. (To withdraw please contact Alex Redfern on07890260559) ☐
3. I understand that interviews and workshops will be recorded for the purposes of data analysis using a dictaphone. I give permisson for this recording to take place. ☐
4. I understand that my responses will be anonymised before analysis. I give permission for members of the research team to have access to my anonymised responses. ☐
5. I agree to take part in the above research project. ☐

_____	_____	_____
Name of Participant	Date	Signature
_____	_____	_____
Lead Researcher	Date	Signature

To be signed and dated in presence of the participant

Copies:
Once this has been signed by both parties the participant will receive a copy of the signed and dated participant consent form and information sheet. A copy for the signed and dated consent form will be placed in the project's main record, which will be kept in a secure location.

Appendix xii – Flesch-Kincaid Reading Ease Calculations

‘Better Sleep Toolkit’ Reading Ease Calculations

A higher score indicates easier readability; scores usually range between 0 and 100.

Readability Formula	Score
Flesch-Kincaid Reading Ease	82.2

Grade Levels

A grade level (based on the USA education system) is equivalent to the number of years of education a person has had. A score of around 10-12 is roughly the reading level on completion of high school. Text to be read by the general public should aim for a grade level of around 8.

Readability Formula	Grade
Flesch-Kincaid Grade Level	5
Gunning-Fog Score	7.6
Coleman-Liau Index	8.2
SMOG Index	5.6
Automated Readability Index	4.2
Average Grade Level	**6.1**

Text Statistics

Character Count	8,530
Syllable Count	2,762
Word Count	2,095
Sentence Count	162

Characters per Word	4.1
Syllables per Word	1.3
Words per Sentence	12.9

Keyword Density

sleep	3.44%
is	1.89%
be	1.44%
child	1.34%
night	1.20%
time	1.05%
are	0.85%
years	0.75%
can	0.75%
will	0.70%
may	0.65%
day	0.60%
bed	0.55%

Appendix xiii– Parent and Teacher Information Sheets

The University Of Sheffield.

Parent Information Sheet

1. Research Project Title:

The impact of a behavioural parent-based sleep education intervention: A multiple case study.

2. Invitation paragraph

You are being invited to take part in a research project. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with your family. Please ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

3. **What is the project's purpose?**

The main purpose of this project is to find out whether an intervention designed to support parents in addressing child sleep problems leads to an improvement in child sleep (according to parents) and a change in parental feelings in relation to the sleep problem. It also hopes to look at whether teacher reports regarding the classroom behaviour of the child considered to have a sleep difficulty change following the intervention.

Child sleep issues can affect the whole family. There is research to suggest that sleep deprivation can have a negative impact on various aspects of child and parent well-being. Behavioural interventions like the one used as part of this intervention have been linked to improvements in child sleep.

Support for child sleep problems can be hard to access and the research will look at whether it is possible for Educational Psychologists and Trainee Educational Psychologists to use this intervention effectively with parents.

4. Why have I been chosen?

Schools in the area were approached and informed of the research. They were then asked to print a notice about the research in their school newsletter or to draw the attention of parents who have reported a child sleep problem to the research. You have been chosen because you have expressed an interest in the research, consider your child to have a sleep problem and it has been confirmed that your child's sleep problem is one which can be addressed by the intervention.

Once asked to participate you will be randomly allocated to a control or an intervention group. Please be aware that the control group will still receive the full intervention but this will be approximately 6-8 weeks later (dependent on the commencement time of the initial group).

5. **Do I have to take part?**

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form and you can still withdraw at any time without it affecting any benefits that you are entitled to in any way. You do not have to give a reason.

6. **What will happen to me if I take part?**

The whole research project will last for nearly 16 months. However, if you were to take part, you will be involved (as described below for a period lasting approximately 6-8 weeks. 12 weeks after the intervention you will have a follow-up 'phone call to check how things are going.

Your child's class teacher will also be asked to complete a questionnaire about some aspects of your child's behaviour such as attention and concentration before and after the intervention so that I can measure any changes.

7. **What do I have to do?**

You will be asked to complete several questionnaires before and after the intervention. One of these will ask you about your Child's sleep habits. The second will be completed as part of the initial discussion and will be about bedtime/sleep routines. You will then be invited to an initial discussion with the researcher to talk about your experiences. This will take place at a location which is convenient to you and will take approximately 45-60 minutes.

Prior to the start of the intervention you will be asked to speak to your child to explain that you will be starting a new routine which will be good for the health and happiness of the whole family. The researcher will suggest that you let your child know that this will involve a few changes and that they can speak to you (parents) at any time if they are worried or want some more information about why sleep is so important for us. You will be supported in handling any concerns which your child may have throughout the intervention sensitively and confidently.

You will be asked to keep a sleep diary for a week prior to the initial interview and to keep a sleep diary throughout the intervention. You will be provided with instructions on how to complete these diaries and it should not be too time consuming. We will then spend some time going through research about sleep which will help us to put together an individualised plan to address your child's sleep issues.

You will be supported with putting the plan into action via weekly telephone calls. The plan will involve checking that you have a regular sleep routine in place (the workshop and booklet will support you with this) and making small changes based on what research suggests to be the best way of addressing your child's specific sleep difficulty. For example, if your child takes a long time to fall asleep we may look at daytime behaviour, bedtime routine and consider making your child's bedtime temporarily later. Additional telephone calls and face-to-face discussions can be arranged on request in order to support you with putting your individual plan into action.

The intervention will take place over a six week period and at the end of the six weeks you will be asked to attend a final discussion with the researcher to talk about your experience, to complete a satisfaction questionnaire and a repeat of the two initial questionnaires so that I can measure any changes.

8. **What are the possible disadvantages and risks of taking part?**

It is possible that you will take part in the intervention and see no positive changes to your child's sleep pattern. If this should happen we will explore possible reasons for this together and discuss the next steps that you can take.

You may be making changes to your child's bedtime routine which will result in disruption and the possibility of some negative behaviours as your child gets used to the new routine. This period of discomfort should be short-term and you will be supported via telephone calls. Many parents who have taken part in similar interventions report that there is a difficult period at first but that the results are well worth this.

It is, however, advised that participants who are experiencing stress or emotional difficulties should not participate in the study and any participant who experiences distress or discomfort during any part of the research should immediately discuss their concerns with the researcher or with the researcher's University tutor.

9. **What are the possible benefits of taking part?**

There is a lot of research to support the effectiveness of the type of intervention used as part of this project in addressing child sleep difficulties. In addition to this there is existing research to show the positive impact that resolving sleep difficulties can have on the child and family. I will be happy to talk through this research at any point.

By taking part in this research you will be contributing to the evaluation of interventions to support sleep difficulties. Evidence from this research may be used to help other families with similar problems.

10. **What happens if the research study stops earlier than expected?**

In the unlikely event that the research study stops earlier than expected, the participants will be informed and reasons will be provided.

11. **What if something goes wrong?**

If you have a complaint you wish to share at any time during the research it should firstly be addressed to the lead researcher and the supervising tutor via email: l.n.campbell@sheffield.ac.uk. However, should you feel that your complaint has not been handled to your satisfaction you can contact the University's Registrar and Secretary via email: registrar@sheffield.ac.uk.

12. **Will my taking part in this project be kept confidential?**

All the information that is collected from your involvement in the project will be kept strictly confidential. All data will be anonymised before being analysed. In signing the consent form you will be giving permission for members of the research team to have restricted access to your data once is has been anonymised.

During the research tasks, participants will be referred to by their first initial and may adopt a pseudonym if desired. No third parties or schools will be made recognisable.

13. **Will I be recorded, and how will the recorded media be used?**

All interviews will be recorded for analysis using a Dictaphone. The audio recordings of your activities made during this research will be used only for analysis. No other use will be made of them without your written permission, and no one outside the project will be allowed access to the original recordings. Telephone calls may be recorded with your permission for record keeping purposes. You will always be informed if you are to be recorded and you will always have the opportunity to request that you are not recorded.

14. **What will happen to the results of the research project?**

The results of the project will be drawn together to be included in a thesis and may be published in a journal. You, your child and your child's school will not be identified in any reports or publications.

You will be informed of the research summary, once the thesis is completed and approved.

You will be informed if the data is published in a journal and asked if you would like a copy of the report.

15. **Who is organising and funding the research?**

The research project is part of the requirements for completion of the Doctorate in Educational and Child Psychology and does not have any sponsorship or funding.

16. **Who has ethically reviewed the project?**

This project has been ethically approved via the University of Sheffield's Education Department ethics review procedure.

Should you decide to take part, you will be given this information sheet and asked to sign a consent form.

Thank you for taking the time to read this information and if you decide to take part then thank you for your participation.

17. **Contact for further information**

If you have any further questions or concerns then please do not hesitate to contact Alexandra Redfern (lead researcher).

Alex Redfern

The School of Education

University of Sheffield

Glossop Road

Sheffield

S10 2JA

07890260559

aredfern2@sheffield.ac.uk

The supervising tutor for this project is Lorraine Campbell and her contact details are as follows:

Dr Lorraine Campbell

The School of Education

University of Sheffield

Glossop Road

S10 2JA (0114) 2228087

The University Of Sheffield.

Teacher Information Sheet

1. **Research Project Title:**

The impact of a behavioural parent-based sleep education intervention: A multiple case study.

2. **Invitation paragraph**

You are being invited to take part in a research project. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with your line manager if you wish. Please ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

3. **What is the project's purpose?**

The main purpose of this project is to find out whether an intervention designed to support parents in addressing child sleep problems leads to an improvement in child sleep (according to parents) and a change in parental feelings in relation to the sleep problem. It also hopes to look at whether teacher reports regarding the classroom behaviour of the child considered to have a sleep difficulty change following the intervention.

Child sleep issues can affect the whole family. There is research to suggest that sleep deprivation can have a negative impact on various aspects of child and parent well-being. Behavioural interventions like the one used as part of this intervention have been linked to improvements in child sleep.

Support for child sleep problems can be hard to access and the research will look at whether it is possible for Educational Psychologists and Trainee Educational Psychologists to use this intervention effectively with parents.

The project will run from April 2015 to July 2016.

4. **Why have I been chosen?**

Schools in the area were approached and informed of the research. They were then asked to print a notice about the research in their school newsletter or to draw the attention of parents who have reported a child sleep problem to the research. You have been chosen because a parent of a child in

your class is participating in the research. The child may have been assigned to a control group (no intervention) or an intervention group (with intervention) and you will not be told which. This is to enable me to draw conclusions as to whether there have been any changes as a result of the intervention or whether there are just natural changes in a child's behaviour over time.

5. **Do I have to take part?**

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form and you can still withdraw at any time. You do not have to give a reason.

6. **What will happen to me if I take part?**

The whole research project will last for nearly 16 months. However, the intervention itself will take place within a six week period. You will be asked to fill in a questionnaire at the beginning and two weeks after the end of this six week period. You may also be asked to complete another questionnaire in ten weeks to see whether the changes have been maintained. If you teach a child in the control group you will be asked to complete an extra questionnaire at the end of the actual intervention.

7. **What do I have to do?**

The questionnaire will not take long to complete. It is a 51 item questionnaire where you are asked to rate a behaviour on a seven point scale. This involves circling a number. It is important that you read the statements carefully and use your experience of how the child has behaved in the last month. Careful instructions will be given prior to completion of the questionnaire.

8. **What are the possible disadvantages and risks of taking part?**

It is possible that you will feel bad to be making judgements about a child's behaviour based on a set of statements. If you feel that you do not want to respond to any of the statements please feel free to write this on the questionnaire.

Teaching is a demanding job and it is understood that the completion of 2-3 questionnaires is an addition to your existing workload.

9. **What are the possible benefits of taking part?**

There is a lot of research to support the effectiveness of the type of intervention used as part of this project in addressing child sleep difficulties. In addition to this there is existing research to show the impact that reduced sleep and sleep disruption can have on the child and family. I would like to use your data to triangulate my evidence - to see whether improvements in sleep have any impact on

other aspects of the child's life. Research indicates that lack of sleep can influence various aspects of behaviour and so the purpose of the questionnaires to see whether this is the case.

10. **What happens if the research study stops earlier than expected?**

In the unlikely event that the research study stops earlier than expected, the participants will be informed and reasons will be provided.

11. **What if something goes wrong?**

If you have a complaint you wish to share at any time during the research it should firstly be addressed to the lead researcher and the supervising tutor via email: l.n.campbell@sheffield.ac.uk. However, should you feel that your complaint has not been handled to your satisfaction you can contact the University's Registrar and Secretary via email: registrar@sheffield.ac.uk.

12. **Will my taking part in this project be kept confidential?**

All the information that is collected from your involvement in the project will be kept strictly confidential. All data will be anonymised before being analysed. In signing the consent form you will be giving permission for members of the research team to have restricted access to your data once is has been anonymised.

During the research tasks, participants will be referred to by their first initial and may adopt a pseudonym if desired. No third parties or schools will be made recognisable.

14. **What will happen to the results of the research project?**

The results of the project will be drawn together to be included in a thesis and may be published in a journal. You and your school will not be identified in any reports of publications.

You will be informed of the research summary, once the thesis is completed and approved.

You will be informed if the data is published in a journal and asked if you would like a copy of the report.

15. **Who is organising and funding the research?**

The research project is part of the requirements for completion of the Doctorate in Educational and Child Psychology and does not have any sponsorship or funding.

16. **Who has ethically reviewed the project?**

This project has been ethically approved via the University of Sheffield's Education Department ethics review procedure.

Should you decide to take part, you will be given this information sheet and asked to sign a consent form.

Thank you for taking the time to read this information and if you decide to take part then thank you for your participation.

17. **Contact for further information**

If you have any further questions or concerns then please do not hesitate to contact Alexandra Redfern (lead researcher).

Alex Redfern

The School of Education

University of Sheffield

Glossop Road

Sheffield

S10 2JA

07890260559

aredfern2@sheffield.ac.uk

The supervising tutor for this project is Lorraine Campbell and her contact details are as follows:

Dr Lorraine Campbell

The School of Education

University of Sheffield

Glossop Road

Sheffield

Appendix xiv– Family Inventory of Sleep Habits (FISH)

Family Inventory of Sleep Habits

Please say how often each statement was true in the last month:

	Never	Occasionally	Sometimes	Usually	Always
My child gets exercise during the day					
My child naps for more than one hour during the day					
My child's bedroom is used as a time-out area for discipline					
My child's bedroom is used as a play area during the day					
My child wakes up at about the same time each morning					
In the hour before bedtime, my child engages in relaxing activities					
My child has drinks or foods containing caffeine after five (chocolate, coke)					
My child sleeps better when wearing PJs made in certain fabrics					
My child sleeps better with certain blankets					
My child sleeps better when the room is a certain temperature (warm/cool)					
My child's room is dark or dimly lit at bedtime					
My child follows a regular bedtime routine that lasts between 15-30 minutes					
My child has a favourite comfort object that he/she sleeps with					
I stay in my child's room until she falls asleep					
After my child is tucked in, I check on him before he falls asleep					
My child watches TV or videos to help him/her fall asleep					
My child listens to music to help him/her fall asleep					
If my child wakes in the night I keep our interaction short					
If my child gets out of bed in the night I return him to his own bed.					

Appendix xv– Participant recruitment poster

SUPPORT FOR CHILD SLEEP DIFFICULTIES

Does your child have trouble getting to sleep? Do they come into your bed once or several times during the night? Do night time fears prevent sleep? Does your child wake regularly during the night? Are sleep issues affecting the wellbeing of you and your family?

If you answered yes to one or more of the above and your child is **aged 5-11,** carry on reading....

Child sleep difficulties can have a huge impact on both the child's ability to function and the wellbeing of the entire family. I am currently doing my doctorate in Educational and Child Psychology at The University of Sheffield and am carrying out some research to look at the use of parental support programmes to address sleep issues. I am a mother of two young children myself and understand how hard it can be to establish a successful sleep routine.

There is a great deal of research to support the effectiveness of these interventions in addressing child sleep problems. The intervention will involve two individual meetings during which we will put together a plan to focus on any specific difficulties. You will also be asked to keep a sleep diary. You will be supported throughout the intervention.

I am afraid that for the purposes of the research, children with a diagnosis of an Autism Spectrum Condition cannot be included in present study. I am happy to explain the reasons for this and discuss alternative methods of support.

If you are interested in taking part please use the contact details below.
Many thanks for your interest.

Alex

Call or text: 07890 260 559
Email: aredfern2@sheffield.sc.uk

Appendix xvi– School Behaviours Rating Scale (Gardon, 2009)

School Behaviours Rating Scale

Student Behaviour Questionnaire

A SCALE TO ASSESS SCHOOL BEHAVIOUR IN PRIMARY AGE STUDENTS

Instructions

Below is a list of descriptions of children's behaviour at school. Please circle the number in the line position which best describes the student's behaviour over the past **four to six weeks**. Circle **one** number only for each question. Please make sure you answer all items.

Note: The number sequence varies depending on whether the descriptor is stated positively or negatively. Focus on the position of the value as it lines up with the *Never*, *Sometimes* and *Very Often* anchor points.

Example:

Please read the example below to make sure you are clear on how to complete the questionnaire

	HOW OFTEN DOES THIS OCCUR WITH THIS STUDENT?						
	Never			Sometimes			Very Often
Follows classroom rules	1	2	3	(4)	5	6	7
Fights in the playground	(7)	6	5	4	3	2	1

This student *sometimes* follows classroom rules. This same student *never* fights in the playground.

Now please go ahead and complete the questionnaire. There are no right or wrong answers. Please answer all items.

Questions

	HOW OFTEN DOES THIS OCCUR WITH THIS STUDENT?						
	Never			Sometimes			Very Often
1. Follows classroom rules	1	2	3	4	5	6	7
2. Has difficulty staying on task during structured activity	7	6	5	4	3	2	1
3. When asked to do something will quietly not comply	7	6	5	4	3	2	1
4. Gets along with other children own age	1	2	3	4	5	6	7
5. Hits other children to get what he/she wants	7	6	5	4	3	2	1
6. Follows other teachers' directions	1	2	3	4	5	6	7
7. Is able to concentrate well in class	1	2	3	4	5	6	7
8. Is able to share equipment in class	1	2	3	4	5	6	7
9. Behaviour attracts complaints from other teachers	7	6	5	4	3	2	1
10. Moves back from the playground when the bell goes	1	2	3	4	5	6	7
11. Stops doing something when asked	1	2	3	4	5	6	7
12. Takes turns during games/sport	1	2	3	4	5	6	7
13. Behaves appropriately for other teachers in the school	1	2	3	4	5	6	7
14. Moves when asked	1	2	3	4	5	6	7
15. Appears to listen carefully to staff	1	2	3	4	5	6	7
16. Makes friends easily	1	2	3	4	5	6	7
17. Plays in correct areas in the playground	1	2	3	4	5	6	7
18. Is verbally aggressive towards other students in class	7	6	5	4	3	2	1

School Behaviours Rating Scale

Student Behaviour Questionnaire

Questions (cont.)

A SCALE TO ASSESS SCHOOL BEHAVIOUR IN PRIMARY AGE STUDENTS

HOW OFTEN DOES THIS OCCUR WITH THIS STUDENT?

	Never			Sometimes			Very Often
19. Needs to be asked to do things only once	1	2	3	4	5	6	7
20. Has friends in class	1	2	3	4	5	6	7
21. Deliberately hurts other children	7	6	5	4	3	2	1
22. Puts hand up to speak in class	1	2	3	4	5	6	7
23. Follows instruction of class teacher	1	2	3	4	5	6	7
24. Fights in the playground	7	6	5	4	3	2	1
25. Relates well to other staff	1	2	3	4	5	6	7
26. Stays in seat in class	1	2	3	4	5	6	7
27. Is able to share equipment in the playground	1	2	3	4	5	6	7
28. Behaves appropriately for casual teachers	1	2	3	4	5	6	7
29. Answers back to staff when challenged about behaviour	7	6	5	4	3	2	1
30. Has difficulty staying on task during unstructured activities or groups	7	6	5	4	3	2	1
31. Bullies/teases other children	7	6	5	4	3	2	1
32. Is easily distracted by others in class	7	6	5	4	3	2	1
33. Finishes set tasks	1	2	3	4	5	6	7
34. Argues with staff	7	6	5	4	3	2	1
35. Is able to work in a group	1	2	3	4	5	6	7
36. Accepts responsibility for his/her behaviour	1	2	3	4	5	6	7
37. Ignores inappropriate peer behaviour	1	2	3	4	5	6	7
38. Perseveres with tasks he/she finds difficult	1	2	3	4	5	6	7
39. Joins in group work	1	2	3	4	5	6	7
40. Looks after own work	1	2	3	4	5	6	7
41. Follows rules when playing games	1	2	3	4	5	6	7
42. Stays in school boundaries	1	2	3	4	5	6	7
43. Engages in safe play	1	2	3	4	5	6	7
44. Brings necessary materials/equipment to school	1	2	3	4	5	6	7
45. Seeks peer attention appropriately	1	2	3	4	5	6	7
46. Behaves when not closely supervised	1	2	3	4	5	6	7
47. Pushes other children in the classroom	7	6	5	4	3	2	1
48. Is verbally aggressive towards other children during play times	7	6	5	4	3	2	1
49. Interacts appropriately with peers in the classroom	1	2	3	4	5	6	7
50. Interacts appropriately with peers in the playground	1	2	3	4	5	6	7
51. Behaves appropriately during assemblies	1	2	3	4	5	6	7

School Behaviours Rating Scale

Student Behaviour Profile Form

Girls aged 5–12 years

Student

NAME	DATE OF BIRTH	SCHOOL	DATE

Intervention Level Indicated

TERTIARY	Competence ≤ 3.41	Competence ≤ 4.20	Competence ≤ 3.83	Competence ≤ 4.00	Competence ≤ 2.50	Competence ≤ 4.00
SECONDARY	Competence < 4.65	Competence < 5.17	Competence < 4.38	Competence < 5.17	Competence < 3.75	Competence < 5.20
PRIMARY	Competence ≥ 4.66	Competence ≥ 5.18	Competence ≥ 4.39	Competence ≥ 5.18	Competence ≥ 3.76	Competence ≥ 5.21

Subscale

GENERAL CLASSROOM BEHAVIOUR	GENERAL PLAYGROUND BEHAVIOUR	GETTING ALONG WITH OTHER STUDENTS	DEVELOPMENT OF SOCIAL SKILLS	ATTEMPTING TASKS PRESENTED	AGGRESSIVE BEHAVIOURS
1 Classroom rules	6 Follows direction	4 Own age	8 Share in class	2 Structured	5 Hits
3 Not comply	10 Moves on bell	16 Makes friends	12 Takes turns	30 Unstructured	9 Complaints
7 Concentrate	13 Other teachers	20 Class friends	27 Share at play	33 Finishes	18 Verbal-class
11 Stops	17 Correct areas	35 Group work	36 Responsibility	38 Perseveres	21 Hurts
14 Moves	25 Relates	39 Joins in	41 Game rules		24 Fights
15 Listens	42 In bounds	45 Peer attention	43 Safe play		29 Answers back
19 Asked once		49 Interation-class			31 Bullies
22 Hand up		50 Interaction-play			34 Argues
23 Follows instruction					47 Pushes
26 In seat					48 Verbal-play
28 Casual staff					
32 Distracted					
37 Ignores					
40 Looks after work					
44 Equipment					
46 Not supervised					
51 Assemblies					
Raw Score	Raw Score	Raw Score	Raw Score	Raw Score	Raw Score
Divide by 17	Divide by 6	Divide by 8	Divide by 6	Divide by 4	Divide by 10
Competence Score	Competence Score	Competence Score	Competence Score	Competence Score	Competence Score

Appendix xvii – Initial codes for each research question

Sub-question one: How does the intervention impact on parent stories about sleep and reports of sleep levels?

Pre-intervention interview data

- Parent experience of sleep disturbance
- Child sleep disturbance
- New beginnings
- A good routine
- Disruption/life incident/change
- Things which wake the child
- The main sleep issue
- Impact on the family
- Night waking
- Technology before bed
- Influence of lack of sleep on daytime behaviour
- Bedroom environment
- Lightbulb moment/realisation/learning
- Food and drink/diet
- Exploring other reasons for sleep difficulties
- Self-settling
- Behaviour change
- Optimism about the future
- Commitment to starting change
- Consistency
- Defining the problem
- Anxieties
- Triggers for sleep difficulty
- Night fears/the dark
- Poor sleep associations
- Impact on parent relationship
- Collaboration with partner/co-parenting issues (all three)
- Coming into parents' bed
- Light in the bedroom/darkness (mentioned by all)
- Parents losing patience with children when tired
- Bedtime avoidance tactics
- Cause of night fears
- Daytime activity
- Reinforcing waking behaviour from an early age

Sub-question one – post-intervention interview data

- Improvements around the main sleep difficulty
- Removal of previous reinforcing behaviours
- Changes from previous situation
- Changes to parent wellbeing/sleep
- Changes to the child
- Evidence of learning from the intervention
- Attitude towards change – difference from the pre-interview
- Final factor to push the participant to make changes

- Parent realisation/revelation of what was a major cause of the initial sleep issue
- Impact on the rest of the family with sleep improvements
- Motivation for change
- Internal/environmental factors which support change
- Setbacks
- New issues
- Remaining difficulties for the child
- Remaining difficulties for the parent
- Potential future problems identified by the parent
- Co-parenting issues with the intervention
- Getting back in the saddle
- Deviating from/adapting the original plan
- Participant commitment to keep going
- Pressure on parents around sleep
- Effect of lack of sleep
- Steps to resolve problems
- Feeling of lack of control – taking this back
- Adaptations of suggested strategies
- Success of the superhero characters [JK found this a better reward that the toys and MG found that treats such as friends round was more effective]
- The process/experience of putting change into practice
- Use of the booklet
- Helpfulness/use of sleep stages knowledge
- Asking for help is hard
- Reciprocal help/empowerment
- Concerns about own parenting highlighted by the intervention
- Advice for other parents
- Use of sleep diaries as part of the intervention
- An external/detached view of the sleep issue
- Food/snacks/eating
- Bedtime pass – success and difficulties
- Having a plan- pathway to a goal

Sub-question 2 – post-interview data only

Do parents consider the intervention to be worthwhile?

- Setbacks
- Improvements around the main sleep difficulty
- Changes to parent wellbeing/sleep
- Appreciation of the role of the researcher
- Most helpful parts of the intervention
- Helpfulness/use of sleep stages knowledge
- Reciprocal help/empowerment
- Participant commitment to keep going
- Impact on the rest of the family with sleep improvements

Sub-question 3 – Pre-intervention interview data

What unique skills can EPs add to the delivery of a parent-based behavioural sleep intervention?

- Solution focused language

- New beginnings
- Empathy building
- Scaling
- Exploring exceptions
- Melatonin
- Collaborative approaches (ideas/strategies)
- Suggestions made by interviewer (advice giving)
- Humour/shared affect/rapport
- Practical solutions
- Reflexive/psychodynamic approaches/past reasons for treating the child differently
- Behavioural psychology/rewards/reinforcement
- Agreement by the interviewer that it's hard
- Modelling by interviewer
- Change talk
- Sharing sleep research with participants
- Positive reinforcement by the interviewer
- Reassurance by the interviewer
- Planning for problems and pitfalls
- Strategies to address child anxiety
- Interviewer focus on existing strengths/successes
- Interviewer explaining the value of sleep
- Researcher making a suggestion/advice giving
- Interviewer phrasing suggestions 'I wonder whether…'
- The wheel of change
- Preparing for obstacles
- Encouragement by the interviewer
- Rolling with resistance (p15 MG)
- Supporting/reinforcing self-efficacy

Sub-question 3 – Post intervention interview data

- Positivity/praise from researcher
- Researcher stressing improvement
- Recognition of parent approach having an impact
- Researcher highlighting change
- Researcher emphasising participant self-efficacy
- Researcher proposing next steps/further development
- Exploring exceptions
- Researcher suggesting reasons for why something is not working
- Role of the researcher
- Staying in touch/taking advice
- The importance of the involvement and support of the researcher
- Researcher identifying with difficulties
- Helpfulness/use of sleep stages knowledge

Sub-question 3 – reflective research diary analysis

- Concern for upsetting participant
- Discomfort about having to disagree with participant

- Concerns that participants are finding it hard to stick to when I don't hear from them – lack of control – awareness of the demands of keeping a sleep diary
- Noting contentious issues – milk
- Overcoming participant scepticism
- Using praise
- Highlighting existing effective strategies
- Picking up on individual strengths and characteristics
- Power balance – particularly felt that they were helping me would you be able to do this to this extent as part of normal EP work
- Empowering
- Affirmation as a way of building participant confidence
- Helpful to refer directly to change
- Change talk
- Was I so happy about positive feedback that I didn't
- probe in more detail?
- Researcher increase in confidence by the 4th intervention
- Researcher reflecting on the dependency of participants – did I put more effort into the relationships because it was my research.
- Use of 'are you ready?' – reflecting on the usefulness of this question
- Self-criticism – interrupting – listening skills giving participants more time to speak and to reflect
- Recognition of how hard it is not to contradict or interrupt
- Reflecting on not using Power Point presentation
- Decision not to use the Wheel of Change
- Learning point – not to use lap top
- Decision to change age limit at the last minute
- Reflections on the wheel of change
- Participants sounding more determined on follow –up phone calls – is this what I wanted to hear or what they wanted me to hear?
- Guided by instinct on which strategies to use
- Noting similarities between cases
- Impact of early sleep experiences
- A feeling that I had helped the participant to understand the reasons
- How TEP experience of working with parents helped with rapport building and with handling different issues sensitively
- Using positive feedback to inform the advice given to others
- Sleepy foods Paul Andre questioned the scientific basis for this
- Mistakes – contradicted myself over no fruit when there are bananas and cherries on the list (learning point)
- Concerns about sounding didactic
- Ignoring contradictory information provided by participant – rolling with resistance
- Usefulness of scaling
- Usefulness of behavioural psychology
- Natural to have ups and downs
- Admiration for the parents and for the obstacles that they have faced
- Admiration for parents' honesty and willingness to admit fearfulness
- Researcher feeling positive
- Appreciation of real life by the researcher
- Making things collaborative
- Reflective listening affirming
- Recognition of the maternal urge to provide comfort (empathy)
- Listing unique circumstances of the case

- Problems cause by the school holiday – behaviour questionnaires to be completed by both teachers
- Participants recognising their cog dissonance
- Researcher reflecting on cog dissonance
- Follow up calls – dealing with ongoing issues
- Participant acknowledging that things are ‘just different’
- Use of CSHQ to prepare for first meeting
- Talk about past difficulties have shaped current behaviour

Appendix xviii – Organising data codes into initial groups

Sub-question one: How does the intervention impact on parent stories about sleep and reports of sleep levels?

Pre-intervention interview data

Group 1	Group 2	Group 3	Group 4	Group 5
Parent sleep disturbance	Reinforcing waking behaviours from an early age	Disruption/life incident/change	Optimism about the future	Child sleep disturbance
Impact on the family	Coming into parents' bed	Night waking	Commitment to starting change	The main issue
Impact on parent relationship	Self-settling issues	Night fears	Lightbulb moment/realisation/ learning	Influence of lack of sleep no daytime behaviour
Collaboration with partner/co-parenting issues	A good routine	The dark	New beginnings	Defining the problem
Losing patience with children when tired	Technology before bed			Bedtime avoidance tactics
	Food and drink			
	Things which wake the child			
	Bedroom environment			
	Consistency			
	Daytime activity			

Sub-question one – post-intervention interview data

Group 1	Group 2	Group 3	Group 4
1.Improvements to sleep	Problems experienced	Putting change into practice	Getting back in the saddle
2.Child change	New issues arising	Advice for other parents	Adapting the original plan
3. Parent change and reflecting on change	Remaining difficulties for child	Experience of practical strategies bedtime pass	Reflecting on the external pressures
4. A change in attitude towards change	Remaining difficulties for parent	Use of the original plan	Commitment to keep going
5. Evidence of having learned from the intervention	Potential future difficulties	Use and success of the booklet	Steps to resolve problems
6. Impact on wider family/life	Co-parenting issues	Sleep stages	
		Food	
		Sleep diaries	

Sub-question 2 – post-interview data only

Do parents consider the intervention to be worthwhile?

Group 1	Group 2	Group 3	Group 4
Setbacks	Most helpful strategies	Improvements to main difficulty	Reciprocal help empowerment
	Helpfulness of sleep knowledge/research	Impact on the family	
	Appreciation of researcher involvement/role	Changes to parent wellbeing	
		Participant commitment to keep going	

Not sure whether the empowerment codes belong here or in the skills of an EP question – will leave and decide.

Sub-question 3 – Pre-intervention interview data

What unique skills can EPs add to the delivery of a parent-based behavioural sleep intervention?

Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
Solution focused language	Empathy building	Change talk	Strategies to address child anxiety	Researcher making suggestions / advice giving	Reflexive/psychodynamic approaches to suggest why child is treated differently.
Scaling	Humour/shared affect/rapport	Supporting/reinforcing self-efficacy	Sharing sleep research with participants	Modelling by interviewer	References to behavioural psychology
Exploring exceptions	Agreement by the researcher that 'it's hard'	Rolling with resistance	Researcher explaining the value of sleep		
Researcher focus on existing strengths/successes	Positive reinforcement by the interviewer	The wheel of change	Practical solutions		
	Reassurance by researcher	Planning for problems and pitfalls	melatonin		
	Phrasing of suggestions 'I wonder whether..'	Preparing for obstacles.	Behavioural psychology – rewards/reinforcement		
	Encouragement by the interviewer				
	Collaborative approaches				

Sub-question 3 – Post intervention interview data

Group 1	Group 2	Group 3	Group 4	Group 5
Praise and recognition of success	Sleep stages	Identifying and empathising with difficulties	Involvement and support of the researcher	Proposing next steps
Stressing improvement	Parent reference to significance of delivery of sleep advice/strategies		Staying in touch	Exploring exceptions
Emphasising parent self-efficacy				Exploring/explaining failures and difficulties
Highlighting change				

Sub-question 3 – reflective research diary analysis

Group 1	Group 2	Group 3	Group 4	Group 5
Collaboration	Adaptations made		Preparing for individual cases	Positive feedback
Self-efficacy and empowerment	Reflecting on usefulness of strategies			Researcher respect and admiration for parents
Researcher concerns and difficulties in working with parents	Reflecting on mistakes			
Empathy	Shaping future work			
Cognitive dissonance				

Appendix xix– Emerging themes

Main research question and sub-question 1

How does the intervention impact on parent reports of sleep levels and parental stories around sleep? Pre-intervention interview data

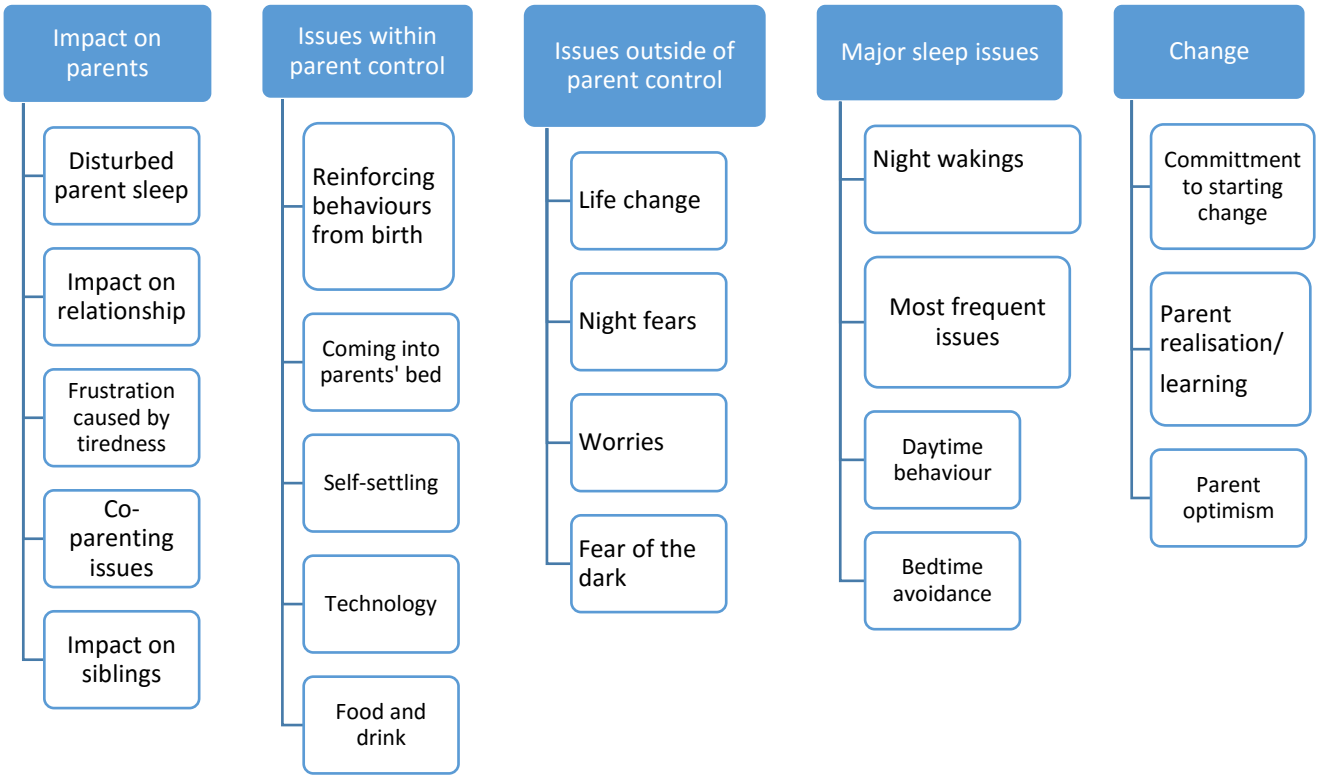


Fig. 7.1 – Sub-question one pre-intervention – emerging themes

How does the intervention impact on parent reports of sleep levels and parental stories around sleep? Post-intervention interview data

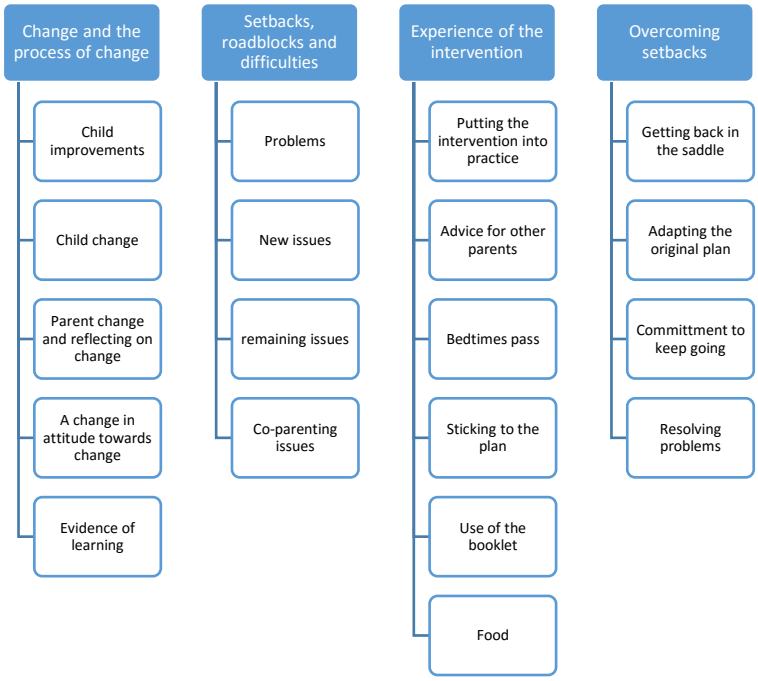


Fig. 7.2 Sub-question one – post-intervention emerging themes

Main research question and sub-question 2.

Do parents consider the intervention to be worthwhile? Post-intervention interview data

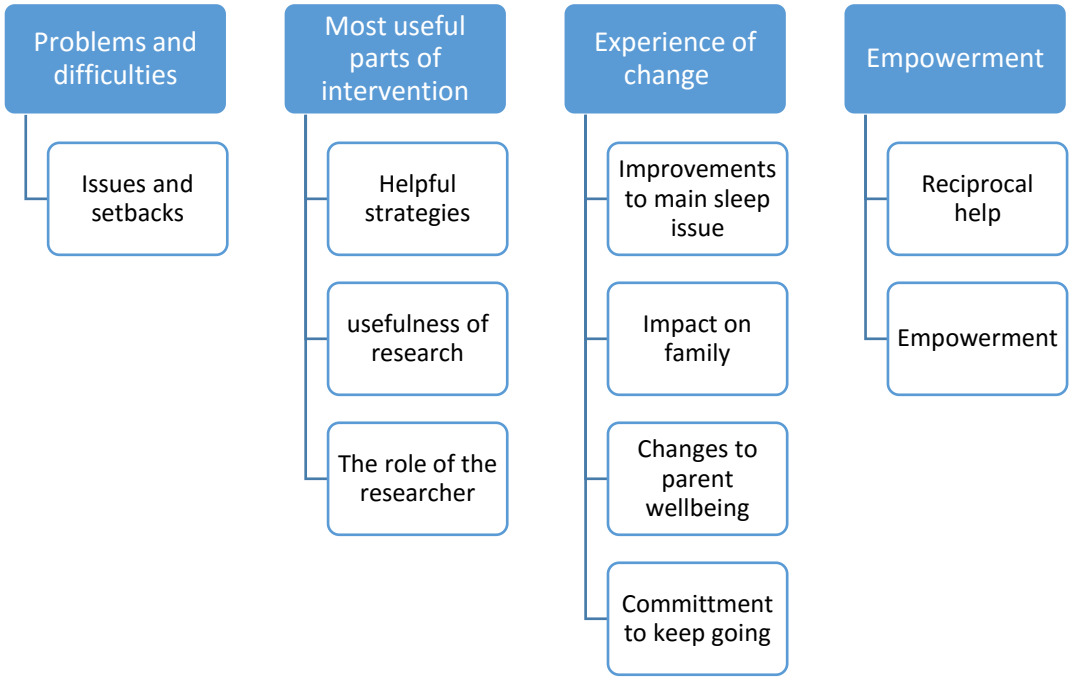


Fig. 7.3 Emerging themes for sub-question 3 – post-intervention data

Main research question and sub-question 4

What unique skills can EPs add to the delivery of a parent-based behavioural sleep intervention? Pre-intervention interview data

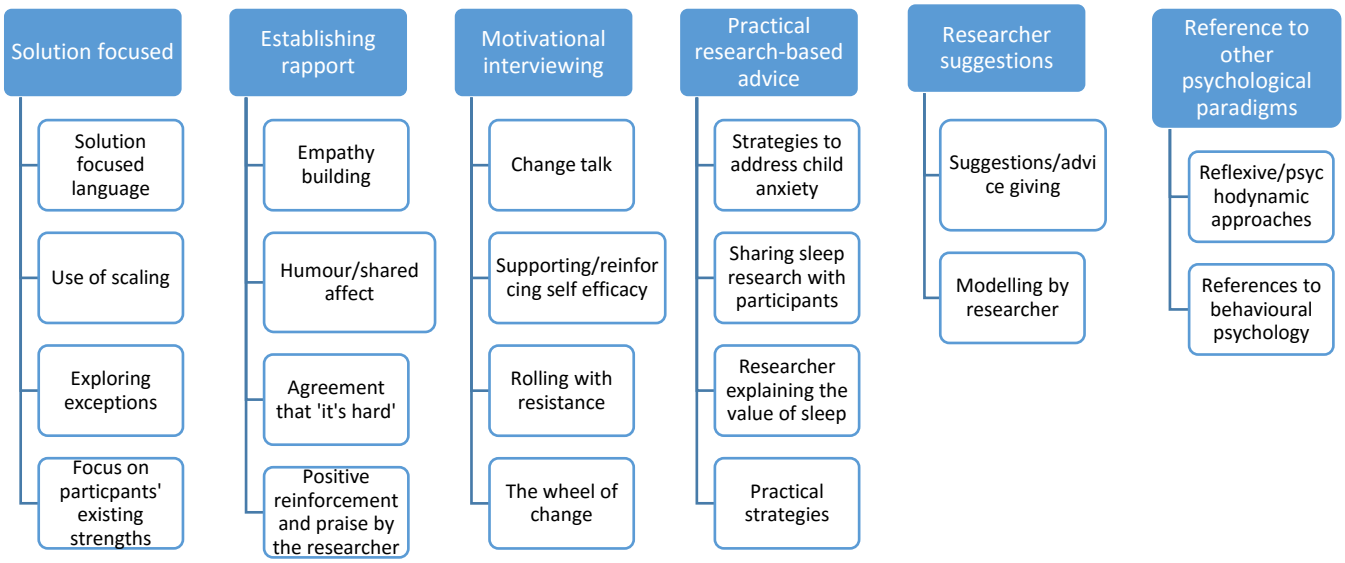


Fig. 7.4 Emerging themes sub-question 4 – pre-intervention

What unique skills can EPs add to the delivery of a parent-based behavioural sleep intervention? Post-intervention interview data

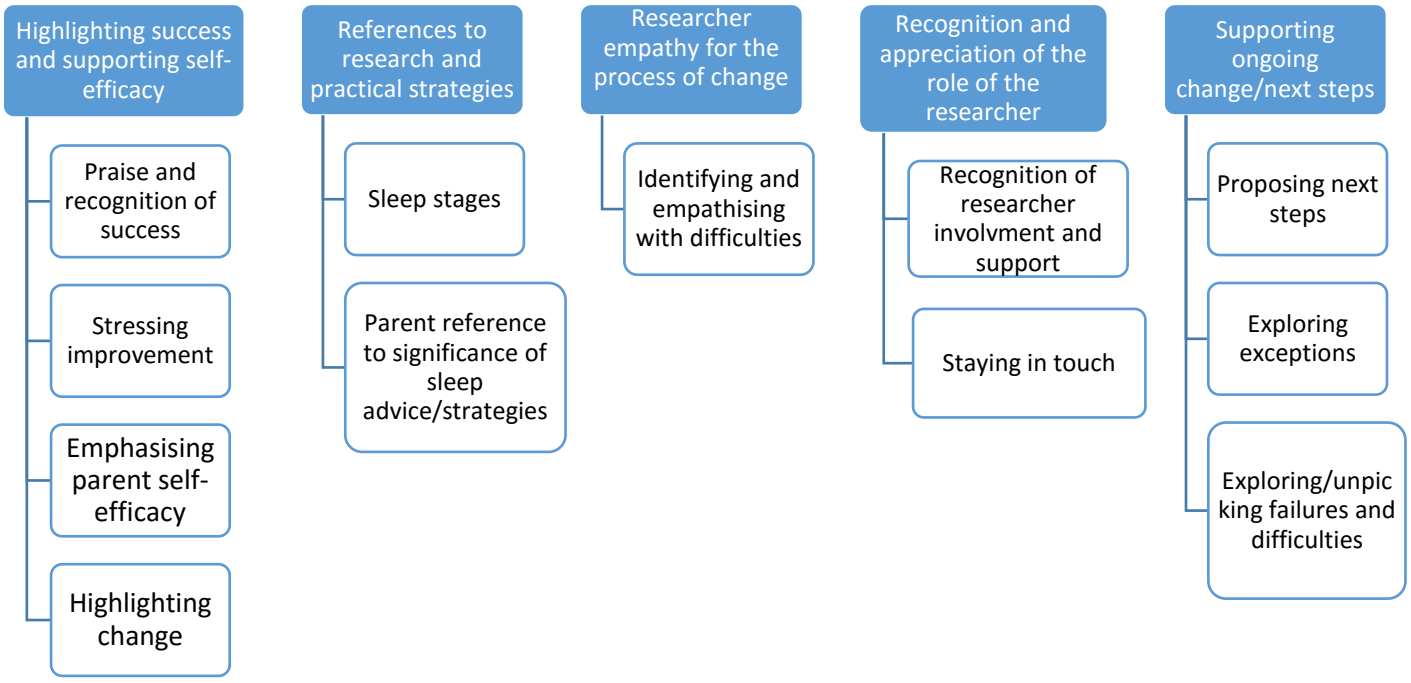
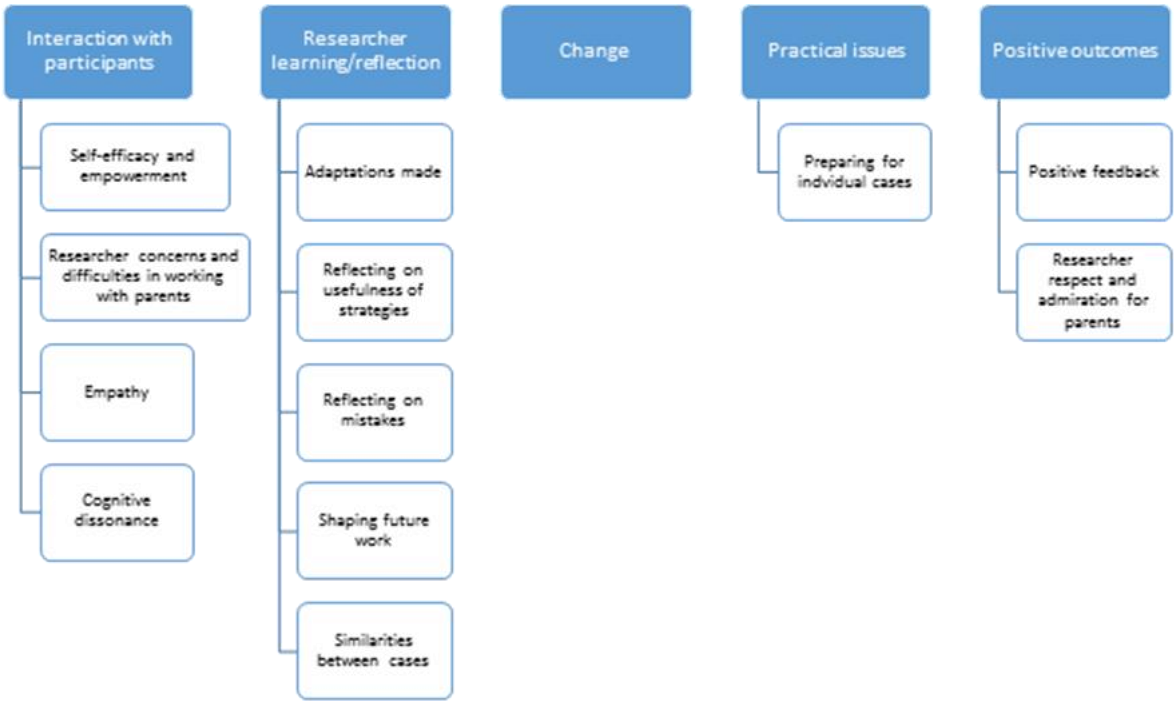


Fig. 7.5 Emerging themes sub-question 4 – post-intervention

What unique skills can EPs add to the delivery of a parent-based behavioural sleep intervention? Reflective research diary data



Appendix xx – Coded data extracts

Main research question and sub-question 1. How does the intervention impact on parent stories about sleep and reports of sleep levels? – Pre-intervention interview data

	Parent description of the problem
The main issue	…he won't settle on his own. (KATE pp6) I: …what bothers you the most? P: Him not detaching, him not being able to sleep on his own KATE pp 28 **I:** …….what are your best hopes for doing this intervention for …? **P:** Getting Brandon to sleep through, unless he's poorly, you know? The broken sleep (EVE pp1) The problem is, he's a good boy for going to sleep and he's really good at that. It's just the waking. EVEpp6 Yeah, they are a nightmare, they are the bane of my life at the moment. But he did run a lot smoother this morning without Dad around. (EVE pp 40) I need him to be able to be confident in myself that when I say, 'It's bedtime, get into bed and settle down' he will do that and that he will stay in his own bed. ALICE pp5 Yeah. I would be happy if I could get him in bed and fallen asleep by 8/8:15,ALICE pp18 [what bothers you most?] Yes, it's coming into my bed and not getting him to sleep early enough so that he's getting his full quota. ALICE pp22
Child sleep disturbance	He woke up about quarter past twelve. Well when I went up to bed at quarter past twelve, he'd got into bed with my husband KATE pp1 And then he woke up about half one, quarter past one again and then he was up at five past five this morning. KATE pp2 I'd say, with Harry on a bad night with him can be up to three quarters of an hour, when he's hyperactivity. But on a good night, it can take anything between ten, fifteen minutes. KATE pp7 And then it was 2 am, 4 am in my bed, put him back 6 am, up 7:15. So he's still waking up at 7, isn't he, just before 7. Yeah, he didn't sleep very well. Well, he's not going to, is he, after watching a film at bedtime? EVE pp10 Now he will still come into my room, particularly when my husband's away, it's a regular thing, sometimes I don't even notice he's done it so therefore I can't really do much about it. ALICE pp3 once he'd broken out of that sleep it goes back to what I was explaining before, it could be another hour before he'd settle himself back off to sleep. Once the sleep pattern has been completely broken and he's wide awake, ugh! <Chuckles> ALICE pp7

Influence of lack of sleep on daytime behaviour	I know … I just read something about hyperactivity. I know when he gets tired and [younger sister] does it as well, because then they go hyper. And then I know they're over-tired and then trying to get 'em to sleep is even more of a nightmare. (KATE pp6) 'cause we have noticed with Harry, when he's had a good night's sleep, if he's gone all the way through the night, the next day he's quite good. But when he's had disturbed sleep, by the afternoon, he's evil. KATE pp.17 We're trying to get him dressed for school, he just doesn't wanna do it. Then it's a major battle, try and get him dressed. Then he'll come home from school and he'll be, 'Mmm', then by the afternoon, he's evil. And then by the time bedtime … (KATE pp18) And I say, 'Oh, we've got to get up now. Got to get up now.' And he doesn't want to because, obviously, he's had broken sleep just as well as I have. His probably more so because he's doing the journey twice, isn't he, to my room and back. And he doesn't … some mo rnings he doesn't want to do anything (EVE pp1) He's not getting on very well socially either at the moment. EVE pp 12 Every day the school was ringing me, he'd done this, he'd done that, he wouldn't settle till it came to a point where his teacher actually asked me to take him to the doctors, which I did ALICE pp2 I, after parents' evening, became aware that he was tired in school and I think that was when I realised that he'd got to start going to bed earlier and it frightened me really. So of course when I started to enforce that, 'You will go to bed' <chuckles> he started to get naughty 'cause I'd just got into this routine of letting him relax in his room and perhaps letting him play till half-eight/nine o'clock, well, he wasn't coping with that because he's a child that needs his sleep. ALICE pp2
	Impact of child sleep difficulty on parent
Parent sleep disturbance	"and I'll admit, I'm a mum, I get tired towards the end of the day and eventually it'll probably end up with me being shouty - the more shouty I would get that would just inflame the situation even more." (ALICE pp.2) "it's just uncomfortable, we all have a shocking night's sleep" (ALICE pp.3) "I would ideally like him to sleep in his own bed because he shouldn't really be sleeping with me and I don't sleep properly when he's there because he's a very, very restless sleeper". (ALICE, pp.5)

	"You just think, when do I get to watch something on my own? <laughs> because obviously I can't watch what I want to watch because it's not appropriate is it?" (ALICE, pp. 24) I; "What would you notice if he was to sleep all the way through the night?" "I think I'd be happier Mummy in the morning. I don't think I'd be so grumpy. <Laughs> I'd probably be more upbeat shall we say? It would be nice if he would just sleep through. Yeah." (EVE, pp. 2) **"** So I sometimes do think, 'Shall I go to bed? Shall I not?' Or just sit there and think about all the stuff in your head, don't you. And then finally drift off and they wake you up anyway." (EVE, pp.2) "It's the broken sleep". (the main problem) (EVE pp.8) "Well it does, doesn't it? 'cause it causes … in your heart you know they're tired but you're annoyed at them because they're tired because they've made you tired and then it's a vicious circle, isn't it?" (EVE pp.14) "If anything does go wrong it'll probably be me in the middle of the night going 'ugh'. I know my faults, I know my faults" (EVE, pp.37) I: "(what are) the things which bother you the most now?" P: "The broken sleep" (EVE, pp. 40) "(a week with no night wakings) Could you imagine what I'd get done? That would be good" (EVE, pp.41) "we've always had to sit on the end of the bed, we have to sit on the end of the bed with him 'til he goes to sleep. We can't just leave him in his room, we have to sit on the end of the bed. 'cause if not, he won't sleep" (KATE, pp.2) "So I've always got up in the night 'cause obviously I used to let him sleep 'cause he had to be up for work in the morning….I've always tried to do it on my own and not disturb my husband too much" (KATE, pp.10) " Yeah. I see some of my friends and they'll say … their kid's maybe about a year older than Harry and they'll say, 'Right OK, ready for bed now. Go up to bed' and they go up to bed. But I have to sit …" (KATE, pp.10) " I am 'cause I'm shattered and when it comes to get up in the morning, I can't get up. Because I'm up two, three times a night. And I feel sorry for hubby 'cause he has to get up with Harry every morning" (KATE, pp.27) "but nine times outta ten, because I'm up in the night, S will say, 'Right, you go back to sleep, I'll take him down.' So then I might have that extra little half an hour to an hour and he'll come down with Harry. Then I get up and help with the morning routine. But hubby's been taking him to school in the morning, which is nice for him. He's been taking him to school because he knows at the moment I'm up two or three times a night." (KATE, pp.27)

	"It's had an effect on me." (KATE, pp.27) "Yeah it's like when I put him back to bed in the night, it'll take me about five, ten minutes 'cause I'm listening out for him, just making sure he's not gonna wake up again. (KATE, pp.27) "And then sometimes I'll just start going back into a sleep and I'll hear him again. It's like, 'Oh God' <chuckles> and I'm up again." (KATE, pp.27) P: "See, I'm quite a stubborn person so if I put my mind to it, I will do it." **I:** "I think you can do it, I think you can <laughs>. I really do." **P:** "'cause I need my sleep now." (KATE, pp.33) **"**He's four years old, I need sleep." (KATE, pp.34) (when waiting on bed for him to fall asleep) "Two hours, and a good night that was, to get him to sleep. I was absolutely shattered by the time I'd done it all." (KATE, pp.34) " Yeah. But it's hard because otherwise he won't leave Dad alone and he's constantly trying to wake Dad up. Well Dad's not very well at the moment. Dad's got severe depression and anxiety so he needs his sleep." (KATE, pp.9) " and the really annoying thing is I think it's only because he has given me nights of sleep that now it's become more difficult because I know I need the sleep." (EVE, pp.34) " Because that's the other thing, it wakes you up, you get into this routine of going to the toilet then you're waking up and needing the toilet and you're like, 'Well I don't need the toilet. Why am I even here?'" (EVE, pp.38) **Losing patience with the children when tired** " And they will go on and go on and go on and in the end, you end up then just giving 'em milk because you've got a raging headache. And I'm not one of these that like giving in to 'em but sometimes I have no choice. Especially if it's the middle of the night, I can't have 'em waking everybody up." (KATE, pp.5) "I know when he gets tired and Evie does it as well, because then they go hyper. And then I know they're over-tired and then trying to get 'em to sleep is even more of a nightmare." (KATE, pp.6) " So when I started to enforce that was when he started playing up again, he'd start perhaps throwing his toys round or constantly coming down the stairs, that's one of his really good tricks, 'Can I have something to eat? Can I have a drink?' Any excuse under the sun, 'Can I come down the stairs?' And of course when this has gone on for sort of an-hour/hour-and-a-quarter that's when I'd start to get cross with him and that's perhaps when I would

	probably start to shout and of course the whole cycle, once I start to shout he just fuels from that and his behaviour gets worse." (ALICE, pp.2) " Yeah, definitely. Well it does, doesn't it? 'cause it causes … in your heart you know they're tired but you're annoyed at them because they're tired because they've made you tired and then it's a vicious circle, isn't it?" (EVE, pp.14) "I've done that in the past. I think I've just lost my tether and I just say, 'I'm just not taking to you. I'm going to take you back to bed again.'" (EVE, pp.37)
Impact on the family	" Now he will still come into my room, particularly when my husband's away, it's a regular thing, sometimes I don't even notice he's done it so therefore I can't really do much about it. He does try to do it when dad's home but Damien always puts him back because there just isn't room, it's just uncomfortable, we all have a shocking night's sleep." (ALICE, pp. 3) I find it hard, yeah, because if we've got visitors, I've got to disappear for half and hour at a time, you know what I mean? (KATE, pp.3) "Yeah so if he's up two, three times a night or if he decides to have a tantrum in the night. 'cause I get up with him and then if he has a tantrum in the night, I've then gotta try and calm him down 'cause of him waking the other kids up. My daughter, she's what, year five now, year six so she's gonna be doing her SATs soon." (KATE, pp.4) "….it got to a point where … we were taking the kids up about eight o'clock and we'd still be sitting there at half nine, ten o'clock. We weren't having family time. By the time we'd got the kids to bed, me and hubby were absolutely shattered. We were coming down here for half an hour and then we were in bed ourselves." (KATE, pp.6/7). " The broken sleep, it doesn't do me very good and it doesn't do him very good and it just can upset [brother] as well, wake [brother] up" (EVE, pp.1) " By the time we'd got the kids to bed, me and hubby were absolutely shattered. We were coming down here for half an hour and then we were in bed ourselves." (KATE, pp.6)
Collaboration with partner/co-parenting issues	P: " Dad's a lot stricter than I am because obviously there's two of you then, it's easier to deal with it and dad is more strict than I am, I let him get away with more, I don't… oh typical mum, I – **I:** So you can play good cop/bad cop kind of? **P:** Well, yes we do, I don't like to see Andrew upset for no reason. Damien is far more strict than I am. (ALICE, pp.4)

	I: **(toy as a reward for good sleep)** You've broken the deal. **P:** You've broken the deal, but then actually… anyway, he did get – **I:** He got the Lego <chuckles>. **P:** His dad bought him a box of Lego but not for that, he bought it him for another reason later on in that day. Because that's another thing, Damien will be away for a while and come home, 'Ooh yes, I'll buy you this, I'll buy you that.' (ALICE, pp.5) "No, it's not a problem; it's a problem just for me, singly." (ALICE, pp.15) "Yeah, he went to America, he was on an American aircraft carrier and even phoning home, it was horrendous, perhaps once a week. But now it's brilliant because Andrew will FaceTime his dad every night and he can speak to him on the phone. The way technology has moved on, it's wonderful. In fact we did go through a phase where when he was up at night I put him on FaceTime to Dad and Dad would be telling him off down the phone and for the first week it worked until J realised, well actually you're on the other end of the screen and you can't get to me, you're not actually here." (ALICE, pp.19). "And it's only me who can do it. S tries to but Harry just plays up for him so then I have to go and take over." (KATE, pp.2) ".. because my hubby can be quite a deep sleeper, Steve can be quite a deep sleeper, he doesn't realise and Harry's literally curled up next to him." (KATE, pp.1) "S's always worked, he's off long-term sick at the moment so I've always been the disciplinary. And dad's always been the fun one." (KATE, pp.2) "So they don't listen to him. So he's trying to get the discipline down with 'em at the moment and they just don't listen. So half the time, I have to then step in." (KATE, pp.3) "Yeah, he will help me 'cause he doesn't work now so … he doesn't expect me to do the parenting, he's hands-on. He tries to be as hands-on as he can but yeah, he will help me, he'll step up and help me." (KATE, pp.10) "Yeah, so he's more Dad but then he will accept that, 'OK, Mum's doing it' so … and I think that's one of the reasons why then he'll go back off to sleep 'cause it's not Dad." (KATE, pp.10) "So I don't get now why all of a sudden, Harry's trying to … the only thing I can think of is in the morning, sometimes if it's like six o'clock, dad will say, 'Just have five minutes with me, Harry'. I don't know whether Harry's then trying to take that into the night, I don't know" (KATE, pp.20) "But D, he's quite a disciplinarian, isn't he? When it comes to stuff like that so he doesn't agree with …." (EVE, pp.9)

	"Yeah, and then … I don't think he went to sleep straight away but, yeah ... 'cause he was … Yeah. I didn't agree with what he (dad) was doing. But yeah. **I:** You can't disagree in front of them." (EVE, pp.18) "When they get a bit old at the end. I've all of them type of films now, totally banned 'em. I said to [partner], 'They're only watching Disney or ...' what's the other one? Pixar? That's it 'cause [partner] was a little monkey for it 'cause he'd sit with them on the knee, watch Avengers. Well, yeah, that's OK in a cartoon but not in the real ones, because it is too much I think." (EVE, pp.14). **"** His excuse is he earns the crust so he gets away with it." (husband sleeping with earplugs, EVE, pp.5)

	Parent behaviour contributing to sleep difficulty
Poor sleep associations	"I'd just got into this routine of letting him relax in his room and perhaps letting him play till half-eight/nine o'clock, well, he wasn't coping with that because he's a child that needs his sleep." (ALICE, p.2) "Well because he never slept through the night until he was seven months old, he was seven or eight months old, oh god he was horrific! He used to be constantly hungry, he was an every two-hour baby and all through the night, sometimes I would feed him two/three times through the night from a very young age. So really I just wondered if there was perhaps any connection" (ALICE, pp.12) "He would sleep, classic way to get him to sleep was just put him in the car, that would be the answer to everything, 20 minutes in the car and that would be it but there were nights when I perhaps did that to get him to sleep to take him to bed." (ALICE, pp.13) "I'm not frightened to admit it. But yeah, [driving around to get to sleep] particularly if he was poorly as well because it would just be an easy way to settle him." (ALICE, pp.13) " The only heating we properly had was the fire downstairs so I used to keep him downstairs with us 'til we went to bed." (KATE, pp.2) ". But we've always had to sit on the end of the bed, we have to sit on the end of the bed with him 'til he goes to sleep. We can't just leave him in his room, we have to sit on the end of the bed. 'cause if not, he won't sleep; he's up down, he's screaming, he's shouting." (KATE, pp.2) " Harry, he's never been able to do that. He's always had to have you there 'til he's asleep." (KATE, pp.3) "But if we try to give 'em juice, they just major kick off. But then he'll wake up in the night wanting milk." (KATE, pp.3)

	"But sometimes he's been that much asleep, so if he's fell asleep about four o'clock, sometimes he's been that asleep, we've literally just put him straight to bed." (KATE, pp.4) "Yeah so if he's up two, three times a night or if he decides to have a tantrum in the night. 'cause I get up with him and then if he has a tantrum in the night, I've then gotta try and calm him down 'cause of him waking the other kids up." (KATE, pp.4) "And they will go on and go on and go on and in the end, you end up then just giving 'em milk because you've got a raging headache. And I'm not one of these that like giving in to 'em but sometimes I have no choice. Especially if it's the middle of the night, I can't have 'em waking everybody up." (KATE, pp.5) "If he wakes up in the night, he might be awake five, ten minutes, I'll give him a bottle. (KATE,pp.6) "I've … if he's been up two or three times and he won't sleep then what I'll do is give him his bottle and then I lie on the bottom of the bed. So then sometimes I end up waking up 'cause I fell asleep on the bottom of his bed." (KATE, pp.9) "He's been so used to sleeping with us that going in his own room, he will sleep but like I say, he's not all the way through the night and he has to have us there to sleep. (KATE, pp.34)
Coming into parents' bed	"Now he will still come into my room, particularly when my husband's away, it's a regular thing, sometimes I don't even notice he's done it so therefore I can't really do much about it. He does try to do it when dad's home but Damien always puts him back because there just isn't room" (ALICE,pp.3) "So yes, most mornings now I am waking up and finding he's there and he's asleep, but he is there, he's asleep, he's resting so I'm just letting it go on." (ALICE,pp.3) "But he does say that the reason why he comes in to get in bed with me is because he does have bad dreams." (ALICE,p.3) "I would ideally like him to sleep in his own bed because he shouldn't really be sleeping with me and I don't sleep properly when he's there because he's a very, very restless sleeper." (ALICE, pp.5) "Sometimes he's asked, if there has been an occasion where it's been quite late I will probably be at the point where I will do anything to get him to sleep and he's said, 'Can I go and get in your bed?' and there are times when I have agreed to that. If it would mean he would be asleep, yes, I have agreed to that." (ALICE, pp.10) "[the thing that bothers you most?] "Yes, it's coming into my bed and not getting him to sleep early enough so that he's getting his full quota." (ALICE, pp.21)

	"**P:** To wake them up. So we've got two choices there, I could either give him a couple of minutes to settle and then carry him back or I need to do it so he knows what's going on. **I:** I'd just do it immediately. **P:** OK. **I:** Because in those few seconds he'll think mum's wavering here, there's a chance I'm going to be up for a winner <laughs>. **P:** So then he thinks he's won, yeah, and then he'll get really upset when he knows he hasn't. **I:** Yeah. **P:** Right, OK." (ALICE, pp.26) "- if I can be bothered… sometimes it's easier just to… get in, snuggle down <chuckles>." (ALICE, pp.30) But he doesn't cry or anything, he just gets up, comes in, 'I'm cold,' go and put him back in, wrap him up. Things like that. And sometimes he'll want to get in my, 'But Mummy, your bed's comfier.' (EVE, pp1) " Like this morning where I said, 'Oh you've got to get up now, Brandon,.' and he climbed into bed and then he fell asleep. And that's bad because I'm thinking it's time to get up now, he can have a cuddle. And that's where I'm doing wrong, isn't it, because I should be just, 'Come on then, let's get up.'" (EVE, pp,35) **"I:** Does he maybe get into your bed and you don't realise? **P:** Yes, that has happened. And I don't know how because ... I think it's probably the sleep deprivation, isn't it? But yeah, it has happened that I've woke up and like, 'How the hell did you get in here and how long have you been here?' And then I'll just transport him to his own room." (EVE, pp.45/46) **"** he'll just give him a quick hug and then put him back to bed. But then sometimes, because my hubby can be quite a deep sleeper, Steve can be quite a deep sleeper, he doesn't realise and Harry's literally curled up next to him. (KATE, pp.1) " So I don't get now why all of a sudden, Harry's trying to … the only thing I can think of is in the morning, sometimes if it's like six o'clock, Steve will say, 'Just have five minutes with me, Harry'. I don't know whether Harry's then trying to take that into the night, I don't know. (KATE, pp.20)
Self-settling issues	"Sometimes he'll say, 'Can I have a cuddle? Can I have this?' Yeah, I will do that if that will help settle him, but sometimes that can go the other way 'cause then we'll start having conversations about anything that's in his mind" (ALICE, pp.4)

	"And if he says, 'Can I play with my toys?' I just have to make that call as to whetI think it's going to be beneficial or whether I think, no actually, we need to get you into bed and we need to get you asleep." (ALICE, pp.4) "Yeah. I need him to be able to be confident in myself that when I say, 'It's bedtime, get into bed and settle down' he will do that and that he will stay in his own bed." (ALICE, pp.4) " And that's another thing he's got as well, he always does it to my hair, when he gets in bed if he wants to settle himself he'll do it, it drives me crackers." (ALICE, pp.7) "For a time when he was little I did stop with him, for about three or four months I stopped with him until he went with sleep and then one day I just found the strength to say this is not happening anymore" (ALICE, pp.16) " The problem is, he's a good boy for going to sleep and he's really good at that. It's just the waking." EVE, pp.6) ". But we've always had to sit on the end of the bed, we have to sit on the end of the bed with him 'til he goes to sleep. We can't just leave him in his room, we have to sit on the end of the bed. 'cause if not, he won't sleep; he's up down, he's screaming, he's shouting." (KATE, pp.2) " Harry, he's never been able to do that. He's always had to have you there 'til he's asleep." (KATE, pp.3) "We shouldn't have to sit with him 'til he's fully asleep." (KATE, pp.3) "No, he won't settle on his own." (KATE, pp.6) "But I know then just to leave him quiet, ignore him. Say, 'Right go to sleep, Harry' and then he'll go off. But even though he's starting to relax, I still can't go out the room 'cause then he's up." (KATE, pp.7) "Basically, I want it to get to a point where I can just say, 'Right, bedtime' and he'll take himself up to bed and go to bed." (KATE, pp.28) of … and I think that's why … you know, he'll have a bit of a cry and I'll say, 'Look, bedtime. Dad's asleep, end of. Dad'll be there in the morning but it's now bedtime.' KATE Pp 10 Like you said earlier about trying not to engage, he'll try and engage conversation. And half the time it won't make much sense. (EVE pp 43) So when I started to enforce that was when he started playing up again, he'd start perhaps throwing his toys round or constantly coming down the stairs, that's one of his really good tricks, 'Can I have something to eat? Can I have a drink?' Any excuse under the sun, 'Can I come down the stairs?' ALICE pp2 Sometimes he'll say, 'Can I have a cuddle? Can I have this?' Yeah, I will do that if that will help settle him, but sometimes that can go the other way 'cause

	then we'll start having conversations about anything that's in his mind so then that can get him motivated again should I say. ALICE pp4 Yeah, and I could tell by the way that once I say to him, 'It's bedtime' the silliness will start straightaway, pp8 One of his classics would be, 'Well I haven't had time to play with my toys.' So one thing that I have started doing with him is once we're both home and there's no further going out I will say to him, 'Right, you've got his amount of time now so you spend that how you would like, so if you want to watch some tele or if you want to play on the iPad or if you want to go and play with your toys then you do that but you've got to fit it into this time span.' So that at eight o'clock he doesn't turn around and say, 'I haven't played with my toys' or 'I haven't done this, I haven't done that.' ALICE pp23
Screen time before bed	"but even when he does go to bed now his little mind has to settle and relax before he does settle in bed, whether that be perhaps a little bit of TV, which I don't try to encourage but if it's a way of settling him then I will do it." (ALICE, p.1) **I:** The only thing with TV is, and I know that it doesn't affect all children the same, but the blue light from it does inhibit melatonin, whereas we're trying to increase it. **P:** OK, maybe that is something that I'm doing wrong. (ALICE pp 24) " And then it was 2 am, 4 am in my bed, put him back 6 am, up 7:15. So he's still waking up at 7, isn't he, just before 7. Yeah, he didn't sleep very well. Well, he's not going to, is he, after watching a film at bedtime? <Chuckles>." (EVE, pp.10) "**I:** For one reason because the light from the TV ... **P:** It's a stimulant. **I:** It inhibits melatonin release, so you've not got a natural… **P:** It's like the phones, isn't it? **I:** Yes, yeah." (EVE, pp.10) " **P:** They've got a TV in the room. Shall we scrap that? I'm happy to scrap it. **I:** I don't want to say to do that but after what I've just told you about … so we're trying to stimulate melatonin, which is the natural chemical that gets you to sleep." (EVE, pp.27) **"P:** You see that's another problem we've got because [partner] … my old mobile phone, [partner] has now decided to give to [brother] without a SIM card in it to use as a tablet because it's a Samsung Galaxy thing so it's quite a big screen. And that's causing problems already because he won't put it down and he's getting addicted to it and he's only got Minecraft on there.

	We'd never played Minecraft before but they will talk about it at school." (EVE, pp.28)

	External factors contributing to sleep difficulty
Disruption/life incident/change	That started a couple of months ago. Since hubby's been off, he will … if he comes in the bedroom for a drink, he'll just give him a quick hug and then put him back to bed. But then sometimes, because my hubby can be quite a deep sleeper, Steve can be quite a deep sleeper, he doesn't realise and Harry's literally curled up next to him. (KATE, pp.1) Steve's always worked, he's off long-term sick at the moment so I've always been the disciplinary. And dad's always been the fun one. (KATE, pp2) When Harry started going to nursery, we did completely change 'cause it got to a point where … we were taking the kids up about eight o'clock and we'd still be sitting there at half nine, ten o'clock. (KATE pp.6/7) At the age of ten months he was hospitalised for croup, which they said he was very young to have croup. Then he was hospitalised so many months later again with it. He's had a febrile fit, he's had asthma attacks. (KATE pp.13) **P:** That could be another reason why he is the way he is because he's been … **I:** Disrupted. **P:** Yeah and he's not … we don't mollycoddle him but obviously, he's the one that's been iller than the others so, with his asthma and he's had a febrile fit on me when I was on my own. When he had that, that was scary. (KATE pp13) But when he started at Reception his behaviour went downhill very rapidly. There's a lot of boys in Andrew's class and they're all very charismatic boys, just boys. And at that point his dad, who he's very close to, went on a very long deployment and everything sort of… we started having problems right, left and centre. (ALICE pp2) Anyway, when dad came home things really settled down. I did tend to notice that he would always be fine when Damien was at home at weekends, it would be during the week because he was cross that daddy had gone. (ALICE pp2)

	I let him watch a *Harry Potter* film and that was a very, very foolish thing to do, somebody had advised me that they were OK and I hadn't seen them and I think that was one of the catalysts that started it off. (ALICE pp3) **P:** I've always been used to it, we've been together 16 years and he's been in the navy for the whole of Andrew's life. It was particularly difficult when he was away for six/seven months. **I:** That's a long time, where was he, was he far away? **P:** Yeah, he went to America, he was on an American aircraft carrier and even phoning home, it was horrendous, perhaps once a week. (ALICE pp19)
Child worries and fears	I think maybe sometimes he may have watched something on the tele and I think he is a child who is more vulnerable to things that he sees on the tele. He can't separate fiction and what he's seen on the tele from reality (ALICE pp1/2) But he does say that the reason why he comes in to get in bed with me is because he does have bad dreams. (ALICE pp3)
Worries	but even when he does go to bed now his little mind has to settle and relax before he does settle in bed, (ALICE pp1) I think he does, I think a lot goes on in his little head, things that he can't articulate to me, whether it be something that's happened at school but things do worry him, things that he sees. He particularly likes to get involved with other children who he thinks are suffering (ALICE pp10) I think if you're a caring kind of person you can be that kind of worrying type of personality, can't you, and then that worrying can lead to bad dreams as well. (ALICE pp11)
The dark	But we've put darker curtains on. Apart from getting complete blackout lining on his … I don't know what else to do. He won't have the light off. We've got a dimmer switch and he won't have it down. He said it scares him, which isn't helping. **I:** So he's scared of the dark. **P:** Yeah. (KATE, pp 1) So my dad put a dimmer switch on so I could turn it down to virtually … but if I turn it … Harry can be asleep, if I turn it down, he wakes up and he's like, 'I can't see.' Yeah, you can see 'cause I don't turn it right off but he doesn't like it, even if it's on the lowest dim. He doesn't like it. (KATE pp22) **P:** So I'll never turn the light completely off with him 'cause I know he doesn't like it.

	I: Well find a dimness that he's happy with to go to sleep with and keep it like that. **P:** Yeah. So I'll have to try and use a reward for that. 'Right, we need to turn your light a little bit down further, now we've read the books, turn your light down a little bit further 'cause it's sleep time.' **I:** Yeah, 'As part of your new routine. So not like a separate reward, it's part of your new big boy routine to go through now.' (KATE pp22) We have the bathroom light on and he has a little plug-in light which he's not really fussed about the plug-in light but the bathroom light does stay on. (EVE pp16) . He does settle a lot more easy when it's light than when it's dark. He likes lights on and I don't know what the reason for that is (ALICE pp1) **I:** He never goes without nightlights, does he? **P:** Well this is something I've come to argue with myself 'cause normally I turn them off when I go to bed so that he's in the dark, but he did try to suggest that he would stop in his room if we left them on all night but that hasn't worked either, he still comes in. **I:** OK, but the thing is, you know that diagram that we looked at with the REM, when he comes out into that REM sleep if anything is different to when he fell asleep that's likely to wake him up. **P:** So just leave them on. (ALICE pp29)

Group 4	Readiness for change
Optimism about the future	See, I'm quite a stubborn person so if I put my mind to it, I will do it. (KATE pp.33)
Commitment to starting change	P: Yeah. I'll probably do it with Evie as well 'cause she's a bugger in the night for milk. **I:** Yeah, you might as well do it at the same time. **P:** So I'll do it at the same time for both. (KATE pp.25)

	I: Yeah, that's it. Right so are you ready? Are you ready to make these changes, K, do you think; do you feel like you're ready to do it? <Chuckles>. **P:** Yes. (KATE pp.26) **I:** I mean you can do it in three weeks. You can do it easily in three weeks if you want to start it now. I mean there's no time like the present, in some ways. **P:** I think we might have to, yeah. 'cause I can't keep going on like it, (KATE pp 26) **I:** But it sounds to me very much like you're at the stage now where you're ready to make some changes. **P:** I am 'cause I'm shattered and when it comes to get up in the morning, I can't get up. (KATE pp.27) See, I'm quite a stubborn person so if I put my mind to it, I will do it. (KATE pp.33) . In that process of trying to make him settle I think I would risk waking him up to a degree where it would take too long to get him back to sleep. I'm not saying I'm not prepared to try it, I'm just saying that's why I've not tried in the past. (ALICE pp15) you just find the strength to deal with the problem when you're strong to do it and you've got the willpower to actually see it through. And that was what I did so. When I'm ready I'll get on with it and sort it out. (ALICE pp16) but yeah, I will definitely have a bash with him. (ALICE 18) do you feel ready? **P:** Yeah. **I:** I don't want to push you. **P:** No, let's do it. (ALICE pp21) **I:** OK. Do you feel ready? **P:** Yeah, yeah let's do it. (ALICE pp.26) That's it, not in my bed. (EVE pp.34) 'You don't need Mummy's bed anymore.' (EVE pp.34) Yeah, I've decided to change. (EVE pp 37)

	Well, might as well start now. That means I'll have had him for a solid week and a half. Oh no ... week. If I do it from now I'll have had a solid with him then before [partner] takes over on the Friday. That's great. (EVE pp.48) Shall we make that a job to do this afternoon? [remove toys from bedroom] EVE pp25
Parent realisation/ learning	**P:** Like you say, probably subconsciously, not even thinking about it, I'm frustrated thinking, 'Oh he won't go to sleep on his own' but maybe subconsciously, I'm thinking, 'Well …' **I:** You want to be there. **P:** So I've sort of put off trying to do it even because I know he's safe. Maybe subconsciously, you're right. (KATE pp.16) **P:** And I think, to be honest with you, that's what they're waking up for. **I:** Yeah, it is, yeah. I think so. I think you might be right. (referring to milk during the night) (KATE pp.25) So it's better to get him to talk about it rather than try and make him forget about it? (ALICE pp 20) OK, maybe that is something that I'm doing wrong.[allowing TV just before bed] (ALICE pp 24) **I:** And you don't hear him, is that likely, will he sneak in? What could you do? **P:** I'll go and put him back. [note: I'll instead of I could] (ALICE pp. 26) And then it was 2 am, 4 am in my bed, put him back 6 am, up 7:15. So he's still waking up at 7, isn't he, just before 7. Yeah, he didn't sleep very well. Well, he's not going to, is he, after watching a film at bedtime? <Chuckles>. (EVE pp10) No. Toys. Now, that could be putting away or cover toys. I should probably find a better places to put … their toys are everywhere. They are everywhere. I do need to go through 'em, don't I really? Thin 'em out 'cause they've got too much. [brother] has a Lego all above his bed on the shelves and, yeah, there's toys everywhere, ain't there? Shall we make that a job to do this afternoon? (EVE pp25)

	It kind of gives him a bit of control, doesn't it? [being able to see his new routine] (EVE pp.31) So he's not getting enough sleep. (EVE pp.33) It's got to be consistent. (EVE pp.34) It's getting yourself out of this routine of being well … It's consistency, like you said. It's just remembering to ... (EVE pp.37)

How does the intervention impact on parent stories about sleep and reports of sleep levels? – Post-intervention interview data

Change and the process of change	
1.Improvements to sleep	**P:** Oh yeah, it's very much better. **I:** The night wakings are… really good. EVE pp3/4 **I:** These are amazing, aren't they? [referring to sleep diaries] **P:** Yeah, this was awesome, what a week. I had a really good week that week. EVE pp5 **I:** So can you tell me about Jake's sleep following the intervention, what's different about it? **P:** Well, generally it's a lot better. There's only the odd days that throw wobblers. EVE pp 7 **P:** But nine times out of ten he might have a little bit of a tantrum when he goes to bed because he wants his dad because he's still clingy for dad, but once he's in bed he's fine, he self-settles straightaway. KATE pp1 **I:** Wow, so you've not been doing any of the sitting on the bed? **P:** No. **I:** Has that all gone now? Fantastic. **P:** The first night, since the first day we started it I've not sat on the bed.

	I: That's brilliant! Wow! KATE pp 1 **I:** And he's not having milk? Oh is it? Oh that's good. **P:** Yeah, that's been turned down as well from the first night. KATE pp 1 **I:** That's great, isn't it, that's a big difference. KATE pp2 **I:** Self-settled, that's such a big improvement then, isn't it? **P:** Yeah. **I:** It's changed because he wasn't self-settling at all really, was he? **P:** No. KATE pp 3 **I:** But it's such a big improvement, isn't it? **P:** You can see straightaway. And we have tried to keep to a lot of the times, obviously they varied sometimes but you can see. KATE pp 4 **P:** How many hours would you say he's having a night? I stopped working them out, didn't I? <Chuckles> **I:** So about 11 hours there. KATE pp5 P: ……at least I know now if he wakes up, within ten minutes he's back off asleep, well, nine times out of ten within five minutes he's back in bed asleep. KATE pp8 P: He's still nervous about sleep in his own bed but it is getting better… ALICE pp1 **P:** Yeah, and he seems to be settling a little bit better now, ALICE pp2 P: so yeah, it's going OK at the moment, it's not perfect, it's not as serene as I would like it to be, it's not without its faults but it's a heck of a lot better than it was a month ago. ALICE pp2 **I:** But if he starts coming into the bed regularly again, now you've got into this, 'cause you've had a good block, haven't you really, of him not coming in. **P:** Yeah. ALICE pp4 I wanted to figure out what was going on and I know his issues probably aren't as big as some, but it helps us all sleep.EVE pp 17

	P: And W's (older sibling) a lot happier when he doesn't have disturbed sleep because I think it does wake him up and it wakes up [dad], even though he wears earplugs and everything it still affects his sleep. So it benefits him, it works' EVE pp9 P: And I suppose because I wanted to get it sorted, I wanted to figure out what was going on and I know his issues probably aren't as big as some, but it helps us all sleep. **I:** It's for your family, for the wellbeing of your family. **P:** Yeah. EVE pp17 Exactly, and E's [younger sibling] been going to bed the same time and she's been virtually the same sleep cycle. KATE pp4
2.Child change	P: He's quite settled at the moment, he's quite happy to be off school. ALICE pp8 **P:** No, not really, he's still the same, he's a happy little thing, he's always grumpy when he's tired, he's foul when he's tired ALICE pp3 **P:** He's getting hyper a lot. **I:** OK. **P:** But that's because he's not having a sleep in the day, but he's started to get quite hyper but he won't leave dad alone, he's mauling and he's trying to be picked up all the time now and trying to be… I think maybe because he's been in a big boy's bed he's now, in the day, 'Right, I'm going to see if I can push this now, see if I can get away with this.' KATE pp5 **P:** It is. So when he was at school his behaviour was a lot better. KATE pp5 P: I did parents' evening last night and the teacher said everything was fine, he was playing well EVE pp1 **P:** Yeah, but she said his behaviour at school's been fine and he's settling more at school so he's not being so disruptive and he's realised that if he doesn't involve himself in the group sessions he's actually missing out, so he's now going in and being involved so that's good.

	I: So that's changed since I last spoke to you. **P:** Since the first time, yeah. EVE pp4 **P:** So I think we're getting a more settled Brandon but he definitely has a problem with the duvet. [kicking it off] EVE pp5 P: Oh, Tuesday he had bad behaviour but he still slept through. EVE pp5 **I:** So have you noticed any changes, you said he was a bit more settled, have you noticed any changes in him in general since you've started? **P:** Yeah, I think when he sleeps through he's just generally more malleable in the morning, I can get him to do what I need him to do without having to raise my voice or threaten him to take toys away <laughs>. EVE pp8 **P:** A mixture of both, mostly the self-settling because I think he realised that he was a big boy, he didn't need us and he could go back to sleep. Because when he was waking up in the night as well I'd have to sit on his bed till he went back to sleep again, so now he realises he doesn't need me. KATE pp9
3. Parent change and reflecting on change	**P:** Well, if I can get a good night's sleep without him in the bed then I do feel much better, it's horrendous when he's in bed with me 'cause he's just tossing and turning all night long, he's such a fidget ALICE pp4 P: But I think because I know it's starting to work I'm a lot calmer with him, not as fraught and I think how you're behaving, it really does have an effect on them, doesn't it? ALICE 6 **P:** I needed it, I needed it because if I hadn't I was slowly losing the plot, being up four times a night it was getting quite bad. KATE pp8 **P:** ……..by the time I got back to bed in the morning I was like that, trying to get up for school I was shattered, you know? Then I could be kind of grumpy all day, but because I'm getting a bit of sleep now… obviously if I didn't go to bed till two o'clock in the morning that was my fault, if I don't get sleep through that it's my fault, but at least I know now if he wakes up, within ten minutes he's back off asleep, well, nine times out of ten within five minutes he's back in bed asleep. KATE pp8

	P: Because when he was waking up in the night as well I'd have to sit on his bed till he went back to sleep again, so now he realises he doesn't need me. KATE pp9 **I:** 'Cause you were staying with him, weren't you? Has that been a lot better for you then? **P:** Yeah, 'cause now I can put him to bed, I'll sit on my bed about five minutes just to listen out, five minutes and I'm downstairs. **I:** That's great, isn't it? **P:** Sometimes I've been literally downstairs, kids have fell to sleep by 25-to-8. **I:** Perfect, you've got a life. **P:** I've got a life. **I:** Watch tele, watch what you want to watch. **P:** Exactly KATE pp3 **I:** What about you, how have you been feeling, better? **P:** Better, yeah, better when he's sleeping through and I've actually been getting more done and now back at uni obviously it's important. The last few days have been a bit rubbish but today… I feel a bit weird today actually P: 'cause I've actually slept through, I woke up and thought, wow, it's the morning! <Laughs> EVE pp10 **I:** But I think if you feel that you're more in control then that's a positive thing. **P:** Yeah, it is, it's a good thing. EVE pp 10/11 **P:** It helps my structure because then I've got to actually tell him, let him and then take back, so I've got a bit more control. EVE pp.19 **P:** Yeah, I think it depends on your mindset and if you're level-headed, I guess, and down to earth because you've got to see the faults, haven't you, and a lot of people don't see their own faults I don't think, if that makes sense? So they can't see how to change EVE pp.14

4. A change in attitude towards change	**P:** And when it's at home it's different because it's your home, it's your family, you just get into this lull of… or routine of doing what you do, it's hard to see the changes that should be made because you're in it, if you know what I mean, if that makes sense? EVE pp 14 **P:** It's just me routine basically, it's just me being a bit more… what's the word I'm looking for? Me actually being in charge I guess and taking control of it all, which I think since Brandon was born really I lost a lot of control because obviously it was me on my own with the two of them, then as soon as Brandon was born D moved in and then it was three kids and him. EVE pp10 **I:** But I think if you feel that you're more in control then that's a positive thing. **P:** Yeah, it is, it's a good thing. EVE pp10/11 **I:** So what do you think helped you to make the changes, as in to do with your own resources? **P:** I think it's you, 'cause I <chuckles> I want to do it for you so, well, not for you but – **I:** Right, OK, so knowing that somebody else is monitoring it and that kind of thing? **P:** Yes, I think that makes a massive difference. **I:** But in terms of your own resources it was that you were – **P:** Oh sorry, yeah. **I:** No, no I appreciate that you said that but I just think you should give yourself a bit more credit. <Laughter> You were willing to make the changes straightaway, weren't you? **P:** Yeah, yeah. **I:** You put it into action straightaway so you're very motivated. **P:** Only when somebody… <chuckles> yeah I can be, I can, but there's an end goal, isn't there? EVE pp.12 **P:** ……you know, when you're getting on with your daily life and you're knackered and you haven't got any sleep and you can't think straight you can't see the pattern,

	you can't see the change, you can't see how to develop it or change it. The simple things like the snack, I mean it's so obvious but we weren't doing it, so why weren't we doing it? Because it wasn't obvious to us, so doing this makes it obvious. EVE pp13
	P: And when it's at home it's different because it's your home, it's your family, you just get into this lull of… or routine of doing what you do, it's hard to see the changes that should be made because you're in it, if you know what I mean, if that makes sense?
	I: Yeah, it totally makes sense. EVE pp13
	P: No. And it's hard to accept that, that you've actually got to change something. It is quite hard and [partner] really didn't want to do it because he was quite stubborn, but I think from doing it we've seen a difference, yeah OK, he kicks the covers off and we're not going to solve that overnight, but the routine has helped. EVE pp13
	P: That was the other problem, I guess, being willing to learn and change and I suppose being around education, in that at the moment I'm changing all the time with that, aren't I, so I suppose I'm open to suggestion and change, whereas a lot of people are going to be quite closed to it and almost in denial I guess. EVE pp13
	P: And I felt really harsh doing it [sticking to rewards] but it worked and it's worked since, so he's had every night in his own bed since last Wednesday I think. ALICE pp1
	P: Well nothing's ever easy, is it? Particularly when you decide you're going to do it and you've got to stick to it, it'd be very easy to give up. It's been quite challenging, it has, and I knew it would be but it's just finding the appropriate time to find the strength to say I am going to deal with this, 'cause in the middle of the night it is easy just to let him flop into bed and snuggle back down, isn't it? ALICE pp6
	P: Yeah, it's not been the easiest but it hasn't been probably as horrific as I thought it would be. ALICE pp6
	P: Well, it was just deciding that I'd had enough of having my sleep completely interrupted and just decided… I've already said, it was just finding the strength to decide now is the time I'm going to deal with this, because he doesn't do it when his dad's home so it's just me that suffers with it. ALICE pp7
	P: I think in a lot of ways in hindsight I should've nipped it in the bud when it started, 'cause it's something he's always done but it was always sporadic and perhaps he

	wouldn't do it for a week and then he'd do it for a couple of nights and then he went through a phase where it didn't happen, so suddenly this cycle started and I think I should've just nipped it far sooner than – **I:** But that is what you're doing now though, isn't it, and it's easy to say that but really at the time you just think, well, it won't hurt for one night. **P:** That's it, that's it. ALICE pp9
5. Evidence of having learned from the intervention	**P:** Yeah, not at night time [electronic items], no they've been doing it in the morning. Well, it's been a treat for [brother] when he's washed and dressed and ready to leave the door… EVE pp9 P: So he did and he would bring it and put it on my side and try and climb into my bed, I'm like, 'No, no, no, no go back to bed.' **I:** Good. EVE pp11 **I:** Oh, the nightlight, I was just saying as long as it's not then turned off in the night, as long as he has what he goes to sleep with and it's there all through the night that's fair enough. **P:** You said that to me and I've kind of stuck with it. **I:** Did that work better? **P:** Yeah, if you change the way he's gone to sleep it does seem to upset his pattern ALICE pp2 P: He did put a couple of things in his worry box and I have to be very careful what he's watching on the television because I think things affect him more than I've realised in the past, and I'm very careful about what he does watch now. ALICE pp4 P: Two of those nights he did come in and have a cuddle but I was adamant, no, jumped straight up, 'Yes, come on, cuddle' and then 'right, go on' <chuckles> 'on your way, toddle off back to your bed.' And he did so, but no, it's been quite challenging, particularly at bedtime and trying to get him into bed for a decent time and

	following through with not letting him have the iPad, on your advice, and letting him colour. ALICE pp6 **I:** That's good, so he knows, you've changed his expectation, haven't you, I suppose. **P:** He knows he's not having milk at bed. KATE pp9

Setbacks, roadblocks and difficulties	
Problems experienced	**P:** So the last two nights he hasn't slept very well, now I don't know why other than… I don't know why. **I:** Has anything happened at school? **P:** Well, this is what I'm wondering because I did parents' evening last night and the teacher said everything was fine, he was playing well, 'cause I'm worried about his social skills, I am generally worried about that because I don't think he's sociable EVE pp1 **P:** Yeah, see bedtime now we've changed that again, which maybe… because they were sleeping together still so you know how we separated them for the first week, well then I decided it was too much 'cause they weren't settling, so I thought, right OK, well settle together and they settled really good and everything was fine and it's been going well, and then the last few… they were messing around end of last week and beginning of last week I think? Yeah, unsettled Tuesday, all Mon, 12th to the 14th, 15th, 16th 'cause they'd been messing around in the bedroom basically chatting far too much. EVE pp2/3 P: There's only the odd days that throw wobblers. EVE pp7 **P:** But nine times out of ten he might have a little bit of a tantrum when he goes to bed because he wants his dad because he's still clingy for dad, but once he's in bed he's fine, he self-settles straightaway. KATE pp1 **P:** He's still nervous about sleep in his own bed but it is getting better, it's taken a while to use the strategies that you've given me because he was adamant he… for some reason he just suddenly decided he was adamant he wasn't going to sleep in his own bed and it's only just recently it's got really bad with him coming in and getting in with me. The first few nights he wanted to earn his treat but he just couldn't seem to have the courage to settle down with it, but gradually he did ALICE pp1

New issues arising	**P:** But I have noticed, I don't know whether he's actually starting to sleep walk? Because a lot of the time I've noticed he's come into our room but then he's either trying to get onto the bed next to you but he's falling straight back to sleep or you'll find him curled up on the floor. **I:** So rather than sleep walking… sleep walking is what we call a parasomnia which kind of happens when you're in quite a deep sleep, but it might be just that he's half woken up, has staggered in in a half sleep and then gone back to sleep rather than sleep walking KATE pp 2 **P:** But that's because he's not having a sleep in the day, but he's started to get quite hyper but he won't leave dad alone, he's mauling and he's trying to be picked up all the time now and trying to be… I think maybe because he's been in a big boy's bed he's now, in the day, 'Right, I'm going to see if I can push this now, see if I can get away with this.' KATE pp5
Remaining difficulties for child	
Remaining difficulties for parent	
Potential future difficulties	**P:** I don't know really, I think it's something that I would just work out as and when it started happening again. I think I'd have to look at why it had suddenly started happening, what the reason was for it. ALICE pp4 **I:** So I think the only thing to get rid of that one last wake up might be to, like I said, phase out the juice because if you think about it he's still getting rewarded, in a way, for waking up because juice is a reward really. If you can phase that out really gradually and make it weaker and weaker until it's basically water and then he won't bother for it probably. **P:** Yeah. KATE pp4 **P:** No, I don't think so. He's quite settled at the moment, he's quite happy to be off school. **I:** So the challenge might be when he goes back to school then? **P:** Yeah. ALICE pp8
Co-parenting issues	P: I'd be interested to know what he'd be like if I wasn't here and dad was here <chuckles> if I had a night out I wonder what he'd do then. I think he just feels a lot more secure when Damien is home. ALICE pp7

	P: Yeah, so then I'd changed it and I said, 'D, right, this is what's happening, [brother]'s staying down here while I go and read with Brandon, Brandon's then going to bed and then [brother]'s coming up after.' Which I've struggled to implicate with D [partner] because D's… not been very helpful with it <chuckles> to put it nicely. I have done it for the last three nights, wasn't it? EVE pp3 P: Except from they have this week started playing 'cause [brother]'s been playing Minecraft 'cause all his friends at school and D's [partner] watched this documentary and it says that it's good for their learning, so now D's allowed them to have… I'm not sure, I'm not convinced, I haven't done enough looking into it. 'Cause it just makes them very unresponsive, EVE pp8 P: **P:** Which is another thing that worries me because I don't think we can be firm enough 'cause our parenting needs to be more together, do you see what I mean? **I:** Yeah, I do. **P:** Because I can say one thing, D will say another and then… yeah there's a lot of issues in that structure that this has made very apparent to me. <Laughs> EVE pp8

Experience of the intervention	
Putting change into practice/motivation for change	**I:** So what do you think helped you to make the changes, as in to do with your own resources? **P:** I think it's you, 'cause I <chuckles> I want to do it for you so, well, not for you but – **I:** Right, OK, so knowing that somebody else is monitoring it and that kind of thing? **P:** Yes, I think that makes a massive difference. EVE pp12 **I:** So thinking about change do you think you were ready for the change when you met me? **P:** Yeah, because I think when I saw that letter I was like I need to ring you. **I:** That's useful.

	P:	Yeah, I don't think you can be pushed into it. EVE pp.13
	I:	So it's you establishing control before bedtime, isn't it?
	P:	Yeah. EVE pp19
	P:	The first night, since the first day we started it I've not sat on the bed KATE pp1
	P:	I needed it, I needed it because if I hadn't I was slowly losing the plot, being up four times a night it was getting quite bad. KATE pp8
	P:	Yeah, just really using some tactics that would work really, obviously the reward strategies were good. I think the worry box was good because although he only used it a couple of times I think I will try and get him to use it perhaps once or twice a week, I will get him to use it again just to see what is going on in there when he's calm and when he's not focussed on anything else. But I think because I know it's starting to work I'm a lot calmer with him, not as fraught and I think how you're behaving, it really does have an effect on them, doesn't it? ALICE pp6
	P:	Well, it was just deciding that I'd had enough of having my sleep completely interrupted and just decided… I've already said, it was just finding the strength to decide now is the time I'm going to deal with this, because he doesn't do it when his dad's home so it's just me that suffers with it. ALICE pp7
Advice for other parents	**I:**	Yeah, that's right. So what advice would you give to other parents who are wanting to make changes?
	P:	Phone you <laughs>! I already said to one that you need this girl, she'll help you out. No, it has helped massive because it's all logical and simple things when you've got it here in black and white, you know, when you're getting on with your daily life and you're knackered and you haven't got any sleep and you can't think straight you can't see the pattern, you can't see the change, you can't see how to develop it or change it. The simple things like the snack, I mean it's so obvious but we weren't doing it, so why weren't we doing it? Because it wasn't obvious to us, so doing this makes it obvious. EVE pp12/13
	P:	Yeah, and it's getting the routine early. EVE pp14

	I: So what advice would you give to other parents who want to make these changes? 'Cause obviously this is quite a common problem the coming into the bed thing. **P:** Well, it's deciding when you're going to deal with it and once you make a start you've got to carry on with it and see it through. ALICE pp7
Experience of practical strategies bedtime pass	**P:** Oh the exchange pass thing was good as well, 'cause in the first week that was really good. **I:** You've phased that out now, haven't you? **P:** I've phased it out, yeah, costing me a fortune <chuckles> 'cause [older sibling] wanted them as well <laughs>. EVE pp11 **P:** So it did work and I think because he had that and then I had to have the interaction with him to say, so it worked for me as well because I had to remember to, if he did bring it, take it off him which meant that I actually had to do something rather than just cuddle him and keep him warm and put him back in his own bed. So it made me have to re- …yeah, yeah EVE pp11/12 **P:** Yeah. And then I've also got to ask the question, how are we going to get through this? **I:** Yeah. **P:** 'Cause once he realises the treat's not there every morning then…ALICE pp.8
Use of the original plan	**P:** Only when somebody… <chuckles> yeah I can be, I can, but there's an end goal, isn't there? **I:** Yeah, do you think it was the end goal that was motivating for you? **P:** Maybe, yeah. **I:** And just having that made clear and seeing a path to that goal. EVE pp12 **I:** Did you find making this plan helpful? **P:** Yes, because obviously by doing that even though I didn't have to go back to it again it stuck in my brain, so by us sitting there going through it I was taking it in and then it just seemed to click into place. KATE pp7/8

Use and success of the booklet	**I:** Well, bananas are good. So did you find the sleepy foods and things from the booklet useful? **P:** Yeah, it's handy. It's good to remind, you isn't it? EVE pp11 **I:** Oh brilliant. Did you use the booklet much? **P:** No. I didn't really, I just remembered what we said and I tried to stick to it the best I can. KATE pp4 I: Do you think if I'd have just given you the booklet it would've been not as helpful; do you think it's been helpful for me to come and go through it? **P:** Yes, very helpful, because if I look at the booklet I think, well, how do I….? But with you coming out and speaking to people you get that friendliness and it helps because then if you……and approach if I've got any problems. KATE pp7 I: So how did the booklet help? So probably for you was it just, I don't know, it was going through it, was it? **P:** Yeah, going through it with yourself really. KATE pp7
Sleep stages	So when we were going through the booklet did you find it helpful to, when we looked at the sleep patterns and that kind of thing, did you find that helpful going through that? **P:** Yes. **I:** So learning about when he might wake up in the night and that kind of thing? **P:** Yeah, so if he goes to sleep what I do now, if I think right he's gone to sleep I won't go into his room, I'll leave him, where if I'm coming up and he hasn't woke up in the night I'll put my head round the door because I know that if he's not woke up he's probably in a deep sleep. **I:** Yeah. **P:** So I can get my head round the door a bit easier. **I:** That's great, so you've used that. **P:** So I know now that nine times out of ten he's actually spark out. KATE pp9

Food	P: They're not asking for food now so much because obviously they're having the snacks and stuff so that's good. EVE pp3 **P:** Yeah, that's what we're doing. Because I did story time with them and then they just keep asking for more, and more, and more and I'd be like, 'No, one, one, one…' <laughs>. **I:** It's really hard, isn't it? **I:** So if you're keeping it gluten free for tea that's probably… **P:** Probably a good idea, isn't it, yeah. EVE pp5 **I:** So which bits of the intervention as a whole did you find most useful? **P:** Probably the feeding of them, I think, giving the snacks and stuff. Although it's quite an obvious thing EVE pp11
Sleep diaries	**P:** It helps, yeah, it helps massive, doesn't it? Because if you don't write it down then you're kind of screwed do you've got to write it down. <Laughter> And then I've got to look at it and think, oh, well that worked well, that didn't work well, oh look at the nights, oh dear me, late nights and then I talk to Alice about it, 'Well, they don't do well on late nights.' I said, 'I know!' <Chuckles> I know, I feel bad. EVE pp11 **P:** Yeah, and actually having physical evidence, I guess, of how it's… 'cause we have got evidence, haven't we, of how everything's worked and what's not worked and making my notes of what they've eaten and whatnot. It helps you paint the bigger picture and without that you're kind of stuck in a lull, aren't you? EVE pp12 **I:** Do you think keeping the diaries helps you to – **P:** Yes. **I:** - not see your faults as such but just to look at the patterns of where it's not gone as well and give reasons? **P:** Yeah, I mean although I know he's woke three times and I know when he's woken, when you've written it down you've committed it so you're almost thinking, well, I've got to beat that, we've got to beat that because not only is it bad for him it's bad for everybody else that wakes up with him. So by seeing that I know I've got to do this <chuckles> the zeros are so much nicer! EVE pp 14

	P: I like having them around though, just to look at <chuckles> just so it reminds me, ah keep on the path thank you, don't deviate. **I:** Yeah, and even if you just make a note when you've had a particularly bad night and see what's happened. **P:** Yeah and I can do that in my diary. It's getting into a routine with it, 'cause a lot of people would look at this and go <sighs> oh god! EVE pp17

Overcoming setbacks	
Getting back in the saddle	**I:** So they'd been late at bedtime? **P:** Yeah, so then I'd changed it and I said, 'D [partner] , right, this is what's happening EVE pp3 **P:** Yeah, it's not been too bad, obviously there's been times when we've been out and he's falling asleep at his nan's or something, but I've put him straight to bed and he's been fine, he's fallen asleep in the car, straight out of the car, straight into bed, fine. **I:** Brilliant. KATE pp 1 P: But we're a lot better now, the only thing he's waking up for now is 'cause he's half asleep and he's walking, but sometimes I'm putting him straight back to bed again. So there's still that bit of him getting out of bed but it's not as bad as it was, it's like five minutes and he's back in bed fast asleep KATE pp2 P: But obviously because dad's not been very well, dad has given into him a little bit in the day, but now I've said, 'You can't keep doing it' and he's stopped it now KATE pp5 **P:** So for about a week or so he earnt three or four treats and then he did get a little bit bored with that, then we got into birthday so obviously his routine was a little bit out of the norm, then obviously once you've got the house full of toys, it looked like a toy store from all his birthday presents and obviously from what he had from his party he wasn't interested in some little toy. But nevertheless we seem to have got back into it and I thought, well, how am I going to get round this and I did it the middle of last week, I'd arranged for his best friend to come round for tea and it was probably really harsh of me but I said, 'You've got to earn this and you've got to earn it by sleeping in your own bed and if you don't then I'm going to ring [friend's] mummy and tell him that he can't come and that's going to upset him as well. ALICE pp1

Adapting the original plan	P: And I felt really harsh doing it [sticking to rewards] but it worked and it's worked since, so he's had every night in his own bed since last Wednesday I think. ALICE pp1 [small toy reward system not working following birthday] **P:** He did, he liked those a lot [stickers provided], 'cause he would play with them. It's simple things, isn't it? **I:** Yeah, yeah it's just anything to motivate them at the beginning, isn't it? **P:** Yeah. I found them probably more useful than the toys. [for use with the bedtime pass] EVE pp 19 **P:** Yeah, because I could have control of those a bit more better, if you see what I mean? So I could say, 'Well if you want Spiderman or Ben Ten then you need to do this.' And even at the bedtime routine, 'cause I used them… I think I used them initially as the bedtime routine thing, so when he'd got dressed and washed and everything he would get to play with them and then we read 'em in bed. **I:** OK, that's good. **P:** It helps my structure because then I've got to actually tell him, let him and then take back, so I've got a bit more control. EVE pp19 **P:** No, sometimes if we're running a bit late sometimes he'll take his milk up but then I take the bottle off him, but as long as it's empty he won't get no more in the night. I find if he's wanting dad it's easier to comfort him, it's easier to get him away from dad and then about half-an-hour later when I know he's asleep the bottle comes out of his room. **I:** Yeah, OK. KATE pp.2 **P:** Yeah, like if I've gone out or if I've been at nan's I've put if I was out or in the car or if I've been at nan's, so if I've popped back to my mum's or something and we've got back later than we expected or something, like we've gone for dinner or something, but we've been ok nine times out of ten. KATE pp2 **P:** Well, I did deviate from your plan slightly because you had obviously advised me to give him the toy then once I realised that that wasn't working we changed it to… I don't know, things just come in your head, don't they, and you try them whether they're good or not <chuckles>. ALICE pp4

	P: But I think from my point of view it's taking on board the advice and strategies but working out how best to use them and if you do need to make any changes, to suit you, then you've got to find them. ALICE pp.7 **P:** Yeah, what works for you and what works for you with your relationship with your child because not every strategy… **I:** Yeah, that's right, so you can just pick and choose really, can't you, and you have to reach a compromise kind of thing. **P:** Yeah. And I just changed your one slightly to, 'Well actually you've got to earn that treat for tomorrow.' ALICE pp7/8
Reflecting on the external pressures	so I private messaged her and said, 'You're doing great, there's nothing wrong with what you're doing.' And I think that's what's lacking, 'cause everybody's going, 'Oh god, that's awful, oh your baby doesn't sleep.' There's so much negative, I'm like, well she's not gonna – **I:** Like it's something that she can't control, whereas really she can. **P:** She's doing fine, yeah. And I think that is what a lot of mums are lacking as well, because they're always constantly trying to do better, better this, better that, better the other. **I:** So there's a lot of pressure? **P:** I think there is a lot of pressure on women in general to be fair, but then that's my… **I:** Particularly around sleep do you think, because I know I noticed it, because you always get those parents who would say, 'Oh yeah, well they sleep for 12 hours, they've slept for 12 hours since three months.' **P:** Yeah, and they put pressures like that, it puts pressure on, doesn't it? But that might be lovely for them and they might even be lying <chuckles> I'm not being funny but there's no kid that sleeps constantly forever, they do have nightmares every now and then, you know? EVE pp15
Commitment to keep going	**P:** Yeah, and I think I was probably in that cycle and it would be easy to slip back into it but by doing this…

	I: Yeah, you'll be aware of it. **P:** … I'll be aware of it, yeah. EVE pp17 **P:** I'm going to carry on with it [separate bedtimes as in the original plan], yeah, because it's helpful for the teacher as well because he's reading the stories with the pictures, that's how they're learning to read so I'm sitting him on my knee, he's reading them. **I:** Oh that's good. EVE pp3 **P:** Yeah, because at the end of the day I don't want a ten-year-old boy climbing into my bed, do I? It's alright while he's three and –EVE pp17 **P:** Yeah, yeah you can. Sometimes you just do anything to sleep as a parent <laughs>. **I:** Yes, of course, you've got to survive, haven't you? **P:** Yeah. **I:** But like you say, in the long term it doesn't work because then he's going to be wriggling next to you when he's like 15. **P:** Exactly. ALICE pp9
Steps to resolve problems	P: What I do now is his duvet's on and it's tucked down the one side, it's not quite long enough to go the full length of the bed to go all the way round, but then I've got a sheet that I fold in half and I put that over his legs. EVE pp5 **I:** The odd nights. Can we see a pattern to that, is it getting cold, is it when something's happened that's out of the normal routine? **P:** Well I'm wondering if it's the cold and then I'm wondering if it's the wheat, but then the two have happened at the same time so it's really maybe just knock out the wheat and see whether the cold does make…EVE pp7 **I:** OK, that's great. Are you going to gradually phase out the juice to water, I'd try and maybe… just make it really weak so he eventually doesn't want it. **P:** Yeah, but to be honest nine times out of ten he'll ask for it and in the morning it's still there. So whether it's just like a comfort thing 'cause I've – KATE pp1

Do parents consider the intervention to be worthwhile?

Difficulties, setbacks and negative experiences	**P:** So the last two nights he hasn't slept very well, now I don't know why other than… I don't know why. **I:** Has anything happened at school? **P:** Well, this is what I'm wondering because I did parents' evening last night and the teacher said everything was fine, he was playing well, 'cause I'm worried about his social skills, I am generally worried about that because I don't think he's sociable EVE pp1 **P:** Yeah, see bedtime now we've changed that again, which maybe… because they were sleeping together still so you know how we separated them for the first week, well then I decided it was too much 'cause they weren't settling, so I thought, right OK, well settle together and they settled really good and everything was fine and it's been going well, and then the last few… they were messing around end of last week and beginning of last week I think? Yeah, unsettled Tuesday, all Mon, 12th to the 14th, 15th, 16th 'cause they'd been messing around in the bedroom basically chatting far too much. EVE pp2/3 P: There's only the odd days that throw wobblers. EVE pp7 **P:** But nine times out of ten he might have a little bit of a tantrum when he goes to bed because he wants his dad because he's still clingy for dad, but once he's in bed he's fine, he self-settles straightaway. KATE pp1 **P:** He's still nervous about sleep in his own bed but it is getting better, it's taken a while to use the strategies that you've given me because he was adamant he… for some reason he just suddenly decided he was adamant he wasn't going to sleep in his own bed and it's only just recently it's got really bad with him coming in and getting in with me. The first few nights he wanted to earn his treat but he just couldn't seem to have the courage to settle down with it, but gradually he did ALICE pp1

Adapting the intervention/plan	P: And I felt really harsh doing it [sticking to rewards] but it worked and it's worked since, so he's had every night in his own bed since last Wednesday I think. ALICE pp1 [small toy reward system not working following birthday] **P:** He did, he liked those a lot [stickers provided], 'cause he would play with them. It's simple things, isn't it? **I:** Yeah, yeah it's just anything to motivate them at the beginning, isn't it? **P:** Yeah. I found them probably more useful than the toys. [for use with the bedtime pass] EVE pp 19 **P:** Yeah, because I could have control of those a bit more better, if you see what I mean? So I could say, 'Well if you want Spiderman or Ben Ten then you need to do this.' And even at the bedtime routine, 'cause I used them… I think I used them initially as the bedtime routine thing, so when he'd got dressed and washed and everything he would get to play with them and then we read 'em in bed. **I:** OK, that's good. **P:** It helps my structure because then I've got to actually tell him, let him and then take back, so I've got a bit more control. EVE pp19 **P:** No, sometimes if we're running a bit late sometimes he'll take his milk up but then I take the bottle off him, but as long as it's empty he won't get no more in the night. I find if he's wanting dad it's easier to comfort him, it's easier to get him away from dad and then about half-an-hour later when I know he's asleep the bottle comes out of his room. **I:** Yeah, OK. KATE pp.2 **P:** Yeah, like if I've gone out or if I've been at nan's I've put if I was out or in the car or if I've been at nan's, so if I've popped back to my mum's or something and we've got back later than we expected or something, like we've gone for dinner or something, but we've been ok nine times out of ten. KATE pp2 **P:** Well, I did deviate from your plan slightly because you had obviously advised me to give him the toy then once I realised that that wasn't working we changed it to… I don't know, things just come in your head, don't

	they, and you try them whether they're good or not <chuckles>. ALICE pp4 P: But I think from my point of view it's taking on board the advice and strategies but working out how best to use them and if you do need to make any changes, to suit you, then you've got to find them. ALICE pp.7 **P:** Yeah, what works for you and what works for you with your relationship with your child because not every strategy… **I:** Yeah, that's right, so you can just pick and choose really, can't you, and you have to reach a compromise kind of thing. **P:** Yeah. And I just changed your one slightly to, 'Well actually you've got to earn that treat for tomorrow.' ALICE pp7/8

Most useful parts of the intervention	
Helpful strategies	**P:** Oh the exchange pass thing was good as well, 'cause in the first week that was really good. **I:** You've phased that out now, haven't you? **P:** I've phased it out, yeah, costing me a fortune <chuckles> 'cause [older sibling] wanted them as well <laughs>. EVE pp11 **P:** So it did work and I think because he had that and then I had to have the interaction with him to say, so it worked for me as well because I had to remember to, if he did bring it, take it off him which meant that I actually had to do something rather than just cuddle him and keep him warm and put him back in his own bed. So it made me have to re- …yeah, yeah EVE pp11/12 **P:** It helps, yeah, it helps massive, doesn't it? Because if you don't write it down then you're kind of screwed do you've got to write it down. <Laughter>

		And then I've got to look at it and think, oh, well that worked well, that didn't work well, oh look at the nights, oh dear me, late nights and then I talk to Alice about it, 'Well, they don't do well on late nights.' I said, 'I know!' <Chuckles> I know, I feel bad. EVE pp11
	P:	Yeah, and actually having physical evidence, I guess, of how it's… 'cause we have got evidence, haven't we, of how everything's worked and what's not worked and making my notes of what they've eaten and whatnot. It helps you paint the bigger picture and without that you're kind of stuck in a lull, aren't you? EVE pp12
	I:	Do you think keeping the diaries helps you to –
	P:	Yes.
	I:	- not see your faults as such but just to look at the patterns of where it's not gone as well and give reasons?
	P:	Yeah, I mean although I know he's woke three times and I know when he's woken, when you've written it down you've committed it so you're almost thinking, well, I've got to beat that, we've got to beat that because not only is it bad for him it's bad for everybody else that wakes up with him. So by seeing that I know I've got to do this <chuckles> the zeros are so much nicer! EVE pp 14
	P:	I like having them around though, just to look at <chuckles> just so it reminds me, ah keep on the path thank you, don't deviate.
	I:	Yeah, and even if you just make a note when you've had a particularly bad night and see what's happened.
	P:	Yeah and I can do that in my diary. It's getting into a routine with it, 'cause a lot of people would look at this and go <sighs> oh god! EVE pp17
	I:	So which bits of the intervention as a whole did you find most useful?

	P: Probably the feeding of them, I think, giving the snacks and stuff. Although it's quite an obvious thing EVE pp11
Helpfulness of sleep knowledge/research	**I:** Well, bananas are good. So did you find the sleepy foods and things from the booklet useful? **P:** Yeah, it's handy. It's good to remind, you isn't it? EVE pp11 **I:** Oh brilliant. Did you use the booklet much? **P:** No. I didn't really, I just remembered what we said and I tried to stick to it the best I can. KATE pp4 I: Do you think if I'd have just given you the booklet it would've been not as helpful; do you think it's been helpful for me to come and go through it? **P:** Yes, very helpful, because if I look at the booklet I think, well, how do I….? But with you coming out and speaking to people you get that friendliness and it helps because then if you……and approach if I've got any problems. KATE pp7 I: So how did the booklet help? So probably for you was it just, I don't know, it was going through it, was it? **P:** Yeah, going through it with yourself really. KATE pp7 So when we were going through the booklet did you find it helpful to, when we looked at the sleep patterns and that kind of thing, did you find that helpful going through that? **P:** Yes. **I:** So learning about when he might wake up in the night and that kind of thing? **P:** Yeah, so if he goes to sleep what I do now, if I think right he's gone to sleep I won't go into his room, I'll leave him, where if I'm coming up and he hasn't woke up in the night I'll put my head round the door because I know that if he's not woke up he's probably in a deep sleep.

	I: Yeah. **P:** So I can get my head round the door a bit easier. **I:** That's great, so you've used that. **P:** So I know now that nine times out of ten he's actually spark out. KATE pp9
Appreciation of researcher involvement/role	P: God oh yeah you didn't tell me what to do, it's the way you worded it..structured your sentences so that I felt that it was…oh god I can't remember what I said…that it was…yeah we were talking about this weren't we? The way you approached the wording of change was very subtle and effective and if I'd h'gone…if somebody'd come up to me and said "you need to do this and you need to do that and you need too…and this won't work if you don't"…that would be negative… your approach was very positive and empowering really cause it made me realise that I can do this and we will do this and this is going to be good if that makes sense? It's not as good as what I just….said was it? I: No it was amazing, love the word empowering… EVE pp19 **I:** So what do you think helped you to make the changes, as in to do with your own resources? **P:** I think it's you, 'cause I <chuckles> I want to do it for you so, well, not for you but – **I:** Right, OK, so knowing that somebody else is monitoring it and that kind of thing? **P:** Yes, I think that makes a massive difference. EVE pp12 So what advice would you give to other parents who are wanting to make changes? **P:** Phone you <laughs>! I already said to one that you need this girl, she'll help you out. No, it has helped massive because it's all logical and simple things when you've got it here in black and white, you know, when you're getting on with your daily life and you're knackered and you

	haven't got any sleep and you can't think straight you can't see the pattern, you can't see the change, you can't see how to develop it or change it. The simple things like the snack, I mean it's so obvious but we weren't doing it, so why weren't we doing it? Because it wasn't obvious to us, so doing this makes it obvious. EVE pp12/13
	P: But I think from my point of view it's taking on board the advice and strategies but working out how best to use them and if you do need to make any changes, to suit you, then you've got to find them. ALICE pp. 7
	P: No. I didn't really, I just remembered what we said and I tried to stick to it the best I can. *Echoing my use of we in the pre-intervention interviews – this emphasises the collaborative nature of the intervention*
	I: Brilliant. What were the most helpful bits?
	P: All of it really because obviously the advice you give, the way you've said to do it so all of it really.
	I: Oh brilliant, that's great. Do you think if I'd have just given you the booklet it would've been not as helpful; do you think it's been helpful for me to come and go through it?
	P: Yes, very helpful, because if I look at the booklet I think, well, how do I….? But with you coming out and speaking to people you get that friendliness and it helps because then if you……and approach if I've got any problems. KATE pp7
	I: Yeah, good word. So how did the booklet help? So probably for you was it just, I don't know, it was going through it, was it?
	P: Yeah, going through it with yourself really.
	I: Did you find making this plan helpful?
	P: Yes, because obviously by doing that even though I didn't have to go back to it again it stuck in my brain, so by us sitting there going through it

	I was taking it in and then it just seemed to click into place. KATE pp. 7/8 **P:** Yeah, definitely, I know what to do and obviously if you don't mind I'll keep your number in case I need any advice. KATE pp9 **P:** It's been absolutely fantastic. If you need anything my number's there or if you want to chat any time I'm always there on a number. KATE pp10
Empowerment/reciprocal help	**P:** Yeah, that'd be great. Yeah, yeah feel free. It's helped you as much as you helped me. KATE pp10 P: …….your approach was very positive and empowering really cause it made me realise that I can do this and we will do this and this is going to be good if that makes sense? EVE pp 19

Experience of positive change	
Improvements to main difficulty	**P:** Oh yeah, it's very much better. **I:** The night wakings are… really good. EVE pp3/4 **I:** These are amazing, aren't they? [referring to sleep diaries] **P:** Yeah, this was awesome, what a week. I had a really good week that week. EVE pp5 **I:** So can you tell me about Jake's sleep following the intervention, what's different about it? **P:** Well, generally it's a lot better. There's only the odd days that throw wobblers. EVE pp 7 **P:** But nine times out of ten he might have a little bit of a tantrum when he goes to bed because he wants his dad because he's still clingy for dad, but once he's in bed he's fine, he self-settles straightaway. KATE pp1

	I: Wow, so you've not been doing any of the sitting on the bed? **P:** No. **I:** Has that all gone now? Fantastic. **P:** The first night, since the first day we started it I've not sat on the bed. **I:** That's brilliant! Wow! KATE pp 1 **I:** And he's not having milk? Oh is it? Oh that's good. **P:** Yeah, that's been turned down as well from the first night. KATE pp 1 **I:** That's great, isn't it, that's a big difference. KATE pp2 **I:** Self-settled, that's such a big improvement then, isn't it? **P:** Yeah. **I:** It's changed because he wasn't self-settling at all really, was he? **P:** No. KATE pp 3 **I:** But it's such a big improvement, isn't it? **P:** You can see straightaway. And we have tried to keep to a lot of the times, obviously they varied sometimes but you can see. KATE pp 4 **P:** How many hours would you say he's having a night? I stopped working them out, didn't I? <Chuckles> **I:** So about 11 hours there. KATE pp5 P: ……at least I know now if he wakes up, within ten minutes he's back off asleep, well, nine times out of ten within five minutes he's back in bed asleep. KATE pp8 P: He's still nervous about sleep in his own bed but it is getting better… ALICE pp1 **P:** Yeah, and he seems to be settling a little bit better now, ALICE pp2 P: so yeah, it's going OK at the moment, it's not perfect, it's not as serene as I would like it to be, it's not without its

	faults but it's a heck of a lot better than it was a month ago. ALICE pp2 **I:** But if he starts coming into the bed regularly again, now you've got into this, 'cause you've had a good block, haven't you really, of him not coming in. **P:** Yeah. ALICE pp4 P: He's quite settled at the moment, he's quite happy to be off school. ALICE pp8 **P:** It is. So when he was at school his behaviour was a lot better. KATE pp5 P: I did parents' evening last night and the teacher said everything was fine, he was playing well EVE pp1 **P:** Yeah, but she said his behaviour at school's been fine and he's settling more at school so he's not being so disruptive and he's realised that if he doesn't involve himself in the group sessions he's actually missing out, so he's now going in and being involved so that's good. **I:** So that's changed since I last spoke to you. **P:** Since the first time, yeah. EVE pp4 **:** So have you noticed any changes, you said he was a bit more settled, have you noticed any changes in him in general since you've started? **P:** Yeah, I think when he sleeps through he's just generally more malleable in the morning, I can get him to do what I need him to do without having to raise my voice or threaten him to take toys away <laughs>. EVE pp8 **P:** A mixture of both, mostly the self-settling because I think he realised that he was a big boy, he didn't need us and he could go back to sleep. Because when he was waking up in the night as well I'd have to sit on his bed till he went back to sleep again, so now he realises he doesn't need me. KATE pp9
Changes to parent wellbeing	**P:** Well, if I can get a good night's sleep without him in the bed then I do feel much better, it's horrendous when he's in bed with me 'cause he's just tossing and turning all night long, he's such a fidget ALICE pp4 P: But I think because I know it's starting to work I'm a lot calmer with him, not as fraught and I think how you're

	behaving, it really does have an effect on them, doesn't it? ALICE 6 **P:** I needed it, I needed it because if I hadn't I was slowly losing the plot, being up four times a night it was getting quite bad. KATE pp8 **P:** ……..by the time I got back to bed in the morning I was like that, trying to get up for school I was shattered, you know? Then I could be kind of grumpy all day, but because I'm getting a bit of sleep now… obviously if I didn't go to bed till two o'clock in the morning that was my fault, if I don't get sleep through that it's my fault, but at least I know now if he wakes up, within ten minutes he's back off asleep, well, nine times out of ten within five minutes he's back in bed asleep. KATE pp8 P: Because when he was waking up in the night as well I'd have to sit on his bed till he went back to sleep again, so now he realises he doesn't need me. KATE pp9 **I:** 'Cause you were staying with him, weren't you? Has that been a lot better for you then? **P:** Yeah, 'cause now I can put him to bed, I'll sit on my bed about five minutes just to listen out, five minutes and I'm downstairs. **I:** That's great, isn't it? **P:** Sometimes I've been literally downstairs, kids have fell to sleep by 25-to-8. **I:** Perfect, you've got a life. **P:** I've got a life. **I:** Watch tele, watch what you want to watch. **P:** Exactly KATE pp3 **I:** What about you, how have you been feeling, better? **P:** Better, yeah, better when he's sleeping through and I've actually been getting more done and now back at uni obviously it's important. The last few days have been a bit rubbish but today… I feel a bit weird today actually P: 'cause I've actually slept through, I woke up and thought, wow, it's the morning! <Laughs> EVE pp10

	I: But I think if you feel that you're more in control then that's a positive thing. **P:** Yeah, it is, it's a good thing. EVE pp 10/11 **P:** It helps my structure because then I've got to actually tell him, let him and then take back, so I've got a bit more control. EVE pp.19 **P:** Yeah, I think it depends on your mindset and if you're level-headed, I guess, and down to earth because you've got to see the faults, haven't you, and a lot of people don't see their own faults I don't think, if that makes sense? So they can't see how to change EVE pp.14
Participant commitment to keep going	**P:** Yeah, and I think I was probably in that cycle and it would be easy to slip back into it but by doing this… **I:** Yeah, you'll be aware of it. **P:** … I'll be aware of it, yeah. EVE pp17 **P:** I'm going to carry on with it [separate bedtimes as in the original plan], yeah, because it's helpful for the teacher as well because he's reading the stories with the pictures, that's how they're learning to read so I'm sitting him on my knee, he's reading them. **I:** Oh that's good. EVE pp3 **P:** Yeah, because at the end of the day I don't want a ten-year-old boy climbing into my bed, do I? It's alright while he's three and –EVE pp17 **P:** Yeah, yeah you can. Sometimes you just do anything to sleep as a parent <laughs>. **I:** Yes, of course, you've got to survive, haven't you? **P:** Yeah. **I:** But like you say, in the long term it doesn't work because then he's going to be wriggling next to you when he's like 15.

	P: Exactly. ALICE pp9

What unique skills can EPs add to the delivery of a parent-based behavioural sleep intervention? Pre-intervention interview data

Group 1	
Solution focused language	I: He's waking up in the night and you'd like that to end presumably? He'd ideally sleep in his own bed? ALICE pp5 I: So, first of all I just want you to tell me about sleep and what are your best hopes for doing this intervention for …? EVE pp1 **I:** Sounds exciting. Bless him. So what would it look like if the sleep problem stopped? How would that be? How would it be different in the morning? What would you notice? **P:** Oh, I think he'd be much more alert in the morning. He doesn't want to get up in the morning. EVE pp1 **I:** What would you notice if he was to sleep all the way through the night? EVE pp2 **I:** OK. So what would your best hopes be? KATE pp4 **I:** Right. What do you want to achieve with this plan? **P:** Basically, I want it to get to a point where I can just say, 'Right, bedtime' and he'll take himself up to bed and go to bed. KATE pp28
Cognitive dissonance	**I:** So what about this coming into your bed thing, 'cause obviously he's waking up, isn't he? **P:** Yeah. **I:** He's waking up in the night and you'd like that to end presumably? He'd ideally sleep in his own bed. **P:** I would ideally like him to sleep in his own bed because he shouldn't really be sleeping with me and I don't sleep properly

	when he's there because he's a very, very restless sleeper. (ALICE pp 5) **P:** It does tend to go in whenever he's got a moment spare or he's thinking about something or he goes tired, that's the sign that he's getting tired and he does this with his head <laughs>. **I:** And it is lovely, isn't it? **P:** It is. **I:** It's kind of almost nice that they can self-calm themselves, isn't it, in a way. **P:** Yeah. **I:** But you don't want him doing it forever. **P:** No, I don't, I don't. (ALICE pp.6) **I:** And maybe if he feels a bit more in control it might help with the anxiety and the worries and that kind of thing and maybe even the thumb sucking. **P:** Yeah. (ALICE pp6) [ALICE was speaking very affectionately about the thumb sucking and the daytime doziness so I wanted, gently, to present her with the other side] **I:** That's good. So then there's the impact on the family because obviously he's coming into your bed and it's not ideal long term, I mean I know it can be quite nice, especially if your husband's away – sometimes if my husband's away I like to have my kids in bed with me, it can be nice, can't it? **P:** Yeah. **I:** But in the long term it probably isn't ideal, is it? **P:** No it's not. (ALICE pp9)
Scaling	**I:** So if you would rate it on a scale of 1 to 10 where a 10 is perfect, sleep is fine, it's not a problem at all, what would it be at the minute? **P:** He's about a 7 now.

	I:	OK, so that's pretty good. (ALICE pp4) [this was really because at this stage ALICE did not perceive J coming into her bed as being a problem]
	I:	So, if it was on a scale of one to ten, what would you say at the minute?
	P:	I'd say it's probably a three, isn't it? It's bad, ain't it, really? Although it could be worse.
	I:	So why is it a three and not a two or a one?
	P:	Because he does go to sleep by hisself and he's quite good, well, he's very good in that way. Should push it up to five maybe. But I could be having a lot of trouble getting him to sleep, he could be a cryie baby, he could be whinging all the time but he doesn't. He's good like that.
	I:	And what would you find acceptable out of ten, on a scale of one to ten, if he's a three to five at the moment?
	P:	I would like it if he would just … I'd be happy with a six if it was like once month waking up <chuckles>. I don't know if there's an answer. That's the thing. I don't know.
	I:	What does six look like if he was a six?
	P:	Just wake me up at five thirty in the morning and I'll just get up straight with him.
	I:	Rather than waking you up in the night? (EVE pp7/8)
	I:	So on a scale of one to ten, where ten is perfect sleep, how would you rate Harry's?
	P:	About five.
	I:	About five, OK.
	P:	Five, six, something like that.
	I:	How come it's a five and not a four or a three?
	P:	'cause he will have the odd night where he'll go all the way through. (KATE pp5)
Visualising and rehearsing the new routine	**I:**	So when you go, what are you going to say? What's your phrase?
	P:	Good night, sweet dreams. EVE pp45

	P: Yeah. So say 7:30 for the PJs and the wash and the go to the loo, and then I would've said probably bedroom about 7:50 and then 8-8:15 depending on whether we've read or we'll do the rest. Then I would say to him… see how he is within himself and perhaps if we've done any of this, if we're using the bedtime pass or the worry box – **I:** Yeah, remind him of the bedtime pass. **P:** Yeah, enforce the strategies and then give him a cuddle and tuck him with his teddies. ALICE pp25 P: It'll be a case of, 'Right Harry, back to bed. Come on, in your own room now.' And if he doesn't, it's like, 'Harry' and if he doesn't, I'll pick him up, put him into his bed (KATE pp25) **I:** Yeah, OK. And then you're gonna leave him to settle to sleep. So what will you say and do? **P:** That he's a big boy, he's going to Reception soon so he needs to basically sleep to get all his energy so he can be strong as Spiderman and Ironman the next day and be able to achieve more of his work at school, sort of thing. And he'll get a reward if he sleeps all the way through. KATE pp31) P: 'Right OK, Harry. You're a big boy now, here's your pass', sort of thing. 'But we're aiming now for you to go to sleep all the way through the night, like a big boy and if you do, we'll see if Spiderman leaves you a reward in the morning. 'cause Spiderman's watching ya and he'll know if you've woke up in the night. If you haven't woke up in the night, there'll be a reward waiting for ya.' (KATE pp.35)
Exploring exceptions	I: So what's different when dad's here do you think? ALICE pp3 I: So there are times when you just put your foot down and you say "Right you're going to sleep now" and that's it? ALICE pp4 **P:** Yeah, he was in bed and fast asleep for half-past seven when my husband left, he didn't even hear him go out through the door. **I:** So what's different about that then, do you think it was the exercise, do you think it was that he wasn't – ALICE pp 8 I: That might be good to remind him. 'You did it at [residential school trip] ALICE pp 22

	I: And he still slept through so obviously that wasn't bothering him was it? **P:** Yeah, so it wasn't that bad. (EVE pp13) **I:** So it's about … do you know what happens on those days when he sleeps through; is there anything different, can you think? (KATE pp5)
Researcher focus on existing strengths/successes	I: So you've already made some changes then haven't you, because you said that you stopped him playing in the bedroom ALICEpp3 I: so that kind of works? [reasoning tools to get him to bed] ALICE pp4 I: That's a good waking time though ALICE pp12 I: …But you have made some changes haven't you? P: Oh yes ALICE pp 15 I: So you can, you've done it quick..effectively. (ALICE pp15) I: Well that's a good one [colouring activity before bed] we can put that on the strategy. ALICE pp28 **I:** So, self-settling is really important but that's why you're in quite a good place anyway because he does self-settle. So he's not relying on you, you're not on his bed. Both of the other cases I've had they've had to have their mum to get to sleep. **P:** So to remove that that's another big hurdle isn't it? Oh good, we've clipped that one. **I:** So that's good. (EVE pp32) **P:** I stopped all his afternoon sleeps. **I:** Right OK, brilliant. (KATE pp5) But on a good night, it can take anything between ten, fifteen minutes. **I:** Right, OK. That's good. (KATE pp7) **I:** Perfect. OK so what you're doing there is absolutely brilliant 'cause anything that gets his brain thinking and challenges him, anything with hand-eye coordination, so if he's writing, it's brilliant. It starts getting him tired, that's what we want.(KATE pp7)

	I: Children are all different, aren't they? And it just goes to show it's nothing you've done but there are ways of changing behaviour, basically. KATE pp10 **P:** I try not to sit there and cuddle him because I know that's gonna make him get even more clingy. **I:** That's perfect. KATE pp11 **P:** I try not to sit there and cuddle him because I know that's gonna make him get even more clingy. **I:** That's perfect. (KATE pp12) **I:** No. That's a really good attitude to start with something like this, isn't it? (KATE pp20) (P showed I the child's bedroom) **I:** Yes. So his room's brilliant, that's absolutely fantastic. He doesn't have a television or a computer before bed. (KATE pp24) **P:** See, I'm quite a stubborn person so if I put my mind to it, I will do it. **I:** I think you can do it, I think you can <laughs>. I really do. **P:** 'cause I need my sleep now. **I:** <Laughs> I can see that about you. (KATE pp 33)

Group 2	
Empathy building	**P:** It does tend to go in whenever he's got a moment spare or he's thinking about something or he goes tired, that's the sign that he's getting tired and he does this with his head <laughs>. **I:** And it is lovely, isn't it? **P:** It is. (ALICE pp6) **I:** I mean I know it can be quite nice, especially if your husband's away – sometimes if my husband's away I like to have my kids in bed with me, it can be nice, can't it? **P:** Yeah. **I:** But in the long term it probably isn't ideal, is it?

	P: No it's not. (ALICE pp9) (cog diss) **P:** Sometimes he's asked, if there has been an occasion where it's been quite late I will probably be at the point where I will do anything to get him to sleep and he's said, 'Can I go and get in your bed?' and there are times when I have agreed to that. If it would mean he would be asleep, yes, I have agreed to that. **I:** I understand that. (ALICE pp10) **I:** He's not one of those children who doesn't need so much sleep. It's more that he's worked out that he can… he knows what the rewards for him messing around are, that he will get to be with you and he'll get the comfort, which isn't a bad thing, it's nurturing, it's – **P:** No, it's not, it's not. **I:** - and it's nice. So I'm not saying that it's manipulative or it's something that has come to – **P:** No it's not; it's just wanting love, isn't it? (ALICE pp13) **I:** Are you used to it now or is it hard? [dad being in the army] (ALICE pp19) **I:** Yeah, OK. So we'll think about how we can deal with that. KATE pp6) **I:** Ah, that's not good for you either, is it? (KATE pp9) **I:** So that won't be helping Dad either, will it? (KATE pp9) **I:** Yeah, I bet that was terrifying, wasn't it? (KATE pp14) **I:** Ah that's horrible, isn't it? (KATE pp15) **I:** Yeah, yeah. Which is worth thinking about and it's totally understandable, totally understandable. **P:** Yeah. **I:** It just makes you a good mum, doesn't it? (KATE pp16) P: I don't know whether Harry's then trying to take that into the night, I don't know. **I:** Probably. Because it's comforting, isn't it? (KATE pp20) **I:** Mm, I know what you mean, yeah. (KATE pp20) **I:** It's almost more tiring for you because you're anticipating waking up so it's hard. You can't relax and think, 'Alright I'm gonna go to sleep now' because you

	know you're probably gonna have to get up. (KATE pp27) **P:** I've got my last year now. I'm just doing my BA, yeah. **I:** Wow. So the hardest year this year I suppose then. Is it? (EVE pp5) **I:** It is, isn't it? And then you haven't got the same patience with them. Yeah, yeah, it's true. (EVE pp14) **I:** So, a lot of our focus just for this time while we're trying to get him sleeping through the night, will be on … you've got a good routine anyway in that he goes to bed but a very, very rigid routine as much as you can but obviously, you know, you've got a normal life so it's not going to have to… (EVE pp.21) **I:** It's true, I'm the same, yeah. They are lucky, aren't they? (EVE pp25) [children have lots of toys] **I:** So we can do that. Either I can do that or you can do that. (EVE pp31) [visual timetable] P: And then I had to realise I had to get on with my life and stop being this milking machine. **I:** But it's lovely, isn't it? (EVE pp37) [breast feeding] **I:** ……don't beat yourself up about that because ... (EVE pp37) **I:** Just stay in touch, I will be here. **P:** OK. (EVE pp40) **I:** I know what you mean. **P:** You know what I mean? (EVE pp40) [involvement of her dad] **I:** So the same thing, just try and keep it very calm and the same every night if you can, although I know it's not always possible. ALICE pp17
Humour/shared affect/rapport	P: Because that's another thing, Damien will be away for a while and come home, 'Ooh yes, I'll buy you this, I'll buy you that.' **I:** Yeah, slightly hard. <Laughter> (ALICE pp5)

	I: Oh he sounds lovely <chuckles>. (ALICE pp11) **I:** Isn't it lovely having your mum next door. <Laughter> (ALICE pp 12) **I:** Just reassure him that he's safe, yeah. **P:** And then try and escape. **I:** Yeah. <Laughter> (ALICE pp25) **I:** Because in those few seconds he'll think mum's wavering here, there's a chance I'm going to be up for a winner <laughs>. **P:** So then he thinks he's won, yeah (ALICE pp26) P: ….on Saturday he said, 'Mrs F calls it a man scan.' <Laughter> **I:** A man scan, oh that's brilliant! Oh gosh, I'm going to use that. (ALICE pp31/31) **I:** The thing I'm gonna say to you <chuckles> is we need to get rid of the milk. **P:** Yeah, we've got to. **I:** <Chuckles> we've got to get rid of the milk. 'cause the milk is that reinforcer, isn't it? **P:** Yeah. (KATE pp12) [we talked around this issue for a while as I realised that this was a big change and wanted to make it feel like the decision was collaborative by this time we had established rapport so I was able to broach this big change using humour]. **I:** <Chuckles> it's amazing that you're like a ninja, aren't you, when you're a mum <chuckles>. (KATE pp17) **P:** Yeah but nine times outta ten, it's usually twice at most. Once on a good time. **I:** Right, OK. We're going for none <chuckles>. **P:** Yes. Please. (KATE pp21) So we're going to get the farm duvet out later. <Laughter>

	I: Sounds exciting. Bless him. (EVE pp1) **I:** Whilst that is incredibly cute, he's woken up [brother]. As an example: not ideal! <Laughter> (EVE pp20) **I:** They're going to hate me. I don't want to meet them. <Laughter> [removing TV from bedroom] **P:** 'Oh, I'm not allowed to talk to you.' <Laughter> **I:** I do have to say that because I don't want to be responsible. **P:** 'He was sick. Alex told me to put him straight back to bed!' (EVE pp37)
Agreement by the researcher that 'it's hard'	**I:** Yeah, it's harder when you're on your own as well, isn't it, I think. (ALICE pp15) **I:** And that was probably quite hard as well, was it? (ALICE pp15) **P:** - if I can be bothered… sometimes it's easier just to… get in, snuggle down <chuckles>. **I:** It is. (ALICE pp30) **I:** Yeah it is hard, isn't it? 'cause they're so good at controlling you, aren't they? (KATE pp4) **I:** It is hard, yeah. (KATE pp.5) [when you've got two screaming kids..] P: It's a difficulty with both of them in there, isn't it? **I:** It is, isn't it? (EVE pp16) I: Yeah it's hard isn't it? (EVE pp18) [he's got to learn that he can't hit] **P:** This is where I'm going to struggle. You know that don't you. **I:** This is the hard bit. (EVE pp34)[putting him back to bed like a robot]

Positive reinforcement by the interviewer	

Group 3	
Change talk	Shall we make that a job to do this afternoon? [remove toys from bedroom] (EVE pp25) **P:** They've got a TV in the room. Shall we scrap that? I'm happy to scrap it. (EVE pp27) **I:** So he won't be in your bed. That's it. **P:** That's it, not in my bed. (EVE pp34) **I:** When are you going to start? **P:** Well, might as well start now. That means I'll have had him for a solid week and a half. (EVE pp 48) I: But what you'd have to think is, at the end of it … **P:** It's gonna be a lot better (KATE pp5) **P:** Yeah, he will help me 'cause he doesn't work now so … he doesn't expect me to do the parenting, he's hands-on. He tries to be as hands-on as he can but yeah, he will help me, he'll step up and help me. (KATE pp10) **P:** Yeah. I'll probably do it with Evie as well 'cause she's a bugger in the night for milk. **I:** Yeah, you might as well do it at the same time. **P:** So I'll do it at the same time for both. **I:** Yeah 'cause they don't need it, they don't physically need it. **P:** No they don't. **I:** In fact if anything, it's stopping them eating in the day. **P:** And I think, to be honest with you, that's what they're waking up for. **I:** Yeah, it is, yeah. I think so. I think you might be right. (KATE pp25). [Milk started out being an area of resistance as it is a big deal for the family (see rolling with resistance) I deal with this very carefully until at this point it becomes part of K's change talk with her suggesting that this is the main reason why L is waking in the night]

	I: I mean you can do it in three weeks. You can do it easily in three weeks if you want to start it now. I mean there's no time like the present, in some ways. **P:** I think we might have to, yeah. 'cause I can't keep going on like it (KATEpp 26) **I:** No I don't think that's the problem. He's waking up for the milk, isn't he? **P:** Yeah. And I think if we can knock the milk on the head then everything else might start coming into place. (KATE pp.29) **P:** See, I'm quite a stubborn person so if I put my mind to it, I will do it. **I:** I think you can do it, I think you can <laughs>. I really do. **P:** 'cause I need my sleep now. **I:** <Laughs> I can see that about you.(KATE pp.33) and then we'll do this bit together, shall we, ready to make a plan; do you feel ready? **P:** Yeah. **I:** I don't want to push you. **P:** No, let's do it. (ALICE pp21) **P:** I'll go and put him back [into bed] (ALICE pp 26) **I:** OK. Do you feel ready? **P:** Yeah, yeah let's do it. (ALICE pp 26)
Supporting/reinforcing self-efficacy	There will be some overlap here with highlighting successes and exceptions **I:** OK. But you don't do that now? **P:** I don't do that now, no. He's too big. (EVE pp8) I: Because I must have got that in thinking, 'Try and keep him asleep.' [clock noise] **I:** Yeah, it's a good idea. (EVE pp 14)

	I: That's good then, so they've both got what they need from [the same bedroom] (EVE pp16) **I:** Yeah, it's a really good time to nip this in the bud, isn't it, really, because starting school ...(EVE pp 17) **P:** No, this is what I want to do. Get him in there. [sports clubs] **I:** That'll be a good thing. You could take him to that. (EVE pp29) **P:** So to remove that that's another big hurdle isn't it? Oh good, we've clipped that one. **I:** So that's good. [self-settling] (EVE pp 32) **P:** I've done that in the past. I think I've just lost my tether and I just say, 'I'm just not taking to you. I'm going to take you back to bed again.' (pp36) [participant able to highlight that she has done this before for herself] I: Say, 'OK, well we'll talk about that in the morning.' **P:** I tend to use that one anyway 'cause I'm trying to escape. <Laughter> Is that really awful? **I:** No, that's brilliant, that's perfect. Just make it clear you're not going to engage in that. If you think they're in pain then don't do that. (EVE pp36) **I:** Right, OK. So it sounds like you've been pretty good at making some changes and seeing those through, with the naps and things. (KATE pp4) **I:** Perfect. OK so what you're doing there [bedtime activites] is absolutely brilliant (KATE pp 7) **P:** So I try to keep it to a minimum. [night-time interaction] **I:** Brilliant. OK, great. (KATE pp11) **I:** Brilliant, that's great. OK. You're halfway there, really. **P:** Yeah. (KATE pp12) **I:** So night wakings. If he wakes up, don't make … you sound like you do this anyway actually, to be honest, K. Don't make eye contact, don't get into a conversation, keep the lights dim, straight back into bed. (KATE pp25) What else might happen; what might happen with the milk going?

	P: He'll scream, have a tantrum <chuckles>. **I:** So what will you do? **P:** Just remind him of his reward if he doesn't have it and just give him water. (KATE pp32) . Anything else; can you think of anything else that might go wrong? **P:** I end up giving up <chuckles>. **I:** Yeah, OK. 'cause it gets too hard? **P:** Yeah. **I:** What could you do? **P:** Get straight back onto the routine again. **I:** Yeah, just try it again. And let him know that you mean it. (KATE pp32) **I:** So you've already made some changes then, haven't you, because you said you've stopped him playing in the bedroom; did you stop that now, has that stopped? ALICE pp4) **I:** So are there times when you just put your foot down and you say, 'Right, you're going to sleep now' and that's it? **P:** There are times when I do that. **I:** And it's not a problem? **P:** Yeah. (ALICE pp4) **I:** So you can, you've done it quick effectively. **P:** There was a time when he wouldn't stop in his bedroom without… when he was very little, 'cause I had a stair gate when he was very little, but there was a time when he wouldn't stop in his bedroom. **I:** So he kept coming… **P:** Yeah just kept coming out. **I:** So what would you do then, just take him back in? (ALICE pp15) **P:** So I have tried to implement that. **I:** That's great. So that would be what you would do? (ALICE pp23)

	P: ….but if he wanted to be really difficult then he would start getting excited. **I:** OK, what else could you offer him, so you could offer him to play with Lego for a bit? **P:** Yeah, could offer him to play with his Lego, I wouldn't give him anything electronic, offer him to play with his Lego. (ALICE pp25)
Rolling with resistance	**P:** No, we keep tea to the same time but I don't know whether that could affect on Sundays because actually … So whether that disturbs the whole pattern 'cause they do go to bed a bit later. It could be lifestyle change needed. [concern that the participant is seeing the potential changes as too big] **I:** OK. **P:** Because we either go to theirs or they come … **I:** I don't think you need to change your weekend, it's just about preparing him, I think, more for that. **P:** Better for that. (EVE pp.9) ... I think it's probably the sleep deprivation, isn't it? But yeah, it has happened that I've woke up and like, 'How the hell did you get in here and how long have you been here?' And then I'll just transport him to his own room. **I:** So it'll either be you don't notice or you're too tired to do anything about it. **P:** Yeah, that'll be the worse one, the too tired to not do anything about it. **I:** So what can you do to prevent that? <Chuckles> (EVE pp46) **P:** This Saturday night we're doing the barn dance se we're not getting home till … well, half nine that finishes. **I:** OK, but he should be shattered by that and you'll just put them to bed and say, 'We're not going to have your bedtime routine but remember your bedtime pass. Good boy.' (EVE pp 47) **P:** Yeah. But it is hard. [making changes to existing patterns]

	I:	Yeah it is hard, isn't it? 'cause they're so good at controlling you, aren't they?
	P:	But I'm struggling. I've been told, 'Oh, just dilute the juice and get 'em on …' But when you've got two screaming kids, it's hard.
	I:	It is hard, yeah.
	P:	And they will go on and go on and go on and in the end, you end up then just giving 'em milk because you've got a raging headache. And I'm not one of these that like giving in to 'em but sometimes I have no choice. Especially if it's the middle of the night, I can't have 'em waking everybody up.
	I:	No, that's right. It takes between a week and ten days to break a habit. (KATE pp5)
	P:	But sometimes, he'll go from being OK and thinking, 'OK I'll go to bed' and then boom, <clicks fingers>, as quick as that, they're hyper.
	I:	Yeah, OK. So we'll think about how we can deal with that. (KATE pp6)
	P:	But I know then just to leave him quiet, ignore him. Say, 'Right go to sleep, Harry' and then he'll go off. But even though he's starting to relax, I still can't go out the room 'cause then he's up.
	I:	Yeah, OK. We'll think about that in a sec. (KATE pp7) [this was not the right time to make suggestions – I wanted to present KATE with the intervention and wait for the solutions to become more collaborative]
	P:	Yeah. I don't think it helped 'cause we were in a house to begin with that was cold.
	I:	Yeah, I think you're right. Not the cold but the fact that he was with you from the beginning and that's what he …
	P:	And that's detrimental. (KATE pp10)
	I:	That's what's reinforcing that behaviour and we don't want that behaviour so we need to get rid of the milk.
	P:	Exactly.
	I:	So we'll come back to that in a bit.(KATE pp12) [I introduced the idea of getting rid of the milk but didn't want to push it too far as I knew that this was a big obstacle – I was waiting for KATE to suggest this.

	P: Then he'll come home from school and he'll be, 'Mmm', then by the afternoon, he's evil. And then by the time bedtime … **I:** So he is a child who needs his sleep, isn't he? **P:** Yeah, he needs sleep. (KATE pp.18) [the conversation was starting to become negative again so rather than making suggestions at this stage I tried to go with that resistance by reframing it) **P:** See the thing is with Harry … **I:** He doesn't like any of this. **P:** He don't tend to eat a lot of fruit. He won't eat it. **I:** Well you don't want any fruits before bedtime anyway other than bananas. Bananas is your only fruit, and cherries. But that's it. So anything, I mean toast, toast is fine. (KATE pp22) **P:** Yeah, definitely. 'cause my health visitor tried to deal with this with me. She was, 'Oh right' and she was saying I had to lie on … the way she did it, she said I have to lie on the bed and pretend to be asleep. Well, Harry was a bit younger then, it was about a year ago. Well, he was just jumping all over the bed and it was taking me two hours. **I:** No, no, you can't do that. **P:** And then she was saying then, 'Go on the floor.' And I was sitting, I'm by the radiator and I was doing that for weeks and every time I'd go to go out the door, he'd kick off and all this lot. And then as well I ended up then just saying, 'Right, OK', and that's when I ended up just sitting on the end of the bed. 'I'm not lying with you, Harry. I'm just gonna sit on the end of the bed.' And then it got to the stage where I was gradually then, with him being at school, reading him stories and just doing them and that seemed to be helping a bit. (KATE pp28) [KATE started to describe previous negative experience with professionals] **P:** But I'm still not at the stage where I can just go out the room and leave him. **I:** No. So you'll take it gradually. You've got that list, take it gradually. (KATE pp29) P: But it's like I said, I'm not being funny but having other kids, I can't just let him cry. **I:** No you can't. (KATE pp29) **P:** We wipe him down with wet wipes and that. But I find, to be honest, if he has a bath … people say, 'Oh give 'em a bath, it

	makes ‘em tired.’ We’ve even put lavender stuff in the bath, he goes hyperactive. Then he just jumps. **I:** Right, OK. Let’s not do that, then. He can have his baths in the day, can’t he? **P:** He’s just jumping all round the bedroom. So it doesn’t work for him. **I:** If that’s never been part of his routine, I don’t think that we should introduce that now. (pp31) **P:** No, it’s not a problem; it’s a problem just for me, singly. **I:** Yeah, it’s harder when you’re on your own as well, isn’t it, I think. (ALICE 15) **P:** I can try because there have been occasions where if he’s hurt himself or if he is crying I’ve tried to teach him to take deep breaths to calm him down and that doesn’t really work <chuckles> but yeah, I will definitely have a bash with him. **I:** This is called stretch and sink which is basically… perhaps if you’ve been to yoga or anything, it’s that kind of thing where you stretch your body out and then you relax each bit bit-by-bit and sink into your bed. So any of those relaxation things if he’s feeling a bit anxious, just to make his body calm down so he feels right. (ALICE pp18) So of course he was laughing over the phone talking to his dad <chuckles> so we had to stop that. **I:** But it could be a regular part of the routine though, couldn’t it, saying goodnight to his dad on FaceTime? **P:** I don’t let him speak to Damien very close to bedtime, we do it prior to six o’clock. **I:** Maybe at the beginning of that half-an-hour might be good. **P:** That will spark him off ‘cause then he’ll realise that he’s not here and he’ll use that as… he will play up. He gets really cross because his dad’s not here, he doesn’t think it’s right, which it’s not. (ALICE pp19) [ALICE was very resistant to the idea that He should speak to dad as part of routine I used this information to change tack and plan the routine without mention of dad]
The wheel of change	**I:** I know what you but … so this is just for you really when you're thinking about change. So it's just a case of deciding where you are. So, 'I don't feel there's a problem,' that's not

	you, OK. So I'm starting to think you want to change … well, you've decided to. **P:** Yeah, I've decided to change. **I:** It's about hitting this spot here and being decided you're going to change, make the changes. It might be that something goes wrong but getting back on the wheel and starting again. **P:** If anything does go wrong it'll probably be me in the middle of the night going, 'Ugh.' I know my faults, I know my faults. (EVE pp37) **I:** It's just starting again, isn't it? It's like a diet in some ways, you know, or going to the gym or any of those things. (EVE pp38) So sometimes when we're thinking about changes, this is quite helpful to think about it like this. It sounds to me like you've actually decided you're ready to change. You've decided you're gonna do that and then you're gonna be moving onto this stage, 'We're making changes' and this will keep going round. Sometimes you can relapse so you can go back. So if you think about it in terms of other things that you try and do in your life. So think about me with going to the gym. I think about it <chuckles>, I sometimes go and then I don't and I stop going. So you can fall back. **P:** Yeah. **I:** But it sounds to me very much like you're at the stage now where you're ready to make some changes. **P:** I am 'cause I'm shattered and when it comes to get up in the morning, I can't get up. Because I'm up two, three times a night. And I feel sorry for hubby 'cause he has to get up with Harry every morning 'cause Harry, he's … the thing is with Harry, he's stubborn. And unfortunately, he gets that from me. (KATE pp26)
Reflective listening	**I:** Rather than waking you up in the night? **P:** Rather than waking up several times. **I:** Yes, it's the night wakings. **P:** It's the broken sleep. (EVE pp8)

	I: So he was tired and he was frustrated. **P:** I think he was tired and frustrated, yeah. I think he was just ...(EVE pp9) P: Now I don't know how much of that's true because Brandon is quite resilient with his brother. **I:** You can't see him being pushed around. **P:** No. (EVE pp12) **P:** He's going to be naturally tired, isn't he? **I:** He's going to be tired. (EVE pp17) **I:** Right, OK, so he's not getting enough sleep. **P:** So he's not getting enough sleep. (EVE pp33) P: He said it scares him, which isn't helping. **I:** So he's scared of the dark. (KATE pp2) So he'd basically been in with us because it was just too cold and we didn't have a spare room for him. **I:** So he got used to being with you. (KATE pp2) [participant launched into problem talk and it didn't feel appropriate to change course at first so I did quite a lot of reflective listening to develop trust and rapport] I: He's not settling on his own, he won't settle without you. **P:** No, he won't settle on his own. (KATE pp6) **P:** Looking back his sleeping pattern's been horrific since day one. It took me a good few weeks to realise that he wasn't getting enough food, that was why he was crying all the time, and I did breastfeed at the time, which it just wasn't… that was quite a… it wasn't working. **I:** He wasn't getting enough food. (ALICE pp12) **P:** He fills his bed with teddy bears as well, I think he finds that, as you were saying – **I:** He finds that comforting. (ALICE pp14)

Group 5	
Researcher making suggestions/ advice giving	Note: there is no advice giving until the latter half of the interview/intervention (ALICE pp16/31). Time is taken to build rapport, gently begin to create cognitive dissonance and explore the nature of the sleep difficulty so that the intervention can be adapted to the individual (reference). **I:** Jigsaws, anything like that in that last half-an-hour are perfect because they kind of tire the brain out a little bit getting ready for bed. So a milky drink, obviously no caffeine and one of the sleepy foods there in the booklet. Wash, teeth brush, so the normal routine, it sounds like he does that anyway, doesn't it? ALICE pp17 **I:** And once he's in the bedroom not back downstairs, OK, and not into your room. ALICE pp17 I: So anxieties, worries and nightmare – don't dismiss the worries obviously, it doesn't sound like you do anyway, but equally I've heard of some parents who will say, 'Right, we'll just check the room for monsters' but we don't want to do that because we just say, 'No, monsters aren't real, there's no such thing as monsters or ghosts' that kind of thing quite calmly. A worry box – I think a worry box might be quite good for J, do you? I've got one with me, might be worth a try. ALICE pp18 **I:** I talked about a faded bedtime, I don't know if this might be quite useful for him really, so make the bedtime a bit later and then you can gradually move this back, so you could move it back say 10 minutes a week, wouldn't want to move it back too quickly, or maybe even less than that, so you could gradually move that back up to eight o'clock. But it sounds like eight o'clock will be a reasonable bedtime for him. ALICE pp18/19 I: Right, so if the child comes downstairs and gets into your bed explain there are going to be some changes, so we talked about, didn't we, he's going to go into Year 3, he's going to be a big boy, you know that he's brave, you know that he's growing up now and he needs to stay in his own bed so it's time to make some changes, that kind of thing, do your relaxing routine and then say goodnight ALICE pp19 **I:** OK, but the thing is, you know that diagram that we looked at with the REM, when he comes out into that REM sleep if anything is different to when he fell asleep that's likely to wake him up. **P:** So just leave them on. **I:** So if he goes to sleep with the nightlight on you need to leave it on or if he goes to sleep in the dark you need to leave it dark, it just needs to be the same that's all. **P:** OK.

	I: I understand why you would turn them off because you want them to be in the dark but if he goes to sleep with it on it's better that it's left on. ALICE pp29 I: Right, so what works for this? The things that usually work for dealing with nightmares are a combination of the things we've talked about, so a regular routine, the relaxation techniques and the rewards and not rewarding the behaviours you don't want. So it's all of those things that we've talked about. Obviously you can keep this and there has been quite a lot of research into night time fears because they are common and they cause problems. This person here had done a big meta-analysis and looked at all the studies and gathered all the things that worked together basically. You can use the worry box in the bedroom, it's easier if you don't use this during the bedtime routine but at the start of it or that kind of thing. If there is anything that he worries about specifically, so if it was monsters or anything like that, I don't know if it's something from Harry Potter or that kind of thing, if that does come out it helps to get them out, for him to talk to you about it rather than it being in his head. So he might put that in the worry box but he might want to talk to you about that. ALICE pp20 **I:** The only thing with TV is, and I know that it doesn't affect all children the same, but the blue light from it does inhibit melatonin, whereas we're trying to increase it. So….. **P:** OK, maybe that is something that I'm doing wrong. **I:** - the TV could be at the beginning, so maybe before seven-thirty because it can still be relaxing, can't it, it can still be part of that wind down but maybe just not in the seven-thirty/eight slot. ALICE pp24 I: so you need to think carefully about that little half hour before he goes to bed and what you can do (KATE pp.6) **I:** But you've just gotta think of it as in in the long-term, it'll be better. KATE pp.9 **I:** Right, OK. Well you need to, for this period anyway, try and do it as a teamwork KATE pp 10 **I:** The thing I'm gonna say to you <chuckles> is we need to get rid of the milk. KATE pp12 **I:** So what can we do? So basically what's happened is Harry's got inappropriate sleep associations. KATE pp12 **I:** Right, OK. Just think about your graph, [sleep stages diagram] OK, when you're doing that <chuckles> 'cause you don't wanna be doing it at these times, that's all. ALICE pp16

	I: So you'd be better off with this one, which is a graded step so gradually getting out of the … so your goal is to distance yourself gradually. It will take a few days, it won't take longer than a few days, you know. It shouldn't take too long. Your child's gonna learn some new bedtime rules and at first, it'll be hard. As you gradually move away, Harry'll get to know that you are gradually moving away and that it's still OK. **I:** Yeah, you don't want him to fall asleep down here. KATE pp18 **I:** Right, OK. So you will know that with your instinct. Although be aware, while you're making some changes, he might wake up three or four times a night because he's trying to push you. KATE pp 21 **I:** Well find a dimness that he's happy with to go to sleep with and keep it like that. KATE pp 22 **I:** Well you don't want any fruits before bedtime anyway other than bananas. Bananas is your only fruit, and cherries. KATE pp22 **I:** So night wakings. If he wakes up, don't make … you sound like you do this anyway actually, to be honest, K. Don't make eye contact, don't get into a conversation, keep the lights dim, straight back into bed. KATE pp25 **I :** Yeah. So reassure him, he can have milk before bed, however he likes it. Does he have it warm, or …? KATE p.29 **I:** No, no, you don't wanna be staying in there for two hours, whatever happens. It's got to be quick and you've got to be out of there. If you have to keep going back up, that might be something that you've got to do for the first bit. Like I said to you, it doesn't take that long to break a habit. KATE pp34 I: The importance of this, I like to know this because if you're thinking of going into them or if you have to go in or if there's any reason why they might get woken up around these times, these are the times when if there's anything that's not there that was there when they went to sleep, that's not there anymore or if you go in and look and suddenly ... [reference to the sleep stages diagram] EVE pp18 **I:** Whilst that is incredibly cute, he's woken up [brother]. As an example: not ideal! EVE pp.20 **I:** So, a lot of our focus just for this time while we're trying to get him sleeping through the night, will be on … you've got a good routine anyway in that he goes to bed but a very, very rigid routine as much as you can but obviously, you know, you've got a normal life so it's not going to have to. EVE pp.21

	I: Well it can be linked to sleep difficulties, gluten. **P:** Oh, can it? Oh! EVE pp.22 **I:** Well, speak to D [husband] about it. See what he thinks but if they're not watching it the hour before bed, that's the key thing. So it can stay in there. EVE pp.28 **I:** So quiet time before bed doing something that doesn't involve technology if you can. EVE 31 **I:** So, yeah, anything with hand-eye coordination. So give water or milk, we've talked about that. Keep hugs, kisses, stories the same length so whatever you do, do the same thing every night even down to saying the same thing. So, 'Night night, sleep tight.' If you need to say, 'You're fine,' whatever, you've probably got a phrase already. EVE pp32
Modelling by interviewer	I: So when he comes back into your bed, take straight back, re-settle, say goodnight but try and… and this is the hardest bit, isn't it, try and not do the cuddling and he'll say to you, 'But mummy I'm really scared and I'm worried.' 'OK, but you are really safe here, night, night.' So it's just not getting into that conversation and they're absolute experts at it, aren't they? They're amazing, 'cause they'll say, 'But there's just something that's really worried me today' and then you will say, 'OK, well you put that in your worry box in the morning and we can talk about it in the morning.' So you have a specified time. And we use the bedtime pass if we need to, so obviously don't shout, don't get angry, keep yourself quite like a robot, 'OK, night, night you're really safe, nighty night' that kind of thing. ALICE pp19 **I:** So night time waking: the bedtime pass, we'll have a look at that in a minute; if the child comes into your bedroom use your mantra, 'You're very safe, nighty, night, see you in the morning.' <Chuckles> So check after a few minutes if you want to 'cause obviously he might get upset and then gradually fade that out. ALICE pp20 **I:** So you do that before and then at 7:30 you say, 'Right, OK, toy time's over.' ALICE pp23 **I:** So remind him of his bedtime pass, OK, 'You've got your bedtime pass, you can use that once.' And you can always say to him he can go on his iPad… I don't know if you'll allow this or not but maybe he could go on his iPad for 15/20 minutes in the morning, can he do that? ALICE pp25 **P:** To wake them up. So we've got two choices there, I could either give him a couple of minutes to settle and then carry him back or I need to do it so he knows what's going on. **I:** I'd just do it immediately. **P:** OK.

	I: Because in those few seconds he'll think mum's wavering here, there's a chance I'm going to be up for a winner <laughs>. **P:** So then he thinks he's won, yeah, and then he'll get really upset when he knows he hasn't. ALICE pp26 **I:** You need to explain to him, 'We're gonna be making some changes, Harry. You're a big boy, we've got the summer holidays and then you're gonna be going into Reception. You know, you're a really big boy', that kind of thing, which you will be doing anyway. 'So we've decided we're not gonna have the milk anymore at night. And it's really important that you get to sleep all through the night so you can be healthy and strong' and all these things, you know, for boys. KATE pp 12 **I:** The key thing: he must fall asleep alone in his bed, so you're not there. **P:** Exactly [although this sounds quite didactic, because I had taken time to build up a relationship and provide information about sleep the participant doesn't feel defensive as she may have done if I'd said this earlier in the intervention] KATE pp12 I: So just straight back to bed, in bed, 'OK Harry, you're really safe, I'm gonna go now. Nighty night, sleepy tighty', whatever your phrase is at night. 'Night night, sleep tight' as often as necessary. KATE pp.17 **I:** OK <chuckles> so you're gonna say, 'Right it's a new start, new routine, getting you ready for school. Your teachers want this, Harry', that kind of thing. KATE pp.24 **I:** Just explain. He can accept it, he's old enough … 'None of your friends, Harry, have a bottle in the night. You can have some water before you go to bed or you can have a nice big bottle of milk before you go to bed, then go for a wee. And then you don't need your milk in the night and then Spiderman will be there and you can have milk in the morning.' KATE pp29 **I:** So you'll just have to say, 'Right, you've had your big milk before bed. You can have a drink of water but then you have to give me your pass if you have a drink of water. Or you can manage without the water and Spiderman will come.' KATE pp 31 **I:** And, you know, explain it to him while he's awake. So you won't be kind to him in the night but you can be really nice to him while you're explaining. <Laughter> 'You're a big boy,' you know, 'and I'm really proud of you.' **P:** 'You don't need Mummy's bed anymore.'

	I: That's it. EVE pp34 **I:** So say to him he can write it down, so say, 'Right, we're not going to talk in the night because you're doing your big boy's routine but you can put anything in here that you want to talk about now.' And you just spend ten minutes, 'You tell me anything you want to tell me, then we can talk about it later in the morning.' EVE pp.43
Main issue – participant articulating the main issue that they want to address Towards the end of the intervention as this may have changed following discussion/new information	**P:** Yes, it's coming into my bed and not getting him to sleep early enough so that he's getting his full quota. [This had changed from the beginning when Alice was more adamant that things were much better and there was no real problem except his fear of the dark] **I:** So with the not getting to sleep early enough it will be the things that we talked about, so getting him into bed and then he doesn't get up once he's in bed; having his teddies, that's fine; reading, that kind of thing, that quiet time. So what do we want to achieve? We want to stop the bed visits completely. ALICE pp21 I: So his problems are that he's waking up in the night and he's not settling very well. He's not settling on his own, he won't settle without you. KATE pp6 **I:** Right so the things that bother us the most now is that … what bothers you the most? Tell me. **P:** Him not detaching, him not being able to sleep on his own. KATE pp 28 **I:** So your sleep goals are no wake-ups from … <Interruption> So no wake-ups from seven thirty til six thirty, that's what you're aiming for, isn't it really? KATE pp30 **I:** Yes, it's the night wakings. **P:** It's the broken sleep. EVE pp8

Group 6	
Reflexive/psychodynamic approaches to suggest why child is treated differently.	**I:** I wonder whether, without even thinking about it, you've become quite protective of him.

	P:	Probably.
	I:	And that's probably making those things …
	P:	Probably why I … I don't like seeing … if he gets too upset that he's coughing and that, that scares me and obviously this weather can affect his breathing as well. So I think maybe as well, I've done it as peace of mind that he's asleep, he's safe.
	I:	Yeah, yeah that's right.
	P:	Like you say, probably subconsciously, not even thinking about it, I'm frustrated thinking, 'Oh he won't go to sleep on his own' but maybe subconsciously, I'm thinking, 'Well …'
	I:	You want to be there.
	P:	So I've sort of put off trying to do it even because I know he's safe. Maybe subconsciously, you're right.
	I:	Yeah, yeah. Which is worth thinking about and it's totally understandable, totally understandable. (KATE pp.16) {KATE described a febrile convulsion when L was very young and she thought that he was going to die]
	P:	Could any of this stem from a baby, from the baby days?
	I:	From the baby days as in?
	P:	As in when he was six months old.
	I:	In what way, do you mean it's like a physical thing?
	P:	Well because he never slept through the night until he was seven months old, he was seven or eight months old, oh god he was horrific! He used to be constantly hungry, he was an every two-hour baby and all through the night, sometimes I would feed him two/three times through the night from a very young age. So really I just wondered if there was perhaps any connection?
	I:	If he developed a comfort, he wanted to be with you, is that what you mean? (ALICE pp 12)
	I**:**	I think it's a mixture of personality. It might be subconsciously how you've treated him because maybe you knew he was your last baby. I'm not saying you did but it could be any of these things. Some of the things we do without even thinking about it, some of the things are down to the child's personality, some of the things are down to the rest of the family. It's just a combination of factors which makes them all different, isn't it? EVE pp32

	I: It is and it's like a nurture thing which I think is quite innate in mums, especially when you breastfed them, and it's just hard. **P:** I did breastfeed for far too long I think, really, but I think that was more me because I didn't want to lose my baby, like you were saying earlier. And then I had to realise I had to get on with my life and stop being this milking machine. EVE pp.37
References to behavioural psychology	**I:** So we don't really need to do this extinction now, although you might need to do it when you take him back to his bed so it might be that you need to, at first, gradually phase out you leaving the room when you take him back to his bed, I don't know, that will be something for you to try. But it might be that you take him back to his bed, 'Night, night go back to your bed' he comes straight back in and it will just be like you see on *Super Nanny* <chuckles> that one <laughs> you take them back to their beds, put them back, but gradually that will stop, it will fade out. (ALICE pp16) I: So what will work particularly well for J I think is using other things, and I've done something especially on night time fears because it's a little bit of a different kettle of fish when they're frightened. So what's going to work is using reinforcers, so as well as taking away the reinforcers for the behaviour we don't want, which is you giving him cuddles and security in your bed, we'll be reinforcing the good behaviour with positive reinforcement. I'll go through that with you in a bit but there are various strategies, so you can put a superhero next to the bed when he's slept well, I've got here a bedtime pass thing which is something that he can either swap for a glass of water or a cuddle with you or for you to go in and just hug him, that kind of thing, but if he doesn't use his bedtime pass he can save it to the morning and then you give him a little prize and they work surprisingly well because it's kind of something they tangible that they can hold onto. We could try that. **I:** And that's double reward for him, he gets to watch TV and he gets to do it for mum. ALICE pp24 I: So what we're gonna do is we're gonna be taking away the things that reinforce the behaviour we don't want, which is milk and you <chuckles>. And then we're gonna be reinforcing the behaviour that we do want, which is sleeping all through the night and staying in his bed. So this is a bedtime pass, which you can give to him. You can say to him, 'Look Harry, you can have this and if you want, you can use it. Look what it says on it. You can use it for one visit from Mum, or Dad if he wants to, a drink of water or a hug. You can swap it for that. But if you

	don't use it, what will happen in the morning is you'll find that Spiderman has brought you a prize. KATE pp18 **I:** I think so. It would be about giving him control. So it's going to be a mixture when we do it, of not rewarding the things that we don't want, as in the night-time waking, but rewarding the behaviour that we do want. EVE pp31 **I:** Right, so where were we? So, yes, so almost robotic in the night because we're not trying to reward any of these wakings. If you do interact with him in the night, don't get into a conversation, try not to make eye contact That's really mean. 'It's time for bed Jake,' your big boy routine, 'back to bed.' And then that's it. EVE pp.34 **I:** I do think that would be worth a try because it's behavioural psychology which we know about so it's just reinforcing what we want. EVE pp.35 **I:** You'll be able to change it with behavioural strategies, really. But if that's not the case there are other things we can do. So, just interesting for you to read. **P2:** Interesting. EVE pp.49
Planning for potential roadblocks to success	**I:** Right, so what might go wrong? **P:** The first thing that could happen is if he specifically wants to do something that is not going to fit in with this, i.e. he wants to have the iPad or he wants to watch tele at eight o'clock because he hasn't done that because it's been his choice and he's done something else, then he would start to…ALICE pp25 **I:** OK, what else could you offer him, so you could offer him to play with Lego for a bit? **P:** Yeah, could offer him to play with his Lego, I wouldn't give him anything electronic, offer him to play with his Lego. I would try a book, probably only because he'd be in his bed then looking at the book and it would be easier to settle him, whereas if he's playing with his Lego he's going to be banging around his bedroom. **I:** So what might happen, he'll demand the iPad? ALICE pp25/26 **I:** Ah that's good. What else might happen; what if he comes into your bed? **P:** Yeah.

	I: And you don't hear him, is that likely, will he sneak in? What could you do? **P:** I'll go and put him back. **I:** Some parents have said they put something by the door so it moves and wakes them up when they come in. ALICE pp26 **I:** What might go wrong? **P:** <Chuckles> <Laughter> He doesn't sleep at all <laughs>. **I:** That might happen. What if he doesn't what if he's up all night; what will you do? **P:** I'll have to sit up with him, try and coax him back to sleep. **I:** OK. So just take him straight back to bed. KATE pp32 **I:** Ok, that's it, good boy. Anything else; can you think of anything else that might go wrong? **P:** I end up giving up <chuckles>. **I:** Yeah, OK. 'cause it gets too hard? **P:** Yeah. **I:** What could you do? **P:** Get straight back onto the routine again. KATE pp.32 **I:** Yeah, well that would be perfect, wouldn't it? Right, OK. What might go wrong? Let's think about that. **P:** Mummy. <Laughter> **I:** So you either won't notice that he's gone … Does that ever happen? EVE pp45 **I:** What else might go wrong? **P:** What else could go wrong? I think that's my major concern is me being the let-down, really. EVE pp.47

What unique skills can EPs add to the delivery of a parent-based behavioural sleep intervention? Post-intervention interview data

Highlighting success, providing encouragement and reinforcing self-efficacy	
Praise and recognition of success	**P:** Three nights, yeah. But he slept through last night, no word from him. **I:** That's good, maybe it's just taken a bit of a while to settle in. **P:** Settle down, yeah. EVE pp3 **I:** Oh, you are so good at organising this, and you've added all the hours, that's above and beyond <laughs>. EVE pp4 [confidence building] I: These are amazing aren't they? [sleep figures on diaries] P: Yeah, this is awesome, what a week. I had a really good week that week. EVE pp5 So he did and he would bring it and put it on my side and try and climb into my bed, I'm like, 'No, no, no, no go back to bed.' **I:** Good. EVE pp11 I stopped it the first time and then the second time I thought well if I whet his appetite then maybe it will work and it did. **I:** Oh great. ALICE pp1 And I felt really harsh doing it but it worked and it's worked since, so he's had every night in his own bed since last Wednesday I think. **I:** That's great. ALICE pp1 **I:** Wow, so you've not been doing any of the sitting on the bed? **P:** No. **I:** Has that all gone now? Fantastic. KATE pp 1 **I:** And he's not having milk? Oh is it? Oh that's good. **P:** Yeah, that's been turned down as well from the first night, halfway down and if he wakes in the night he has juice not milk. **I:** Great. KATE pp1

	Otherwise there's a few nights he's gone all the way through. **I:** That's great! Brilliant! KATE pp2
Stressing improvement	I: you got good sleep P: Yeah it was great! EVE pp5 Me actually being in charge I guess and taking control of it all, which I think since Brandon was born really I lost a lot of control because obviously it was me on my own with the two of them, then as soon as Brandon was born [partner] moved in and then it was three kids and him. I suppose I, not when he was a baby so much because I had the control then, but I don't know, somehow I've lost my… authority with them I suppose, in a way I think. And maybe that's why he struggles at school because it's female teachers and maybe he hasn't… I don't know and I'm probably reading into it too much. **I:** I think you're being a bit hard on yourself. **P:** Yeah, maybe. **I:** But I think if you feel that you're more in control then that's a positive thing. **P:** Yeah, it is, it's a good thing. EVE pp 10 [reframing to support self efficacy] **I:** But once it's for consistent periods like that – **P:** Yeah, exactly. **I:** - it will be ongoing, won't it? **P:** Yeah, and he seems to be settling a little bit better now ALICE pp1/2
Emphasising parent self-efficacy	P: I've got a sheet that I fold in half and I put that over his legs. **I:** That's a good idea, yeah. EVE pp5 **I:** You've phased that out now, haven't you? EVE pp11 **I:** So what do you think helped you to make the changes, as in to do with your own resources? **P:** I think it's you, 'cause I <chuckles> I want to do it for you so, well, not for you but –

	I: Right, OK, so knowing that somebody else is monitoring it and that kind of thing? **P:** Yes, I think that makes a massive difference. **I:** But in terms of your own resources it was that you were – **P:** Oh sorry, yeah. **I:** No, no I appreciate that you said that but I just think you should give yourself a bit more credit. <Laughter> You were willing to make the changes straightaway, weren't you? **P:** Yeah, yeah. **I:** You put it into action straightaway so you're very motivated. EVE pp12 **I:** Do you think there's anything that could help with that, for me working with parents in the future? **P:** That's a very tricky one, isn't it, because I suppose it's how you handle them parents. Because there's a lot of parents out there that will swear their kids are the best of the best and they aren't, you know? And it's them kind of mindset people that I think would be the hardest to deal with. **I:** So you think it depends on your mindset then? **P:** Yeah, I think it depends on your mindset and if you're level-headed, I guess, and down to earth because you've got to see the faults, haven't you, and a lot of people don't see their own faults I don't think, if that makes sense? So they can't see how to change. EVE pp13 [*this question encourages parents to articulate their own strengths – part of confidence building].* **P:** I don't know if I'm making sense but – **I:** No, you're totally making sense, it's really helpful to know because obviously from talking to you I'm trying to learn what has helped you so that I can use it for – **P:** For future. EVE pp14 [*stressing the collaborative, reciprocal nature of the intervention to build confidence and support self-efficacy*] **I:** Aw, you'll be the resident sleep expert now, won't you? <Laughter> EVE pp18

	P: It helps my structure because then I've got to actually tell him, let him and then take back, so I've got a bit more control. **I:** So it's you establishing control before bedtime, isn't it? **P:** Yeah. **I:** That's interesting, that can go in my next booklet <chuckles>. **P:** Yeah, establishing control, yeah. It all sounds really good, can you write my dissertation please? <Laughter> EVE pp19 **I:** OK great. So I think that's a good idea, to tackle not getting in bed with you and then deal with the other thing because they might be linked, probably. **P:** Quite possibly. ALICE pp2 [*rolling with resistance a little – ALICE was saying that she had neglected one part of the plan a little but this was reframed as a positive – it is still moving forward but I have mentioned that the setting routine still needs to be addressed]* P: But I think because I know it's starting to work I'm a lot calmer with him, not as fraught and I think how you're behaving, it really does have an effect on them, doesn't it? **I:** Yeah, it does, it's like you just said about the panic thing, isn't it, if you panic they pick up on that. ALICE pp6 **I:** But you've done really well with it. So what do you think helps you to make the changes that you did? Not necessarily to do with the intervention, was it to do with… how did you find the motivation I suppose? **P:** Well, it was just deciding that I'd had enough of having my sleep completely interrupted and just decided… I've already said, it was just finding the strength to decide now is the time I'm going to deal with this ALICE pp.6 **I:** So what advice would you give to other parents who want to make these changes? 'Cause obviously this is quite a common problem the coming into the bed thing. **P:** Well, it's deciding when you're going to deal with it and once you make a start you've got to carry on with it and see it through. But I think from my point of view it's taking on board the advice and strategies but working out how best to use them and if you do need to make any changes, to suit you, then you've got to find them. ALICE pp 7 **I:** Yeah, that's right, so you can just pick and choose really, can't you, and you have to reach a compromise kind of thing.

	P:	Yeah. And I just changed your one slightly to, 'Well actually you've got to earn that treat for tomorrow.' ALICE pp8
	I:	But you've mainly been cutting that out anyway, haven't you, really.
	P:	He doesn't tend to have a lot of sleep, it's just if he's fallen asleep in the car mainly or if he's been absolutely shattered he might fall asleep on the settee but he has to be really, really shattered for that. As you can see, as we're getting on, there's no sleep at all.
	I:	That's great. KATE pp4
	I:	I suppose it's just, like you say, being firm and sticking with it.
	P:	Yeah. KATE pp5
	I:	That's good, so he knows, you've changed his expectation, haven't you, I suppose.
	P:	He knows he's not having milk at bed.
	I:	Fantastic
Highlighting change	**I:**	OK, well that's good, great. So it looks a lot better.
	P:	Oh yeah, it's very much better. EVE pp3
	I:	The night wakings are… really good. EVE pp4
	P:	Yeah, but she said his behaviour at school's been fine and he's settling more at school so he's not being so disruptive and he's realised that if he doesn't involve himself in the group sessions he's actually missing out, so he's now going in and being involved so that's good.
	I:	So that's changed since I last spoke to you.
	P:	Since the first time, yeah.
	I:	Oh that's really good, oh good. EVE pp4
	I:	But if he starts coming into the bed regularly again, now you've got into this, 'cause you've had a good block, haven't you really, of him not coming in.
	P:	Yeah. ALICE pp4
	I:	So you've made quite a lot of changes, how hard have you found that?
	P:	Well nothing's ever easy, is it? ALICE pp6

	I: So he knows he's not going to get the milk anymore? **P:** Yeah. **I:** That's great, isn't it, that's a big difference. KATE pp 2 **I:** Self-settled, that's such a big improvement then, isn't it? **P:** Yeah. **I:** It's changed because he wasn't self-settling at all really, was he? **P:** No. **I:** 'Cause you were staying with him, weren't you? Has that been a lot better for you then? **P:** Yeah, 'cause now I can put him to bed, I'll sit on my bed about five minutes just to listen out, five minutes and I'm downstairs. **I:** That's great, isn't it? KATE pp3 **I:** But it's such a big improvement, isn't it? **P:** You can see straightaway. KATE pp4

Helpfulness of research and practical knowledge	
Sleep stages	
Parent reference to significance of delivery of sleep advice/strategies	**I:** So which bits of the intervention as a whole did you find most useful? **P:** Probably the feeding of them, I think, giving the snacks and stuff. Although it's quite an obvious thing EVE pp 11 **P:** So it did work and I think because he had that and then I had to have the interaction with him to say, so it worked for me as well because I had to remember to, if he did bring it, take it off him which meant that I actually had to do something rather than just cuddle him and keep him warm and put him back in his own bed. So it made me have to re- …yeah yeah **I:** OK, that's good, that's useful. **P:** Yeah. EVE pp11/12 **I:** Yeah, do you think it was the end goal that was motivating for you? **P:** Maybe, yeah.

	I:	And just having that made clear and seeing a path to that goal.
	P:	Yeah, and actually having physical evidence, I guess, of how it's… 'cause we have got evidence, haven't we, of how everything's worked and what's not worked and making my notes of what they've eaten and whatnot. It helps you paint the bigger picture and without that you're kind of stuck in a lull, aren't you? EVE pp12
	I:	Do you think keeping the diaries helps you to –
	P:	Yes.
	I:	- not see your faults as such but just to look at the patterns of where it's not gone as well and give reasons?
	P:	Yeah, I mean although I know he's woke three times and I know when he's woken, when you've written it down you've committed it so you're almost thinking, well, I've got to beat that, we've got to beat that because not only is it bad for him it's bad for everybody else that wakes up with him. So by seeing that I know I've got to do this <chuckles> the zeros are so much nicer!
	I:	Yes, chasing the zeros, chasing the noughts, yeah. EVE pp14
	P:	He did put a couple of things in his worry box and I have to be very careful what he's watching on the television because I think things affect him more than I've realised in the past, and I'm very careful about what he does watch now. ALICE pp4
	I:	OK. What did you find most helpful about the things that we talked about, the booklet or was it just talking to somebody?
	P:	Yeah, just really using some tactics that would work really, obviously the reward strategies were good. I think the worry box was good because although he only used it a couple of times I think I will try and get him to use it perhaps once or twice a week, I will get him to use it again just to see what is going on in there when he's calm and when he's not focussed on anything else. But I think because I know it's starting to work I'm a lot calmer with him, not as fraught and I think how you're behaving, it really does have an effect on them, doesn't it? ALICE pp 6
	I:	That's great. Do you think it was the self-settling that helped the most, just getting that bit right at the beginning?
	P:	Yes, definitely.
	I:	More than milk or do you think it was a mixture of both?
	P:	A mixture of both, mostly the self-settling because I think he realised that he was a big boy, he didn't need us and he could go back to sleep. KATE pp8

Empathy for the process of change	
Identifying and empathising with difficulties	**P:** Yeah, that's what we're doing. Because I did story time with them and then they just keep asking for more, and more, and more and I'd be like, 'No, one, one, one…' <laughs>. **I:** It's really hard, isn't it? <Laughter> EVE pp3 **I:** OK. So it's not anything new, is it, it's just – **P:** No, it's just absolutely… you know as a parent you get shattered, don't you, you don't think straight. **I:** No, that's right. **P:** And when it's at home it's different because it's your home, it's your family, you just get into this lull of… or routine of doing what you do, it's hard to see the changes that should be made because you're in it, if you know what I mean, if that makes sense? **I:** Yeah, it totally makes sense. EVE pp13 **P:** I think there is a lot of pressure on women in general to be fair, but then that's my… **I:** Particularly around sleep do you think, because I know I noticed it, because you always get those parents who would say, 'Oh yeah, well they sleep for 12 hours, they've slept for 12 hours since three months.' **P:** Yeah, and they put pressures like that, it puts pressure on, doesn't it? But that might be lovely for them and they might even be lying <chuckles> I'm not being funny but there's no kid that sleeps constantly forever, they do have nightmares every now and then, you know? EVE pp15 **P:** And asking for that help is really hard. **I:** Yeah, of course it is, nobody likes to ask for help, do they, really. **P:** I know nobody likes to admit that they can't cope with it. But I could see and we did talk her down from the high pitched sound to a lower level <laughs>. [*referring to a friend with sleep difficulties – I encouraged this as a good place from which to emphasise her own achievements]* EVE pp18 **P:** 'Cause you've had four hours since you came home from school and it hasn't bothered you up until now.

	<Laughter> **I:** They just know, don't they? **P:** Yeah, yeah he's got that down to a fine art <chuckles>. ALICE pp6 **P:** I think in a lot of ways in hindsight I should've nipped it in the bud when it started, 'cause it's something he's always done but it was always sporadic and perhaps he wouldn't do it for a week and then he'd do it for a couple of nights and then he went through a phase where it didn't happen, so suddenly this cycle started and I think I should've just nipped it far sooner than – **I:** But that is what you're doing now though, isn't it, and it's easy to say that but really at the time you just think, well, it won't hurt for one night. **P:** That's it, that's it. **I:** You can see how it's happened. **P:** Yeah, yeah you can. Sometimes you just do anything to sleep as a parent <laughs>. **I:** Yes, of course, you've got to survive, haven't you? ALICE pp 8

Recognition and appreciation of the role of the researcher	
Involvement and support of the researcher	P: God oh yeah you didn't tell me what to do, it's the way you worded it..structured your sentences so that I felt that it was…oh god I can't remember what I said…that it was…yeah we were talking about this weren't we? The way you approached the wording of change was very subtle and effective and if I'd h'gone…if somebody'd come up to me and said "you need to do this and you need to do that and you need too…and this won't work if you don't"…that would be negative… your approach was very positive and empowering really cause it made me realise that I can do this and we will do this and this is going to be good if that makes sense? It's not as good as what I just….said was it? I: No it was amazing, love the word empowering… EVE pp19 **I:** So what do you think helped you to make the changes, as in to do with your own resources? **P:** I think it's you, 'cause I <chuckles> I want to do it for you so, well, not for you but –

	I: Right, OK, so knowing that somebody else is monitoring it and that kind of thing? **P:** Yes, I think that makes a massive difference. EVE pp12 So what advice would you give to other parents who are wanting to make changes? **P:** Phone you <laughs>! I already said to one that you need this girl, she'll help you out. No, it has helped massive because it's all logical and simple things when you've got it here in black and white, you know, when you're getting on with your daily life and you're knackered and you haven't got any sleep and you can't think straight you can't see the pattern, you can't see the change, you can't see how to develop it or change it. The simple things like the snack, I mean it's so obvious but we weren't doing it, so why weren't we doing it? Because it wasn't obvious to us, so doing this makes it obvious. EVE pp12/13 P: But I think from my point of view it's taking on board the advice and strategies but working out how best to use them and if you do need to make any changes, to suit you, then you've got to find them. ALICE pp. 7 **P:** No. I didn't really, I just remembered what we said and I tried to stick to it the best I can. *Echoing my use of we in the pre-intervention interviews – this emphasises the collaborative nature of the intervention* **I:** Brilliant. What were the most helpful bits? **P:** All of it really because obviously the advice you give, the way you've said to do it so all of it really. **I:** Oh brilliant, that's great. Do you think if I'd have just given you the booklet it would've been not as helpful; do you think it's been helpful for me to come and go through it? **P:** Yes, very helpful, because if I look at the booklet I think, well, how do I….? But with you coming out and speaking to people you get that friendliness and it helps because then if you……and approach if I've got any problems. KATE pp7 **I:** Yeah, good word. So how did the booklet help? So probably for you was it just, I don't know, it was going through it, was it? **P:** Yeah, going through it with yourself really. **I:** Did you find making this plan helpful? **P:** Yes, because obviously by doing that even though I didn't have to go back to it again it stuck in my brain, so by us sitting there going through it I was taking it in and then it just seemed to click into place. KATE pp. 7/8

	P: Yeah, definitely, I know what to do and obviously if you don't mind I'll keep your number in case I need any advice. KATE pp9 **P:** It's been absolutely fantastic. If you need anything my number's there or if you want to chat any time I'm always there on a number. KATE pp10
Staying in touch	I: Yeah absolutely, so if you want any advice or if you want to ring me or anything… KATE pp9 **I:** OK. So I've put in my diary that I'm going to get in touch with you ten weeks after we started which will be about two weeks into back at school. I've got St. Peter's next year anyway so I'll be around, so Monday the 14th… you're at home on Mondays, aren't you? **P:** Yeah, that's a good day. **I:** So I'll give you a call that day and we can talk about how it's going. **P:** OK, you're going to call me, yeah? **I:** Yeah, I'll call you and see how it goes. But I feel like you've got everything you need now, like you say, it's just a matter of doing it consistently and seeing how… **P:** Yeah. ALICE pp8 *Other discussions about the ten week check are not recorded/transcribed but are referred to in the research diary.*

Supporting ongoing change next steps	
Proposing next steps	**I:** OK. So maybe that sheet over the end is a good idea or what about putting his duvet the other way round? **P:** The other way round, that's a good idea, I hadn't thought about it that way EVE pp5 **I:** OK, that's great. Are you going to gradually phase out the juice to water, I'd try and maybe… just make it really weak so he eventually doesn't want it. **P:** Yeah, but to be honest nine times out of ten he'll ask for it and in the morning it's still there. So whether it's just like a comfort thing KATE pp1 **I:** So I think the only thing to get rid of that one last wake up might be to, like I said, phase out the juice because if you think about it he's still getting rewarded, in a way, for waking

	up because juice is a reward really. If you can phase that out really gradually and make it weaker and weaker until it's basically water and then he won't bother for it probably. **P:** Yeah. KATE pp4
Exploring exceptions	**I:** So what's happening on these? **P:** When was that, 21st, 22nd. **I:** So this was a while ago, wasn't it, actually. **P:** Yeah, that's September. Ah 21st and 22nd, [older sibling] was poorly on the 22nd. **P:** Well, generally it's a lot better. There's only the odd days that throw wobblers. **I:** And the odd days – **P:** Well, nights, should I say? **I:** The odd nights. Can we see a pattern to that, is it getting cold, is it when something's happened that's out of the normal routine? **P:** Well I'm wondering if it's the cold and then I'm wondering if it's the wheat, but then the two have happened at the same time so it's really maybe just knock out the wheat and see whether the cold does make… **I:** It might be a combination, mightn't it, it might be wheat some days, cold other days. **P:** Yeah. **I:** It's probably worth trying both, isn't it, 'cause that seems to work, doesn't it? Like last night when you snuggled him up he was fine. EVE pp. 7 **I:** But there will always be exceptions, won't there? You can't live your life – **P:** It seems to be every blooming week! <Laughter> It has been every week. **I:** If the weekends are like that it's OK, as long as you've got… so maybe you could say to him, 'I'm flexible on the weekends but if you could help me on the Thursday and the Friday just

		so we can maintain it all through the week then that would be really helpful for me.' EVE pp8/9
Exploring/explaining failures and difficulties	**P:**	No. Well, I don't know any of them really because Jake… the other thing I think maybe it's my fault because he's moved from childcare to childcare with me as I've… because he had a child minder, the child minder retired, then he went to college nursery, then he's come to Haywood Nursery and then he went to Colwich one, so he's had a lot of changes and I don't know if we've maybe damaged something <laughs>.
	I:	No, you haven't damaged something, but maybe he's just settling in still, it's still early.
	P:	It's early days, isn't it?
	I:	It's the first half-term of a big change, as in going in all day and that kind of thing. And social skills really develop over that first year, don't they?
	P:	Yeah, I guess so. EVE pp2
	I:	So if you're keeping it gluten free for tea that's probably…
	P:	Probably a good idea, isn't it, yeah. EVE pp6
	P:	Sometimes when he's upset and he's hurt himself and I try to get him to calm down, 'Andrew, take a deep breath' that doesn't work. Not that it happens very often, he doesn't really get worked up very often.
	I:	OK, what would work in that situation?
	P:	Just trying to calm him down, just a cuddle really and not panicking myself, keeping myself calm 'cause he reacts to… if he's hurt himself, 'Oh my god what have you done?!' that would set him off, but if I, 'Oh, Andrew, come on, I'm sure you'll be alright.'
	I:	So he probably associates take a deep breath with panic, panic 'cause that is the kind of thing that people say, isn't it?
	P:	Yeah.
	I:	Whereas the breathing is you just count your breaths; my daughters do it sometimes when they need to relax and it's just counting your breaths so it takes your mind off whatever you're thinking about really. ALICE pp 5
	I:	I wonder if he's thinking about going to school as well because it's a big change, isn't it?

	P: It is. KATE pp5 [recent silly behaviours]

What unique skills can EPs add to the delivery of a parent-based behavioural sleep intervention? Researcher reflective diary data

Theme one Working with parents	
Self-efficacy and empowerment	'tried to remind her of her strengths and successes' p2 'MI strategies of affirmation and praise worked really well' p3 'by affirming, using praise and highlighting her own effective strategies and characteristics she changed throughout the conversation' p3/4 'it felt quite empowering for her' p4 'it was also quite empowering for KATE because she felt that she understood the things which may have contributed towards the problem and started to realise that change was within her control' p5 '..it needs to be collaborative and I think a way to do this is to listen to the parent – reflective, affirming – offer the information – facilitate understanding of how this can fit in with some changes' p6 'she said that she found going through the booklet with me and drawing up the plan together was important – useful knowledge for the future of the intervention – focus on collaborative' p16 'again reflected on the power balance – KATE actually said – I want to help you like you have helped me (recipriocity) p16 'KATE is more confident this time – things are better sometimes he sleeps all through but we need this to be consistent. I reminded her of her previous success and she was able to respond to this "I just need to do it every night don't I?". I actively acknowledged that it is hard – I understand – empathy' p22
Researcher concerns and difficulties in working with parents	'hope that she did not feel under pressure or criticised' p1 'At some points in going through information, I had to disagree with her' p1

	‘there were a few contradictions in statement about sleep – roll with the resistance – felt that this was part of defending some of her choices’ ‘at the start I felt that [participant] was sceptical and doubted her own abilities as well as those of others to help her’p3 ‘I noted that the milk in the night was a contentious issue – she had been told before not to (health visitor) and let him cry but didn’t feel that she could do this because of his asthma’ p5 ‘EVE’s dad was there which changed the dynamic slightly as I felt that it was polite to include him in the conversation where possible and he is around a lot so it is useful to have him on board with the intervention’ p19
Empathy and rapport building	‘dad able to be the strict one but mum wanted to provide comfort’ p2 ‘I elicited empathy by sating how hard that must have been for her’ p4 ‘in some ways she liked having [child] in bed when husband away which is understandable’ p6 ‘couldn’t get in touch with KATE..bit concerned that she is worried that she’s not been able to start/keep diary’ p7 ‘feel that we have built up some rapport through initial telephone conversation and texts prior to meeting’ p17 ‘thought that we built up good rapport which I have found to be key to the intervention’ p19 ‘I found that I talked about my own children quite a lot – not in relation to sleep but as part of general chat/rapport building’ p19 ‘I didn’t feel that my approach was patronising and perhaps part of that was my genuine admiration for both parents. Both were willing to admit their fearfulness and to describe their situations with honesty and to consider the factors which may have been involved in the development of the sleep problem’ p6 ‘KATE is more confident this time – things are better sometimes he sleeps all through but we need this to be consistent. I reminded her of her previous success and she was able to respond to this “I just need to do it every night don’t I?”. I actively acknowledged that it is hard – I understand – empathy’ p22

	‘Natural to have ups and downs – KATE needs the support she was so positive at the end of the intervention interviews but she has a lot going on with partner’s ill health so probably relies on support from me more and that only need be a text/phone call’ p23

Group 2 Researcher learning/reflection	
Adaptations made	‘print off pages of powerpoint – not effective to be crowded around a laptop – more accessible – go through booklet more booklet -based’ p2 ‘I decided to dispense with powerpoint which I felt was a bit clumsy – it was much easier going through the printed slides and going through the booklet in detail’ p4 ‘for all participants the second behaviour questionnaire will be completed in collaboration with new/old teacher but it will still be hard to draw any conclusions from this because a new term/teacher/developmental age all have an impact on behaviour – however I still think it is worth consideration’p8 ‘I was able to refer to some other cases as examples I found this helpful – also helpful for EVE to know that she is not facing such a large battle as [her child] already self-settles and this is very important’ p19
Reflecting on usefulness of strategies	‘reminder of what [paediatric nurse] had told me about there being little scientific basis for sleepy foods’p1 ‘didn’t feel I used scaling very effectively’ [case one] p2 ‘scaling this time was quite useful…. Gave her time to think about some exceptions to the problem’ p3 ‘SF does not recommend looking back, however I think our conversation about Harry’s past illnesses was useful, KATE was quite upset when talking about Harry’s febrile convulsion and described the incident in detail’ p4 ‘I felt that the knowledge of this [thinking about why she felt especially protective towards her son] might help her whilst she was carrying out the programme’ p4 ‘highlighted/created cognitive dissonance during the initial interview - Milk habit/nurturing/anxiety over Harry’s health v’s

	need to get sleep! This dissonance already existed but the booklet and the interview helped to make this overt' p16 'used this with EVE, talked about how easy/nice it is to cuddle and know that he'll go back to sleep in her bed and how hard it is to get up and return him and how cute it was when he fell asleep on the landing – I tried to gently juxtapose this with what her aims were and with her acceptance of the value (for her and Brandon) of sleeping through the night' p 20
Reflecting on difficulties	'I was worried that I sounded a little didactic' p2 'at one point I heard myself talk when I don't think that KATE had finished speaking – I checked this and returned to what she was saying – it's quite hard when you have the information and advice to impart not to interrupt or contradict but this is a necessary part of encouraging the parent to have control – it needs to be collaborative' p5 'is it too relationship dependent? Have I put more into building relationships and emphasising my availability because it is my research? P16 'KATE said that she would like to stay in touch – again this made me reflect on the intensity of our relationship and the role which this plays in the intervention'p16 'was I so happy (shy/modest) about positive feedback that I didn't probe into the feedback as much as possible?' p16 'I didn't suggest anything specific just mused generally on how we treat siblings differently and how this may impact on their behaviour – EVE then returned to this later in the conversation – did I control this as a theme? Is it valuable for parents to know this?' p19
Shaping future work	'unique family circumstances – lone parent, missing dad, early period of trauma' p2 'this is the value of working individually rather than in a workshop – it was an opportunity to tease out the unique factors of the family situation' p2 'need to think about my role – think we established a good rapport – need to consider this as part of the intervention but perhaps rapport building and expertise of working with parents is part of the skill set of an EP and also goes along with some of the principles of MI' p5

	‘feeling very positive about this case and think it could be useful to apply strategies from this to other cases’ p7 ‘have realised that I don’t need to rigidly stick to same amount of support for each parent as they have different needs and this has to be intuitive to a certain extent- does this mess with case study protocol?’ p9 ‘the most important part seems to be the initial discussion/the education after that it is probably knowing that somebody is there’ p10 ‘she described how she had developed a routine for completing the diaries and felt that this was important for the intervention’ p15 ‘she said that she found going through the booklet with me and drawing up the plan together was important – useful knowledge for the future of the intervention – focus on collaborative’ p16 ‘now that this is my fourth case I feel more confident about working with parents to talk about sleep – find it helpful to explain in terms of behavioural psychology – rewarding the behaviour we do want and not rewarding the behaviour we don’t want p.18 ‘I think it’s appropriate to be guided a little by instinct and the flow of discussion in terms of which strategies to use’ p4 ‘[case one and two] both issues had arisen over time and both involved an ‘unusual’ attachment with the mother- Harry’s illness/dad’s absence’ ‘recurring themes seem to be some kind of over-protection’ p19 ‘now that this is my fourth case I feel more confident about working with parents to talk about sleep – find it helpful to explain in terms of behavioural psychology – rewarding the behaviour we do want and not rewarding the behaviour we don’t want p.18

Change The wheel of change and motivation for change	case one – ‘felt right to deliver intervention following discussion to capitalise on willingness to change’ (p.1) ‘there was quite a lot of change talk especially towards the end – we looked at the wheel of change and I think that this was useful – it linked well to our discussion of things which might go wrong’ p4 EVE professed a desire to change we talked about change motivation and the wheel of change – deciding where she was and discussing the importance of getting back to it after relapse’ p20

	‘found it helpful to refer directly to change – are you ready? Quite a light-hearted question but encourages the parent to articulate (reminder to self about Bruner quote about words shaping real worlds) p6 ‘she also said that she found it useful to look at the wheel of change and to talk about her readiness to change’ p16 ‘I found a key question in assessing motivation for change to be ‘when do you want to start?’ EVE said “now” which is a good sign that motivation is high. P20[in first follow up 7phone call with case one ‘ said – don’t know what it is but things are ‘just different’’ p7 tone of email (from EVE) much more positive – in control of own strategies – dealing with two children as a whole rather than individually’ p24

Appendix xxi – Raw data tables

CSHQ – results raw data

CSHQ Results Andrew

Total score pre-intervention	Total score post-intervention
53	**48**

SUB-SCALE ONE – BEDTIME RESISTANCE		
	Pre-intervention	Post-intervention
1	1	1
2	1	1
9	2	1
10	2	2
11	1	1
12	2	2
Total sub score 1	9	8

	SUB-SCALE TWO – SLEEP ONSET DELAY	
	Pre-intervention	Post-intervention
3	2	1
Total sub score 2	2	1

SUB-SCALE THREE– SLEEP DURATION		
	Pre-intervention	Post-intervention
4	2	1
5	2	1
13	2	2
Total sub score 3	6	4

SUB-SCALE FOUR – SLEEP ANXIETY		
	Pre-intervention	Post-intervention
11*	1	1
12*	2	2
14	3	3
15	1	1
Total sub score 4	7	7

SUB-SCALE FIVE – NIGHT WAKINGS		
	Pre-intervention	Post-intervention
16	3	2

17	3	2
18	1	1
Total sub score 5	7	5

SUB-SCALE SIX– PARASOMNIAS		
	Pre-intervention	Post-intervention
19	1	1
20	3	3
21	1	1
22	1	1
23	2	2
24	2	2
25	1	1
Total sub score 6	11	11
SUB-SCALE 7 – SLEEP DISORDERED BREATHING		
	Pre-intervention	Post-intervention
26	2	1
27	1	1
28	1	1
Total sub score 7	4	3

SUB-SCALE 8 –DAYTIME SLEEPINESS		
	Pre-intervention	Post-intervention
6^	1	1
7^	0	0
8	1	2
29	1	2
30	2	2
31	1	1
32	2	2
33	2	2
Total sub score 8	10	12

*11 and 12 are counted in two sub-scales but should only be counted once in the final score.

^ 7 and 8 are scored on 0, 1, 2 (all others on 1,2,3)

CSHQ Results Brandon

Total score pre-intervention	**Total score post-intervention**
61	**34**

SUB-SCALE ONE – BEDTIME RESISTANCE	

	Pre-intervention	Post-intervention
1	1	1
2	1	1
9	2	1
10	3	1
11	1	1
12	1	1
Total sub score 1	9	6

	SUB-SCALE TWO – SLEEP ONSET DELAY	
	Pre-intervention	Post-intervention
3	2	1
Total sub score 2	2	1

SUB-SCALE THREE– SLEEP DURATION		
	Pre-intervention	Post-intervention
4	2	1
5	1	1
13	1	1
Total sub score 3	4	3

SUB-SCALE FOUR – SLEEP ANXIETY		
	Pre-intervention	Post-intervention
11*	1	1
12*	1	1
14	2	2
15	1	1
Total sub score 4	5	5

SUB-SCALE FIVE – NIGHT WAKINGS		
	Pre-intervention	Post-intervention
16	3	1
17	3	1
18	2	1
Total sub score 5	8	3

SUB-SCALE SIX– PARASOMNIAS		
	Pre-intervention	Post-intervention
19	2	1
20	3	1
21	2	1
22	1	1

23	3	1
24	1	1
25	1	1
Total sub score 6	13	7
SUB-SCALE 7 – SLEEP DISORDERED BREATHING		
	Pre-intervention	Post-intervention
26	1	1
27	1	1
28	1	1
Total sub score 7	3	3

SUB-SCALE 8 –DAYTIME SLEEPINESS		
	Pre-intervention	Post-intervention
6^	3	1
7^	2	1
8	2	1
29	2	1
30	3	1
31	2	1
32	2	1
33	3	1
Total sub score 8	19	8

*11 and 12 are counted in two sub-scales but should only be counted once in the final score.

^ 7 and 8 are scored on 0, 1, 2 (all others on 1,2,3)

CSHQ Results Harry

Total score pre-intervention	**Total score post-intervention**
49	**43**

SUB-SCALE ONE – BEDTIME RESISTANCE		
	Pre-intervention	Post-intervention
1	1	1
2	3	1
9	1	1
10	1	1
11	3	1
12	2	1
Total sub score 1	11	6

	SUB-SCALE TWO – SLEEP ONSET DELAY

	Pre-intervention	Post-intervention
3	2	1
Total sub score 2	2	1

SUB-SCALE THREE– SLEEP DURATION		
	Pre-intervention	Post-intervention
4	2	2
5	3	2
13	2	1
Total sub score 3	7	5

SUB-SCALE FOUR – SLEEP ANXIETY		
	Pre-intervention	Post-intervention
11*	3	1
12*	2	1
14	3	3
15	1	1
Total sub score 4	9	6

SUB-SCALE FIVE – NIGHT WAKINGS		
	Pre-intervention	Post-intervention
16	1	2
17	3	2
18	1	2
Total sub score 5	5	6

SUB-SCALE SIX– PARASOMNIAS		
	Pre-intervention	Post-intervention
19	1	1
20	2	1
21	2	1
22	1	1
23	1	1
24	1	1
25	1	1
Total sub score 6	9	7
SUB-SCALE 7 – SLEEP DISORDERED BREATHING		
	Pre-intervention	Post-intervention
26	2	2
27	1	1
28	2	1
Total sub score 7	5	4

SUB-SCALE 8 –DAYTIME SLEEPINESS		
	Pre-intervention	Post-intervention
6^	1	1
7^	0	0
8	1	1
29	2	1
30	1	1
31	1	1
32	1	1
33	2	2
Total sub score 8	9	8

*11 and 12 are counted in two sub-scales but should only be counted once in the final score.

^ 7 and 8 are scored on 0, 1, 2 (all others on 1,2,3)

Alice – Sleep diary data

DAY	TOTAL SLEEP m	Parents' bed	Night wakings	Settle time	
1	600	✓	1	15	PRE-INTERVENTION
2	555	✗	0	15	
3	540	✓	1	0	
4	630	✗	0	30	
5	600	✓	1	45	
6	615	✓	1	15	
7	660	✓	1	10	
TOTALS	4200	5	5	130	
Mean	600 10 h			18.6	

DAY	TOTAL SLEEP m	Parents' bed	Night wakings	Settle time	
1	600	✗	2	10	WEEK ONE
2	600	✗	0	20	
3	720	✓	1	0	
4	600	✓	1	30	
5	510	✓	1	45	
6	510	✓	1	10	
7	540	✓	1	30	
TOTALS	4080	5	7	145	
Mean	582 9.7 h			20.7	

DAY	TOTAL SLEEP m	Parents' bed	Night wakings	Settle time	
1	525	✓	4	15	WEEK TWO
2	540	✗	0	5	
3	630	✗	0	10	
4	570	✓	1	5	
5	540	✗	0	15	
6	660	✓	1	15	
7	660	✗	0	15	
TOTALS	4125	3	6	80	
Mean	589 9.8 h			11.4	

DAY	TOTAL SLEEP m	Parents' bed	Night wakings	Settle time	
1	630	✗	2	10	WEEK THREE
2	600	✗	0	5	
3	660	✓	1	75	
4	540	✓	1	75	
5	630	✓	1	15	
6	615	✓	1	15	
7	660	✓	1	10	
TOTALS	4335	5	5	205	
Mean	619.1 10.3h			29.1	

DAY	TOTAL SLEEP m	Parents' bed	Night wakings	Settle time	
1	555	✗	0	5	WEEK FOUR
2	630	✗	0	5	
3	720	✓	1	25	
4	510	✗	1	25	
5	705	✗	1	15	
6	600	✗	0	10	
7	615	✗	1	30	
TOTALS	4335	1	4	115	
Mean	619 10.3h			16.4	

DAY	TOTAL SLEEP m	Parents' bed	Night wakings	Settle time	WEEK FIVE
1	555	✗	1	15	
2	630	✗	0	5	
3	630	✗	0	5	
Total Mean	605 10.1h	0	1	8.3	

Kate – Sleep diary data

DAY	TOTAL SLEEP m	Parents' bed	Night wakings	Settle time	PRE-INTERVENTION
1	545	✓ 2	3	105	
2	625	✓ 1	3	10	
TOTAL	585	3	6	125	
MEAN	585 9.75 h	1.5	3	63m	

DAY	TOTAL SLEEP m	Parents' bed	Night wakings	Settle time	
1	633	✓	1	35	WEEK ONE
2	650	✗	0	25	
3	600	✓	1	15	
4	630	✗	0	10	
5	545	✗	0	60	
6	625	✗	1	20	
7	645	✗	0	9	
TOTALS	4328	2	3	174	
Mean	618.1 10.3 h	0.3	0.9	24.9	

DAY	TOTAL SLEEP m	Parents' bed	Night wakings	Settle time	
1	500	✗	0	0	WEEK TWO
2	678	✓	2 hayfever	/	
3	635	✗	3	10	
4	685	✗	1	15	
5	657	✗	1	15	
6	660	✗	3	15	
7	660	✗	3	15	
TOTALS	4475	1	13	70	
Mean	639 10.7h			10	

DAY	TOTAL SLEEP m	Parents' bed	Night wakings	Settle time	
1	625	✓	1	15	WEEK THREE
2	620	✗	0	10	
3	505	✗	0	0	
4	675	✗	2	0	
5	610	✗	1	40	
6	635	✗	0	15	
7	605	✗	0	10	
TOTALS	4275	1	4	80	
Mean	610.1 10.2h			12.9	

DAY	TOTAL SLEEP m	Parents' bed	Night wakings	Settle time	
1	650	✗	0	25	WEEK FOUR
2	630	✗	0	15	
3	632	✗	4	5	
4	645	✗	1	5	
5	632	✗	0	10	
6	530	✗	1	?	
7	560	✗	1	0	
TOTALS	4279	0	7	60/6	
Mean	611.3 10.2h			10	

DAY	TOTAL SLEEP m	Parents' bed	Night wakings	Settle time	
1	580	✕	0	5	WEEK FIVE
2	590	✕	0	0	
3	495	✕	0	0	
4	680	✕	2	10	
5	680	✕	1	10	
6	680	✕	1 blocked nose	10	
7	650	✕	2	7	
TOTALS	4355	0	6	42	
Mean	622.1 10.4h			6	

DAY	TOTAL SLEEP m	Parents' bed	Night wakings	Settle time	
1	660	✕	1	7	WEEK SIX
2	615	✕	2	10	
3	665	✕	2	10	
4	670	✕	2	10	
5	615	✕	1	15	
6	673	✕	0	17	
7	460	✕	0	0	
TOTALS	4358	0	8	69	
Mean	622.1 10.4h			9.9	

DAY	TOTAL SLEEP m	Parents' bed	Night wakings	Settle time	
1	650	✗	1	10	WEEK SEVEN
2	705	?	?	20	
3	435	✗	1	0	
4	585	✗	1	15	
5	656	✗	1	10	
6	580	✗	2	5	
7	640	✗	1	5	
TOTALS	4251	0	7/6	65	
Mean	607.3 10.1h			9.3	

EVE – SLEEP DIARY DATA					
DAY	TOTAL SLEEP m	Parents' bed	Night wakings	Settle time	
1	659	✗	0	15	PRE-INTERVENTION
2	660	✓	3	15	
3	660	✗	0	10	
4	660	✗	0	30	
5	600	✓	3	60	
6	615	✗	0	5	
7	720	✓	3	15	
TOTALS	4574	3	9	150	
Mean	653 10.9 h		1.3	21	

DAY	TOTAL SLEEP m	Parents' bed	Night wakings	Settle time	
1	630	✕	3	20	WEEK ONE
2	595	✕	2	20	
3	710	✕	0	5	
4	707	✕	0	5	
5	660	✕	3	15	
6	698	✕	3	15	
7	675	✕	0	20	
TOTALS	4675	0	11	100	
Mean	668 11.1h		1.6	14	

DAY	TOTAL SLEEP m	Parents' bed	Night wakings	Settle time	
1	690	✕	0	50	WEEK TWO
2	558	✕	0	82	
3	645	✕	0	15	
4	680	✕	0	10	
5	750	✕	0	30	
6	710	✕	0	20	
7	665	✕	0	20	
TOTALS	4698	0	0	247	
Mean	671 11.2h			35	

DAY	TOTAL SLEEP m	Parents' bed	Night wakings	Settle time	WEEK THREE
1	679	✗	0	16	
2	598	✗	0	10	
3	613	✗	0	30	
4	682	✗	0	10	
5	641	✗	0	65	
6	701	✗	0	13	
7	656	✗	0	20	
TOTALS	4570	0	0	164	
Mean	652.8 10.9h	0	0	23	

DAY	TOTAL SLEEP m	Parents' bed	Night wakings	Settle time	WEEK FOUR
1	652	✗	0	35	
2	680	✗	0	15	
3	585	✗	1	0	
4	696	✗	0	60	
5	656	✓	1	20	
6	655	✗	1	10	
7	643	✗	2	13	
TOTALS	4567	0	5	153	
Mean	652 10.9h	0.1	0.7	22	

DAY	TOTAL SLEEP m	Parents' bed	Night wakings	Settle time	WEEK FIVE
1	655	✗	0	25	
2	593	✓	1	45	
3	661	✗	0	1	
4	720	✗	0	10	
5	681	✗	0	0	
TOTALS	3310/5	1	1	81	
Mean	662 11h	0.2	0.2	16m 20	

SBRS results for all participants pre- and post-intervention

	Andrew		Harry		Brandon	
SRBS sub-scale	Pre-	Post-	Pre-	Post-	Pre-	Post-
General classroom behaviour	4.47	5.41	4.29	4.59	4.14	4.44
General playground behaviour	5.5	6.83	4.8	4.5	5	5.17
Getting along with other students	4.43	6.25	5	5	5.57	5.38
Development of social skills	5.17	5.67	4.67	4.83	5	4.83
Attempting task presented	3	5.25	3.75	3.5	4.5	4.5
Aggressive behaviours	4.7	6.5	6.2	6.5	6.1	5.9

Appendix xxii- Inter-rater reliability check

One data set (post-intervention data for the main research question and sub-question one) was checked by an experienced EP colleague in January 2016. The inter-rater was provided with a folder with all of the cut out data extracts and small envelopes with each sub-theme stuck on. She was also provided with a provisional thematic map for the relevant data set.

Agreement was reached for all codes except four:

'*There's only the odd days when he throws wobblers*' (Eve, pp7)

This comment followed the line 'well generally it's a lot better' but this was coded separately. Thus, I had also included this in the 'improvements to sleep' sub-theme but could see that this did not make sense without the previous context. I decided to put these two extracts back together and place in the 'improvements to sleep' sub-theme.

'I: *But I think if you feel that you're more in control then that's a positive thing*

P: *Yeah, it is, it's a good thing'* (Eve, pp10/11).

I had put this into the sub-theme parent change because was a reference to the fact that Eve had described feeling more 'in control'. Following discussion with my colleague and with me providing context, we agreed that it should remain there.

'*No, not really, he's still the same, he's a happy little thing, he's always grumpy when he's tired, he's foul when he's tired'* (Alice, pp3)

This was Alice telling me that she had not really noticed any changes in Andrew following the intervention. Again I had to provide context but it was agreed that this should remain in the sub-theme child change because it is important to highlight that not all parents noticed a change.

'P*: No I don't think so. He's quite settled at the moment, he's quite happy to be off school.*

I: *So the challenge might be when he goes back to school then*?

P: *Yeah*'. (Alice, pp.8)

This was removed completely as it was agreed that it did not really fall into any sub-theme. I had initially placed this in 'child change' because Alice was referring to the fact that Andrew is different in the holidays anyway and so this did not relate to the intervention. However, it was agreed that this extract does not convey that satisfactorily enough for it to remain there.

Calculating the percentage of the data set (Joffe, 2011).

RQ1 pre-intervention – 7226 words

RQ1 post-intervention – 6876 words

RQ2 post-intervention – 3889 words

RQ4 pre-intervention – 10470 words

RQ4 post-intervention – 6431 words

Total words = 34892

This means that the proportion of the data subjected to inter-rater analysis was 20%.

Appendix xxiii– Ethics Approval Letter

Downloaded: 25/04/2016

Approved: 13/04/2015

Alex Redfern

Registration number: 130113469

School of Education

Programme: Education and Child Psychology Doctorate

Dear Alex

PROJECT TITLE: A multiple case study to examine the impact of a behavioural parent-based sleep education intervention.

APPLICATION: Reference Number 003524

On behalf of the University ethics reviewers who reviewed your project, I am pleased to inform you that on 13/04/2015 the above-named project was **approved** on ethics grounds, on the basis that you will adhere to the following documentation that you submitted for ethics review:

- University research ethics application form 003524 (dated 11/04/2015).
- Participant information sheet 1006981 version 2 (11/04/2015).
- Participant consent form 1006982 version 1 (06/04/2015).

  Participant consent form 1007066 version 1 (11/04/2015).

The following optional amendments were suggested:

Thank you for addressing the points raised by the reviewers. My only concern still relates to parents of children with ASD feeling excluded by the research. I understand the rationale given here for their non inclusion but I worry that parents will feel excluded nonetheless. Can your approach to acessing children ensure that you (1) identify with schools children who are not labelled as having ASD so that (2) parents of children with ASD are not contacted and therefore rejected. I hope you do not think I am being petty - I just know from experience that parents of disabled children often feel excluded from research.

If during the course of the project you need to deviate significantly from the above-approved documentation please inform me since written approval will be required.

Yours sincerely

Professor Daniel Goodley

Ethics Administrator

School of Education