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Abstract

Childhood behavioural disorders affect up to 9% of UK children under the age of ten (Meltzer et al., 2000). The consequences of these difficulties are widespread, placing the child at greater risk for later psychopathology, unemployment, relationship problems and criminal activity. The trajectory towards the development of behavioural difficulties presents a complex milieu of potential risk and protective factors. Individual risk factors include cognitive deficits, premature birth and childhood physical illness, although these are tempered by interactions with environmental risk factors such as low socioeconomic status and parental factors such as parental self-efficacy and mental health. Parenting skills are consistently highlighted as a key factor for the mediation of behavioural difficulties, and consequently lend themselves to the most influential intervention approach – the group parenting programme. Despite a wealth of programmes available, strength of content and supporting evidence base vary widely. Current approaches are outlined and critiqued.

‘Getting Through the Day’ is a manualised group parenting programme developed to impact upon child behaviour, parental self-efficacy and parental wellbeing. The aim of the current study was to evaluate this resource in the community setting within which it is delivered. Following longitudinal design, group participants and parents of ‘healthy controls’ from local schools and nurseries completed the standardised assessment questionnaires Strength and Difficulties Questionnaire (corroborated by teacher version), Parenting Stress Index-Short Form, Hospital Anxiety and Depression Scale and the non-standardised Tool to Measure Parenting Self-Efficacy. Statistical analyses of Analysis of Variance and Analysis of Covariance were conducted as appropriate. Results indicate positive change for intervention group participants as compared to healthy controls across domains of parent self-efficacy and parent mental health. Results and clinical implications are discussed in the context of this valuable resource and the existing evidence base for group parenting interventions.
Introduction

Childhood behavioural disorders (which encompass those behaviours that cause clinical levels of stress or impairment (American Psychiatric Association, 2000)), have been shown to affect up to 9% of children under 10 years of age in the UK (Meltzer et al., 2000). The financial cost of supporting these youngsters has been estimated at approximately £70,000 across their childhood and adolescence (Scott, Knapp et al., 2001), with the personal, familial and societal costs immeasurable. Evidence suggests that behaviours such as noncompliance to parental requests, aggressive outbursts, lying and cheating can be addressed most effectively in early childhood - potentially preventing a trajectory of negative outcomes across the lifespan (e.g. Webster-Stratton, 1996). However, with rates of adolescents suffering from severe conduct problems more than doubling between 1974 and 1999 (Collishaw et al., 2004), it is apparent that more needs to be done to prevent and treat these debilitating disorders. It is an issue that has gained political significance and public health importance (e.g. Department of Children, Young People and Families, 2003; Moran & Ghaite, 2005) and one which deserves the utmost attention.

This introduction outlines the scale of the problem of behavioural difficulties and their impact upon the individual and the systems that surround them. It goes on to discuss what is known of the aetiology of behavioural disorders and begins to outline the complex picture this presents. The rationale for intervention at a parent-level is then presented, with current, evidence-based programmes critiqued. Finally, ‘Getting Through the Day’ is introduced as the intervention of focus in this study. An 8 to 10 week group parenting programme delivered by trained staff to parents of children aged 0-11, the programme aims to promote parental self-efficacy in equipping parents with the confidence and skills to deal with their children’s difficult behaviours, enhanced by increased awareness and facilitation of the parent-child relationship. The aims of the current study in evaluating the effectiveness of this programme close this introduction section.
1.1 Defining childhood behaviour difficulties

The development of a child from infancy through to school years and adolescence, whilst being one of the most remarkable and rewarding experiences a parent can undertake, is also a journey fraught with challenges, for both the individual child and those providing their care. By its very nature, development requires the child to strive towards ever changing goals, from recognising a world and systems external to themselves, to steadily gaining increasing independence across domains such as feeding, movement and communication (Bee, 2000). For each child, the endeavour to progress along this path will inevitably include setbacks as well as achievements, eliciting frustration and anger, the assimilation and effective processing of which being an essential part of the learning experience (Keenan & Wakschlag, 2002). These natural demonstrations of frustration and rebellion make the agreement on a single, unified definition of the stage at which these behaviours become a serious problem, or behavioural difficulties, highly contentious (Keenan & Wakschlag, 2002). Terms used throughout the relevant literature are numerous and varied, e.g. ‘disruptive behaviours’, ‘disordered behaviours’, ‘challenging behaviours’, ‘conduct problems’ and ‘hard to manage’ children or behaviours, with little qualification of the exact behaviours each term refers to, nor where they fall upon the continuum from ‘normal’ development to clinical concern.

Opinions vary as to whether difficult behaviours should be considered within a diagnostic framework, and whether there is any benefit of doing so (Keenan & Wakschlag, 2004). A developmental approach would argue that these behaviours are manifestations of the developmental process, and although these will vary across age, stage and individual, the broad patterns of behaviour are consistent across development (Keenan & Wakschlag, 2002). Although early behavioural difficulties show stability across time for a number of affected individuals as we shall go on to see, for a significant proportion of children early conduct problems do not predict later difficulties (e.g. Harvey et al., 2009). Thus, one must carefully consider what is to be gained, and lost, in the process
of applying diagnostic tools and a subsequent label to children from as young as their preschool years, with the risks of categorising children with what in fact may be transient difficulties, weighed against the benefits of early identification and intervention for long duration difficulties (Harvey et al., 2009).

Prevalence studies have found evidence of children as young as three years old demonstrating sufficiently disruptive behaviours to qualify them for a clinical, Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) diagnosis of a behavioural disorder (e.g. Keenan & Wakschlag, 2002; Keenan & Wakschlag, 2004), suggesting that there is a place along the ‘normal’ spectrum of behavioural difficulties for diagnosis and appropriate intervention at its most extreme. These behavioural disorders and their known prevalence will be described shortly, and where relevant throughout this project shall be referred to by name, as opposed to ‘behavioural difficulties’ – those temper tantrums, oppositional behaviours and mild aggression, which, while likely to be far more common and to some extent experienced by all parents, are beneath the scope of diagnostic criteria and consequently, far harder to quantify.

Oppositional Defiance Disorder (ODD) is defined by DSM-IV and International Statistical Classification of Diseases and Related Health Problems, Tenth Revision (ICD-10) as “a recurrent pattern of defiant, disobedient and hostile behaviour beginning in childhood or adolescence” (as quoted in Nock et al., 2007, p.703). Despite some overlap with normative child behaviour characterised by irritability and non-compliance (Holmes et al., 2001), it is distinct as a group of diagnostic symptoms (Keenan & Wakschlag, 2004). Prevalence rates vary, and are influenced by gender differences in frequency and manner of presentation, however it has been estimated that approximately 4.8% of boys and 2.1% of girls aged 5-10 meet the criteria for this disorder (Meltzer et al., 2000).

ODD is most commonly diagnosed in younger children (Richardson & Joughin, 2002), and it is its relationship with the more severe counterpart Conduct Disorder (CD) which has gained much attention over recent years. CD is defined
by repeated and persistent misbehaviour, with disregard for age appropriate norms and the rights of others (Richardson & Joughin, 2002) and prevalence for children age 5-15 fitting the DSM-IV criteria for the disorder is between 2-9% of the population (Meltzer et al., 2000).

ODD has often been considered as a precursor for CD (Rowe et al., 2002), at the lower end of the spectrum of severity of behavioural disorders, with antisocial personality disorder at the other extreme (Richardson & Joughin, 2002). Indeed, studies have identified significant overlap between the two disorders, with up to 62% of children with a diagnosis of CD also meeting the criteria for diagnosis of ODD (Maughan et al., 2004). However, recent evidence refutes speculation of a simple unidirectional trajectory between ODD and CD (Baker, 2008), highlighting that not all children with a diagnosis of ODD will go on to develop CD (Holmes et al., 2001). The overlap between ODD and the development of CD appears to be heavily influenced by age, with 12% of boys at age 5-7 with ODD also fitting criteria for CD, as compared with 57% boys at ages 13-15 (Maughan et al., 2004). The factors which mediate these two disorders and distinguish them from the less severe behavioural difficulties further down the spectrum are part of a complex interplay which we shall go on to explore.

1.2 Counting the cost

The immediate and long term implications of a childhood diagnosis of behavioural disorder are far reaching. Links with later psychopathology impact profoundly upon developmental trajectories and the impact is felt for both the individual and the family and systems surrounding them.

1.2.1 Personal impact

One of the most robust associations found between early behavioural disorders and later outcomes is the trajectory towards adult antisocial behaviour and criminal conduct. Problems of conduct in childhood have been shown to predict
serious antisocial behaviours in adulthood across a number of different studies (e.g. Hill, 2003; Kratzer & Hodgins, 1997; Sourander et al., 2006), the link being particularly strong the earlier the onset of conduct disorder (Richardson & Joughin, 2002). For example, Elliott (1994) found that those youths who first initiated violent acts prior to the age of 11 were twice as likely as those who had initiated these acts age 11-12 to be continuing violent crime beyond the age of 20 (Richardson & Joughin, 2002). In a 25-year longitudinal study with data across a range of individual, contextual and social domains including conduct at the age of 7, Fergusson and colleagues (2005) found that the extent of childhood conduct problems was significantly associated with later crime in adulthood (Fergusson et al., 2005). Of these crimes, the association was most marked for offences at the extremity of severity and violence, with those individuals demonstrating most disturbed conduct at age 7 over ten times more likely to be convicted and imprisoned by age 25 than those with little or no evidence of conduct problems in childhood (Fergusson et al., 2005).

Early indications of later antisocial behaviours have been shown to be present from pre-school age, and indeed, this early onset is associated with a particularly poor prognosis for later recovery (Moffit et al., 1996). Children with conduct difficulties at age 5 have a significantly higher risk of conduct difficulties at age 7 (Kim-Cohen et al., 2005). This pattern appears stable across childhood as Stevenson and Goodman (2001) found that those children aged 3 who had serious uncontrolled temper tantrums were significantly more likely to become violent offenders as adults (Hutchings & Lane, 2005).

A potential explanation for the high rates of crime in individuals with childhood conduct problems might be linked to evidence regarding propensity to antisocial personality disorder among this population. Early work carried out by Robins in the 1960’s and 70’s highlighted a robust association between childhood behaviour disorders and antisocial personality disorder in adulthood (Lahey et al., 2005). These findings have been replicated more recently with current figures estimating that between 40-50% of children with CD go on to develop
antisocial personality disorder as adults (American Academy of Child and Adolescent Psychiatry, 1997). Although not all children with conduct difficulties will go on to develop antisocial personality disorder (Lahey et al., 2005) - indeed figures suggest that this will be the case for less than half of all individuals - longitudinal studies indicate that complete recovery from CD is rare and that even those without personality disorder will have mental health difficulties and poor functioning across domains in their adult lives (Moffit, 2003).

Both ODD and CD have been shown to have high levels of comorbidity with other psychiatric diagnoses, in the short and long term. Many of the symptoms of attention deficit/hyperactivity disorder (ADHD) overlap with the behavioural disorders. Comorbidity between the disorders has been linked with an increased risk of sustaining antisocial behaviours across childhood and into adulthood (Holmes et al., 2001). In a sample of 177 males who were engaged as outpatients in mental health services when first assessed between the ages of 7 and 12, Lahey et al., (2005) found virtually all who met the criteria for CD to have high levels of ADHD. However, there was no evidence to suggest the converse relationship of the presence of ADHD predicting later antisocial personality disorder in the absence of CD (Lahey et al., 2005).

In addition to ADHD, CD and ODD have both been shown to have high comorbidity in childhood and precede in adulthood a number of psychiatric disorders (Kim-Cohen et al., 2003). For example, between 15-25% of children and adolescents with conduct disorder also meet the diagnostic criteria for major depression (Marmorstein & Iacono, 2003). The impact of these combined symptoms has been found to interact in a particularly maladaptive manner, with long term outcomes across domains such as schooling, peer relationships and substance dependence significantly worse than as compared with a single diagnosis of either disorder (Marmorstein & Iacono, 2003). In a large (n=3,199) adult sample, 92% of those with ODD in childhood later met criteria for another mental disorder, the most common being anxiety disorders, depression and
substance abuse or a combination of these (Nock et al., 2007). Fergusson et al.’s (2005) longitudinal study demonstrated significant association between childhood conduct problems and adult mental health difficulties, namely major depression, anxiety and suicide attempts.

Substance dependence in adulthood has also shown strong links with early conduct problems, with alcohol, drug and nicotine all misused at higher levels within this population (Richardson & Joughin, 2002). Higher incidence of involvement in domestic violence (Fergusson et al., 2005), of involvement in the abuse of children (Robins, 1991) and even of higher mortality rates prior to middle age (Jokela, 2009) has also been shown to be associated with conduct difficulties in childhood, further demonstrating the pervasive effect of these early childhood difficulties.

This impact can be felt across domains, with evidence indicating that childhood behaviour difficulties also influence peer relationships (e.g. Richardson & Joughin, 2002). A lack of understanding of appropriate social cues and interaction has been demonstrated at higher levels among children with difficult behaviours (e.g. Dodge et al., 1995). Discussed later as a potential risk factor for the development of behavioural difficulties, consideration is also given to the transactional nature of the relationship between peer and behavioural problems. Children with CD show marked deficits in levels of empathy and social understanding (Cohen & Strayer, 1996), which will inevitably impact upon the ways in which they respond to other children around them. It has been suggested that social isolation might lead a child to increase those behaviours which gain utmost attention and interaction, such as aggression, which in turn might isolate them further and thus perpetuate a worsening cycle of peer interaction (Lahey et al., 1999). These isolated children can then be drawn towards each other, reinforcing their antisocial and delinquent behaviours as the social norm within the groups they form (Lahey et al., 1999).

Difficult behaviours have also been shown to affect academic functioning and achievement (Richardson & Joughin, 2002). Many children with behavioural
difficulties leave school early of their own volition or through permanent exclusion (Maughan et al., 1996). Intellectual functioning will be considered shortly in terms of a potential risk factor for the development of behavioural difficulties, as one must consider whether it is underlying cognitive deficits which lead to difficult behaviours along a complex trajectory as explored shortly, or whether poor academic performance is due to school exclusion as a consequence of those difficult behaviours. However, this poor functioning documented in childhood is not inevitably carried forward onto later attainment, as Fergusson et al. (2005) found that educational and career attainment in adulthood were unrelated to early conduct problems once adjustment for IQ was taken into account.

Although there is a body of research documenting clear evidence for a male dominated gender split in levels of conduct disorder (Nock et al., 2007), there is emerging evidence that whilst incidence between genders may differ, the long term consequences of these problems are largely universal (Fergusson et al., 2005). Pajer’s (1998) review found the adult crime rates of women who had childhood diagnoses of CD to be significantly higher than those for women with other psychiatric diagnoses or no psychiatric history, and adult psychiatric problems to be significantly more prevalent within this childhood CD population (Pajer, 1998). Evidence suggests that all individuals with conduct problems in childhood might be considered at risk for later psychopathology, regardless of gender. This risk is mediated to a greater or lesser extent by a range of other factors, including the child’s own innate characteristics and the environment in which they develop, including their experience of being parented (Fergusson et al., 2005) as we shall progress to explore after considering the wider impact of behavioural difficulties.

1.2.2 Familial cost

The widespread consequences of these difficulties are felt not only by the individuals but by those around them too. The strain of constantly dealing with extreme conduct may impact upon the mental health of the parents themselves,
as well as the energy and attention they are able to provide to other children within the family (e.g. Scott, Knapp et al., 2001). It has been demonstrated that parents of children with behavioural difficulties suffer higher levels of stress and mental health difficulties, such as dysphoria, than parents who do not have to cope with such extreme behaviours (Dumas et al., 1991). The impact of this stress and low mood upon the family dynamics can be widespread. Parents who report higher levels of stress have been shown to demonstrate significantly more negative parent-child interactions (McKay et al., 1996). This in turn impacts upon the attachment relationship between parent and child, the child’s capacity for self-regulation and ultimately the child’s behaviour (Hill et al., 2003). What emerges is a transactional relationship where high parenting stress elicits worsening child behaviour, which in turn aggravates parental stress (Baker et al., 2003).

The consequences of this emotional stress and distress are unlikely be limited to responses to difficult child behaviours. The strain that parents are under will likely be felt within their adult relationships as well those with other children within the family. Mothers with a diagnosis of depression have been shown to be more critical than non-depressed mothers (e.g. Webster-Stratton & Hammond, 1988), which will be experienced by the family as a whole. In addition, mothers of low income families (which we shall go on to explore as a key risk factor for the development of behavioural difficulties) who undergo chronic distress partially or wholly due to child behavioural difficulties, have been shown to be unable to effectively meet their children’s emotional needs (Dumas & Wekerle, 1995). Rather than responding directly to actual behaviours elicited from the child, the numerous stresses which the parent is undergoing significantly influence their response, thus making reactions towards each of their children and family events, whether supermarket shopping or a trip to the park, critical, over-reactive and potentially inappropriate (Dumas & Wekerle, 1995).

Siblings of a child with behavioural difficulties are likely to experience physical aggression and potentially bullying from that child, in addition to experiencing
within the family environment the impact of parental stress and a lowered capacity for effective parenting (Tremblay et al., 2005). The presence of a sibling has been shown to significantly increase the risk of childhood aggressive behaviours in those children with behavioural difficulties (Tremblay et al., 2005). Although there is minimal literature pertaining to the experience of siblings in particular, growing up amongst those risk factors for later psychopathology is likely to impact profoundly upon the developmental trajectory of all children within the family and is an area in which further research could lend much insight.

As the child grows into adolescence - a period of intense change and potential conflict both within the individual and the family dynamics around them (Obsuth et al., 2006) - the familial impact of behavioural difficulties continues to be marked. It has been shown that a secure attachment with parents most easily facilitates the transition through adolescence to adulthood (Ryan & Lynch, 1989). However, in the face of parental stress, relationship difficulties and dysfunctional family culture, the emotional tools for facilitating this smooth transition are likely to be limited (Obsuth et al., 2006). Those adolescents who have demonstrated behavioural difficulties since childhood and likely have established patterns of coercive, aggressive behaviour and deficits in their ability to regulate their emotions, will find the natural shifts, boundaries and limit testing that accompany adolescence, frustrating and overwhelming (Obsuth et al., 2006). Relationships with parents that are already fragile may be placed under intense strain as the adolescent seeks their autonomy - potentially also engaging in aggressive, delinquent behaviours with peers who may share disrupted and “premature disengagement” with parents (Obsuth et al., 2006). In turn, this conflict impacts upon parental stress and family wellbeing, again reinforcing maladaptive patterns of family interaction.

As adolescence merges into adulthood there is the potential, as has been explored herein, for the child with behavioural difficulties to become an adult with a diagnosis of antisocial personality disorder or other psychiatric disorder.
They have been shown to be at greater risk for unemployment, substance misuse, interpersonal relationship difficulties and criminal behaviour (e.g. Fergusson et al., 2005). The impact of each of these trajectories will be felt across the lifespan by partners, families and peer groups, potentially feeding into a vicious cycle of perpetuating misbehaviour.

1.2.3 Societal Cost

Beyond the personal and familial consequences of these disorders, their impact is felt by society as a whole. 30% of child consultations with GPs are for behavioural difficulties (Knapp et al., 1999) and conduct difficulties. Along with ADHD, these form the highest proportion of referrals to Child and Adolescent Mental Health Services (Loeber et al., 2000). Social services and education provide resources to advocate for children with CD, often with their parents and schools who no longer know how to deal with their extreme behaviours (Richardson & Joughin, 2002). Police become involved when this behaviour requires the involvement of criminal justice services, as it has the potential to do, and the state is called upon to provide financial support to families and individuals for whom high unemployment is common (Richardson & Joughin, 2002). The financial implications of these societal burdens are significant. Knapp (1999) calculated the cost for agencies involved with children with behavioural disorders as being approximately £8,258 in one year. The indirect costs, such as parental unemployment and repairs for damage caused by misbehaviour, amounted to £7,012. Thus, the total cost of supporting an individual with CD ten years ago, and as such likely an underestimate of today's cost, was estimated at £15,270 per year (Richardson & Joughin, 2002).

Scott, Knapp et al., (2001) compared individuals with diagnosed conduct disorder, with those who had conduct problems and those with no difficulties, and found that across childhood through early adulthood to the age of 28, the costs of supporting an individual with CD was ten times that required for individuals with no difficulties (Scott, Knapp et al., 2001). Costs were based across six domains including foster and residential care in childhood, health,
state benefits and crime, with those individuals with no difficulties incurring most costs through legal aid for divorce and healthcare for abortion or miscarriage. This contrasted significantly with the distribution of cost for those individuals with conduct disorders where costs lay within residential care and remedial school support as children, and justice system involvement and hospital inpatient care as adults (Scott, Knapp et al., 2001). Total costs for the CD group were estimated at £70,000, though even those without a diagnosis but demonstrating problem behaviours, were estimated to cost significantly more, in fact four times as much, as those without any difficulties (Scott, Knapp et al., 2001). Such evidence would suggest that the greater the difficulties, the greater the financial burden, along with the emotional one, for both society and families.

1.2.4 Summary

With no unifying definition of childhood behavioural difficulties, and the wide spectrum that they are known to encompass from the normal expression of developmental frustrations to the actual behaviour disorders of ODD and CD, exact prevalence is unknown but may affect up to 10% of the child population (Meltzer et al., 2000). What is certain is that such behaviours are widespread, and that the impact they have upon the individual, the family and society can be measured across domains of emotional, financial, criminal, vocational and healthcare costs.

1.3 Risk factors for the development of behaviour difficulties

The resistance to treatment in adulthood of antisocial personality disorder (Lahey et al., 2005), and the widespread impact of aggressive, antisocial behaviours across the individual’s lifespan highlight the need for an understanding of those factors which mediate the emergence of behavioural difficulties and their eventual trajectory. In the following section, attention shall
be given to those individual factors which have been shown to contribute, to a
greater or lesser extent, to the complex interplay of the trajectory of behavioural
difficulties. It must be borne in mind throughout, however, that there is no
simple pathway for the development of behavioural disorders (Vando et al.,
2008). For each individual, interactions between potential risk factors inherent
in the child, in the environment and in the parenting to which they are exposed
will be interwoven to mediate the emerging behaviours (Vando et al., 2008).

1.3.1 Child factors

Childhood temperament - those personality characteristics which emerge soon
after birth (Coffman et al., 1992) - has been linked across some studies with
later conduct difficulties (Richardson & Joughin, 2002). The nature of
temperament as a construct still evokes debate (Burke et al., 2002), and the
inevitable interaction with environmental influences ensures that the literature
is divided as to how much this factor can be included as a significant influence
(Hill, 2002). Many studies measure both temperament and behaviour at the
same point in time, confounding a clear picture of their relationship and the
extent to which they interrelate (Hill, 2002). However, it is plausible that early
personality traits will impact upon how parents respond to their child, with a
more difficult child evoking greater anger reactions from their caregivers which
in turn leads to behavioural difficulties (Marshall & Watt, 1999). Support for
this coercive, bidirectional process operating between child and parent
behaviours has recently been demonstrated, essentially showing that the child’s
impact upon the reactions they elicit from their parent are as strong as the
impact of the parent’s reaction to the child’s behaviour (Burke et al., 2008).

Physical illness within childhood, particularly disorders such as epilepsy and
those which impact the central nervous system, have been shown to be linked
with the development of conduct difficulties (Rutter, 1988). The incidence of
conduct disorders for chronically ill children is three fold that found for well
children (Rutter, 1988). However, consideration must be paid to the extent to
which the illness itself contributes to this high incidence, and the contribution
given by the child’s exposure to medical environments, over restrictive parenting and so forth. Comorbid mental health difficulties also impact upon the behavioural trajectory, the impact of which was detailed in the previous section. The high correlation between conduct disorders and ADHD, depression and anxiety (e.g. Marmorstein & Iacono, 2003) ensures they too must be considered within this myriad of risk factors.

Premature birth has been consistently linked with later behavioural difficulties (e.g. Assel et al., 2002; Breslau & Chilcoat, 2000). Suggested mechanisms include the trauma of an extended labour and potential asphyxia (Richardson & Joughin, 2002). However, interrelated risk factors must also be considered, such as the recognised high incidence of obstetric complications for young mothers and those of low socioeconomic status (Hill, 2002), factors which have shown high contribution to the behavioural disorders trajectory as shall be explored shortly.

Cognitive deficits, and particularly impaired verbal abilities, have also shown strong links with childhood behavioural difficulties across a number of studies (Hill, 2002). A range of theories to underpin this link has been proposed, for example whether the impact of cognitive deficits upon a child’s experience at school leads to low self-esteem, lessening interest in the school environment and an increase in externalising, difficult behaviours (Richardson & Joughin, 2002). Others have suggested that poor verbal reasoning skills reduce a child’s capacity to consider the consequences of their actions and effectively inhibit disruptive behaviours (e.g. Lynam & Henry, 2001). However, further research, particularly prospective studies to examine the direction of influence between cognitive abilities and behavioural difficulties, is needed before clarity can be obtained regarding the mechanisms at play (Hill, 2002).

Social skills and peer relationships impact profoundly upon behavioural outcomes (Hill, 2002). Debate continues as to whether behavioural difficulties or social difficulties emerge first in this transactional relationship, and evidence has shown that many children with behavioural difficulties lack the social
awareness necessary to understand and appropriately respond to social cues and societal norms (e.g. Dodge et al., 1995). However, the influence of both parenting and environment upon a child’s development of social skills and the potential interplay with verbal ability deficits ensures contention currently continues as to whether it is the social skills, the behaviours or a third, common linking factor (Hill, 2002) which mediate this complex relationship.

The final aspect to be considered within child risk factors is the potential genetic contribution to childhood behavioural difficulties. There is consistent evidence for a substantial role for heritability within the development of behavioural disorders, although estimates to the extent of this influence vary (Hill, 2002). A recent study found child gender to affect the extent to which heritability was a key factor in the development of conduct problems, with genetic risk overriding any environmental influences for females, whilst for males the environment was the most influential factor (D’Onofrio et al., 2007). The methodological challenges of separating the impact of the environment from a genetic contribution ensure that more robust research is needed before definitive conclusions can be drawn regarding heritability (Burke et al., 2002). An alternative route of transmission, and one that will interrelate strongly with any genetic component, is the transgenerational transmission of antisocial behaviours. Parental history of antisocial behaviours has been linked with childhood development of CD (Elkins et al., 1997). Furthermore, Ehrensaft and colleagues (2003) found a direct contribution of maternal diagnosis of CD prior to age 15 to sons’ behavioural difficulties, independent of parenting skill. Ehrensaft questions whether this is an indicator of a strong genetic link, or whether in fact the mother’s early onset of CD has led to a trajectory of more chronic antisocial behaviours, thus impacting upon the environment she is able to provide for her son, regardless of the quality of her parenting (Ehrensaft et al., 2003). Thus the impact of both parental and environmental factors is highlighted and shall be considered.
1.3.2 Parenting factors

Poor parenting skills are consistently linked to, and are one of the strongest predictors of, childhood behaviour difficulties (Marshall & Watt, 1999). Parenting behaviours have the potential to impact upon every aspect of a developing child’s life, and indeed positive parenting may even be a protective factor for behavioural and other disorders (McCord, 1991). Research suggests that there are key aspects of parenting characteristics which are consistently linked with an elevated risk of a child developing behavioural difficulties. These aspects include: erratic, harsh discipline; rejection of the child; low parental involvement in child’s activities; poor supervision; general neglect; and abuse (Carr, 1999; Scott, 1998). Stormshak et al., (2000) found clear links between parental physical, aggressive punishment styles and child aggression, and between low warmth and oppositional behaviours.

Parenting characteristics will impact greatly upon the attachment relationship which emerges between parent and child, a relationship which in turn can influence the child across a number of domains. Children who do not experience a secure attachment relationship, whether this be due to neglect, abuse or other aspects of negative parenting, find it more challenging to develop a successful sense of self-regulation, of positive self-concept and essentially have less to lose as a consequence of negative behaviours (Hill et al., 2003; Richardson & Joughin, 2002). Such children may lack positive role models for interpersonal skills and the inconsistent, coercive or punitive aspects of their insecure caregiver relationship are highly likely to be transferred to later relationships with peers (Richardson & Joughin, 2002). Perhaps unsurprising given the influence of attachment status across the lifespan, attachment in infancy has been found to be a key factor in influencing behavioural outcomes later in childhood (Munson et al., 2001). For example, Vando et al., (2008) found that infant attachment status at age one significantly predicted child conduct problems at age four, an outcome which was not mediated by hostile parenting or maternal depressive symptomatology.

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Factors of parental wellbeing which will influence the ability to parent effectively include mental health issues. A diagnosis of antisocial personality disorder in one or both parents has been shown to have strong links with later childhood behaviour disorders (West & Farrington, 1973), as has substance abuse (Patterson et al., 1989), and whether this is due to genetics, the parental capacities of the individual or the resulting environment, it again emphasises the complex interplay of factors which mediate a child’s development. Maternal depression in particular has shown clear links with child developmental difficulties and with conduct problems specifically (e.g. Owens & Shaw, 2003). Children aged one year or older whose mother was postnatally depressed have been shown to have greater incidence of antisocial behaviours and insecure attachments (Beck, 1998; Stein et al., 1991). Vando et al., (2008) found that although maternal depression did not mediate the effects of the attachment relationship upon conduct problems, level of depression significantly predicted the extent of behavioural difficulties at age 42 months (Vando et al., 2008). Even milder levels of maternal distress, below diagnostic criteria for major depression, impact strongly upon child outcomes (Assel et al., 2002). Assel et al., (2002) demonstrated an association between mild to moderate levels of stress, loneliness or anxiety and lower responsiveness of the mother to the child. This in turn was found to impact upon the social skills of the child, thus influencing peer relationships along with the attachment relationship and linking in to key risk factors for behavioural difficulties as discussed previously (Assel et al., 2002). This association between maternal mental health and child behaviours may be due to the mother’s inability to engage effectively, to enforce appropriate boundaries and to provide a sufficiently safe space from which the child might explore and return to for comfort and guidance (Assel et al., 2002). However, it is also likely to be influenced by the mother’s perception of the child’s behaviour, with evidence suggesting that mothers with depression are more likely to label their child’s behaviour as inappropriate or unacceptable (Hall et al., 1991).
The link between maternal depression and behavioural difficulties is known to be mediated by parental self-efficacy (PSE) (Weaver et al., 2008); that is, the extent to which a parent believes that they will competently perform their parental role (Teti & Gelfand, 1991), although the exact nature of this link is still under exploration. Sanders and Woolley (2005) demonstrated that PSE was a significant predictor of maternal discipline style, even when addition risk factors across child and parent domains were accounted for (Sanders & Woolley, 2005). In addition, it has been shown that PSE has a significant influence on the dynamic between parenting behaviours and the child’s developmental outcomes (Coleman & Karraker, 2003). For instance, Weaver et al., (2008) found that low PSE when the child was age two predicted higher incidence of problem behaviours in the child at age four, even when the effects of initial levels of difficult behaviours were controlled for (Weaver et al., 2008). This predictive relationship was mediated by maternal depression and Weaver and her colleagues postulate that the characteristics of depression facilitate low PSE which directly impacts upon the socioemotional adjustment of the child and elicits difficult behaviours (Weaver et al., 2008). As well as highlighting the important role of PSE as a risk factor, it demonstrates an additional potential mechanism for the significant impact of maternal depression upon childhood behaviours.

1.3.3 Environmental factors

Along with child factors and parenting factors, environmental factors are intrinsically linked with the complex picture of potential risk factors for childhood conduct disorders. Both child and parent will exert influence upon the environment around them (Hill, 2002), with key factors of this context known to mediate the developmental trajectory of child behaviour.

Low maternal age has been linked to negative developmental outcomes including conduct disorders across a range of studies (Vando et al., 2008). This is due in part to the parenting style of young, adolescent mothers which has been found to be of lower quality and in particular more punitive than that of
older parents (Scaramella et al., 1998), thus impacting upon behavioural outcomes in their children as discussed previously. However, it has also been demonstrated that younger mothers have lower incomes, low social support, greater levels of substance misuse and higher incidence of relationship breakdown (Vando et al., 2008). Rather than parental age per se, it is potential correlates of young parenthood which might impact upon the quality of the environment a parent is able to provide for their child.

Low socioeconomic status (SES) is correlated with elevated risk of behavioural difficulties identifiable at 2 years of age (Sutton et al., 2004) and direct links have also been established between childhood behavioural difficulties and poverty, social isolation and social disadvantage (Richardson & Joughin, 2002). Overcrowding within the house and low maternal education are consistently linked with persistent trajectories of CD (Shaw et al., 2005), as are marital discord, relationship breakdown and single parenthood (Richardson & Joughin, 2002). In a longitudinal study of childhood aggression, Tremblay et al. (2005) found that of those infants followed up from the age of five months, those at highest risk for physical aggression at age 42 months, were those infants who were born to young mothers, mothers with a history of antisocial behaviour during their school years and those parents with high poverty levels and high interrelationship difficulties. Thus the environment further adds to the interplay of factors, with low SES and single parenthood likely to impact upon a parent’s levels of stress and perceived ability to cope, feeding into many of the parenting risk factors such as low mood and low PSE. However, as with all of these factors, their presence is a sign of higher risk for behavioural difficulties given the overrepresentation of such factors among the conduct disordered population (Richardson & Joughin, 2002). They are not directly causal. Instead, a complex interplay between developmental processes will mediate the influence of both risk and resilience factors present in the child and their environment (e.g. Maughan et al., 2004).
1.3.4 Summary

No single trajectory can explain the emergence of behavioural difficulties. For each individual child there is a complex web of potential risk factors at play. Factors innate to the child such as temperament and physical and mental wellbeing, to the capacity of the parent to provide effective and appropriate parenting skills, mediated by their own wellbeing, and to the environment with factors such as the SES and family structure of that child’s immediate world. The extent to which each of these factors influences the short and long term outcomes for the individual child will depend upon how these factors interact, and the effectiveness of protective factors in alleviating their potentially negative influences.

1.4 Theoretical underpinnings

The preceding sections have outlined the widespread impact of childhood behavioural difficulties upon both the individual and the family and systems surrounding them, and the complex web of risk and protective factors which interrelate in the developmental trajectory of behavioural outcomes. However, before we move on to consider mechanisms by which we may aim to address these difficulties, it is essential to lend a stronger theoretical understanding of the psychological processes at play in behavioural development and thus explore the foundations within which these interventions are grounded.

1.4.1 Social Learning Theory

Social learning theory is an understanding of the development of human behaviours developed by Albert Bandura (Bandura, 1977). The theory recognises that the acquisition of new behaviours will, at some level, be determined by a physiological basis (i.e. genetics and hormones) specific to each individual, which provides a template of potential outcome with which factors such as environment and social context interact to facilitate learning and developmental
outcomes (Bandura, 1977). Upon this foundation, learning is initiated with the process of observation and modelling from stimuli such as peers and societal norms. In observing the positive or negative consequences of specific behaviours as they are elicited by others, an individual begins to assimilate those behaviours worthy of reproduction in themselves. The production of these new behaviours is then reinforced by ‘response consequences’ – the positive or negative outcomes that their behaviour evokes. In turn, these consequences serve a motivational function; an incentive for the individual to continue with those behaviours which elicit reward and extinguish those with less favourable outcome (Bandura, 1977).

This process of ongoing interplay between observation, modelling and reinforcement is described by Bandura as “continuous reciprocal interaction between cognitive, behavioral and environmental determinants” (Bandura, 1977, p.vii). Essentially, cognitive processes direct attention towards appropriate behaviours, signalled by environmental cues. These cognitive processes then work to retain information regarding that which has been modelled in order that those effective behaviours may then be reproduced (Bandura, 1977). Effective motivating consequences will be determined both by cognitive processes and environmental stimuli, thus perpetuating this cycle of intertwined determinants. In this way, constantly evolving assimilation and modification of behaviours takes place across the lifespan (Ormond, 1999).

Relating social learning theory to those maladaptive patterns of childhood difficult behaviours discussed in previous sections, children may learn the boundaries of acceptable behaviour initially through observing and modelling those behaviours demonstrated by their parents. In turn, parenting characteristics impact upon child behaviour through reinforcement of those desired behaviours with positive attention and reward (Taylor & Biglan, 1998). Conversely, negative behaviours such as aggression may be modelled by parents and consequently consolidated in children by evoking strong reaction and negative, but nevertheless reinforcing, attention from adults. We shall go on to
see how this theory underpins aspects of behavioural interventions after considering the influence of attachment theory.

1.4.2 Attachment Theory

Attachment theory was developed by John Bowlby with his initial exploration of the emotional bonds between an infant and their primary caregiver, most often their mother (and thus referred to as such throughout this section) (Bowlby, 1969). Bowlby recognised an infant’s need to seek and sustain proximity to their caregiver, both physically and emotionally, with the disruption of this proximity eliciting specific behaviours signalling protest, distress and after sustained disruption, detachment (Bowlby, 1973). The work of Mary Ainsworth significantly contributed to the attachment theory model in her recognition of the need for a mother to provide a ‘secure base’ from which to allow her child to safely explore their internal and external worlds (Ainsworth et al., 1978). The extent to which this secure base is provided by a mother’s responsiveness to her child’s needs will profoundly impact upon how that child responds to disruptions in this proximal relationship and indeed, in relationships across their lifespan (Bowlby, 1988; Fonagy, 2001).

Parenting behaviours which provide a secure base and thus facilitate the development of a secure attachment relationship include maternal sensitivity and appropriate responsiveness to her child’s cues (Bowlby, 1988). Deficits in these capacities and a lack of insight into a child’s internal world impairs the potential for secure bonds to be forged (Bowlby, 1988). Consistent links across studies between maternal low age and maternal depression with attachment difficulties (Vando et al., 2008), are largely due to this reduced maternal capacity to provide the consistent, emotionally rich environment to sustain their child’s secure base (Bowlby, 1988). Manifestations of this lack of maternal sensitivity include parental behaviours such as rejection of the child and erratic attention-giving, whether positive or negative (Levy & Orlans, 2000) - some of those key characteristics outlined earlier with consistent links with the development of behavioural difficulties (Scott, 1998).
Attachment classification - the categorisation of the attachment relationship as either ‘secure’, ‘insecure-ambivalent’, ‘insecure-avoidant’ or ‘disorganised’ (Ainsworth et al., 1978, Main & Cassidy, 1988) - offers a framework from which to understand the ongoing impact of attachment relationships across development, particularly in this instance with respect to behavioural manifestations. Growing up within a secure attachment relationship facilitates for the child a range of protective factors which can impact on reducing the risk of emerging behavioural difficulties (Levy & Orlans, 2000). Protective factors include enhancing the child’s capacity for self-regulation; for developing a positive sense of self; for successful adaptation to stress or adversity; and for the development of healthy, reciprocal relationships with others across their lifespan (Levy & Orlans, 2000). These factors - intrinsic to a secure attachment relationship - can allow the child to develop appropriate coping mechanisms to deal with extremes of emotion (as opposed to uncontrolled, violent outbursts as evident in behavioural disorders). Furthermore, these factors allow the child to understand more of another individual’s mental state, thus potentially protecting them from conducting antisocial behaviours which impact negatively upon that state (Levy & Orlans, 2000). Those children who have not been afforded this secure relationship from which to approach their world may not have these same capacities, thus opening them to greater vulnerability of less protective and more maladaptive coping techniques and interaction behaviours. Insecure relationships may result in poor self-regulation skill in the child, negative attention seeking and negative expectations of their social environment, manifestations of which can emerge as problem behaviours (Van Zeijl et al., 2006).

The impact of childhood attachment status can also be felt in adulthood, when an individual’s perspective of their own experience of being parented will impact profoundly upon the parenting they in turn are able to offer their child (Bowlby, 1988). As with other risk factors for the development of behavioural difficulties previously discussed, the impact of a child’s attachment status and a parent’s own internal representation of parenting will interact with an array of protective
and vulnerability factors to elicit a transactional relationship which differs for each individual (Greenberg, 1999). However, the tenets of attachment theory and the research conducted into its impact across domains pertain that an individual’s early attachment history has the potential to influence behaviour, attributions and interactions across the spectrum from childhood through to adulthood (Levy & Orlans, 2000) thus necessitating its place within the development of parenting interventions.

1.4.3 Theoretical basis for parent-targeted intervention

As we shall go on to explore in the following section, there are a wealth of different approaches aimed at modifying the potentially maladaptive developmental trajectory for children at risk of behaviour disorders. Given consideration of the familial and environmental factors known to present risk of behaviour difficulties and the links made throughout this section thus far regarding the theoretical bases for the development of behavioural patterns, parental intervention for behavioural difficulties has become a key policy drive over the past few years and has emerged with a strong substantiation base for change (Kane et al., 2007). The most efficacious of such programmes are those which ground their focus within an understanding of the underlying processes at play (Baker, 2008).

Patterson extended social learning theory to outline patterns of parent-child interaction in his coercion hypothesis (Patterson, 1982), upon which the aims and content of behavioural parenting interventions rest (Webster-Stratton, 1996). According to this hypothesis, patterns of interaction are tempered by coercive processes. For example, a parent may cease a request of their child to lay the table in the face of the child’s whining behaviour. This negatively reinforces the child’s whining, encouraging them to use it as an effective mechanism in future interactions. At the same time, the child ceases their undesired behaviour, in turn negatively reinforcing the parent’s approach – i.e. if they cease to request such tasks, they will avoid the behaviour elicited in the child (Patterson, 1982). Interventions such as the Incredible Years programme
(Webster-Stratton & Herbert, 1994) seek to remove this coercive element by equipping parents with the cognitive tools to recognise those behaviours from both child and parent which may be perpetuating cycles of difficult interactions, and the behavioural tools to positively reinforce desired outcomes and decrease negative outcomes, for example through ignoring, logical consequences or ‘time out’ (Sanders & Woolley, 2005).

Approaches based upon social learning theory are the most common parenting interventions (Bunting, 2005), and are those with the most evidence supporting their efficacy in effecting change (Hutchings et al., 2005). However, given their focus upon limited aspects of the medley of risk factors previously discussed, it is perhaps unsurprising that for some families these programmes are unable to lead to significant positive outcomes, particularly across relational and psychosocial aspects of parenting (Webster-Stratton, 1991). Thus, attention turns to those programmes with a focus upon the parent-child relationship, namely those with their theoretical underpinnings within an attachment theory basis.

Attachment-based parenting interventions within the current scope of focus (i.e. those which address child behaviours and the parent-child relationship as opposed to those targeted solely at modifying the attachment relationship) centre upon increasing parents’ sensitivity to their child’s needs, and creating a better understanding of their child’s behaviours (Suchman et al., 2006). In addressing relationship factors in addition to specific behavioural aspects, these programmes have the potential to effect change across a much wider spectrum, perhaps reducing the child’s vulnerability for later psychopathology across domains. The most widely implemented programme with its roots embedded within attachment theory is Mellow Parenting (Puckering et al., 1994), the aims and mechanisms of which shall be subsequently outlined.

Thus far, a key theme throughout this introductory chapter has been the transactional nature of the risk and protective factors related to developmental trajectories across childhood. There is no single, unilateral factor which can
account for the development of conduct difficulties in children and as such, no unidirectional model of causation will fully capture the breadth of intervention necessary to evoke sustained change (Baker, 2006). Although occupying distinct bases, both social learning and attachment models converge in their emphasis upon transactional development and the role of sensitive interaction between parent and child in effective socialisation (Van Zeijl et al., 2006). In recognition of this, a number of existing and emerging programmes, including the intervention of interest in this study – Getting Through the Day – draw from both approaches in an attempt to effect change across domains (Bunting, 2004).

1.4.4 Summary

Both social learning theory and attachment theory offer theoretical understanding of how difficult behaviours manifest in childhood, and provide insight into the mechanisms of interaction between a range of risk and protective factors. Efficacy across intervention approaches has been shown to be grounded within appropriate recognition of the complex interplay of parent and child processes underlying behavioural or emotional manifestations (Richardson & Joughin, 2002). Hence, these models underpin those key programmes currently offered within parenting intervention and should be borne in mind as we go on to explore the intricacies of these approaches.

1.5 Interventions for behaviour difficulties

The picture that has emerged thus far of the wide ranging consequences of behavioural difficulties for all those who experience them directly and indirectly can be tempered by the emerging evidence for the impact of mediating known key risk factors. This search for effective intervention has been fuelled by suggestion that despite the high association between early behaviour disorders and later psychopathology and antisocial behaviour, the risks for this causal link are significantly reduced if the disorder is placed in remission during early development (Kessler & Price, 1993). As earlier onset is often indicative of
poorer long term prognoses (Nock et al., 2007), attention has turned towards making a significant impact upon the trajectory of behavioural difficulties from as early a stage as possible.

1.5.1 Individual Approaches

Treatment strategies vary and include individual, group and family approaches. Individual approaches such as anger control programmes, assertiveness training and rational-emotive therapy were deemed “probably efficacious” in a review by Brestan and Eyberg (1998) (cited in Burke et al., 2002), and programmes which aim to teach children problem solving skills have been shown to have some positive impact upon behavioural manifestations (e.g. Webster-Stratton & Hammond, 1997). However, sustained reduction and universal benefits have not been elicited (Burke et al., 2002). Psychopharmacological treatments are the alternative individual intervention, and some role for mood stabilisers and antipsychotic drugs has been documented (Burke et al., 2002), in particular the use of lithium was found to be efficacious in short term treatment of youths with CD (Malone et al., 2000). However, the evidence for their effectiveness is limited to a small number of randomised controlled trials, all of which also concluded that pharmacological approaches were only partially effective (Burke et al., 2002). The general consensus is that treatments directed at the individual child alone have not been shown to be widely successful (Burke et al., 2002). This is perhaps unsurprising if one considers the myriad factors which have been shown to contribute to the development and maintenance of these disorders, and the strong potential influence of the environment around the child upon any shift towards change. However, there does appear to be a role for individual treatments when used in conjunction with other modalities addressing a variety of contributing factors (Burke et al., 2002). For example, the positive behaviour outcomes demonstrated by cognitive problem solving skills training, which operates by means of improving the child’s understanding of effective response within interpersonal situations, are only present when
offered alongside a parent training programme, which impacts across domains (Baker, 2008).

1.5.2 Parental Approaches

Although individual parenting interventions do exist, group-based versions are most widely used due to evidence of their relative cost-effectiveness and tangible, maintained outcomes (Thomas et al., 1999). Parenting programmes in general aim to provide training for parents to enhance their skills, knowledge base and confidence in dealing with their child’s behaviour (Bunting, 2004). Broadly divided into two key approaches, behavioural programmes aim to help parents identify problem behaviours and learn to use modified responses to these e.g. through positive reinforcement of desired behaviours (Barlow et al., 2005). Non-behavioural programmes, or ‘relationship programmes’, centre on those based upon attachment theory as outlined in the previous section. However, they also include those based on Adlerian theory (when focus lies upon helping parents to understand how their child might think and their motivation for specific behaviours (Dembo et al., 1985)) and family systems theory (when parents are facilitated to understand their child’s behaviours within the context of their own behaviours and relationships within the family (Barlow et al., 2005)). These non-behavioural programmes focus on helping parents to understand the underpinnings of their own and their child’s behaviour, and to shift these behaviours by modifying the interpersonal mediators (Barlow et al., 2005). Rather than distinct entities however, most current programmes draw from both approaches and involve aspects from an eclectic mix of theoretical models (Bunting, 2004).

Research has identified those characteristics of parenting programmes which are essential components for desired positive outcomes. Interventions with a strong theoretical base, identifiable, measureable objectives and multi-level delivery options are those that evoke greatest success (Moran et al., 2004). Related to the range of risk factors discussed previously, intervention must focus not only on the modification of maladaptive and hostile parenting
practices, but also on equipping parents with the skills to provide a safe, nurturing environment for their child (Shaw et al., 2005). This recognition must be reflected in intervention content targeted specifically at those mechanisms by which both risk and protective factors operate to effectively elicit change (Richardson & Joughin, 2002).

The National Institute for Health and Clinical Excellence (NICE) brought together essential components in their guidance for the management of children with conduct disorders, stating that group-based parent training programmes are recommended for the management of children under the age of 12, and that individual approaches should only be used when a group approach is unfeasible due to poor parental engagement or the complexity of the presenting problem (NICE, 2006). Upon review of the available evidence, they also concluded that those group programmes provided should be informed by social learning theory and should feature strategies for enhancement of the parent-child relationship, bringing together the two strands of parent programme approaches. Other essential components of their recommendations included the incorporation of role-play and homework, delivered by trained and supervised facilitators across the optimum period of 8-12 weeks (NICE, 2006).

1.5.3 General parent group interventions

The NICE guidelines emerged from a need for clarity in the wake of exponential growth in the availability of different parenting group approaches (Dretzke et al., 2009). A growing recognition of the significance of early intervention in the management and prevention of conduct disorders has led to a wealth of current programmes, many of which overlap in their core features but differ in emphasis or theoretical grounding. However, the quality of both the programmes and their evidence base is highly variable. Hundreds of studies have been published over the past decade, detailing these programmes and evidence of their effectiveness. However, in the majority of cases, programmes lack those key elements described by the NICE guidelines, and the evidence proposed does not always adhere to sound research standards as will be highlighted here.
This dearth of rigorous programmes and accompanying research is evidenced by a recent systematic review of the clinical effectiveness of parenting programmes for addressing conduct problems in children (Dretzke et al., 2009). Generally, they found that parent programmes are effective in eliciting positive behavioural outcomes. However, of the 544 ‘potentially relevant papers’ stemming from their initial search strategy, only 57 of these met the essential criteria for inclusion in their review. Criteria included being a randomised controlled trial (RCT) of a structured, manualised programme delivered to parents of children under 18 years of age and evaluated with at least one standardised child behaviour outcome measure (Dretzke et al., 2009). The average group size per study was 21, which hindered even those studies which met the stringent inclusion criteria in their predictive power. This small sample size, and indeed, relatively small number of studies eligible for inclusion, resulted in the authors being unable to draw conclusions regarding which of the existing programmes was most effective, highlighting the need for more rigorous research within this field.

Despite the availability of potentially highly beneficial parenting programmes in the UK, much of the evidence for their effectiveness has been conducted abroad, with a paucity of robust UK based evaluations tempering their use (Moran & Ghate, 2005), although this is slowly being rectified (Richardson & Joughin, 2002). Few programmes emphasise addressing parental psychosocial wellbeing in addition to behavioural management techniques. This is reflected in the lack of studies which address outcome across both parent and child domains. Exceptions to these are included in a recent Cochrane review of 26 studies which concluded that such multifaceted input can evoke significant change across aspects of maternal psychosocial health, particularly with respect to depression, anxiety and self-esteem (Barlow et al., 2003). This finding is particularly pertinent when one considers the extent to which maternal depression and general mental health can impact upon the parent-child relationship and the child behavioural and emotional outcomes, as discussed earlier.
Another issue of note is that the majority of trials have been conducted with volunteer families within controlled, university situations (Richardson & Joughin, 2002). More research is needed within community settings, to allow conclusions to be drawn regarding clinical effectiveness in practice.

Evidence suggests that interest in parenting programmes and subsequent participation is likely to be present in only a small minority of families, and often those who are at less clinical risk than others (Spencer, 2003). Recent meta-analyses of parent-training moderators found that those families from the lowest SES backgrounds were least likely to engage in group-based training programmes (Reyno & McGrath, 2006). Perhaps inevitably, they were also the population for whom these programmes were least effective (Lundahl et al., 2006). Indeed, single parenthood and maternal depression have been shown to predict the worst outcomes on parenting group participation (Webster-Stratton & Hammond, 1990). This is particularly significant when related to the high correlation between disadvantaged circumstances and the development of behavioural difficulties (Sutton et al., 2004), and the demographics of the populations to which programmes are most likely targeted. Exploration of those factors which foster interest and engagement is an essential component of the research base if effective programmes are to affect change in those families which need it most.

1.5.4 Summary

Despite recent rapid expansion in the range and availability of parenting intervention programmes and the publication of hundreds of related research papers and reviews, a number of the programmes being delivered are not standardised and repeatable, nor are they being delivered to or evaluated within the community settings nor clinical populations in which they are most needed. Consequently, the existing evidence base for these programmes is weak, with outcome measures largely limited to child behaviour and little emphasis upon psychosocial or parental wellbeing outcomes (Dretzke et al., 2009).
1.6 Current group parenting programmes

Focus shall now shift to those programmes which do fit the criteria outlined by NICE, with the scope and quality of their evidence bases summarised and critiqued below.

1.6.1 The Incredible Years Programme (Webster-Stratton & Herbert, 1994)

- Programme outline

The Incredible Years (IY) programme originally emerged as a parenting intervention but has since evolved to encompass child, teacher and parent programmes with the common goal of reducing conduct problems in childhood and equipping a child with enhanced social and emotional abilities through increased parental competence and effective behaviour management (Webster-Stratton, 2000). It is a behaviour-based programme targeted directly at children with behavioural difficulties, developed specifically with Patterson’s coercion hypothesis underpinning its approach (Webster-Stratton, 1996). Parenting groups centre around video vignettes modelling effective behaviour management strategies, accompanied by structured discussion, role-plays and explicit homework tasks. As a key part of the programme parents are given written summary sheets regarding the techniques they have learnt within the session each week and are encouraged to use the Incredible Years published book to accompany their participation. Although initially developed and delivered in the United States, it is now widely known and used across the globe, including in the United Kingdom, and is supported by an evidence base across a range of settings, cultures and populations (e.g. Reid et al., 2001). Delivery over 12-14 weeks takes place in weekly, two-hour sessions within healthcare, community and school settings.
The substantial financial and practical resources of the programme allow ongoing development of programme content and delivery. Recognition of the need for fidelity in delivering the programme emerged in the recent development of the ‘Leader Observation Tool’ which is in the early stages of implementation (Eames et al., 2008). In addition, recent recognition of limitations in the scope of the programme resulted in the development of an infant and toddler version within the series. However, despite resources channelled into an ever amassing evidence base, the quality of the research underpinning this evidence varies widely in its quality and relevance, as will be explored.

- Current evidence base

Much early parenting programme research was conducted within controlled, university settings, often with volunteer families (Woolgar & Scott, 2005) and although encouraging results emerged, applicability of these results to ‘real world’ community populations was highly limited (e.g. Webster-Stratton et al., 1989). More recent studies have recognised the limitations of setting and adapted trials to community and healthcare situations (e.g. Gardner et al., 2006; Scott, 2005). In one of the first controlled trials in Europe of IY parenting groups for children referred to mental health services for antisocial behaviour, Scott and colleagues found significant reductions in antisocial behaviour in those children whose parents attended IY groups (n=90), compared with waiting list controls (n=51) across the 13-16 week period of group attendance (Scott, Spender et al., 2001). Scott (2005) published a paper describing one-year follow-up of this controlled trial sample. Absence of control group comparison for the follow-up intervention sample one year after group completion means that although there is some evidence for sustained change within this group, it is not clear whether this change is attributable to the intervention itself. Indeed, change might also have been afforded to the waiting list control sample, thus limiting potential conclusions. In addition, children within this one-year follow-up sample showed no improvement in the peer
relationship difficulties they had originally presented with in addition to
behavioural problems. These findings led Scott to suggest input be
supplemented with the child DINO programme with the aim to impact upon
this additional facet of child outcome (Scott, 2005).

Children included in this study (Scott, Spender et al., 2001) had been referred to
mental health services as a result of demonstrating antisocial behaviour.
However, almost half of all children whose parents were interested in taking
part in the study were excluded (124 from a potential 268) due to the presence
of hyperkinetic syndrome or additional comorbidity (Scott, Spender et al.,
2001). Given recognised high levels of comorbidity between difficult behaviours
and other psychopathology (e.g. Lahey et al., 2005), the exclusion of these
children creates a sample non-representative of the true population of conduct
disordered individuals requiring, and potentially benefiting from, IY input. This
further limits the conclusions which can be drawn from this study regarding
general effectiveness and applicability.

The IY programme, as delivered by primary care nurses or clinical
psychologists, was compared to a minimal intervention treatment (simply giving
parents the IY book) in a recent study by Lavigne et al., (2008). This primary
care based study of 117 parents aimed to assess the effectiveness of the IY
programme within conditions as similar as possible to normal treatment, in
contrast to the strict exclusion and inclusion criteria of many other non-
laboratory efficacy trials such as that by Scott, Spender et al., (2001) (Lavigne et
al., 2008). Thus, children with complex difficulties and comorbid conditions
were included, and incentives such as transport to sessions were not provided,
closely replicating the conditions of real-world programme delivery. Assessment
across a range of self-report and independent observational ratings of child and
parent outcomes indicated significant improvement across time for all three
groups (nurse-led IY, psychologist-led IY and minimal treatment), but no
difference between treatment modalities. The study did find significant ‘dose’
effects for intervention group participants, with greater improvement in child
behaviour scores for those parents who attended at least seven therapist-led IY sessions (Lavigne et al., 2008). However even when dose was accounted for, there was no significant benefit found for participating in an IY group over simply reading the IY book. Given the costly resources involved in training facilitators and delivering IY groups, the results of this study are highly noteworthy when considering the effectiveness of this programme within a real life setting.

In contrast to the initial Scott, Spender et al., (2001) study, 6-month IY group participant follow-up data was included in the block randomised controlled trial conducted by Patterson and colleagues (2002) and 12-month follow-up data for the same trial by Stewart-Brown et al., (2004). Parents of children age two to eight were recruited to the trial from three general practices, and requested to complete the Eyberg Child Behaviour Inventory (ECBI) (Robinson et al., 1980). All of those families for whom at least one child fell below the median level on this standardised instrument, i.e. within the 50% most difficult behaviours, were invited to take part in the study. Those families who chose to participate in the project were more likely to have higher levels of behaviour disturbance, as measured by the Eyberg, as compared with those who refused participation. Thus, inclusion was based upon existing, baseline levels of behavioural difficulties. Exclusion criteria were composed of child diagnosis of a learning disability or previous involvement in a parenting intervention. The final trial sample included 116 families, 60 of whom were randomly assigned to take part in the IY parent programme, the remainder forming the control sample (Stewart-Brown et al., 2004). Evaluation tools were questionnaire based and included the Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1994), the Parenting Stress Index (Abidin, 1995), the General Health Questionnaire (Goldberg & Hillier, 1979) and the Rosenberg Self Esteem Scale (Rosenberg, 1979), alongside the ECBI. All measures were parental self-report measures with no inclusion of additional caregiver, teacher or objective observer perspectives.
Positive results across intervention participants at 6-month follow-up were limited, with control group participants demonstrating comparable improvement across measures such as the ECBI and SDQ (Patterson et al., 2002). SDQ conduct scores were significantly reduced in the intervention group as compared to the controls, however there was no significance in SDQ impact scores between groups and the ECBI problem score was significantly reduced across both groups at follow-up (Patterson et al., 2002). Of those significant differences that did exist at 6-month follow-up, evidence at 12-months indicated that intervention and control groups could no longer be differentiated (Stewart-Brown et al., 2004).

Intervention attrition within this trial was high, with just over half of the intervention sample attending at least 50% of the programme’s 10 classes. In addition, data from this same trial population were reported in a third published study, when qualitative interviews were conducted across samples regarding parenting patterns and behavioural concerns (Patterson et al., 2005). The potential risk of alerting control participants to the aims of the project may have induced contamination (Stewart-Brown et al., 2004). The lack of long-term significant difference across studies highlights what is a serious limitation of the IY programme and one for which further investigation and consequent programme modifications are essential.

This limitation is further evidenced in Hutchings and colleagues’ recent randomised controlled trial of 153 parents across Sure Start areas in Wales (Hutchings et al., 2007). The study included parent-rated child and self-report measures along with a third-party observational measure (Hutchings et al., 2007). In addition, the authors carried out an intention-to-treat analysis for lost participants which ensures that data from those individuals who dropped out of the intervention prior to completion are included in final analysis (Lachin, 2000). Intent-to-treat analysis has been recommended as best-practice for intervention study analyses (e.g. Heritier et al., 2003) due to its ability to overcome the potential bias of reporting only outcome for those individuals who
were retained within the programme (Hollis & Campbell, 1999). Although significant differences in child scores on the Eyberg inventory between intervention and control groups were reported immediately following group participation and again at 6 month follow-up, without a longer term follow-up, little can be concluded regarding the long term impact of this intervention.

As a primarily behaviour focussed programme, the IY series’ recognition of the long term mediating impact of psychosocial factors and interpersonal difficulties is minimal. As is the case in the studies critiqued, selection criteria are based primarily upon high levels of existing behavioural difficulties in the child. Risk factors such as parental mental health, parental self-efficacy and social context factors are often assessed but not used as primary selection criteria nor as a primary outcome measure, which overlooks the significant mediating role they can play in the trajectory of behavioural disorders. As outlined earlier, psychosocial factors including maternal mental health and self efficacy have a strong impact upon child behaviour outcomes. Consequently, evidence is accruing for the benefits of addressing parental stress and the family context alongside behavioural approaches (Woolgar & Scott, 2005). Substantiation for this approach is demonstrated by a recent study which showed reduction in maternal depression and enhanced parental effectiveness to underpin measured child behaviour changes (Patterson et al., 2004). Indeed, a recent meta-analysis of predictors of parent-training efficacy found that addressing parental mental health and stress can positively influence treatment outcomes in terms of child behaviour (Reyno & McGrath, 2006). This is perhaps unsurprising given the evidence for the extent to which parental stress and low mood impact upon child behaviours, and the transactional relationship previously discussed between these factors (Baker et al., 2003).

The IY series does recognise that parenting techniques alone will not be sufficient to elicit sustained change (Taylor & Biglan, 1998). All of the programmes have some element of coping strategies included within, but it is only the advanced parenting programme (to which little evidence pertains)
which takes the next step to target relationship difficulties (Webster-Stratton, 1994). Connolly et al., (2001) included one psychosocial measure (the General Health Questionnaire) in their community child mental health study of parents of children with CD or ODD who participated in an IY programme, as compared with a waiting list control group (Connolly et al., 2001). No change was demonstrated across this measure as a result of participation in the IY group. Whilst one might argue that this measure was too insensitive to capture parental shift, a more recent study included a range of parental wellbeing measures and found no significant change in maternal depression – that aspect of emotional wellbeing they had predicted as being most likely to undergo change as a consequence of IY participation (Gardner et al., 2006). In comparison with other programmes which recognise more fully the importance of parental wellbeing and the parent-child relationship (e.g. Mellow Parenting which is discussed shortly), this skewed emphasis can be seen as a significant oversight in eliciting effective, sustained change in the families at which it is targeted.

Additional limitations include the limited evidence for the IY programme long-term outcomes as outlined in this section. The addition of teacher and/or child training alongside the parental programme has been shown to facilitate longer term results (e.g. Reid et al., 2003), and improve cost-effectiveness (Foster et al., 2007), as one might expect if different domains are targeted in tandem. However, a number of studies which demonstrate significant behavioural outcomes directly following parental intervention are unable to report the same at follow-up (e.g. Stewart-Brown et al., 2004).

Recent Scottish community-based evidence suggests that some parents find the literacy level required for participation in IY to be a barrier (Aldgate et al., 2007). Inability to read and comprehend course materials could have a significant impact upon what a parent is able to gain and sustain from each session. Parents are also asked to complete weekly evaluation material, again demanding a level of literary competence. Insufficient consideration of literacy
demands is perhaps a criticism which could be assimilated by many of the parenting programmes currently available; however as one of the most widely implemented series in Britain, it is a point of note within the critique of the IY series.

Of final note and key pertinence are the costs involved in the delivery of the IY programme. As the series evolves with the development of new versions and tools, so too does the cost required to deliver the programme with fidelity across settings. Training on the BASIC parent programme facilitators course costs £400 for three days, as does training in the child DINO programme, with each additional facet such as the infant and toddler version priced at an additional £150 per one-day course. Course handbook and materials are purchased separately. Given the fragility of aspects of the evidence base as described in this section, combined with the costs of facilitation of this programme, caution may be exercised before committing valuable resources.

1.6.2 Triple P: Positive Parenting Programme (Sanders & Dadds, 1993)

- Programme outline

This programme differs foremost from IY with its emphasis upon the prevention of behavioural and emotional difficulties in children aged 0-16 by means of enhancing the skills and knowledge of parents and their confidence in applying these (Sanders, 2002). It is offered in a five-level multi-modal system, from a media-based parent information campaign which allows parents who wish to to access advice and information, through broad and narrow focussed parent training, to enhanced programmes aimed directly at persistent behaviour or entrenched parent-child relationship difficulties. Although parents are typically offered intervention at just one level (Sanders et al., 2003). There are five core principles which underpin each level of intervention: creating a positive learning environment, using assertive discipline, having realistic expectations, ensuring a
safe and engaging environment and taking care of oneself as a parent (Sanders et al., 2003).

- **Current evidence base**

Published studies indicate the efficacy of Triple P at individual and population level, with a recent large scale public health trial in Australia demonstrating positive outcomes for both parents and children across intervention levels (Sanders et al., 2005). In addition, the parent groups as a subsection of the tiered system have been shown to work effectively in a stand alone capacity (e.g. Bodenmann et al., 2008). However, although Triple P has become increasingly popular and more widely delivered across the UK, its evidence base is still firmly set within its original home - Australia - and European, let alone British outcome studies have only just begun to emerge.

A recent European randomised controlled trial (Bodenmann et al., 2008) involved 150 Swiss couples equally divided into three treatment conditions – a Triple P group parent programme (level 4 of the Triple P structure), a marital distress prevention programme, and a non-treatment control group (Bodenmann et al., 2008). Although all three groups showed significant change across the one year study duration, general results indicated that Triple P was effective within this European sample, particularly in reducing mothers’ reports of disruptive behaviour in their children, while increasing their own sense of satisfaction and efficacy in their parenting. Despite couples attending all treatment conditions, there were only minor effects noted for the male contingent of the study. Fathers did not show the same shift in perception of their parenting capacity nor of their child’s behaviour. The authors propose that this is due in part to cultural influences. Traditionally, Swiss fathers are somewhat removed from parenting roles and with less involvement, they have lower capacity for change within this domain (Bodenmann et al., 2008). While cultural influences must not be underestimated, it is also important not to dismiss this finding as solely influenced by the culture in which the study took
place, perhaps highlighting an area requiring further investigation within the Triple P research arena.

As the only randomised controlled trial of Triple P published within Europe to date, results are encouraging for the application of this sole aspect of the programme – the parenting groups – within a British population. However, methodological and interpretive flaws within this trial add caution to generalising its findings. Although Bodenmann and colleagues provide some justification for the inclusion of a marital programme as a comparison group for the intervention of interest, namely in citing evidence that the quality of the marital relationship and inevitable influences of this upon the home environment will impact upon the capacity of the adult to parent effectively and upon the behaviour of the child (Bodenmann et al., 2008), one must consider if this is a fair comparison to make when outcome measures are based largely upon child behaviour. It is perhaps inevitable given the focus of the programme that a marital distress prevention programme would perform less effectively on measures of parenting capacity and child outcomes than a programme precisely targeted at modifying these variables. The inclusion of an alternative parenting intervention as an additional or alternative comparison group might have enhanced the interpretation of this study’s findings. In addition, although this study includes follow-up to one year, little is known regarding the longer term impact of participation in the Triple P parenting groups within a European or British population, and whether interaction between the five levels of the Triple P programme is necessary (or sufficient) for sustained change.

Finally, one must consider the logistics of Triple P as a programme within a British population. The majority of Australian evidence regarding the efficacy of this intervention is related to the programme as a complete, five part model. Studies have indicated that the long term impact of Triple P upon the prevalence of conduct disorders will result in the programme being a cost effective intervention and thus worthy of public investment (Mihalopoulos et al., 2007). However, these analyses took place in an Australian context where Triple P is
already widely adopted. The financial and logistical costs to establish this intervention to the multi-tiered level at which it best operates, and the accompanying burden to the existing healthcare system, particularly without strong evidence for its effectiveness within this country, is likely to prohibit the widespread implementation of this programme within Britain.

1.6.3 Mellow Parenting (Puckering et al., 1994)

- Programme outline

Aimed specifically at supporting families of children up to 5 years old at risk of parent-child relationship difficulties, the MP programme is delivered one day a week across 14 weeks (Hutchings & Lane, 2005), usually within a community setting. To facilitate its aim to reach those families most in need, transport is provided as is lunch and a children’s group which runs alongside the parent group, negating the need for separate childcare. This on-site childcare and structured children’s group is aimed at providing a safe, learning space for both parents and children. The morning programme focuses upon those aspects of the parents’ own childhood and life which impact upon their capacity to parent and utilises a psychotherapeutically based approach to address parent wellbeing. The parent-child relationship is modelled and supported by a joint adult/child lunch and play session. Parenting, with a behavioural, social learning theory based skills session fills the afternoon.

The potential strength of the Mellow Parenting programme lies in two key differences from both IY and Triple P. The first is its use of video-taping participants’ own interactions with their children within the home setting, before the group begins and again on completion, and using these real-life vignettes for group discussion. This process allows the parent to gain objective feedback and support from others within the group, to practice applicable modifications to their identified problem behaviours, and to see change themselves in a very concrete form. It also allows group facilitators to develop

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rapport by visiting at home and gain a greater understanding of the home environment, including those issues which might be most pertinent to each individual.

The second key difference is Mellow Parenting’s emphasis upon the parent-child relationship. Half of each day is spent in discussion and tasks revolving around their own experiences of being parented, with the aim that maladaptive transgenerational patterns of parenting might be recognised and ideally modified. The other half is used for skill-based parenting training linked to personal vignettes.

- **Current evidence base**

The weighting that the Mellow Parenting programme places upon the parent-child relationship and wellbeing of the parents as well as the children, and its emphasis upon early intervention suggests that it has the potential to affect significant long-term positive outcomes for its participants. Rigorous evidence of the benefit of this holistic approach is sparse (Puckering, 2004) but an early version of the programme was evaluated (Puckering et al., 1994). Outcome measures were based upon observation of the parent-child relationship (although notably this was not performed blind to subject condition), maternal ratings of child behaviour and child protection status, with six families, (a total of 12 children), on the child protection register at the start of the intervention (Puckering et al., 1994). Improvements were noted in parent-child interaction, in child behaviour ratings and all children whose names had been on the child protection register prior to intervention had subsequently been removed (Puckering et al., 1994). Mellow Parenting in its current form emerged from the positive results of this study. A single case study of the intervention then labelled as Mellow Parenting followed two years later, again detailing positive effects of group participation on the quality of the parent-child relationship and effective parenting techniques (Puckering et al., 1996). However, there has not to date been a published randomised controlled trial of the Mellow Parenting
programme. Much of its implementation is based upon strong face validity for the model and qualitative feedback from previous participants and facilitators.

In addition to the weak evidence base, the resources required for effective delivery of the programme are potentially prohibitive for its delivery. Along with training costs, the investment of committing at least two trained staff to facilitate the programme across one day a week for four months could be seen as a drain upon organisational resources. As well as delivering the programme, staff need time for home visits prior to the group starting to engage families, inform them of the programme aims and the commitment required of them, and to collect a video of home interaction to be used within sessions. Time for training, ongoing supervision and preparation of weekly resources also must be considered in the planning of this intensive programme. Transport, trained crèche workers’ time, and lunch costs must be accounted for, as must the impact upon those parents attending in terms of their commitment to such an intensive programme. Each of these costs becomes more difficult to justify in the absence of concrete evidence of the efficacy of investing such a sum. Finally, Mellow Parenting also depends heavily on the literacy skills of participants. Specifically aimed towards hard-to-reach, at risk families (Puckering, 2004), the demands of weekly worksheets and written homework have the potential to impact negatively upon participants commitment and maximum gains from course materials.

1.6.4 Summary

The Incredible Years programme, Triple P and Mellow Parenting are three currently available and widely implemented group parenting interventions with the key aim of increasing positive parenting practices and addressing the development of behavioural difficulties and conduct disorders. The means by which they approach this aim differ in their implementation and focus, but all three have some evidence for their efficacy with parents and children. As discussed in this section however, the evidence for each of these approaches is
limited by methodological flaws or omissions within the spectrum of programme focus.

The Incredible Years has a wide, well-funded evidence base and consequently has been implemented throughout Britain and across the world. However its lack of focus upon the emotional aspects of parenting and the wellbeing of the parent is an oversight which potentially limits the long term impact of this programme. Triple P has a strong evidence in its home culture of Australia, however early indications of efficacy within European populations are weakened by inappropriate comparison groups. Furthermore, cost and logistical implications of delivering this five-tiered programme within a British healthcare system are prohibitive. Mellow Parenting has high face validity but little concrete evidence to corroborate this and similar cost implications as each of the previous programmes outlined.

Thus key limitations across the three parenting group programmes reviewed here include the following: low sample size and power to effectively demonstrate effectiveness across groups; lack of emphasis upon the essential role played by parental stress and wellbeing in the development and maintenance of behavioural difficulties; limited or poorly reported intent-to-treat analysis; lack of supportive long term follow-up data; unrealistic demands upon service resources for sustained delivery of the programme; unrealistic demands upon parental literacy levels, especially given the education and attainment levels of the target population; insufficient measurement of essential aspects within the matrix of contributing factors i.e. parental mental health and stress, parental self-efficacy and corroboration of child scores from additional caregiver/teacher etc.

This myriad of limitations, each applicable to a greater or lesser extent for all three programmes discussed, highlight the need for further effective research across all domains addressed by these programmes, as well as the need for an intervention which addresses many of the shortcomings highlighted in this critique.

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1.7 Current Study

The focus of this study now turns to the intervention of interest. Developed in light of the limitations of the programmes discussed above, Getting Through the Day has the potential to deliver on many areas of need not yet addressed by existing group parenting interventions.

1.7.1 The Programme

Getting Through the Day (GTDD) is a group-based parenting programme, delivered over eight to ten 2-hour sessions by trained and supervised professionals. GTTD was developed by John Rogers, one of the original contributors to the Mellow Parenting programme who, upon leaving that team, sought to develop an intervention which remained true to the holistic impact of the Mellow Parenting approach, whilst overcoming many of the limitations of this expensive, labour intensive programme. Thus, following a similar model to Mellow Parenting, GTTD places its foundation within attachment theory and incorporates social learning in the discussion of behaviour management techniques such as positive reinforcement and the positive modelling elicited through facilitators and video. The key aims of the programme are to promote parental sense of self-efficacy and confidence in their ability to effectively manage their child’s behaviour. With a greater repertoire of potential strategies to promote child-centredness in parents, thus assisting them to understand why their child behaves in the way they do and facilitate a more positive parent-child relationship, it can lead to enhanced problem-solving skills amongst the group and individual parents. By drawing upon an attachment theory base, this programme allows parents a space to reflect upon their own experiences of being parented, and consider which of these experiences they would like to carry forward in their own parenting behaviours. Each weekly session is broken down into a different aspect of parent-child interaction or the effective management of specific behaviours (see Appendix One for programme content outline). Within
each session, parents are given the opportunity to reflect with other parents upon how their own emotions and behaviours towards their children may be impacting upon the behaviours they elicit. Thus, parents harness a fuller understanding of their own role in their child’s presentation and how they can work towards sustaining a nurturing and emotionally attuned environment to enable their joint interactions to be rewarding for both parties. At the same time, social learning theory underpins the behavioural management techniques which are introduced each week, facilitated by parents’ enhanced understanding and subsequent modification of coercive processes that might be taking place on both sides.

Aims are delivered in the format of discussion, role-play, homework and video vignettes, encompassing the requirements outlined in the NICE recommendations (NICE, 2006). A multi-component approach such as this has been shown to be the most effective in producing change across areas of need (Moran & Ghate, 2005).

With its focus upon those families most at risk for behavioural difficulties, the programme was developed to be delivered to a clinical sample and to those families who demonstrated aspects of risk along the identified spectrum discussed previously. For example, young mothers, parents with recognised mental health difficulties, families undergoing domestic violence or relationship breakdown, and those with known attachment difficulties with older children. Delivery through both ‘Sure Start’ and ‘Children and Young People’s’ Social Work services leads to internal referrals as well as referrals from GPs, health visitors and community services. In contrast to those programmes outlined previously, this ensures that it is those vulnerable populations who are being approached and engaged in this programme which is specifically targeted towards their needs.

The GTTD programme can be delivered by a range of professionals, from social workers to community health workers, thus increasing the range of organisations that are able to deliver it within the training and manual
guidelines. Resource costs are much lower than those discussed for other programmes, namely Mellow Parenting, with parents and staff only required to commit 2 hours per week in group participation which even with consequent preparation time for facilitators is more manageable. In contrast to other programmes, training takes place over one day and at no cost other than professional time to conduct or participate. Cost effectiveness is enhanced by delivering the programme within community resource centres, easily accessed by parents living within that community, removing the charge for transport or premises. With only tea, coffee and fruit provided for the session, food costs are also minimal.

1.7.2 Rationale for current study

Although already widely implemented across West Lothian, rigorous evaluation of the outcomes of this programme has not been undertaken. Subjective verbal reports and non-standardised pre/post intervention satisfaction questionnaires from participants and facilitators suggest positive impact across domains. The current evidence base for parenting programmes is dominated by evaluations set within university or laboratory based situations (Richardson & Joughin, 2002). This study strives to place the evaluation of this programme within the setting it is intended to be delivered – the community.

With local resources currently channelled towards this programme as the primary intervention for children with, or at risk for, behavioural difficulties, this study aims to provide formal evaluation regarding the programme’s efficacy and whether this remains the most appropriate way to channel these valuable resources in the future.

1.7.3 Study Aims

The key aims of the project are to investigate whether participation in the Getting Through the Day parenting programme has a significant and positive impact upon child behaviour and parental wellbeing, particularly with regards to self-efficacy and mental health.

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1.7.4 Hypotheses

i) GTTD participants will show significant change as compared with control groups in parent and teacher rating of child behaviour as measured by the Strength and Difficulties Questionnaire (SDQ).

ii) GTTD participants will show significant change as compared with control groups in parental self-efficacy as measured by the Tool to Measure Parenting Self-Efficacy (TOPSE).

iii) GTTD participants will show significant change as compared with control groups in parental stress and mental health (depression and anxiety) as measured by the Parenting Stress Index (PSI) and Hospital Anxiety and Depression Scale (HADS).
Method

2.1 Design

This study investigates the impact of participation in the group parenting programme ‘Getting Through the Day’ (GTDD) on parent and teacher reports of child behaviour, parental sense of self-efficacy, and parental mental health, as compared with relevant control groups.

The design of the study is longitudinal, to assess change across the range of pre- and post- intervention measures at two time points, eight weeks apart. Measures, as detailed shortly, are consistent at both time points and across intervention and control samples.

The initial design of this study incorporated three distinct groups. With the aim to allow, as far as possible, confident attribution of any change across dimensions within the Intervention group to parents’ participation in the GTDD programme, two control groups were planned. The first of these was a non-structured drop-in group for parents within Sure Start services: a ‘Group’ control group. The aims of including this group were two-fold. Parents participating in the drop-in group were likely to be of similar demographic background as those parents attending GTDD - both being drawn from the same pool of parents within West Lothian. In addition, parents attending a group format but without the specific content of the GTDD parenting programme would be undergoing similar group processes and social support, without targeted intervention. Thus, both group effect and demographic skew would be accounted for to some extent in any changes recorded in the GTDD group not also recorded in the non-structured group.

The second planned control group was a Waiting List control group, composed of individuals referred to NHS West Lothian Child and Adolescent Mental Health Service for assistance in managing difficult child behaviours. Given the potential clinical trajectory of behavioural difficulties, and the absence of selection for such attributes in those families taking part in GTDD, it was of
interest to explore how behaviour disturbance and parental wellbeing differed between the Sure Start population and a clinical population (i.e. whether Sure Start and GTTD were actually impacting upon clinical levels of concern). Inclusion of this control group allowed exploration of how any change measured across parental GTTD participation differed from those changes in clinical populations without targeted intervention across the same time period.

Unfortunately, due to conflicting service demands, the non-structured drop-in Sure Start group which had been intended for inclusion in this study did not take place across the six month period that this evaluation was conducted. Thus, the ‘Group’ control group was omitted from the final study design. In order to include an alternative relevant control group, data was collected from families with children attending schools and nurseries across West Lothian. This control group was included to compare any changes demonstrated across parental GTTD participation as compared with changes that might occur within a non-clinical family without intervention across the same period of time.

Hence, the final design was composed of the Intervention group, Waiting List control group and Healthy control group.

2.2 Participants

Participants were identified and approached following study approval from both the Lothian Research Ethics Committee and the NHS Lothian Research and Development Department (see Appendices 2 & 3). Study participants may be divided into three sample categories, namely Intervention, Waiting List control and Healthy control. Criteria for participant inclusion or exclusion within each of these categories will be considered in turn.

2.2.1 Intervention group participants

- Selection criteria

Intervention group participants were referred to GTTD through the local Sure Start organisation, which also co-facilitated the running of the groups alongside
the Children and Young People Social Work service. Sure Start is an organisation which emerged from a nation-wide government initiative in 1998 with the key aim to provide support to parents with children up to the age of 5 years old. Practical, emotional and social support is delivered by early years development workers and early years family workers through one-to-one parenting work, child development education, careers advice and a range of parenting programmes of which GTTD is just one example. The majority of referrals for families to Sure Start come from Social Work and Health Visitors who are in a unique front-line position to be able to identify specific areas of need; however referrals can come from any source including GPs and other social care organisations. Following referral, families are guided towards those services best suited to their specific needs. In those families for whom management of child behaviours is a key issue, participation in GTTD would be one suggested route of intervention.

All of those individuals who agreed to attend an upcoming GTTD course were identified as potential study participants.

- **Inclusion criteria**

In order to be included as a potential study participant, individuals needed to be a willing GTTD participant as detailed above. Given the range of referrals across both Sure Start and the Children and Young People Social Work service, participating parents had children across the age spectrum from 0-11 years old. Although initial indications were that the majority of the groups would be running for parents of school aged children, in reality the groups that ran across the study duration included parents of children across the age range and thus additional permission was sought and obtained from the ethics committee to include child data from both pre-school and school targeted groups (see Appendix 4). The final factor for inclusion was sufficient command of English to be able to read the information sheet, give informed consent and complete the study materials. This factor was consistent across study groups.
• **Exclusion criteria**

The only factor for which individuals would be excluded from potentially participating in the study, which was again consistent across study groups, was if they had insufficient command of English to be able to give informed consent and complete the study materials. In the reality of participant selection, this factor had limited significance as GTTD participants need some level of English in order to participate and benefit from the course. Those individuals with identified literacy difficulties were still given the option of participation with support from either group facilitators or the chief investigator, as detailed in the procedure section to follow.

**2.2.2 Waiting List control group participants**

• **Selection criteria**

A waiting list control group was selected to allow comparison of change across eight weeks in those families also attempting to manage difficult child behaviours but without input from GTTD or other sources. The NHS West Lothian Child and Adolescent Mental Health Service includes the department of Clinical Psychology which receives on average 18 referrals each month of families seeking assistance with the management of child behaviour difficulties. The majority of referrals are received from GPs however Social Work, Health Visitors and Paediatrics also regularly refer to the service. It is the policy of the department to offer all appropriate referrals an assessment appointment with two Clinical Psychologists, as a result of which an appropriate course of intervention either within or outwith the department will be agreed upon with the referred individuals. At the time of this study, the waiting time between receipt of referral and attendance at an assessment appointment was approximately three months. This allowed the chief investigator, who as member of the department had access to waiting list information, to include families across an eight to ten week period whilst on the waiting list for assessment.
All individuals who had been referred to Clinical Psychology for assistance with management of child behaviour difficulties and were on the waiting list for assessment were identified as potential study participants.

2.2.3 Healthy control group participants

- Selection criteria

A second control group was included to measure potential changes one might expect across measures for any parent of a child within the targeted age range. In this way it allows consideration of any significant changes potentially recorded in the intervention group in the context of comparison with those families not experiencing reported significant behavioural difficulties. To allow collection of normally distributed variation within healthy subjects, parents of children attending local West Lothian primary schools and nurseries were identified as potential study participants.

Permission to approach schools and nurseries was sought from West Lothian Council and Department of Education. Permission was granted by Director of Education (see Appendix 5). Two schools with strong existing links with West Lothian CAHMS service were identified and a standard email requesting their participation sent to the head teachers of both (see Appendix 6). Both schools, each with incorporated nursery classes, agreed to take part in the study.

2.3 Procedure

2.3.1 Power Calculation

A power calculation was carried out to indicate the sample size required within each group to give sufficient power (0.80) at α=0.05. The calculations were based upon clinical norms of the recognised cut off point for clinical change within the parent rated SDQ conduct problems domain scores, along with sample sizes of previous studies which also used this as their key outcome
measure of change (e.g. Gavidia-Payne et al., 2003; Mathai et al., 2003). Using
published power tables (Clark-Carter, 2004), optimum sample size for this
study was calculated as 40 participants per group.

2.3.2 Data Collection

Although assessment materials were identical across the three groups, the
procedure up until and including collection of this data differed between them
and shall be described in turn.

• Intervention group

Intervention group participants were recruited from the ten groups running
across West Lothian between March and June 2009. Once an individual had
agreed to attend a GTTD group, they were sent a copy of the study information
sheet and informed consent form (see Appendix 7) at least two weeks prior to
the start of the group. This was to allow potential participants the opportunity to
consider what their involvement in the study would consist of and decide
whether they felt able to give their consent. The chief investigator was present at
the initial group to introduce herself and the aims of the project, to go through
the information sheet in more detail and to discuss any queries or concerns that
might have arisen for potential participants. Assessment materials were then
distributed to those individuals happy to consent to participation. Participants
were given the opportunity to go through these with the chief investigator or to
take them home to complete and send directly to the chief investigator in the
pre-paid envelope provided.

The chief investigator also attended the final group to distribute follow-up
questionnaires to consenting participants. These could again be completed in
the group or posted directly in the provided pre-paid envelope.

Participants were encouraged to ask any questions they might have of the chief
investigator in person and contact details were provided on the information
sheet.
It was emphasised to participants both in the information sheet and in person that participation was not obligatory, that they could withdraw at any time without repercussions, and that all data were completely anonymous and confidential.

- **Waiting List control group**

Once identified on the waiting list, potential participants were sent by post the relevant information sheet and informed consent form (see Appendix 8) along with the initial questionnaires. In this way, participants were given the opportunity to read the information sheet, contact the chief investigator to discuss further and answer any queries, and if willing, to give consent to participate. If they consented, they were asked to return their completed questionnaires and signed consent form in the pre-paid envelope provided.

Seven weeks after the date given on their completed initial questionnaires, control group participants were sent the follow-up set of questionnaires, again with a pre-paid envelope to return completed copies. This allowed participants one week to complete and return assessment materials within the set time period.

It was emphasised to participants within this group that participation or withdrawal would have no impact upon their waiting time or subsequent treatment within the Clinical Psychology service.

- **Healthy control group**

The two participating schools were asked to distribute packs containing an information sheet, consent form, questionnaires and pre-paid return envelope to parents of children across classes (see Appendix 9). Procedure from this point was identical to that for the waiting list control group (as detailed in Figure 1), with parents given the opportunity to contact the chief investigator with any queries or concerns.
2.3.3 Teacher participation

In order to understand and corroborate any change attributed to participation in GTTD it was deemed beneficial to also collect ratings of child behaviour from their regular school or nursery teacher. The standardised teacher version of the behaviour-related parent questionnaire, as detailed in the ‘measures’ section to follow, was used for this purpose. Parent information sheets described the rationale for collecting teacher ratings as well as including a copy of the teacher questionnaire to allow parents to familiarise themselves with the areas of interest and make an informed decision regarding whether they would consent to teacher involvement. In order to allow teachers the freedom to complete the questionnaire openly and honestly, parents were advised that any information given by the teacher was confidential and unable to be accessed by themselves. Those participants who gave consent for teacher involvement indicated this in their consent forms, also giving information regarding their child’s teacher’s name and the school of attendance.

Once this information was received on the consent form, a letter was sent to the head teacher of the relevant school detailing the aims of the project (please see Appendix 10). An additional letter was sent to the teacher (please see Appendix 11), along with a copy of the signed parental consent for their participation, the questionnaire to be completed and a pre-paid envelope in which to return it to the chief investigator.

Seven weeks after the completion date of the initial questionnaire, teachers were sent the follow-up material and again asked to return within one week the completed questionnaire in the provided envelope.
2.3.4 Diagrammatic representation of study procedure

Figure 1 summarises the process of data collection from identification of potential participants to dissemination of results.

![Diagram of study procedure]

Figure 1: Diagrammatic representation of study procedure

2.3.5 Sample Description

Table 1 outlines the distribution of data collected to form the final study sample.
Table 1: Sample distribution across targeted groups

<table>
<thead>
<tr>
<th>Total number initial questionnaires distributed</th>
<th>Intervention Group</th>
<th>Waiting List Control Group</th>
<th>Healthy Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>53 questionnaires distributed to all initial GTTD group participants</td>
<td>48 questionnaires sent out to families on CAMHS waiting list</td>
<td>320 questionnaires distributed to families attending local schools</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total initial participation</th>
<th>Parent</th>
<th>Teacher</th>
<th>Parent</th>
<th>Teacher</th>
<th>Parent</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent</td>
<td>51</td>
<td>21</td>
<td>15</td>
<td>4</td>
<td>34</td>
<td>31</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total follow-up participation</th>
<th>Parent</th>
<th>Teacher</th>
<th>Parent</th>
<th>Teacher</th>
<th>Parent</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent</td>
<td>24</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>26</td>
<td>33</td>
</tr>
</tbody>
</table>

• Intervention group participants

As noted in Table 1, the majority of GTTD group participants consented to take part in this study. For those two individuals that did not consent, one relayed that she had completed the form at home however did not bring it to the group nor post it to the chief investigator in a pre-paid envelope provided. The other relayed that she was in the group only to support a friend and had no problems with herself or child so did not want to participate.

Teacher questionnaire return was low for the intervention group. This is largely due to a number of parents having children younger than the age of school or nursery attendance, thus consent for this process was redundant, however a small minority of mothers did not wish to consent for teacher involvement. In line with protocol they were not asked to justify this decision.

A reduction in numbers for follow-up Intervention Group participation was largely due to group attrition. Once individuals were lost from the group (n=16),
they were also lost to the study, giving no opportunity for an intent-to-treat analysis which would have been the analysis of choice had the opportunity been available. In some groups, although participants were present for the final group session, they had not been present for the initial session and so pre-group data had not been collected (n=3). Thus, they were excluded from the study. Finally, a small number of GTTD group participants (n=4) declined to complete follow-up questionnaires, citing the length of the materials as too much of a burden.

- **Waiting list control participants**

Potential participants for the waiting list control group were limited by numbers of referrals to CAMHS for support with behavioural difficulties across the period of data collection from January-May 2009. The chief investigator sought to increase the pool of potential participants by also including those families on the waiting list for the specialist ADHD service within CAMHS, however this did little to boost numbers with only 1 of the 15 responses coming from this source.

- **Healthy control group participants**

The 320 information and questionnaire packs which were distributed to parents of school and nursery children in West Lothian elicited 34 initial responses as shown in Table 1. Teacher responses for this group were much higher than for those in other groups, perhaps because the study became a small part of the school’s culture with teachers more aware of the study aims and the role they might play than those teachers who simply received a letter and questionnaire with no background knowledge. Those 10 parents who failed to respond to the follow-up questionnaires are again lost to the sample with no means or provision within the protocol to follow them up nor include them in an intent-to-treat analysis.
2.4 Measures

The measures used to assess change across this study were carefully chosen with regards to the constructs of interest as outlined in the hypotheses. Justification for inclusion of each measure, along with brief psychometric properties will be discussed in turn.

2.4.1 Strength and Difficulties Questionnaire (SDQ) (Goodman, 1994)

The SDQ (see Appendix 12) is an aged screening measure of behavioural difficulties and psychopathology for children and adolescents 3-16 years old. Composed of parent-report, teacher-report and adolescent self-report versions, it has proven effective in highlighting behavioural and emotional difficulties and sensitivity to change across a range of cultural and experimental settings. British studies of psychometric properties report high levels of validity and reliability for this population – mean Cronbach’s α: .73 (Goodman, 2001).

This measure was the key tool for the assessment of potential child behaviour changes across the study period. Both parent-report and teacher-report versions were used in this study. Respondents rate across a three-point Likert Scale (from ‘Not True’ through ‘Somewhat True’ to ‘Certainly True’) the extent of their agreement with 25 statements related to child behaviour. In addition to a total difficulties score, the five factor structure gives comparable scores for the constructs of emotion, conduct, hyperactivity-inattention, peer relations and prosocial, each with cut offs for ‘normal’, ‘borderline’ and ‘abnormal’ ranges as related to a large normative sample.

2.4.2 Parenting Stress Index – Short Form (PSI-SF) (Abidin, 1995)

The PSI-Short Form (see Appendix 13) (referred to throughout this thesis simply as ‘PSI’) is a parental self-report questionnaire which was derived from the significantly more lengthy but widely established original Parenting Stress Index (Abidin, 1983). Parents rate across a 5-point Likert scale from ‘Strongly Agree’ to ‘Strongly Disagree’ the extent of their agreement with 36 statements.
Construct validity, test-retest validity and predictive validity have all been shown to be good (Hackett et al., 2006) including across a more vulnerable, low socioeconomic status (SES) sample (Reitman et al., 2002) – particularly relevant for this study population. Confirmatory Factor Analysis has demonstrated three distinct constructs which arise from the PSI-SF (e.g. Reitman et al., 2002), these being Parental Distress, Parent-Child Dysfunctional Interaction and Difficult Child.

High levels of psychological distress associated with parenting demands have been shown to be a strong risk factor for a number of negative parent and child outcomes (Reitman et al., 2002). High parental stress has been associated with dysfunctional parent-child interactions (Abidin, 1995) and elevated levels of abuse and negligence (Dopke et al., 2003) and reduction of this stress can be considered a key factor in reducing child behaviour problems (Kazdin et al., 1992). Given the evidence base for the potential impact of parental stress upon child behaviour, reducing this stress and enhancing parental coping skills is a key aspect of the GTTD programme and thus the assessment of this stress an essential component of the programme evaluation.

2.4.3 Tool to Measure Parenting Self-Efficacy (TOPSE) (Kendall & Bloomfield, 2005)

The TOPSE (see Appendix 14) is a relatively new tool, developed in 2005 in response to a perceived lack of empirically sound assessment tools for outcome of participation in parenting programmes. Although the key focus is upon efficacy, the parental rated questionnaire also addresses aspects of child behaviour and the parent-child relationship, linking it to the constructs of interest within this study. Parents are required to rate 48 statements on an 11-point Likert scale across varying degrees of agreement from ‘Completely Disagree’ (a score of zero) to ‘Completely Agree’ (a score of ten). Rating results in a potential maximum score of 60 for each of the 8 domains which are as follows: emotion, play, empathy, control, boundaries, pressures, acceptance & learning.

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An individual’s degree of perceived efficacy as a parent is closely related to parental stress and of key focus within the GTTD programme. Research links parental self-efficacy, namely the perception of a parent to have the ability to perform effectively in a given situation (Kendall & Bloomfield, 2005), with parenting style and effectiveness which links closely to child behaviour as a direct outcome.

Assessment of its psychometric soundness has not yet taken place but it has been shown to be an effective measure of change across parenting group participation in a recent sample of 356 British parents (Bloomfield & Kendall, 2007). Given its potential insight into those factors impacting upon change across group participation, and in order to add to the currently limited understanding of the merits of this tool, the TOPSE was deemed a justified and worthy inclusion in the assessment battery.

**2.4.4 Hospital Anxiety and Depression Scale (HADS)** (Zigmond & Snaith, 1983)

The HADS (see Appendix 15) is a brief, 14-item self report screening measure of anxiety and depression in adults. It is used widely across primary care and community populations as an assessment tool for symptom severity. Psychometric assessment reports high reliability and validity, with Cronbach’s $\alpha$: .80 & .76 for anxiety and depression subscales respectively (Mykletun *et al.*, 2001). Respondents rate 7 depression symptom items and 7 anxiety symptom items across a four-point Likert scale. The scale assesses the extent to which the individual has experienced symptoms in the preceding week thus ratings can range from ‘Not at all’ through ‘Occasionally’ to ‘Very Often’. Of a total possible score of 21 for both depression and anxiety, scores of 11 and above indicate the probable presence of psychological distress.

Research has long established poor parental mental health as a key risk factor for negative outcomes in the parent-child relationship and consequently child behaviour. Given the vulnerable nature of many of the families participating in
this study, parental mental health was a significant area of interest and its potential impact upon GTTD participation outcomes needed to be monitored and where possible controlled for.

2.5 Ethical Considerations

The study obtained full ethical approval from NHS Lothian Research Ethics Committee in February 2009 and permission for the retrospective collection of pre-school age GTTD group data in March 2009. Some of the key ethical issues that were considered over the course of this study are detailed below.

- **Confidentiality**

  Once consent to participate was given, to ensure confidentiality and anonymity each participant was assigned an identification number which was used to organise data. Consent forms and the list of identification numbers were kept in a locked filing cabinet separate from that containing the raw data within the department of Clinical Psychology. Consent forms, identification numbers and anonymised questionnaires will be held in secure storage for five years after which they will be destroyed.

- **Capacity to consent**

  Consideration was given to participants' ability to give fully informed consent. Within the intervention groups, group facilitators and the chief investigator were present to assist where necessary. This was not possible for control participants with whom communication was by post. Thus, it must be assumed that those able to consent and complete the battery of assessment questionnaires were also able to make an informed choice regarding their participation. In order to assist in this process, it was emphasised that questions or comments could at any time be directed towards the chief investigator or other relevant persons within the school or department.
• **Coercion to participate**

It was essential to ensure that no participants felt obligated or coerced to be part of the study. Attempts to ensure this was not the case included giving potential participants sufficient time to consider the information sheet and ask any questions they might have. In addition, participants across groups were assured that their experience of their current service would not be impacted upon as a result of not participating or withdrawing from the study at any time.

• **Other ethical considerations**

Consideration was also given to whether completion of the assessment materials could cause distress to participants within any of the groups. All of the questionnaires are standardised, quantitative tools which present little opportunity for eliciting sensitive disclosures. However, disclosure of the difficulties one might be facing as a parent can be a highly emotive experience and one to which the chief investigator and group facilitators remained mindful of throughout data collection.

Of final ethical note was the potential burden placed upon teachers in requesting their assistance in completing assessment material. Given the demands placed upon busy teachers, their involvement was kept to a minimum in completing just one brief questionnaire and it was hoped that ensuring their responses would remain confidential would allow open and honest completion.

### 2.6 Statistical Analysis

In line with the hypotheses detailed in section 1.7, this study was designed to allow for comparison of any changes across measures for the intervention group participants with changes within the control group samples. In order to investigate any interaction effects between group and time and the impact of this interaction upon outcome across the measures of interest, data relevant to each hypothesis will be analysed using an Analysis of Variance (ANOVA).
Given that intervention and control samples were drawn from different populations there is the potential that significant discrepancies in baseline scores across measures might exist. To explore this further, for those variables which demonstrate significant interaction effects, independent sample t-tests of initial scores will be conducted across measures relevant to each respective hypothesis.

If significant differences in baseline scores are present, hypothesis testing will be extended to include an Analysis of Covariance (ANCOVA). This analysis allows conclusions to be drawn relevant to each hypothesis, whereby potential variance explained by initial score discrepancies is removed.

Effect size of significant results in the form of partial eta squared will be calculated throughout, with interpretation led by Cohen’s (1988) original guidelines.

SPSS for Windows version 14.0 will be used to conduct all statistical analyses.
**Results**

### 3.1 Missing Data

A small proportion of respondents overlooked one item within a standardised questionnaire (for distribution of omissions see Appendix 16).

Despite one missing variable, in order to ensure that respondents’ time and effort were not wasted and overall questionnaire responses could be included within the analysis, missing data was addressed by imputing the parent’s mean response on that questionnaire (Shrive *et al.*, 2006).

### 3.2 Excluded Data

Insufficient numbers were available in the waiting list control group to include in statistical analysis and therefore this group was excluded from further exploration.

### 3.3 Normality Testing

Each individual variable which emerged from the battery of administered questionnaires was tested for fit with the assumptions of normality. This was done using both the Kolmogorov-Smirnov test for normality, and Q-Q plots of distribution (Field, 2000). (See Appendix 17 for normality statistics). Although some skew from normality was demonstrated in a range of individual variables, it has been documented that both ANOVA and ANCOVA tests, whilst parametric analyses and thus bound by the assumption of normally distributed data, are actually able to cope with a degree of data skew (e.g. Field, 2000) and thus were deemed acceptable for application to these data. The limitations that this approach might present are discussed within Section 4.3: Limitations and Future Research Directions.
3.4 Participant Characteristics

The demographic characteristics of the study sample across groups are displayed in Table 2.

*Table 2: Demographic characteristics of study sample*

<table>
<thead>
<tr>
<th></th>
<th>Intervention Group</th>
<th>Waiting List Control Group</th>
<th>Healthy Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=51</td>
<td>n=15</td>
<td>n=34</td>
</tr>
<tr>
<td>Child gender (% male)</td>
<td>55%</td>
<td>73%</td>
<td>32%</td>
</tr>
<tr>
<td>Mean (s.d) child age - months</td>
<td>54.43 (31.55)</td>
<td>92.27 (24.47)</td>
<td>84.29 (28.31)</td>
</tr>
<tr>
<td>Mean (s.d) mother age - years</td>
<td>30.06 (7.33)</td>
<td>32.50 (6.20)</td>
<td>37.59 (4.57)</td>
</tr>
<tr>
<td>Percentage of single parent families</td>
<td>37%</td>
<td>20%</td>
<td>21%</td>
</tr>
<tr>
<td>Mean (s.d) children in household</td>
<td>2.10 (1.09)</td>
<td>2.47 (0.99)</td>
<td>1.97 (0.58)</td>
</tr>
</tbody>
</table>

3.5 Preliminary Analysis

Table 3 outlines the distribution of final numbers collected across groups, measures and time points.

*Table 3: Distribution of numbers across measures, groups and time points*

<table>
<thead>
<tr>
<th>Numbers across measures</th>
<th>TOPSE</th>
<th>PSI</th>
<th>HADS</th>
<th>Parent SDQ</th>
<th>Teacher SDQ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Initial</td>
<td>Follow up</td>
<td>Initial</td>
<td>Follow up</td>
<td>Initial</td>
</tr>
<tr>
<td>Intervention</td>
<td>51</td>
<td>24</td>
<td>48</td>
<td>24</td>
<td>46</td>
</tr>
<tr>
<td>Healthy Control</td>
<td>34</td>
<td>26</td>
<td>34</td>
<td>26</td>
<td>34</td>
</tr>
</tbody>
</table>
3.6 Analysis of Hypotheses

3.6.1 Hypothesis 1: GTTD participants will show significant change as compared with control groups in parent and teacher rating of child behaviour as measured by the Strength and Difficulties Questionnaire (SDQ).

- Data exploration

Mean (and standard deviation) for SDQ Total Difficulties scores are outlined in Table 4. Improvements in child outcomes are indicated by a reduction of SDQ total difficulties score.

*Table 4: Mean SDQ Total Difficulties scores*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Variable</th>
<th>Intervention Group</th>
<th>Healthy Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Pre mean (s.d.)</td>
<td>Post mean (s.d.)</td>
</tr>
<tr>
<td>Parent SDQ</td>
<td>Total difficulties</td>
<td>15.41 (6.513)</td>
<td>10.40 (4.611)</td>
</tr>
<tr>
<td>Teacher SDQ</td>
<td>Total difficulties</td>
<td>12.57 (6.013)</td>
<td>8.07 (6.057)</td>
</tr>
</tbody>
</table>

- Parent SDQ Total Difficulties formal analysis

A univariate 2-way ANOVA for the comparison of mean SDQ Total Difficulties score across time and groups was carried out to explore whether there was an interaction between means across group and time. Both group and time were found to be significantly related to Total Difficulties score: group F(1)=33.97, p=0.000 (partial eta squared=0.241), time F(1)=4.35, p=0.039 (partial eta squared=0.039). The interaction between these two variables was also

~ 78 ~
significant: group*time F(1)= 6.36, p=0.013, with moderate effect size (partial eta squared=0.056) as demonstrated visually in Figure 2.

![Estimated Marginal Means of ParentTotDiff](image)

*Figure 2: Line graph of interaction across time and group for mean parent SDQ Total Difficulties*

As evident in Table 4 and Figure 2, there is a large discrepancy between initial scores for the intervention and control groups. This was confirmed as a significant difference by an independent samples t-test: t(68)=−6.396, p=0.000. Thus, further analysis of this relationship was undertaken with an ANCOVA to explore the impact of the discrepancy in initial between-group SDQ Total Difficulties scores upon the final outcome. When variance explained by initial scores was included in analysis as a covariate, the effect of group was no longer significant.
• Teacher SDQ Total Difficulties formal analysis

As with the Parent SDQ scores, a univariate 2-way ANOVA for the comparison of mean Teacher SDQ Total Difficulties score across time and groups was carried out to investigate the presence of an interaction between means across group and time. Both group and time were found to be significantly related to Teacher SDQ Total Difficulties score: group F(1)=13.62, p=0.000 (partial eta squared=0.124), time F(1)=6.13, p=0.015 (partial eta squared=0.060). However there was no significant effect of the interaction between these two factors.

3.6.2 Hypothesis 2: GTTD participants will show significant change as compared with control groups in parental self-efficacy as measured by the Tool to Measure Parenting Self-Efficacy (TOPSE).

• Data Exploration

Total TOPSE is the overall score obtained across all eight variables of the TOPSE. Mean Total TOPSE scores are outlined in Table 5. An increase in Total TOPSE score indicates an improvement in parental self-efficacy.

Table 5: Mean Total TOPSE scores across group and time

<table>
<thead>
<tr>
<th></th>
<th>Initial Total TOPSE mean</th>
<th>Follow-up Total TOPSE mean</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Healthy control group</strong></td>
<td>411.94(55.12)</td>
<td>400.65(50.43)</td>
</tr>
<tr>
<td><strong>GTTD group</strong></td>
<td>345.92(69.20)</td>
<td>401.17(46.12)</td>
</tr>
</tbody>
</table>
• Total TOPSE formal analysis

An ANOVA was carried out to explore effects of group and time and any potential interaction between these factors. Both group and time were significantly related to Total TOPSE outcome scores: group F(1)=9.626, p=0.002 (partial eta squared=0.068); time F(1)=4.334, p=0.039 (partial eta squared=0.032). In addition, the interaction between group and time was also found to be significant: group*time F(1)=9.930, p=0.002 with a moderate effect size (partial eta squared=0.070). Figure 3 demonstrates the nature of this interaction effect.

![Estimated Marginal Means of TOPSE](image)

*Figure 3: Line graph of the interaction effect of Total TOPSE between group and time*

It is clear from Table 5 and Figure 3 that there is a discrepancy in initial Total TOPSE scores between intervention and control groups. An independent samples t-test confirms that this difference is significant: t(83)=4.661, p=0.000. In order to account for this difference as a potential covariate, an ANCOVA was carried out. Results indicate that the effect of group is still significant, even when initial scores are accounted for as a covariate: F(1)=4.83, p=0.033 with a moderate effect size (partial eta squared=0.093).

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3.6.3 **Hypothesis 3:** GTTD participants will show significant change as compared with control groups in parental stress and mental health (depression and anxiety) as measured by the Parenting Stress Index (PSI) and Hospital Anxiety and Depression Scale (HADS).

- **Data exploration**

Mean scores across groups and time for PSI and HADS variables are outlined in Table 6. It should be noted that improvements across PSI constructs are indicated by an increase in score. Conversely, improvements across HADS constructs are indicated by a decrease in score.

**Table 6: Distribution of PSI and HADS means across variables, group and time**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Construct</th>
<th>Intervention Group</th>
<th>Healthy Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Initial mean (s.d.) (N)</td>
<td>Follow-up mean (s.d.) (N)</td>
</tr>
<tr>
<td><strong>PSI</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parental Distress</td>
<td>37.85 (9.983) (48)</td>
<td>46.54 (10.296) (24)</td>
</tr>
<tr>
<td></td>
<td>Parent-Child Dysfunctional Interaction</td>
<td>45.04 (8.661) (48)</td>
<td>49.75 (9.488) (24)</td>
</tr>
<tr>
<td></td>
<td>Difficult Child</td>
<td>37.63 (8.389) (48)</td>
<td>42.21 (9.236) (24)</td>
</tr>
<tr>
<td><strong>HADS</strong></td>
<td>Depression</td>
<td>7.09 (3.638) (46)</td>
<td>4.08 (2.620) (24)</td>
</tr>
<tr>
<td></td>
<td>Anxiety</td>
<td>10.61 (4.786) (46)</td>
<td>6.79 (4.149) (24)</td>
</tr>
</tbody>
</table>
• **PSI formal analysis**

The PSI was divided into its three distinct constructs, each lending themselves to individual investigation. For the construct *Parental Distress*, time was significantly related to outcome score: $F(1)=4.553$, $p=0.035$ (partial eta squared=0.034). The interaction between time and group was also found to be significant: time*group, $F(1)=8.021$, $p=0.005$ with moderate effect size (partial eta squared=0.059). However, the effect of group was not found to be significant. For the construct *Parent-Child Dysfunctional Interaction*, group was significantly related to outcome score: $F(1)=15.046$, $p=0.000$ (partial eta squared=0.105). Neither time nor the interaction between time and group emerged as significant factors. For the construct *Difficult Child*, the effect of group was found to be significant: $F(1)=16.418$, $p=0.000$ (partial eta squared=0.114). However neither time nor the interaction between factors was found to be significant.

Given the significant interaction effect of data related to *Parental Distress*, and a significant discrepancy in baseline scores demonstrated by an independent samples t-test ($t(80)=3.754$, $p=0.000$), an ANCOVA was performed to include initial scores as a potential covariate. A significant effect of group was demonstrated: $F(1)=13.01$, $p=0.001$ with large effect size (partial eta squared=0.220).

• **HADS formal analysis**

Both constructs of the HADS were analysed separately to elicit key trends in the data and potential interactions between group and time effects. In order to initially explore these potential interactions, 2-way ANOVAs were carried out on both *Anxiety* and *Depression* data.

The 2-way ANOVA for *Anxiety* data demonstrated a significant effect of the interaction between group and time: $F(1)=6.748$, $p=0.011$, with moderate effect
size (partial eta squared=0.051). There was no significant effect of group or time outwith the interaction effect. The ANOVA for Depression data conveyed a significant effect of group: F(1)=4.991, p=0.027 (partial eta squared=0.038) and a significant interaction effect: F(1)=7.303, p=0.008, with moderate effect size (partial eta squared=0.055). However, no significant effect of time was elicited.

Independent samples t-tests indicated a significant difference between initial scores for the two groups for both Anxiety (t(78)=-3.661, p=0.000) and Depression (t(78)=-3.851, p=0.000). Thus ANCOVAs were applied to the data to investigate the significance of effects when these initial scores are included as a covariate.

ANCOVA results for the construct of Anxiety indicated that when the effect of initial score is accounted for, ‘group’ is still a significant moderator of outcome: F(1)=5.613, p=0.022, with large effect size (partial eta squared=0.107). Results of an ANCOVA of Depression data also produced a significant effect of group even when initial scores are accounted for: F(1)=7.442, p=0.009, again with large effect size (partial eta squared=0.137).

### 3.7 Summary of Results

#### Changes in child behaviour

- Although a 2-way analysis of variance demonstrated significant interaction between time and group for changes in parent SDQ Total Difficulties scores, indicating an improvement in follow-up SDQ scores as a result of group intervention, this effect was insignificant when initial group scores were accounted for as a covariate.

- Both group and time were found to impact significantly upon Teacher SDQ Total Difficulties score. However the interaction between group and time was not significant.


**Changes in parental self-efficacy**

- A significant interaction between group and time was found for parental self-efficacy as measured by the TOPSE. The effect size of this interaction was moderate. In addition, an analysis of covariance indicated a significant effect of group when discrepancies in initial total TOPSE scores between groups was accounted for as a covariate. The effect size of this significant result was again, moderate.

**Changes in parental stress and mental health**

- Formal analysis of PSI *parental distress* elicited a significant interaction effect between group and time, with moderate effect size. Further analysis of this construct found group to impact significantly upon outcome scores when initial score discrepancies were accounted for as a covariate. The effect size of this outcome was large.

- Formal analysis of PSI *parent-child dysfunctional interaction* found no significant interaction between group and time, but did find a significant main effect of group upon outcome score.

- Formal analysis of PSI *difficult child* found no significant interaction between group and time, however group was found to have a significant main effect on outcome.

- Analysis of HADS anxiety scores demonstrated a significant interaction effect between group and time, with a moderate effect size. In addition, analysis incorporating initial scores as a potential covariate showed a significant effect of group with large effect size.

- Analysis of HADS depression scores demonstrated a significant interaction between group and time with a moderate effect size, and a significant effect of group when initial scores were included as covariates. The effect size for this outcome was large.

~ 85 ~
Discussion

4.1 Analysis of Results

The aim of this study was to investigate the impact of the parenting group intervention ‘Getting Through the Day’ upon a range of parent and child outcomes, namely child behaviour (rated by both parent and teacher), parental self-efficacy and parental stress and wellbeing. Exploration of this aim has provided sufficient relevant data to address each of the three hypotheses, as detailed in the following section.

4.1.1 Hypothesis 1

*GTDT participants will show significant change as compared with control groups in parent and teacher rating of child behaviour as measured by the Strength and Difficulties Questionnaire (SDQ).*

Investigation of this hypothesis centred upon formal analyses of both parent and teacher SDQ Total Difficulties scores. This construct is the sum of scores across the four domains of difficulties addressed by the SDQ: *Conduct Problems, Hyperactivity, Emotional Problems* and *Peer Problems* and as such gives a good representation of any potential changes across domains related to child behaviours.

However, analysis of data relating to this construct did not allow definite support for the hypothesis. Analysis of variance for parent scores demonstrated a significant interaction effect between group and time, as detailed in Figure 2. Interpretation of this interaction demonstrates that parents participating in the GTTD programme report significant improvement in their child’s behaviour, as measured by the SDQ, as compared to change reported by parents of healthy control children across the same time period. The significant change in intervention group scores is clinically relevant, with mean scores shifting from the ‘abnormal’, clinical range prior to group intervention to the ‘normal’, non-
clinical range at follow-up (see Table 4). However, caution is exercised in interpreting this relationship when the large discrepancy in pre-intervention scores is taken into account as a covariate. Analysis of covariance indicated that rather than a significant impact of intervention upon outcome, initial scores accounted for the majority of the significant variance therein. It is likely that initial scores for the healthy control group were already too low for substantial positive change to take place. Therefore, the respective impact of the intervention as compared to change over time represented by the control group remains unclear. The limitations and implications of this sole control group are discussed shortly.

Analysis of the interaction between intervention and control group outcomes across child behaviour domains as scored by an additional respondent – their teacher – elicited no significant interaction effect between these two variables. Hence, any change demonstrated in SDQ scores for intervention group children across time were not significant when compared with change across time for scores of control group children. Main effects for both group and time were found to be significant for this construct, however, little can be concluded from the knowledge that scores are significantly different between the two groups and two time points when it is known that no interaction exists between the two variables.

The significant interaction found for parent SDQ outcome scores suggests that some improvement in child behaviour is elicited by parental participation in the GTTD group. However, the limitations of discrepancies between intervention and control group scores demonstrated in the analysis of covariance impacts upon any conclusions which can be drawn regarding this effect. It is likely that limited sample size across these variables has impacted significantly upon the usefulness of the data, perhaps resulting in insufficient power to demonstrate significant outcomes, the limitations of which shall be discussed shortly. However, lack of support for this hypothesis does not necessarily mean that GTTD as an intervention does not impact at some point upon the behavioural
outcomes of the children of participations. This evaluation and the intervention itself took place over just eight weeks - a limited space of time for parents to assimilate new ways of thinking about and dealing with their children’s behaviour.

GTDD differs from programmes such as the Incredible Years with its emphasis upon modifying parental variables such as self-efficacy and wellbeing. From an attachment theory perspective, changes in behavioural outcomes will only manifest themselves when that child begins to experience more of a secure base with sensitive, appropriate parenting delivered from their caregiver (Levy & Orlans, 2000). Indeed, the initial case study of Mellow Parenting, a programme whose basis is comparable to that of GTDD, elicited significant change in the quality of techniques brought to parenting across group participation, but no recorded change in child outcomes (Puckering et al., 1996). It may be that for parents attending GTTD, changes in child behaviour manifest themselves some time after group participation has ceased, when the impact of group participation upon parent variables such as self-efficacy and mental health has begun to influence their parenting approach more consistently.

However, GTDD is not a solely attachment-based programme, with elements of behavioural training included across sessions. It is perhaps these aspects which are impacting sufficiently upon child outcome to demonstrate clinically relevant changes in child behaviour scores within the intervention group, as demonstrated by the significant interaction between group and time. This would be in line with previous evidence of those facets of intervention based upon social learning theory that have been shown to elicit most significant outcomes across behavioural measures (Hutchings et al., 2005). However, without further exploration into long term effects in a wider sample size and with a more closely comparable control group, no conclusions can be drawn as to whether participation in GTDD has a significant impact upon child behaviours, as rated on the SDQ by parents or teachers.
4.1.2. Hypothesis 2

GTDD participants will show significant change as compared with control groups in parental self-efficacy as measured by the Tool to Measure Parenting Self-Efficacy (TOPSE).

Hypothesis 2 was supported by a two-way analysis of variance which demonstrated significant interaction between the variables of time and group. Parents who participated in GTDD showed significant improvement in their levels of parental self-efficacy across time as compared with any change for non-participant control parents. Further support for this hypothesis was gleaned when the potential variance explained by significant discrepancies between group initial scores was accounted for within an ANCOVA. The results of this ANCOVA indicated that changes between group means across time were significant even when initial score differences were taken into account.

Parental self-efficacy was defined earlier as the extent to which a parent believes that they will competently perform their parental role (Teti & Gelfand, 1991). The impact of low parental self-efficacy upon parenting behaviours and the complex mediating relationship it shares with maternal depression (Weaver et al., 2008) has been linked directly with child behaviour difficulties (Weaver et al., 2008) and more general negative developmental outcomes (Coleman & Karraker, 2003).

Considering this study’s results in the context of the recognised impact that self-efficacy can exert upon developmental trajectories, it is apparent that those parents who attended ‘Getting Through the Day’ became significantly more confident in the manner in which they parented their children by the end of the intervention period. This confidence potentially encompassed feeling more able to understand and meet their child’s physical and emotional needs (the variables of empathy and emotion), through feeling more able to enjoy their child and help them to reach their potential (play), to feeling good enough in their effectiveness as a parent (self-acceptance). Further exploration of each of
those eight variables which make up the Total TOPSE construct would allow for additional conclusions to be drawn regarding which specific aspects of parental self-efficacy are best addressed by GTTD and are most responsible for the overall change demonstrated across time. However, exploration of this type was outwith the scope of data available in this study.

As discussed with regards to Hypothesis 1, it was not possible in this study to demonstrate significant changes in child behaviour as a consequence of parental GTTD participation when compared with control group change. However, there is the possibility that the significant increase in parental self-efficacy in the intervention group parents as compared with control group parents will impact favourably, perhaps in the longer term, upon child behaviour outcomes. Support for this potential impact can be gathered from existing evidence regarding the strong association between parental self-efficacy and parenting competence (e.g. Jones & Prinz, 2005). Those parents who experience low self-efficacy find it more difficult to sustain positive parenting techniques. As a result, they are more likely to exhibit inconsistent discipline and negative attention, impacting poorly upon their relationship with their child and consequently their child’s behaviours (Ardlt & Eccles, 2001). It may be that GTTD as an intervention which is effecting significant change in parental self-efficacy has the potential to shift this perpetuating negative cycle of parent and child interaction. If parents feel more confident and competent and have been given a ‘toolbox’ of potential behaviour management techniques, as they become more adept in applying these tools, positive outcomes in child behaviour serve to further reinforce the growing sense of efficacy they may feel. Thus commences a positive reinforcement cycle, the beginning of which may be what has been measured in this population in their significant improvement in self-efficacy scores as compared with the non-intervention control. At this stage however, mechanisms of change within this population remain purely speculative and again, further investigation is needed to explore the complex interplay between parental self-efficacy and child behaviour outcome, both in the GTTD population and across a wider spectrum.

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4.1.3 Hypothesis 3

GTDD participants will show significant change as compared with control groups in parental stress and mental health (depression and anxiety) as measured by the Parenting Stress Index (PSI) and Hospital Anxiety and Depression Scale (HADS).

This hypothesis was supported by significant changes within the intervention group across a selection of measures of parental stress and wellbeing as compared with changes in the healthy control group. Analysis of the PSI construct parental distress elicited a significant interaction effect between time and group. This outcome illustrates that parents within the intervention group have demonstrated significant reduction in levels of distress across time as compared with changes for healthy control parents across the same time period. When significant discrepancies between group initial scores were accounted for in an ANCOVA, group was found to have significant effect upon outcomes scores. Thus, although differences exist between baseline levels of distress across the two groups, the significant improvement demonstrated by intervention group parents as compared to control group parents remains significant even when accounting for this covariate. Formal analysis of the PSI construct parent-child dysfunctional interaction elicited a significant main effect of group upon outcome scores, however no significant interaction effect between variables was demonstrated. Hence, although intervention group means differed significantly from control group means, the impact of time upon group means was not significant, nor was the relationship between group and time. Formal analysis of the final PSI variable, difficult child, elicited a significant effect of group upon outcome scores. However, there was no significant effect of the interaction between group and time. Thus, of all variables related to parenting stress as measured by the PSI, parental distress was the only variable to indicate significant change across time for GTDD group participants as compared to control group parents. The implications of this outcome are discussed shortly.
Formal analysis of the mental health variables anxiety and depression, as measured by the HADS, also lend support to this third hypothesis. An ANOVA of HADS anxiety demonstrated a significant effect of interaction between group and time. In addition, an ANCOVA of these data conveyed that the effect of group was significant when differences in initial scores between groups were accounted for. The effect size of this outcome was large. Thus, even when baseline discrepancies are taken into account, levels of anxiety for parents within the intervention group decreased significantly as compared with the change in anxiety levels for control group parents.

An ANOVA of HADS depression data also elicited a significant interaction effect between group and time. Analysis of these data, while accounting for differences between baseline scores, also demonstrated a positive effect of group with a large effect size. As results indicated for anxiety outcome, depression levels have also been shown to improve significantly across time for intervention group participants as compared to change across the same time for control group participants.

Maternal depression and parental distress have been linked with parenting capacity and behavioural outcomes across a range of studies (e.g. Assel et al., 2002; Vando et al., 2008). Impairments in an individual’s ability to effectively deal with the demands of parenting, whether this be due to their mental health capacity and/or the constraints of multiple stressors, impacts profoundly upon the quality of environment and interaction they are able to provide for their child (Assel et al., 2002). Difficult child behaviours can themselves cause or add to these levels of stress, thus perpetuating a negative cycle. Parental wellbeing will also impact upon and be influenced by the parent’s own sense of worth and self-efficacy (Coleman & Karraker, 2003), again highlighting links across the spectrum of domains addressed in the current study.

Analysis of these data indicates that GTTD as an intervention significantly reduces the parenting distress experienced by participants, as compared to change across the same period of time in healthy controls. The impact of this
significant improvement has the potential to be seen across domains for both the parent and child, potentially impacting longer term upon behavioural outcomes as previously discussed in relation to parental self-efficacy. However, our conclusions regarding parental stress in general are limited by the lack of significant outcome across the remaining two PSI variables. *Parental Distress* as a variable differs from *Parent-Child Dysfunctional Interaction* and *Difficult Child* variables in that the focus of the questions pertaining to this construct are not focussed solely upon the child, but include other domains such as relationships with peers and partner. It is possible that GTTD as a programme is impacting upon parental wellbeing more holistically than simply focussing upon interactions with their child. This would link closely with those positive changes recorded in parental mental health. The significant improvement in levels of both anxiety and depression within the intervention group as compared to control group participants is likely to impact significantly upon a parent’s ability to function in general, as well as more specifically, upon their capacity to parent more effectively. This increased capacity due to greater parental wellbeing has the potential to affect positive change across both parent and child outcomes (Assel et al., 2002).

### 4.2 Strengths

The positive results of this study which have been outlined, and indeed those variables across which a significant effect was not reported, are best viewed within the context of the multiple strengths of both the programme ‘Getting Through the Day’ and the study itself.

#### 4.2.1 Programme Strengths

- *Holistic approach encompassing parent and child outcomes*

One of the key benefits of GTTD as a parenting programme, and one which sets it apart from many others, is its focus upon parental outcomes in addition to
child behaviour outcomes, and indeed, change across these parental variables has been the key outcome of this study. In aiming to address parents’ psychosocial needs, the programme targets a known mediator of behavioural difficulties with the intention of sustained change within this domain impacting across all other outcomes of interest, as supported by the existing evidence base (e.g. Woolgar & Scott, 2005). A recent meta-review of 26 studies demonstrated that parenting programmes can effect positive change upon a number of aspects of maternal psychosocial wellbeing (Barlow et al., 2003). Positive change in parental mental health and self-efficacy will impact upon the quality of parenting an individual is able to provide, as well as the environment within which that parenting takes place (Richardson & Joughin, 2002). These changes have the potential to impact upon child outcomes including behaviour across a long time span, perhaps more so than simply equipping parents with new techniques and not placing emphasis upon their ongoing confidence to be able to deliver them effectively (Sanders & Woolley, 2005), as is the process with other programmes described. Of additional strength is that although this programme is aimed to address multiple domains, the comprehensive content of GTTD ensures that it can be delivered by a range of professionals with relatively little training, and still evoke significant positive change in parent and child, as evidenced in this study.

- **Delivery to the populations in need**

Another strength of this programme, in comparison with those others available, is its delivery within a community setting to those populations deemed to be in most need of interventions of this nature. Designed to encompass referrals from social care agencies in addition to healthcare organisations, programme content is delivered within settings familiar to families, often by professionals known within the community. Rather than evoke stigma as might be elicited by inclusion in other, less well-known programmes, GTTD is a recognised facet of community services across many areas in West Lothian and consequently is able
to engage many hard-to-reach, vulnerable families, many of whom know of friends or family who have been on and benefited from previous groups.

- **Financially viable**

In comparison to many of the other programmes previously critiqued, GTTD may be viewed as a significantly more financially viable option for many potential facilitators. Training occurs over one day and as an internal resource for the organisations currently delivering it, at no financial cost. Programme delivery and the accompanying crèche facility take place within local community centres and family centres, negating a need for transport and often incurring no additional cost for premises. As a programme developed for delivery within community settings for hard-to-reach families, the nature of its presentation in the midst of these populations ensures that those that are willing to attend are able to do so with relative ease.

### 4.2.2 Study Strengths

- **True clinical population**

This study attempted to secure a sample representative of treatment in its usual form as opposed to treatment or patient selection confined within tight research boundaries thus lacking ecological validity. Hence, the population used in this study were those parents actually participating in the GTTD programme. Families were not excluded from the study on the basis of child comorbidity or complex family dynamics as occurs in many strict research trials (Scott, 2005), nor were added incentives included as is described across a number of efficacy studies (Lavigne *et al.*, 2008). Consequently, the results which emerged from this study represent the impact of GTTD in its true form, as delivered by typical facilitators, upon a genuine clinical population representative of those families who are regularly referred to and engage in the programme. This affords great
weight to the conclusions which can be drawn regarding the effectiveness of this intervention for the population at which it is aimed.

- **Community-based**

In addition to evaluating the programme as delivered to a representative population, this study was conducted within the community setting that the programme is delivered in. Appeals have been made from within the evidence base for more studies based within real-life settings as opposed to university-centred, controlled research conditions (e.g. Scott, 2005). Results gleaned from these distinct settings have been shown to differ significantly (Scott, 2005), with large effect sizes across meta-analyses of university-based trials of child behaviour interventions (Weisz et al., 1992) contrasting with no significant effects across meta-analyses of clinic-based studies (Weisz et al., 1992). Given that the majority of parenting programmes are designed to be delivered within community settings, studies such as this which take place in situ provide greater insight into the applicability of the intervention within the limitations inherent with a community setting. Within this study these constraints of setting included high variability in the size and comfort of rooms provided and groups being moved to another room within the family centre at the last minute due to local elections taking place. That the results of this study report significant change across a range of variables in spite of these potentially confounding circumstances, allows stronger inferences to be made regarding the effectiveness of this programme within the community, and the ability to generalise these results across other settings and populations.

- **Valid and reliable measures**

The current study struck a sensitive balance in the selection of measures. This was in contrast to the collection of too little information, as demonstrated by Connolly *et al.* (2001) who used just two outcome measures in their evaluation of the Incredible Years programme, and without overwhelming participations as was the potential with the wide battery of measures used by Gardner *et al.*
Standardised measures specific to domains of interest were incorporated with the non-standardised TOPSE to yield insight into the thus far under-explored variable of parenting self-efficacy, also highly specific to the aims of the study and of the intervention itself. As a result, conclusions can be drawn regarding the effectiveness of this programme across a range of relevant outcomes.

- **Inclusion of teacher ratings of child behaviour**

A particular methodological strength of this study is the inclusion of teacher corroboration of child behaviour ratings. A number of parenting outcome studies have been critiqued for their unilateral approach of self-report parent questionnaires as the key behavioural outcome measure (e.g. Patterson *et al.*, 2002). Some have justified this omission by highlighting lack of specific behavioural intervention within the school setting, thus suggesting that one would not expect changes within this domain (e.g. Scott, 2005). However, it may be argued that if significant, sustained change is demonstrated within the home setting as a result of parenting programme participation, one would hope to see this improved behaviour mirrored across child settings.

Teacher completion of SDQ questionnaires within this study allowed insight into child behaviour in a setting apart from those where the parent is involved. Parent ratings of child behaviour are known to be influenced by many factors, including the parent’s own wellbeing (Hall *et al.*, 1991). However, teacher ratings are likely to be more impartial and are given within the context of a spectrum of normative behaviours demonstrated across the child’s peers. It may be because of this that most studies which include teacher measures have been unable to demonstrate change across this variable as a consequence of parenting group participation (Connolly *et al.*, 2001), as indeed was the case in this evaluation.
• **Power/effect sizes**

Although lower engagement of participants than anticipated resulted in reduced power, effect size calculations indicated that for the majority of variables for which a significant effect was shown, power was sufficient to facilitate moderate to large effect sizes. Thus, across some variables, lack of power in itself may not be seen as a limitation given the sizeable effects which were observed. This was not the case for analysis of data relating to child behaviour outcomes however, as will be discussed in the following section.

### 4.3 Limitations and Future Research Directions

Although the aims of this study were achieved in exploring the impact of GTTD across multiple domains, and strengths across both programme and study have been illuminated, limitations in design and implementation became clear as the study progressed. Consideration of these limitations, their implications for the results outlined and how they might inform future research approaches are now discussed.

• **Appropriate control groups**

The inclusion of an appropriate control group or groups is a key factor in the validity of any research study. The omission of appropriate control data has been discussed previously in the critique of the existing evidence base for parenting group interventions. The control sample allows any results to be seen within the context of related but differing populations. This facilitates further understanding of how best to interpret those results and ensure their clinical applicability.

It was evident from analyses that initial scores across measures within this study differed significantly between the intervention and healthy control groups. This indicates that participants within these groups were beginning their study participation at differing levels of clinical severity, and as such may have
differed in their capacity for change across the study time period. Scores for the healthy control sample represent the distribution of symptoms that one would hope to see in a ‘normal’ non-clinical population sample. Hence, they are a good representation of how we might simply expect the passage of time with no specific intervention to impact upon normal children and parents. However, due to the minimal levels of clinical concern within this group at the offset, it may be that there is not the scope for this group to show significant change across the study except in a negative direction. If this is indeed the case, although results regarding significant change within the intervention group are still of high clinical interest, stronger support of their impact may have been provided had it been possible to demonstrate lack of such change in a comparative non-intervention Sure Start population across time.

In addition to discrepancies in scores across assessment measures at the initial time point, discrepancies exist between demographic and socioeconomic distributions across the two samples. As discussed in previous sections, the development of behavioural difficulties is a complex trajectory of a range of individual and environmental factors. It is impossible within this study to separate the impact of known risk factors such as maternal age, single parenthood and the increased parental stress of additional siblings within the home. This would ideally be controlled for in future research, with groups matched across variables. However, given that the risk factors are present in greater proportion within the intervention group within this study, it would appear that the positive impacts of the programme as reported are able to effect change even in those populations overwhelmed by potentially confounding variables.

An additional potential explanation for the significant change across variables in support of all three hypotheses is the effect of group participation. It has been documented that inclusion within a social sphere, regular appointments with peers and an opportunity to share difficult experiences can effect significant change in self-confidence, stress levels and coping abilities within group
participants, irrespective of group content or aims. For example, Verduyn et al. (2003) found no significant difference in maternal depression or child behaviour outcomes between a CBT parent group targeted at these domains, a ‘placebo’ parent support group and a no intervention group. Similar outcomes in maternal depression were reported between the two parent intervention groups, thus corroborating the effect of peer support (Verduyn et al., 2003). Hence, without a matched control group who also experienced a group effect, i.e. the Sure Start control group included in initial study design, it is not possible to conclude resolutely to what extent shifts in scores for GTTD participants across domains such as parental self-efficacy and parenting stress may be due to the increased sense of support and belonging fostered from a group setting.

Recognition of the importance of appropriate control groups was incorporated in this study from the start. As outlined in Section 2, the original protocol included a Sure Start drop-in parent-child group to account for changes across time due to group participation effect, along with a waiting list control group to account for changes across time in a clinical population awaiting intervention. Unfortunately, the parent-child group intended for inclusion did not take place over the study period and thus did not present a viable control group. Despite concerted efforts to engage waiting list control group participants, for example also including referrals on the CAMHS ADHD waiting list for initial assessment to boost the pool of potential families, initial response rates were minimal and follow-up returns from those that did consent were very poor. This is perhaps due to the volume of questionnaires that parents referred to the CAMHS are required to complete as a matter of course in the assessment process, thus impacting upon their willingness to voluntarily complete another battery of materials. It may also be that for these families who were awaiting support with difficult behaviours and familial dynamics, stress levels might be high and motivation to take on anything outside the realms of their immediate necessity was a low priority. However, it is noteworthy that even if waiting list control group data had been available for analysis, indications were that the demographic characteristics of this sample such as percentage of single parent
families and mean child age were not necessarily more appropriately matched to the intervention group than the healthy control group. Subsequently, although inclusion of this group would have shed more light upon some aspects of the conclusions drawn, questions would still pertain as to the complex mediation provided by these deviating characteristics.

- **Long term follow-up**

Although this study has demonstrated significant change in outcome measures across the duration of group participation, no data as to whether these changes will be sustained beyond programme completion are available due to the limitations of study duration. In addition, no information is known as to whether the impact of improvements across parental variables will in time elicit changes in child behaviour. Lack of long term substantiation is a criticism levelled at many of the other programmes reviewed across this study and represents one of the greatest limitations of the existing data. It is perhaps particularly pertinent in this study given the findings of the meta-analysis by Barlow *et al.*, (2003) that initial gains in maternal psychosocial health as a consequence of parenting programme participation are tempered by a paucity of published long-term outcomes. Future work to rectify this limitation would focus on following up those individuals who have participated in GTTD and their children, along with participants in appropriately matched control groups, over a period of at least 12 months and ideally longer to record any changes across outcomes.

- **Engagement and retention**

31% of mothers who attended the initial session of Getting Through the Day were no longer attending when the course ended. This is a similar rate of dropout to the 28% reported in a review of studies exploring parenting group attrition (Forehand *et al.*, 1983) and significantly less than the approximate 50% dropout reported by some studies (e.g. Patterson *et al.*, 2005; Prinz & Miller, 1994). However, perhaps inevitably, limited attendance reduces the potential for
parents to gain the full impact of knowledge the programme imparts (Reyno & McGrath, 2006) ensuring that factors mediating intervention uptake and engagement are a continued focus of research and reviews (e.g. Rooke et al., 2004). Factors shown to impact upon dropout rate include socioeconomic status, maternal stress and psychopathology, and the severity of pre-intervention child symptoms; essentially those factors which also necessitate intervention and mediate outcomes (Kazdin et al., 1993). Addressing those factors which impact upon attrition must be a key aspect of the ongoing development of the GTTD programme model.

The relatively small numbers of participants across groups as a result of attrition meant that the initial calculation of participants required for sufficient power was not met. Despite this limitation, analysis of data pertaining to parental variables elicited significant results across a number of outcome measures, each with moderate to large effect size, thus indicating a strong relationship between variables. However, significant results were not demonstrated for the SDQ Total Difficulties scores and it is of key note that it was for this measure that sample numbers were lowest, due to limitations of the assessment tool, as discussed shortly. This limitation means that we can draw no definite conclusions regarding the impact of GTTD participation upon child behaviour outcomes.

As group dropout also signified study dropout, with no means by which to follow-up those individuals who prematurely terminated their group involvement, this also impacted upon the outcome data that were available to analysis, preventing the performance of an intention-to-treat analysis which requires outcome data for all participants regardless of completion (Hollis et al., 1999). This analysis provides impartiality to outcome results, preventing overoptimistic interpretation of treatment efficacy by also including change across time for those participants who did not complete the intervention (Heritier et al., 2003). With the knowledge that those individuals who are most likely to dropout of treatment are those who might benefit least (Lundahl et al.,
2006) the omission of this analysis suggests caution in the interpretation of the current results. It is recommended that this should be included within the methodology of future studies of this type.

- **Assessment materials**

Questionnaires were carefully selected with regards to: the information they would obtain relevant to the key aims of this study; their use across similar parenting intervention outcome research projects; and the burden that they might place upon the parents and teachers completing them. Aside from the TOPSE, which had particular pertinence for this population and study aims, all questionnaires were standardised with good psychometric properties. However, there are certain limitations which arose in the use of questionnaires which require consideration.

The SDQ is a widely used measure of child behaviour and was chosen in preference above other behavioural questionnaires such as the Child Behaviour Checklist (Achenbach, 1991) – another tool widely used in parenting outcome assessment batteries – for its ease of completion and the valuable potential it poses for teacher corroboration. However, the SDQ has only been standardised for children aged three years and over. Thus, although all parents in this study completed the SDQ in the general battery of assessment at both time points, 38% of completed data (nine out of 24 intervention group respondents) were discarded in the final analysis of this measure because they were completed for children under the age of three and consequently not valid. This means that results discussed with regards to Hypothesis 1 in the analysis of SDQ data are only relevant to children age three and above, and to less than two thirds of the total intervention population, thus presenting a significant limitation in generalisability of findings. There is the potential that significant change occurred in child behaviour outcomes for those children under three years of age in the intervention group as compared to the control group, however the SDQ would not have captured this change and thus it is lost to this evaluation.
Although the administered assessment materials give some insight into the clinical characteristics of the study samples, formal clinical assessment has not been applied to these populations. It appears evident that those families referred for participation in the Getting Through the Day programme are those with significant levels across known risk factors for later behaviour disorders such as low parental self-efficacy and high child conduct problems. However, what is not gathered from the assessment tools used is whether this targeted population has within it existing levels of diagnosable behavioural disorders. Nor is it gleaned whether the intervention, whilst evidently effective, is being as closely targeted to the population of need as it perhaps could or should be. More rigorous inclusion and exclusion criteria for referrals to the programme would allow more definitive conclusions to be drawn as to those population characteristics for which GTTD is best suited for effectively addressing.

- **Mechanisms of change**

The results of this study have supported the impact of a parenting group intervention upon parent outcomes. What has been outwith the scope of this study however, is a further understanding of the mechanisms by which the parenting intervention effected the recorded significant changes, and how these might interrelate with changes in child outcomes. It is likely that different aspects of the programme impact upon different domains. For example, the support of a group of peers experiencing similar difficulties may have most strongly addressed parental self-efficacy, but the specifics of these changes are simply speculative. The preceding discussion of results has considered the impact that each of the outcome domains themselves may have had on each other as opposed to programme characteristics; for example, increased confidence and lower anxiety potentially resulting in more effective parenting approaches. Again, there is minimal evidence regarding the complex interplay of factors occurring. This is a limitation which might be applied to many studies within the range of parenting intervention research, however it is an area which deserves significant attention and resources if we are to truly understand the
mechanisms at play and appropriately tailor this knowledge towards developing effective interventions.

- Additional considerations

The size of this study sample and the demographic characteristics of the West Lothian community within which it was based present some limitations in the ability to generalise these thus far positive findings across the application of GTTD in other settings. All of the intervention group participants were white mothers. There were no fathers who attended the groups and no individuals of diverse ethnic origin. Although it is possible to draw some conclusions regarding the effectiveness of this programme for this specific sample at this time, further research is needed to conclude whether this same programme would be as effective in producing change in differing populations. Particularly taking into account the invaluable role and unique characteristics that a father lends to the parenting forum. This is a criticism aimed at a number of existing programmes but one which should be addressed (Moran et al., 2004).

One of the key strengths of Getting Through the Day as a parenting group intervention lies in its ability to effect change across a wide range of parent and child demographics. This is particularly pertinent when one considers the changing needs of the child as they develop, and in consequence the relative demands placed upon the parent. Evidence suggests that parenting interventions, particularly those aimed at pre-school children, are most effective when tailored specifically for the age range of the targeted population (Nixon, 2002). Although GTTD has already made steps towards the delivery of two versions of the programme – both a pre-school and school age model – this will be another factor to consider in its ongoing development.

In addition, modes of delivery of parenting interventions are progressing alongside technological advances and cultural shifts in how parents and families best access the information and support they require. Consequently, parent training programmes can now be delivered via the internet, TV and with
telephone support (Nixon, 2002). One example of this is the self-administered CD-ROM series ‘Parenting Wisely’ (MacQueen et al., 2007) for which early outcome evidence appears encouraging (Gordon, 2002). Although the social impact of group support cannot be overlooked nor replaced by new modalities in parenting interventions, programmes are most effective when tailored to the needs and skills of the population they aim to effect change within (Lundahl et al., 2006), and so the harnessing of some of these new approaches might further benefit GTTD uptake and engagement across clinical populations.

Finally, as has already been noted, analysis of the data within this study took place with a range of parametric statistics, despite evidence of some skew within the variables of interest. Although this analysis proceeded with the recognition that some variation from the assumption of normality is acceptable within ANOVA and ANCOVA reliability, there is the potential that subtleties of the data have been overlooked by this analysis. This does not significantly impact upon those conclusions which have thus far been drawn, however it is of note for future investigation.

4.4 Clinical Relevance

This study began by outlining the considerable cost of childhood behavioural difficulties across domains spanning an individual’s lifetime. The repercussions of these difficulties cannot be overemphasised, and have spurred the ongoing quest to develop effective interventions for the treatment and prevention of these disabling disorders.

Despite the limitations of this current study, and with recognition of the need for ever expanding knowledge of what causes such difficulties and how best to address them, the significant change demonstrated within families who participated in Getting Through the Day programmes across West Lothian
represents significant clinical and research advancement. In contrast to other existing parenting group programmes which aim to address behavioural difficulties, this study has demonstrated that GTTD is able to achieve tangible effect, facilitating a shift in scores across parent variables from previously clinically significant ranges of impairment to normal functioning across a period of just 8 weeks. Although this study was not able to demonstrate significant improvement across child behaviour outcomes across this time in comparison to control group participants (given significant differences between initial group scores), data suggests that changes are being elicited within the intervention group. Also allowing for potential change across time as a consequence of enhanced parental functioning across domains, future investigation with a larger sample, more sensitive tools and longer term follow-up may harness the intricacies of child behaviour outcomes. In the meantime, what can be drawn from this study is that GTTD is a key resource for those parents who attend, in facilitating changes across parental wellbeing and parenting self-efficacy.

The low demands that this programme makes upon resources for training and delivery; its applicability and effectiveness across a wide range of population characteristics; its target towards those families who most need intervention, at a time in the child’s life when that intervention is likely to affect most lasting change; and its suitability for delivery by a range of professionals within community settings, make Getting Through the Day a forerunner in current parenting group intervention programmes.

This evaluation took place within the community setting that the programme is delivered in, with the populations at which it is primarily aimed. Thus, the applicability of these significant results to the West Lothian community is undeniable. This study provides justification for the channelling of valuable community resources towards this as an intervention of choice for families struggling to cope with child behaviour difficulties, or demonstrating risk of this trajectory across a range of factors. It is a study, and ultimately a programme, which has the capacity to impact positively in the lives of many more families.
4.5 Conclusions

This study has demonstrated across a longitudinal design that the parenting group intervention ‘Getting Through the Day’ exerts significant positive change upon parental sense of self-efficacy and parental wellbeing, as compared to changes across the same period of time in a non-clinical control group. In addition, indications suggest significant improvement in parental ratings of child behaviour for those parents attending GTTD as compared to healthy controls, although further exploration is essential to illuminate the intricacies of this relationship in light of discrepancies between group baseline scores.

A child’s experience of being parented will be one of the most significant factors in determining that individual’s developmental trajectory across their lifespan. This study has highlighted the benefits of early parenting interventions on parental outcomes and, it is speculated and hoped, in turn those of the child. The impact of these benefits will offset the potential prospective costs should that child not receive the input they need and go on towards a diagnosis of conduct disorder and the widespread consequences that might entail.

There is still some distance to go before one can draw definitive conclusions regarding the complex relationship of factors mediating child behaviour difficulties, or indeed sufficiently tailoring appropriate intervention to evoke maximum impact upon the targeted population. However, it is hoped that ‘Getting Through the Day,’ as one spoke in the ever evolving wheel of potential intervention and change, drives us a step closer towards reaching the goal of effecting significant, long-lasting change in those children and families who need it most.
References


Appendix 1: ‘Getting Through the Day’ programme content

Week 1  Introduction
         Group rules
         Expectations/hopes for the course
         Experiences of being a parent – ‘you are not alone’

Week 2  Communication
         Reflective listening
         Attending to your child’s play

Week 3  Encouragement
         Parental self-esteem and confidence
         Helping your child to learn

Week 4  Co-operation
         Co-operating with your child and helping them to co-operate with you

Week 5  Conflict Strategies
         Self-awareness
         Dealing with anger
         Assertion

Week 6  Behaviour management I
         Why children behave the way they do
         Aspects of daily parenting: getting ready in the morning, going shopping

Week 7  Behaviour management II
         Problem solving
         Further aspects of daily parenting: mealtimes and bedtime

Week 8  What have we learned? And what next?
         Reflections on course experience
         Hopes for the future
         Celebration

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Appendix 2: LREC study approval
Appendix 3: R&D study approval
Appendix 4: LREC additional data collection approval
Appendix 5: Director of Education West Lothian study approval

Date: Mon, 16 Mar 2009 14:07:09

From: "Ford, Gordon"

To: KA Bland

Subject: RE: Research in West Lothian schools

Hi Kirsten

I am happy to support your research request. Please understand however that our schools receive many such requests in the course of the session and it is the Head Teacher who will decide whether or not to participate.

Good luck

Gordon

Gordon Ford

Director of Education West Lothian
Appendix 6: Headteacher email requesting study participation

Date: Fri, 27 Mar 2009 12:16:06
From: KA Bland
To: ***************
Subject: Parenting Research Project

Dear Head teacher,

I am a final year Trainee Clinical Psychologist, carrying out my specialist placement with Ion Wyness at St John’s Psychology Department. I am currently coordinating an evaluation of the parenting group programme ‘Getting Through the Day’ which runs extensively across West Lothian. In addition to the intervention group and a CAMHS waiting list control group, we are keen to include a control group of ‘healthy’ families who are not attending the parenting group at this time. It was for this purpose that I received permission from Gordon Ford to contact a selection of West Lothian schools with the aim to collect data from some of the parents of your pupils.

If you feel able to allow your school to participate in this project, parents would receive an information sheet regarding the aims of the study and exactly what their participation would involve. Should they agree to participate they will be asked to return a signed consent form to me, along with completed questionnaires in a pre-paid envelope. They will then be asked to complete the same set of questionnaires 10 weeks later, in order that we might monitor any changes across the time period. All participating parents, and of course the school, will be informed of the results of the study when they are collated.

Parental participation in the project is entirely voluntary and all data is completely anonymous. Some of the questions are inevitably quite personal, but parents who have completed them thus far have reported that they found them interesting and thought provoking and that the anonymity and direct postage to me has allowed them to answer honestly.

I would be very grateful if you felt able to consent to your school’s participation in this project. I would be happy to come and meet with you if you would like to discuss participation in more detail, or please contact me on this email address or at the Psychology Department on 01506 523615.

I look forward to hearing from you.

With thanks and best wishes, Kirsten
Appendix 7: Intervention group information sheet and consent form

Study Information Sheet

• Why are we doing a research study?

You are being invited to take part in this study because we hope to find out more about what being a parent feels like for you. We would like to know more about your child’s behaviour, what you see as their strengths and what might be most difficult for you about being a parent. Being a parent can be a difficult job at times and it is important that you feel that you have some support with this job. The Getting Through the Day course is one type of this support and we hope this study will help us to know more about whether this course is helpful for you.

Three different groups of families are being invited to take part in this study. These groups are:

i) You and other families attending ‘Getting Through the Day’.

ii) Families who have been referred to the Child and Adolescent Mental Health Service for help with managing their child’s behaviour.

iii) Families whose children attend schools and nurseries in West Lothian.

By comparing the experiences of families within these three groups across a period of eight weeks, it is hoped that we can find out more about what is helpful for parents and their children and inform future support as it develops.

• What does taking part in the study involve?

Please carefully read this information sheet and ask any questions you would like to. If you feel you understand what the study is about and are happy to take part, you will be asked to sign a consent form. You will then be asked to complete a selection of short questionnaires asking about you as a parent and about your child/children. This should take no more than 40 minutes. You will complete the same questionnaires in the first session of the group and again in the last.
As well as finding out from you how things are going, and to get a wider picture of your child’s behaviour, we are also keen to hear from their regular teacher. If you are also happy for this to happen, please give details of your child’s school and teacher on the consent form and we will contact them directly to ask them to complete a short questionnaire at the same time points as you. The teacher will be sent a copy of your consent form so that they know you are happy for them to take part. The information that your child’s teacher provides will be confidential and cannot be accessed by yourself. However, a copy of the questionnaire the teacher will complete is attached to this information sheet so that you can see the types of questions they will be asked to answer.

• **Do I have to take part?**

No. If you don’t feel that you would like to participate in this study, you do not have to. If you wish to withdraw from the study at any stage, you can do so without having to give a reason.

• **Will not taking part affect my experience of the group?**

Choosing not to take part in the study will not impact on your experience of the group or any other Sure Start activities in any way.

• **Will my information remain confidential?**

Just as is the case with everything you discuss in the group remaining confidential unless it involves harm to yourself or others, your answers to the questionnaires will remain private. All information that is collected will be kept in a way that is completely anonymous so that when it comes to writing up the study, no one will be able to identify you or your answers in any way.

• **Will I hear about the results?**

Yes! You will be an important part of the project and so deserve to hear what an impact your participation has had. Everyone who takes part will receive a summary of the project results by post when the project is finished in summer 2009.

• **What do I do if I have more questions?**

Please speak to any of the group leaders with any questions you might have or if you’d like any more information, or you can contact Kirsten Bland who is running the study, directly on 01506 523615.

*Thank you for taking the time to read this!*
Research Participant Consent Form

(please circle)

- I have read and understand the ‘Study Information Sheet’. Yes  No
- I have had an opportunity to ask any questions about my participation. Yes  No
- I understand what involvement in this project will mean for me. Yes  No
- I understand that I can withdraw from this project at any time and No
it will not affect our participation in this group or any other Sure Start activities.
- I consent to take part in this project. Yes  No
- I consent for my child’s teacher to complete a brief questionnaire at two time points as detailed in the participant information sheet. Yes  No

I understand that any information my child’s teacher provides is confidential and I will be unable to access it.

Teacher’s Name ..............................................................
School.............................................................................

Signed ................................................................. Date .................................

Name (please print) ........................................................................................................

Signed (Chief Investigator)................................. Date.................................
Appendix 8: Waiting list control group information sheet and consent form

Study Information Sheet

- Why are we doing a research study?

You are being invited to take part in this study because we hope to find out more about what being a parent feels like for you. We would like to know more about your child’s behaviour, what you see as their strengths and what might be most difficult for you about being a parent. Being a parent can be a difficult job at times and it is important that you feel that you have some support with this job. We hope this study will help us to develop support which is appropriate for the parents who would like it.

Three different groups of families are being invited to take part in this study. These groups are:

i) You and other families who have been referred to the Child and Adolescent Mental Health Service for help with managing their child’s behaviour.

ii) Families attending a Sure Start parenting course called ‘Getting Through the Day’.

iii) Families with children attending schools and nurseries in West Lothian.

By comparing the experiences of families within these three groups across a period of eight weeks, it is hoped that we can find out more about what is helpful for parents and their children and inform future support as it develops.

- What does taking part in the study involve?

Please carefully read this information sheet and ask any questions you would like to. If you feel you understand what the study is about and are happy to take part, you are asked to sign the enclosed consent form. You are then asked to complete a selection of short questionnaires which are enclosed, asking about you as a parent and about your child/children. This should take no more than 40 minutes. Please then return all questionnaires and your signed consent form in the envelope provided. Eight weeks from now, you will be sent a second set of questionnaires and asked again to complete them and return them in a pre-paid envelope provided.

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As well as finding out from you how things are going, and to get a wider picture of your child’s behaviour, we are also keen to hear from their regular teacher. If you are also happy for this to happen, please give details of your child’s school and teacher on the consent form and we will contact them directly to ask them to complete a short questionnaire at the same time points as you.

The teacher will be sent a copy of your consent form so that they know you are happy for them to take part. The information that your child’s teacher provides will be confidential and cannot be accessed by yourself. However, a copy of the questionnaire the teacher will complete is attached to this information sheet so that you can see the questions they will be asked to answer.

• Do I have to take part?

No. If you don’t feel that you would like to participate in this study, you do not have to. If you wish to withdraw from the study at any stage, you can do so without having to give a reason.

• Will not taking part affect my experience of the Child and Adolescent Mental Health Service?

Choosing not to take part in the study or withdrawing at any stage will not impact on your child’s referral, waiting list time or general experience of this service in any way.

• Will my information remain confidential?

All information that is collected will be kept in a way that is completely anonymous so that when it comes to writing up the study, no one will be able to identify you or your answers in any way.

• Will I hear about the results?

Yes! You will be an important part of the project and so deserve to hear what an impact your participation has had. Everyone who takes part will receive a summary of the project results by post when the project is finished in summer 2009.

• What do I do if I have more questions?

Kirsten Bland, Trainee Clinical Psychologist, who is running the study, would be happy to answer any queries you might have if you contact her directly on 01506 523615. Alternatively, if you would prefer to speak to someone outside the study, please call the Psychology secretary on the above number and she can transfer you to a psychologist on the CAMHS team.

Thank you for taking the time to read this!

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Research Participant Consent Form

(please circle)

• I have read and understand the ‘Study Information Sheet’. Yes  No
• I have had an opportunity to ask any questions about my participation. Yes  No
• I understand what involvement in this project will involve for me. Yes  No
• I understand that I can withdraw from this project at any time and it will not affect the referral, treatment or any other aspect of our involvement with the Child and Adolescent Mental Health Service in any way. Yes  No
• I consent to take part in this project. Yes  No
• I consent for my child’s teacher to complete a brief questionnaire at two time points as detailed in the information sheet. I understand that any information my child’s teacher provides is confidential and I will be unable to access it. Yes  No

Teacher’s Name .......................... School ..........................................................

Signed .................................................................................................................. Date ..................................................

Name (please print) ..................................................................................................

Signed (Chief Investigator) ................................................................. Date .................................
Appendix 9: Healthy control group information sheet and consent form

Study Information Sheet

• Why are we doing a research study?

You are being invited to take part in this study because we hope to find out more about what being a parent feels like for you. We would like to know more about your child’s behaviour, what you see as their strengths and what might be most difficult for you about being a parent. Being a parent can be a difficult job at times and it is important that you feel that you have some support with this job. We hope this study will help us to develop support that is appropriate for the parents who would like it.

Three different groups of families are being invited to take part in this study. These groups are:

i) You and other families whose children attend nursery or primary schools in West Lothian.

ii) Families who have been referred to the Child and Adolescent Mental Health Service.

iii) Families attending a Sure Start parenting course called ‘Getting Through the Day’.

By comparing the experiences of families within these three groups across a period of eight weeks, it is hoped that we can find out more about what is helpful for parents and their children and inform future support as it develops.

• What does taking part in the study involve?

Please carefully read this information sheet and ask any questions you would like to. If you feel you understand what the study is about and are happy to take part, you are asked to sign the enclosed consent form. You are then asked to complete a selection of short questionnaires which are enclosed, asking about you as a parent and about your child/children. This should take no more than 40 minutes. Please then return all questionnaires and your signed consent form in the envelope provided. Eight weeks from now, you will be sent a second set of questionnaires and asked again to complete them and return them in a pre-paid envelope provided.
As well as finding out from you how things are going, and to get a wider picture of your child’s behaviour, we are also keen to hear from their regular teacher. If you are also happy for this to happen, please give details of your child’s teacher on the consent form and we will contact them directly to ask them to complete a short questionnaire at the same time points as you.

The teacher will be sent a copy of your consent form so that they know you are happy for them to take part. The information that your child’s teacher provides will be confidential and cannot be accessed by yourself. However, a copy of the questionnaire the teacher will complete is attached to this information sheet so that you can see the questions they will be asked to answer.

- **Do I have to take part?**

No. If you don’t feel that you would like to participate in this study, you do not have to. If you wish to withdraw from the study at any stage, you can do so without having to give a reason.

- **Will my information remain confidential?**

Questionnaires are sent directly to the project coordinator and so no one at your child’s school will have access to your responses.

All information that is collected will be kept in a way that is completely anonymous so that when it comes to writing up the study, no one will be able to identify you or your answers in any way.

- **Will I hear about the results?**

Yes! You will be an important part of the project and so deserve to hear what an impact your participation has had. Everyone who takes part will receive a summary of the project results by post when the project is finished in summer 2009.

- **What do I do if I have more questions?**

Kirsten Bland, Trainee Clinical Psychologist, who is running the study, would be happy to answer any queries you might have if you contact her directly on 01506 523615.

*Thank you for taking the time to read this!*
Research Participant Consent Form

(please circle)

- I have read and understand the ‘Study Information Sheet’. Yes No
- I have had an opportunity to call Kirsten Bland, chief investigator, Yes No
to ask any questions I have about my participation.
- I understand what involvement in this project will involve for me. Yes No
- I understand that I can withdraw from this project at any time. Yes No
- I consent to take part in this project. Yes No
- I consent for my child’s teacher to complete a brief questionnaire Yes No
  at two time points as detailed in the information sheet. I understand
  that any information my child’s teacher provides is confidential and
  I will be unable to access it.

Teacher’s Name .................................................................
School.................................................................................

Signed .................................................................................. Date ...........................................

Name (please print) ..................................................................................................................

Signed (Chief Investigator).................................................. Date..............................................
Appendix 10: Headteacher letter

Dear Head teacher,

We are currently carrying out a research study within West Lothian investigating parenting supports and the impact they might have upon child behaviour and family wellbeing. A selection of families across West Lothian is being invited to take part in this study, some of whom have one or more children attending your school.

The project involves parental ratings of child behaviour across two time points, eight weeks apart. In order to get a wider picture of any behavioural changes across this period, we are also keen to assess teacher perceptions by completion of a brief questionnaire at the same two time points.

If parents give informed consent for their child's teacher to be involved in the project we will contact the teacher directly, enclosing a copy of the questionnaire attached overleaf. A copy of the signed parental consent and a pre-paid envelope for return of the questionnaire will also be enclosed. Parents will be aware that any information teachers may provide will remain confidential and will be inaccessible to them, in order to allow teachers to complete the questionnaires as accurately as possible.

I would be grateful for any support you feel able to give teachers in completing and returning questionnaires as promptly as possible, and as an essential component of this valuable research you will be kept informed of study outcomes when it is completed in summer 2009.

Please do not hesitate to contact me on 01506 523615 or Kristen.bland@nhslothian.scot.nhs.uk should you have any queries or require any further information regarding this project. Many thanks for your time and cooperation.

Yours sincerely

Kirsten Bland

Trainee Clinical Psychologist, NHS Lothian/ University of Edinburgh
Appendix 11: Teacher letter

Dear Teacher,

We are currently carrying out a research study within West Lothian investigating parenting supports and the impact they might have upon child behaviour and family wellbeing. As well as collecting parent ratings of child behaviour, we are keen to gather a full picture by also gathering teacher’s perceptions of child behaviour and how these might shift across an eight week period.

The parent(s) of ................................................. (child’s name) have agreed to participate with this project and have given their consent for information to be collected from you as ........................................ (child’s name) teacher. Please find enclosed a copy of this consent, signed with parental knowledge that any information you may give is confidential to this study and will not be accessible by them.

I would be grateful if you could complete the enclosed brief questionnaire and return it to me in the pre-paid envelope provided at your earliest convenience. You will also be sent a second questionnaire in eight weeks’ time which I would also be very grateful if you could complete and return in the same manner.

Please do not hesitate to contact me should you have any queries or require any further information regarding this project. I can be contacted on 01506 523615 or Kirsten.bland@nhslothian.scot.nhs.uk Many thanks for your time and cooperation.

Yours sincerely

Kirsten Bland

Trainee Clinical Psychologist, NHS Lothian/ University of Edinburgh

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Appendix 12: SDQ parent and teacher questionnaires
Appendix 13: PSI-Short Form parent questionnaire
Appendix 14: TOPSE parent questionnaire
Appendix 15: HADS parent questionnaire
Appendix 16: Distribution of questionnaire omissions

- 8% of parents omitted one question out of 60 on the TOPSE
- 20% of parents omitted one question out of 36 on the PSI
- 5% of parents omitted one question out of 25 on the SDQ
- 4% of teachers omitted one question out of 25 on the SDQ
- 4% of parents omitted one question out of 14 on the HADS
Appendix 17: Normality statistics

The tables below outline the normality statistics across measures. Parametric analyses could only be performed if variables were normally distributed across both groups and time points, as highlighted.

- **Kolmogorov-Smirnov normality statistics across SDQ Total Difficulties**

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- **Kolmogorov-Smirnov normality statistics for Total TOPSE**

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- **Kolmogorov-Smirnov normality statistics across Teacher SDQ variables**

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