

EDUCATIONAL AND CHILD PSYCHOLOGY
PROFESSIONAL PRACTICE REPORTS

By

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CHAPTER 1

OVERVIEW AND INTEGRATING CONTEXTUAL INFORMATION

This overview outlines the local context in which the Professional Practice Reports (PPRs) were completed. As a Trainee Educational Psychologist (TEP), I provided a service to schools in Dudley Local Authority, following the Educational Psychology Service (EPS) model of service delivery. The following section of this overview outlines the method of service delivery and the implications for me while working as a TEP. In the third section there is an outline of the professional practice reports, and finally, concluding comments regarding my own professional development as a TEP.

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1.1 Introduction

The government agenda set out in Every Child Matters (DfES, 2003) restructured Education and Social Care departments in Local Authorities to form Children's Services. Multi-agency working was outlined as a priority and schools were re-positioned as part of the community. Professionals are expected to operate as a team around the family and child to meet the five key objectives (DfEE, REF). In Dudley, EPs work as part of multi-agency teams on certain projects or cases but are not located in distinctive teams with other professionals.

The pieces of work included in the PPRs reflect my experiences as a TEP in Dudley EPS; I have completed a wide variety of work from an individual case level to a more systemic level. As a year 2 TEP, I worked on particular cases or group interventions in schools, under the supervision of the Educational Psychologist (EP) named for that school. During my third year, I was the named EP for four primary schools, one secondary school and one specialist provision for children with severe learning difficulties. I negotiated and planned the work with schools through consultation with the SENCo's. The professional practice reports contained in this volume are based on work that I completed as a TEP.

1.2 Service delivery

Boyle and MacKay (2007) suggest that the “reconstruction” (pg22) of the Educational Psychology profession has been recognised by official government documents, such as the working group, set up to advise ministers on the future role and training of EPs. The document recommends moving to a consultative problem solving approach rather than a referral system, along with increased preventative work and action research.

The need for EPs to redefine their professional role has resulted in a focus on a systemic model of practice (Boyle and MacKay, 2007). The “old role” of the EP was essentially based on casework and psychometric assessment, while the “new role” (pg20) includes affecting change at a more organisational level in schools,

targeting staff development and altering people's values or beliefs (Boyle and MacKay, 2007).

In reality however, the practice of EPs varies depending on how each individual Local Authority operates. Interestingly in 1998, MacKay and Vassie, found that EPs perception regarding their roles had changed. The EPs in this study (1998) predicted that EPs in 1982 spent twice as much time completing casework. However, the time sampling in the study revealed that the total amount of time spent on casework in 1998 by EPs, was the same (82%) as colleagues in 1982. This indicates that although EP views about their role had changed, they were incongruent with the service they delivered or perhaps the service expected by receivers.

Dudley EPS operates a time allocation system, whereby schools are allocated a minimum number of hours (15 hours) per year. Additional hours are given to schools at the discretion of the named EP. Imich (1999) concluded that some of the benefits from having a time allocation system were that receivers of the service (schools) considered it equitable. It also protects EPs from excessive demands from schools. One of the disadvantages noted was the loss of control and professional autonomy because of pre-determined time (Imich, 1999). However, in Dudley, additional time for schools is at the EP's discretion and provides individual EP's with control over developing certain projects or becoming involved with wider Local Authority initiatives. As a TEP I benefited from this flexible way of working

because I was able to complete a wide variety of work to develop my professional skills.

Service delivery to schools in Dudley is agreed through an annual planning meeting with the EP, Special Educational Needs Co-ordinator (SENCo) and sometimes Head Teacher. This is to encourage schools to plan and prioritise work for each term. Through this consultation some children are re-directed to more appropriate agencies, while others are considered for further involvement from the EP, through a subsequent referral system.

Munro (2000) suggests that the term “referral” presents the idea of handing the problem on, rather than schools and parents retaining the problem. Some EPSs, such as Buckinghamshire, only accept referrals through termly planning meetings (Munro, 2000). In Dudley SENCo’s make referrals to EPs throughout the year, this can result in unexpected or sometimes inappropriate referrals. Perhaps a termly planning meeting would be more productive and prevent this occurring.

Consultation is not a formal method of delivery by Dudley EPS but many EPs adopt this approach, particularly in the initial planning meeting. Consultation aims to bring about change to individuals, groups and at a more systemic level (Wagner, 2000). Recent research by Boyle and MacKay (2007) indicate that schools valued the systemic model of service delivery and the involvement of EPs at a strategic school level.

SENCo's in Dudley usually prioritise individual children and retain expectations that the EP will work individually with pupils. At the planning meeting SENCO's are prompted to consider more systemic work such as staff training and wider school development. This supports previous research findings, that schools continued to value the direct assessment and intervention work with individual children cited by Boyle and Mackay (2007). Cameron et al, (2008) report that the change in Educational Psychology training to doctoral level has not succeeded in changing the schools emphasis on individual case work. Therefore in reality, the systemic approach currently seems to co-exist with a more traditional child focused model (Norwich, 2005).

1.3 Overview of the professional practice reports (PPR's)

1.3.1 Professional practice report 1

In Dudley the funding for children with Special Educational Needs (SEN) has only been partially delegated to schools. EPs have a statutory role in providing the psychological assessment to contribute to the multi-professional individual assessment. The subsequent Statement of Special Educational Needs then provides an individual record of need and allows access to Local Authority resources to support that child.

The first professional practice report focuses on a secondary aged pupil who required a statutory re-assessment. In the review completed by Farrell et al (2006) respondents (including parents, EPs, Teachers, Head Teachers) highlighted that an important role for EPs was working with pupils who have complex individual needs. Through my assessment it was apparent that this young person's educational, behavioural and emotional needs had become more complex, particularly since her initial Statutory Assessment. The report considers this pupils needs using an ecosystemic framework and outlines the role of the EP in mediating between and within the different systems that the young person operates.

1.3.2 Professional practice report 2

To work more effectively as an EP, group interventions are sometimes more appropriate than working with individual children. During a planning meeting with a secondary school SENCo, various pupils in a particular year group, who were having difficulties managing their anger were discussed. The second professional practice report considers this group intervention. Rather than leading the group sessions as a TEP, I supported the SENCo to plan and lead the sessions. Wagner (2000) suggests that EPs are most effective when they work collaboratively with teachers. Although this is an effective use of time for an EP, it highlights the tension between retaining skills as a profession and supporting others to use psychology within the field.

1.3.3 Professional practice report 3

Throughout my time working as a TEP, it has been important to consider the perspectives of parents and teachers, especially in understanding and managing children's behaviour. It is important to apply psychological theory and consider why some interventions may be more successful than others. The third professional practice report considers how attributions that adults make about children's behaviour could effect their subsequent interactions. Implications for interventions with teachers and parents are also highlighted.

1.3.4 Professional practice report 4

EPs are increasingly required to make a distinctive contribution and within the Farrell et al (1996) report it was suggested that EPs may be able to provide better access to psychological therapies, such as Cognitive Behavioural Therapy (CBT). However, without flexibility in a time allocation model, the long-term involvement that can be required for CBT to be effective may make it a less practical contribution.

The fourth professional practice report in this volume highlights the potential of using CBT approaches as a long-term intervention at a primary school, to support a pupil in managing his anger. The theoretical underpinnings to CBT and how this applies to anger are discussed, along with research using CBT with children who

have difficulties managing their anger. The issues arising from this literature will be considered alongside the case study. Also considered in this report, are the components of a CBT programme that make it effective, and the difficulties of using CBT in an educational setting.

1.3.5 Professional practice report 5

The EP role is gradually expanding and there is scope for EPs to become involved with projects and interventions that have a community focus, rather than the more traditional focus of schools. Due to their training and knowledge of psychology, EPs are in a strong position to make a valuable contribution to multi-agency meetings (Davis et al, 2008). Farrell et al (2006) reported that other colleagues in multi-disciplinary teams valued the psychological knowledge and skills of the EP, along with their ability to bring a wider systemic perspective. EPs are becoming increasingly involved with other community bases such as Children's Centres. Farrell et al (2006) found that 57% of EPs were completing work at a Children's Centre and this was an important part of their contribution to early intervention.

In Dudley there has been a greater EP involvement in multi-agency work at Children's Centres. The fifth professional practice report outlines an intervention for mothers and children, who had been exposed to domestic violence. In this professional practice report, a Child and Adolescent Mental Health (CAMHs) worker seconded to a local Children's Centre, identified that a high number of

adults and children that she worked with from the local area, had been exposed to domestic violence. As a TEP I supported the planning of this intervention as part of a multi-agency team.

1.4 Professional development

My position as a TEP has provided me with varied opportunities to extend my professional experiences and develop my skills. I have been self-reflective in objectively identifying my strengths and areas for development. As a TEP I have also developed rapport with colleagues, other professionals, school staff and families to work collaboratively in supporting pupils. Through individual and group supervision I have increased my professional knowledge and reflected upon my own practice. This has facilitated my ability to problem solve in a creative and critical way when considering cases and projects. As a Trainee, and throughout my EP career, I shall continue developing my skills and knowledge to become a dynamic practitioner improving the lives of children, young people and their families.

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CHAPTER 2

CONSIDERATION OF A PERSON WITH PRADER-WILLI SYNDROME, A GENETIC DISABILITY, FROM A SYSTEMIC PERSPECTIVE. IMPLICATIONS FOR EDUCATION, INCLUSION AND EDUCATIONAL PSYCHOLOGY

2.1 ABSTRACT

Prader-Willi Syndrome is a complex, genetic disorder with substantial research that defines the individual's phenotype. With the focus of research being the individual, there has been limited consideration about how the environment affects individuals with Prader-Willi Syndrome. In the outlined case, it was important to consider the factors within the different systems and how these interacted. The concept of educational and social inclusion is considered at the different systemic levels and how this can affect children with Prader-Willi Syndrome. The issue of whether identified difficulties from a phenotype should be addressed in education is discussed, as is the potential role of the Educational Psychologist within and across these interacting systems.

2.2 INTRODUCTION

Systems theory considers the context within which an individual's behaviour occurs. It takes into consideration the different interactions that occur between the systems and the individual (Dowling and Osborne, 1994). This provides an alternative theoretical framework to the traditional medical or scientific model that supports a linear model of cause and effect with the aim of isolating variables to test causality. Systems theory considers causality as a circular concept (Dowling and Osborne, 1994). Therefore, epistemology is altered from considering the question of "why", a positivist linear effect question to "how", a non-positivist view (Robson, 2006).

Interestingly, Wertsch (2005) makes a distinction between Russian Psychologists and those from Western Societies. He suggested that the latter focussed primarily on the individual and then considered the impact of the social aspects with these as separate entities, whereas Russian Psychologists, such as Bronfenbrenner (1979), focussed on the social environment and interactions between and within the systems of the individual and their wider environment.

The ecological systems model, initially proposed by Bronfenbrenner (1979) considers the contextual factors that can affect human development, and proposes that child development occurs within a series of systems, often represented visually as concentric circles. Each of these systems resides within a larger setting. The individual is at the centre of the systems and includes factors that are personal

characteristics or genetic predispositions (Bronfenbrenner, 1979). The next concentric circle is defined as comprising microsystems in which the individual directly participates; this often includes multiple environments such as the classroom and home. The mesosystem describes the link between the microsystems such as the relationship between teachers and parents. The next two systems, the exosystem and macrosystem exert an influence on the microsystems but these are systems that the individual is unlikely to directly participate within. The exosystem may include educational policy decisions such as the drive for inclusion while the macrosystem considers the influence of philosophical or cultural influences sometimes underpinning the exosystem. The different levels interact and have the potential to influence and be influenced by one another (Bronfenbrenner, 1979).

More recently Bronfenbrenner and Ceci (1994) expanded the ecological systems model defining the “bioecological” model. They conceptualised how the genotype is translated into the phenotype (expressed characteristics or behaviours). The bioecological model expands the previous model identifying mechanisms defined as “proximal processes” through which the

“genetic potential for effective psychological functioning is actualised” pg 568.

They define “effective” as including achievements such as directing and controlling one’s behaviour or managing stress. Bronfenbrenner and Ceci (1994) argue that

proximal processes (within the environment) can vary in the extent to which they facilitate the expression of an individual's genetically predisposed characteristics.

The majority of research with children and young people who have a diagnosis of Prader Willi Syndrome (PWS) has focussed on the individual. Research has aimed to identify the “phenotype” associated with the diagnosis and the biological mechanisms that could account for these behaviours. There has been little consideration of how other factors within the environment could account for, or contribute to, the difficulties associated with this condition, although there have been some notable exceptions (e.g. van Lieshout et al, 1998a; Whittington et al, 2004). Over the last 20 years there has been a change in view from disability being considered from a medical perspective towards a social model of special educational needs. The emphasis should therefore signal the consideration of other factors than simply those that reside within a child.

The case referred to throughout this report required a multi-level analysis to consider the impact of ecological factors. Polly was a 14 year old pupil with a diagnosis of PWS, attending her local, mainstream secondary school. The Special Educational Needs Coordinator (SENCo) had concerns regarding Polly's difficulties with peer interactions, her behaviour, mental health and also her academic achievement. Mrs Slayter, Polly's Mother was relatively well informed about her daughter's condition and was concerned that the secondary school was unable to meet her daughter's

complex needs. As a Trainee Educational Psychologist (TEP) I was responsible for completing a statutory re-assessment of Polly's needs.

In the present article the research focussing on the individual with PWS will be critically considered and the phenotype outlined. The case of Polly will be referred to and conceptualised in terms of ecological systems throughout this report. Information and opinions from her Mother, Mrs Slatyer will also be included. Due to the small quantity of research completed directly with PWS pupils, the body of literature from those pupils with general learning difficulties and other genetic disabilities will also be considered.

2.3 BIOSYSTEM: THE INDIVIDUAL

Bronfenbrenner (1979) described the individual or biosystem as the centre of the ecological model. The individual characteristics of the child are therefore part of this system. Some researchers would argue that these characteristics have a large effect on how successfully a child can be included within a mainstream school; others argue that the curriculum should be modified with a focus on individual needs. These dimensions will be identified in terms of the current case and the issue of inclusion discussed.

Advances in the study of human genetics have resulted in the identification of over 1000 genetic intellectual disability syndromes (Ly and Hodapp, 2005). Researchers

have begun to identify particular behaviours that are associated with a genetic disorder; this is defined as a behavioural phenotype (Ly and Hodapp, 2005). This associates various domains of functioning including motor, social, cognitive and linguistic as “directly affected” by the biological disorder (Ly and Hodapp, 2005). This can be further defined as the way in which a genetic disorder predisposes the individual to show particular characteristics or behaviours. Interestingly, Hodapp (2004) also considered how others react to the expression of particular characteristics and whether this in turn effects the expression of phenotype characteristics. This issue will be considered later in this report (see section 2.4).

Polly, the 14 year old pupil, who will be considered for the remainder of this discussion, was given a diagnosis of Prader-Willi Syndrome (PWS) at a young age. A recent epidemiological study placed PWS as affecting 1 in 25,000 births with no differences in relation to sex or social-economic circumstances (Whittington et al, 2001).

This complex, genetic disorder is caused by the absence of expression, of the maternally imprinted genes, on the long arm of chromosome 15. This can be due to either microdeletion or translocation; slightly different phenotypes have more recently been identified depending on the origin of the disorder (Jauregi et al, 2007).

2.3.1 Physical Characteristics

The disorder is characterised by hyperphagia (excessive eating) in childhood which can lead to obesity in later life if it is not controlled (Butler and Meany, 1987; Walley and Donaldson, 2005; Dimitropoulous et al, 2001). Physical development is characterised by weak large muscle tone with often poor coordination and balance (Butler and Meany, 1987). Individuals are generally short in stature and remain sexually underdeveloped throughout their lives (Butler and Meany, 1987). Polly is characterised by these physical characteristics about which there is general consensus in the literature. However, there is less agreement as to how and why behavioural characteristics manifest and I would argue that systems wider than the biosystem need considering to explain variation.

2.3.2 Behavioural Characteristics

Akelfeldt and Gilberg (1999) compared data from parent reports of individuals with PWS, obese individuals and those with a learning disability. Behaviours reported by Polly's Mother, Mrs Slayter of skin picking, ritualised behaviours and changeable mood support the results of this study as they differentiate those with a PWS diagnosis from the two other groups. Akelfeldt and Gilberg (1999) suggested that this behaviour pattern emerges at a young age and continues at a similar rate into adulthood. They found no association between Body Mass Index and behaviour.

Such findings are not wholly consistent with Mrs Slayter's report that different behaviours have emerged and become dominant during different periods in Polly's life. Mrs Slayter suggested that Polly began skin picking when she was in primary school but that in adolescence this behaviour only occurred when Polly was particularly anxious. It is possible that such variation in displayed behavioural characteristics could be influenced by factors within the environment. The study by Akelfeldt and Gilberg (1999) did not report how and why the behaviours had manifested themselves.

Mrs Slayter describes a change in Polly's behaviour when she was a toddler (3 years old) from being relatively happy to becoming stubborn with temper tantrums. She explained this was principally due to her refusing Polly food but that the tantrums also served as a function for her to gain what she wanted. This supports findings by Dimitropoulous et al (2001) that suggest emergence of tantrums moderately correlates with the onset of appetite increase. However, the authors also suggest that the causal link is not clear. Interestingly, the onset of tantrums is later than for typically developing children and tantrums are more severe in older children with PWS in comparison to developmentally delayed and typically developing groups.

Dimitropoulous et al (2001) suggest there could be a neurochemically based obsessive-compulsive disorder that causes both tantrums and exacerbates or triggers the preoccupation with food, leading to constant food seeking. However,

another explanation is that the frustration of chronic hunger is likely to elicit tantrums (Dimitropoulous et al 2001). Tantrums therefore vary between individuals as a response to the environment as different food restrictions and requirements to exercise are imposed. These restrictions may increase as children become older, and efforts are made to prevent obesity; therefore the tantrums continue. Also, depending on the environment, children may generalise tantrum behaviours to gain desired outcomes within their environment. If these are reinforced the behaviours are likely to continue or increase.

Research completed by Wigren and Hansen (2003b) focussed on the development of compulsive behaviours. They found that typically developing children exhibited a reduction in compulsive behaviours when they were 5 years old; this supports previous findings (e.g. Evans et al, 1997). One explanation is that compulsive behaviours maintain a degree of control over an ever-changing environment and that as a child becomes older they learn other ways to exercise control (Bolton, 1996).

Wigren and Hansen (2003b) found a higher prevalence and intensity of compulsive behaviours in children with PWS across all ages. This finding is again discrepant with Mrs Slayter's accounts of an increase in emotional difficulties and a reduction in compulsive behaviours with Polly's increasing age. This again supports the argument that the degree to which these behaviours manifest themselves may vary as a response to the degree of control over one's environment. This is further supported by Greaves et al (2006) who found that children with lower developmental

levels, with either PWS or autism showed higher levels of ritualistic behaviours, which could also be due to having less ability to control their external environment.

However, an alternative hypothesis for the change in behaviour is that instead of externalising her anxieties Polly began to internalise. Two pathways of co morbidity for behaviour and psychiatric difficulties have been identified by research using parent reports and defined as either internalizing or externalizing behaviours (Van Lieshout et al 1998b). Van Lieshout et al (1998b) found that psychiatric problems were more likely if the child was internalising their difficulties (1998). This supports the profile outlined by Mrs Slayter. Further longitudinal research into the pathways found that school aged children with PWS showed behaviour problems but these reduced with age, but frequently culminated in psychiatric difficulties in adolescence and adulthood (Descheemaeker et al, 2002).

Descheemaeker et al (2002) identified two different behavioural patterns for individuals with PWS “active and extrovert” or “passive and introvert”. The former is characterised by frequent temper tantrums, general rigidity and insistence on routines. These individuals were also frequently diagnosed with autistic spectrum disorder when school aged. During adolescence, many of the extrovert group developed a psychotic disorder with episodes of agitation, delusions and hallucinations. The introvert group showed internalizing behaviours and preferred to be solitary. They showed periods of sudden crying and general dissatisfaction. In adolescence this group developed an unspecified bipolar affective disorder

characterised by emotional instability, aggression and obsessive behaviours (Descheemaeker et al, 2002).

Polly appears to fit both of the profiles to a certain degree; she exhibited the externalising behaviour when she was younger but as an adolescent became passive and internalized her behaviours. Such developmental trends are described by other research that suggests periods of adolescence and young adulthood are characterised by an increase in emotional and behavioural difficulties (Steinhausen et al, 2004). The Child and Adolescent Mental Health Service are currently working with Polly in response to reported symptoms of depression and low self esteem. Descheemaeker et al (2002) did not investigate whether there were any environmental similarities between the extrovert and introvert groups. For example attending either a mainstream or special school is likely to have a different impact on the type and degree of anxiety. This is subsequently likely to have an impact on whether the individual internalises or externalises distress. In Polly's case she may have altered her coping mechanisms to suit the environment.

Dimitropoulos et al (2001) suggests that further research is needed that focuses on how externalising and internalising behaviours develop and why they sometimes continue to occur into adulthood. They propose that by studying the emergence of the behaviours, causal mechanisms may be identified that could be biological, environmental or a combination of both. They suggest that a combination of

biological and environmental factors is likely to contribute to the behaviours exhibited by PWS individuals.

2.3.3 Social Characteristics

Polly attended a mainstream primary school and progressed academically. However, there were some difficulties with how she viewed social situations and she frequently argued with peers. Research indicates that these difficulties are characteristic of children aged 7 years with PWS (Akefeldt and Gillberg, 1999). However, Descheemaeker et al (2002) suggest that the onset of social difficulties occur earlier. Research has also found that social competence does not increase with age, unlike individuals with other genetic disabilities (Rosner et al, 2004).

Descheemaeker et al (2002) found that children could be divided into two separate groups depending on their social skills. The “extrovert” group showed a desire to participate in group play but frequently imposed their own rules and took over. They showed a lack of emotional and social reciprocity. This group also initiated contact with adults. This pattern of social behaviour continued throughout primary school with speech impairments becoming more obvious. Mrs Slayter suggested that in primary school Polly exhibited characteristics of an “extrovert” but that when she moved to secondary school she began to show characteristics of the “introvert” group.

The “introvert” group was characterised by withdrawal from peers’, these children preferred to observe group games from the outside when they were toddlers (Descheemaeker et al, 2002). They preferred quieter, solitary activities such as drawing or reading and found it difficult to build relationships with adults. When this group was in primary school, during the first term every school year, behaviour was characterised by looking for contact with peers. However, these contacts quickly deteriorated presumably due to lack of social skills and the children became excluded from games, Bullying also occurred (Descheemaeker et al, 2002).

The response of others within the individual's environment therefore had an effect on both groups of children although a limitation of the research is that it was not systematically reported. Both groups attempted to interact socially, but it can be argued that due to negative responses from peers these efforts were quickly extinguished.

Peer relationships for Polly as a teenager have become particularly difficult. She has been unable to build relationships with peers from her mainstream secondary school and has reported incidents of bullying by peers. This could indicate that her primary school environment was more conducive to her attempts at peer interaction. However with the different environment at secondary school and consistent failure at building friendships, her behaviour has become characteristic of the introvert group. Van Lieshout et al, (1998b) link the higher level of internalising in adolescents with PWS as a possible reflection of difficulties in forming and maintaining relationships.

The majority of research indicates poor peer relationships and social withdrawal in those with PWS (eg. Van Lieshout et al, 1998b, Descheemaeker et al, 2002, Ly and Hodapp, 2005). However, there are few studies that consider the contribution of environmental factors to difficulties in social functioning. The majority of research has focussed on identifying a deficit within the individual. Rosner et al (2004) also draw attention to the limited research of the social competences of the wider population of children with intellectual disabilities.

Koenig et al, (2004) completed the first study to consider social ability of children with PWS independently of cognitive ability. They researched whether social impairments in individuals with PWS could be due to a biological deficit in recognising social cues and interpreting social situations. When compared to a group with a diagnosed developmental disorder and a comparable IQ group, individuals with PWS performed comparably. Ability to organise visual information into a coherent social story was interpreted correctly by PWS participants in only 15% of cases. Therefore in real life situations that are complex and require the interpretation of non-verbal information and feeling states, individuals with PWS are likely to miss the majority of important information.

A comparable difficulty between children with PWS and those with ASD in attributing affective terms to feeling states and shared feeling states, has also been reported (Koenig et al, 2004). More recent research suggests there may in fact be a

phenotype overlap with autism. Greaves et al, (2006) compared the rituals and repetitive behaviours of autistic children with those of children with PWS and found similar levels. This point will be returned to later in this report (see section 2.3.3).

Koenig et al (2004) explain their results from a neuropsychological perspective with reference to cortical specialisation, proposing that people with PWS have deficits in the regions responsible for processing and attributing social meaning. They continue by endorsing the theory by Klin et al (2003, cited in Koenig et al, 2004) who outline the idea of individuals having an “inactive mind”. The theory proposes that a primary drive for interaction with others promotes the development of social and emotional knowledge. However, this theory does not explain why pupils with PWS have a similar deficit to children with ASD but display a drive to interact with others.

The environment, particularly the responses of others, are likely to affect the drive that an individual retains for interacting: this may consequently influence the development of the brain area identified by Koenig et al (2004). The age of participants in this study (Koenig et al 2004) is not reported; therefore it is difficult to conclude whether there is a biological or environmental causality for results. If young children show these difficulties then perhaps a biological conclusion can be drawn. However, children with PWS have been observed to initiate interactions with others. Perhaps it's their failure to be successful that results in their being unable to develop the knowledge and experience needed to judge interactions, rather than simply a biological difficulty.

Findings also suggest that individuals with PWS have difficulties in distinguishing between lies and jokes. Sullivan et al, (2003) found that 91% of an adolescent group with PWS misclassified jokes as lies, whereas none of the comparison group of participants misclassified the lies as jokes. This is a particularly interesting point, as surely if the deficit were simply due to a biological or cognitive difficulty in attributing high-order mental states, lies would also have been misclassified as jokes. I would argue that prior experiences of bullying and negative peer interactions may have resulted in adolescents with PWS making negative interpretations of the majority of social interactions. This was a principal difficulty displayed by Polly. She found it difficult to understand the difference between an intentionally false utterance intended to be a joke compared to utterances intended to deceive. If she were unsure Mrs Slayter suggested that Polly was more likely to interpret something negatively because of her previous experiences. Keeping up with the everyday playground exchanges that include utterances of sarcasm, irony and lies was therefore a particularly complex task for her.

Recently literature has begun to focus on whether there is a neuropsychological deficit for difficulties with social interactions. Walley and Donaldson (2005) suggest that such research has been limited until more recently due to methodological difficulties. Researchers have investigated whether there is a deficit in the frontal cognitive functions such as attention, working memory and executive functions. Deficits have been associated with individuals who have autism and individuals with

frontal lobe lesions who show similar difficulties with behaviour and social interactions to those with PWS (Jauregi et al, 2007). Although some deficits were found, authors concluded that evidence regarding the degree to which these contributed to the social and behavioural characteristics of individuals with PWS remained inconclusive. Similarly, Walley and Donaldson (2005) investigated whether individuals with PWS had deficits in executive function. Executive function has been associated with the ability of individuals to deal with novelty and change in social situations. They compared a group of individuals with similar language ability and those with PWS, again concluding that there were no significant differences.

Research investigating social behaviours in children with PWS has focussed on identifying a specific biological deficit, rather than considering whether the environment facilitates positive social interactions. Although parallels have been drawn between individuals with PWS and ASD one of the principal differences between these groups is that people with PWS are motivated to interact. Although children with PWS, such as Polly seem to have motivation, without positive experiences they may be unable to develop the social skills required for successful interactions. With increasingly negative experiences (such as bullying) individuals may begin to misinterpret the intent of more neutral social interactions. Interventions for pupils with PWS may therefore be preventative in terms of developing social skills or providing them with the experience of positive interactions. In Polly's case the difficulty of building positive relationships with peers had perhaps contributed to deterioration in her emotional health. Therefore Mrs Slayter considered whether to

move Polly to a specialist provision for children with moderate learning difficulties. The issue of whether this was appropriate for Polly's academic needs is considered in the following section.

2.3.4 Cognitive profile

The majority of research indicates that the cognitive functioning of individuals with PWS varies between "mild and moderate learning difficulties" (Whittington et al, 2004). Individuals often have difficulties with short term memory and display relative strengths with visual detail (Dykens et al, 1992 cited in Dykens, 2002).

I completed a cognitive assessment (British Ability Scales II) (Elliott et al, 1996) with Polly. Her scores indicated that her abilities were below the 3rd percentile in verbal, non-verbal and spatial areas. Therefore she could be considered to have a moderate learning difficulty. Her profile suggested a relative strength with verbal ability but difficulties with non-verbal and spatial processing. Achievement scales indicated average attainment in reading and spelling but difficulties with number work. Although verbally, Polly could have a conversation with someone, her understanding of words both orally and from reading was actually very limited. Interestingly, Polly was able to recall visual information both immediately and following a delay, at a similar level to other children of her age. Although her recall of visual information was average, she showed difficulties if requested to use this information to then solve a problem.

Recently there has been research into whether there are different cognitive profiles for individuals with differing genetic subtypes of PWS contingent on whether the individual has a “deletion” or “disomy” of chromosome 15. Dykens (2002) investigated jigsaw puzzle skills in children with PWS. Participants completed a word search task, block design task and a puzzle (measured by the number of correctly placed pieces in 3 minutes). She compared groups of children with PWS, an IQ-matched group with learning disabilities and an age-matched normal group. For both the block design and word search tasks, the order of highest performance was normal, PWS and then learning disabilities group. However, for the puzzle task the order altered to PWS, normal and then learning disabilities. If the PWS group were split into disomy and deletion subgroups, results suggested that it was the latter group who performed exceptionally well.

Dykens (2002) noted that findings could have been affected by practice. Children with PWS could have had more practice at solving puzzles, and therefore become more proficient. Parents reported higher levels of puzzle enjoyment in their child with PWS. Dykens (2002) also suggested that further research is necessary to understand the strategies utilised by participants with PWS. They were less likely than typically developing children to use the picture as a reference or to force pieces into place. She hypothesises that participants may have used a visual matching approach. Whittington et al divided their group of individuals with PWS according to parental reports about whether the child had exceptional skills with jigsaw puzzles.

Those individuals with disomy, identified by parents as having high ability performed better on both of the visual spatial tasks. Whittington et al (2004) therefore suggested a practice effect may have affected Dykens (2002) findings.

Whittington et al (2004) found both a global delay, and also a normal distribution of cognitive abilities within the PWS population. Further, there was also a difference between individuals with chromosome disomies and deletions. Those with a disomy showed higher verbal abilities, while those with deletions performed better on a block design task in comparison to those with disomy. It may therefore be suggested that Polly is likely to have a disomy as she had significantly higher verbal abilities than her visual spatial ability.

Walley and Donaldson (2005) found that children with PWS performed relatively well on a self-ordered pointing task, (a visually presented task) in comparison to Digit Span Forward, (an auditorially presented task). They suggest this could indicate deficits in capacity of the phonological store. They found that this particularly affected the deletion genetic subtype where visuo-spatial tasks may then become more efficient to compensate for the deficit.

Research has identified a different cognitive profile for individuals with PWS depending on the genetic subtype. Those individuals with disomy display higher abilities verbally while those with a deletion show strengths with visual-spatial information. These strengths could be potentially useful to educators when

supporting these pupils to learn. There has been little consideration of how the environment affect performance on tasks. Research indicates that parental expectation and practice at tasks affects the performance of individuals with PWS. Further research, particularly in the classroom is therefore required to identify other environmental factors and how these can be optimised to promote learning.

2.3.5 Summary

Research into the characteristics of individuals with PWS has established a number of typical behaviours, social characteristics and features of the cognitive profile of diagnosed individuals. However, variation between individuals and the different developmental pathways for behaviour suggests that other factors other than simply within child factors associated with chromosome 15 deletion or disomy require consideration. The remaining part of this paper will consider the different systems surrounding the individual and how these influenced Polly in her behaviour, social skills and cognitive functioning.

2.4 MICROSYSTEMS: THE FAMILY AND THE CLASSROOM

Microsystems are environments in which the individual participates and interacts directly. For the majority of children this includes both the school and family systems. Bronfenbrenner (1979) also drew attention to the importance of interrelations between other people within the Microsystems such as parents and the siblings of

the individual. He suggests that the microsystem is “experienced” by the person and therefore the way a person perceives their experience is particularly important.

2.4.1 The Family

Bronfenbrenner and Ceci (1994) suggested that genetic predisposition is actualised through proximal processes, proposing that setting limits or respect for a child’s autonomy exemplified the direct role of proximal parental behaviour, whereas family stress and marital conflict exemplified the role of the distal family context. There is limited research about how parental behaviours and family contexts affect children with genetic syndromes although research has begun to consider both proximal and distal parenting behaviour.

The degree of family stress in raising a child with a particular genetic disability such as PWS has limited research. Hodapp, Dykens and Masino (1997) completed the first detailed investigation about the stresses faced by families of children with PWS. Higher levels of maladaptive behaviours exhibited by the child (such as skin picking and overeating), resulted in higher family stress levels. The child’s age, IQ and degree of obesity were not correlated with familial stress levels. However, from the research it is difficult to determine whether children with more PWS behaviours cause greater family stress or whether highly stressed families elicit higher levels of difficult behaviour characteristics (Hodapp et al, 1997).

Research into how the phenotype personality is affected by or can affect the family context was investigated by van Lieshout et al (1998a). Parents who had either a child with PWS, Williams Syndrome or Fragile X Syndrome were compared. Those parents with a PWS child reported higher level of parental stress which frequently coincided with higher marital conflict and lower parental consistency. This culminated in a higher level of anger and parental hostility towards their children in comparison with the other two groups.

Van Lieshout et al (1998a) found that “agreeableness and irritability” in the PWS children could be predicted by family context and parental behaviour. It was also found that “conscientiousness, openness and emotional stability” in children with PWS were negatively affected by parental anger. In the present case, Polly found it difficult to talk to her mother about how it felt to be different to others and Mrs Slayter found her daughter difficult at times admitting that she often became angry with her. Van Lieshout et al (1998a) extended research findings by Hodapp et al (1997) considering how families may influence the degree and type of behaviours that are exhibited. However, this indicates that a more complex interaction of variables must be considered rather than simply a genetic phenotype of PWS.

Ly and Hodapp (2005) suggest that genetic disorders predispose individuals to exhibit certain behaviours, defined as “direct effects”. However, these behaviours then elicit responses from others (parents, teachers and siblings), defined as

“indirect effects”. These responses can then have an effect on phenotype behaviours.

Ly and Hodapp (2005) investigated the indirect effects of parents on children with PWS. They suggested that responses to behaviour may be due to parental views and perceptions about the genetic phenotype, rather than a response to the actual behaviour. Ly and Hodapp (2005) compared children with PWS and Williams syndrome when completing a jigsaw puzzle task with their parents. The former phenotype has identified strengths with this task whereas the latter has associated weaknesses. They found that PWS parents provided fewer helping and reinforcement behaviours when the children showed higher puzzle abilities and higher IQ scores. Parents of children with Williams syndrome were more directive and displayed more helping behaviours. Subsequent analysis found that a child’s phenotype was the main predictor of parent-child interactions.

If parents are therefore influenced by knowledge of their child’s phenotype rather than responding to the actual behaviours displayed by their children, further research is needed to establish whether these perceptions are accurate. Fidler et al (2002) found that parents with PWS or Williams syndrome knew less about cognitive strengths and weaknesses than maladaptive behaviours associated with the diagnosis. Parents were found to be informed about observable behavioural features of their child’s syndrome but not necessarily about the more subtle learning issues (Fidler, Hodapp and Dykens, 2002). It is therefore not surprising that parents

identified behaviour management of their child with PWS as the most important parental need (James and Brown 1993).

Parents of PWS children raised concerns about how their child would manage the challenges associated with the syndrome and how this could affect them in later life. These parents also identified concerns about psychosocial consequences of the diagnosis (Borne et al, 1999). Researchers suggest this could be due to children with PWS having a higher intellectual ability than children with Angelmen Syndrome and therefore exhibit a higher awareness of their condition. Parents may therefore fear when the child will be confronted by their limitations. Mrs Slayter appears to have managed this fear by instilling in Polly that she has few limitations and that she has the potential to achieve good GCSE results. However, there is a high risk that these unrealistic expectations that Polly has internalised may have contributed to her low self-esteem in the pursuit of potentially unreachable academic goals.

Borne et al (1999) identified high levels of depressive feelings in the mothers of children diagnosed with a genetic syndrome. Parents of PWS children also had significantly lower self-esteem than parents of children with other syndromes (Borne et al, 1999). James and Brown (1993) suggest that the high level of stress experienced by families requires intervention to support the mental health of parents. Hodapp et al (1997) suggested that further research to compare families of children with PWS and those with learning difficulties would be beneficial. This could then establish whether parents of children with genetic difficulties experience higher

levels of mental health difficulties or whether this is a consideration for all parents of a child with learning difficulties.

Research indicates that families with a child who has a PWS diagnosis, have more difficulties than those families with children who have other genetic diagnoses. This may be partly due to the higher levels of behavioural difficulties characteristic of people with PWS. However, there is likely to be a complex multi-directional effect between families and PWS individuals. The effects of the environment may therefore increase the likelihood or exacerbate the expression of characteristics that individuals with PWS retain a genetic predisposition towards. Further research is required to consider the interaction between the individual child, their genetic predisposition and the environment.

2.4.2 The Classroom

Research has investigated various aspects of the classroom environment that could affect individuals with PWS. However, this research is limited so this report will consider findings from children with learning difficulties and other genetic syndromes. The environmental factors that contribute to, or inhibit a child's academic or social success are discussed.

Whittington et al (2004) investigated the academic achievement of pupils with PWS and general learning difficulties. Findings indicated that the percentage of time spent

in special school provision was a significant predictor of educational underachievement for children with PWS but not the comparison group. Whittington et al (2004) found that the five children with PWS who attended a mainstream school were achieving expected levels (in reading, spelling and arithmetic). Authors also found that some children with PWS who had attended special schools for more than half of the time were attaining expected levels in only one domain. They suggest that special schools may have difficulties accommodating children who exhibit higher skill levels.

PWS participants show a higher ability at reading, with particular difficulties in arithmetic (WISC III achievement tasks) (Whittington et al, 2004). Polly showed a similar profile when assessed with the BAS II achievement tasks. However, she showed difficulties comprehending or defining the text that she had read. This had particular implications in the classroom as staff and peers considered her more able to comprehend than she actually was. Whittington et al (2004) did not report whether participants showed an understanding about what they were reading.

The attitude of staff within a school can also have a detrimental impact on whether a pupil with special educational needs is able to access the curriculum. Research completed in a secondary school indicates that attitudes towards pupils with special educational needs varies, with teachers of core subjects, particularly those teaching Science retaining a negative view (Ellins and Porter, 2005). For pupils with PWS to

succeed academically a change in the attitudes of staff within schools is likely to be needed.

Whittington et al (2004) conclude that children with PWS may be placed in a special school due to their behaviour rather than their learning needs. Findings also suggested that underachievement was correlated with a lower “Vineland Socialization” standardised measure. This suggests higher levels of social interaction are positively related to educational attainment, particularly for children with PWS.

Mrs Slayter is considering whether Polly would be more appropriately placed in a special school due to the impact of her social and emotional difficulties. Although caution must be drawn due to the limited number of studies, there is an indication that difficulties with social interactions are often a cause of children with PWS being unable to attend a mainstream school. This will be considered in more depth below.

A significant difficulty with peer relationships has been identified in children with PWS. Frostad and Pijl (2007) suggest that age-appropriate social skills are imperative for children to build positive relationships with peers. They found that 20 to 25 per cent of children with special needs were not socially included (they were less popular and had fewer friends) by their peer group compared to 8 per cent of typically developing peers. The group with special needs had less effective social skills, which then caused difficulties with social interactions that could lead to poorer

relationships and a lack of opportunities to develop subsequent social skills. However, authors also draw attention to the finding that 75 per cent of pupils within the study were able to build relations with peers. Frostad and Pijl suggest this could be due to variables such as teacher attitudes and classroom organisation which require further investigation. I would also argue that the school ethos and attitudes to inclusion would have an impact.

Research suggests that the quality and frequency of social interactions are higher when children with Autism have access to typically developing peers (Pirrie and Head, 2007). However, this variation was not significant for children with Down syndrome or developmental delay. This could indicate that children with autism particularly benefit from being with typically developing peers. As individuals with PWS display similar social difficulties to those with autism it is possible that a similar inference can be drawn. Further understanding of the particular elements of the environment that facilitate social interaction is required. I would argue that the variation in ethos and organisation of each mainstream school and attitudes towards inclusion will have a different impact.

As parallels have been drawn between individuals with PWS and those with autism research with the latter is useful. Sigman and Ruskin (1999) found that children with autism initiated and responded to interactions less frequently than other children. However, those children who made bids for interaction were better accepted. This resulted in authors concluding that children were isolated but not rejected. However,

the study only measured the frequency of interactions. Therefore interactions could have occurred with only one other child. Also, the children with autism could have been rejecting inappropriate or negative social initiations from their peers.

Research generally suggests that social skills training does not maintain effects over time. Frostad and Pijl (2007) suggest this can be explained by their findings that although participants generally became competent in their skills, they did not have the opportunity to practise these due to the peer group retaining pre-intervention attitudes and behaviour towards the pupil. This can be further explained by the theory of “Homophily”.

Mc Pherson, Smith-Lovin and Cook (2001) found that children were likely to associate with similar peers. This occurred across various dimensions including age, educational attainment and values. They defined this as “Homophily”. Mrs Slayter suggested that Polly mostly associated with peers who were also socially and emotionally immature with a low intellectual level. Due to their own difficulties they were unable to accept or understand Polly’s difficulties. This supports research that found typically developing children “flocked” together, excluding those with special needs, while the latter group also preferred to associate with each other. Research has not identified the particular dimensions that exclude children with special needs. However, the phenomenon of homophily has seemingly been overlooked when considering the drive for inclusive education as it challenges the basic principles of this theory.

Research suggests that children who are rejected or have fewer friends are more likely to become the victims of bullying (Hodges, Malone and Perry, 1997). There are various theories as to why bullying occurs. In Polly's case this could be due to individual differences, where perpetrators seek to undermine someone less powerful. However, bullying can also be the response to a permissive school ethos or peer pressure within the school. In cases where there are groups of perpetrators bullying is sustained due to an affiliation to the group rather than by a personal or individual motive (Rigby, 2004).

Children with special needs are reportedly more likely to be victimised (De Monchy, Pijl and Zandberg, 2004). Research with PWS pupils suggests they are frequently the victims of bullying (Descheemaeker et al, 2002). Victims of bullying typically show low self-esteem, unhappiness at school, social isolation and depression (Rigby, 2004). These characteristics have often been noted in PWS pupils and have been considered as part of the phenotype. However, the effects of bullying have not specifically been investigated in this population and are likely to have a large impact. In the sample of children investigated by Descheemaeker et al, (2002) all of the children experienced bullying. Polly displayed all of these characteristics and had reported incidents of bullying.

Some research has considered whether there are positive factors that buffer victims from the negative effects of bullying. Research by Martin and Huebner (2007)

investigated the emotional well being of young adolescents. They found that prosocial experiences with other peers operate as a protective factor to emotional well-being. Due to the difficulties for children with PWS in interacting and understanding social situations, this is less likely to occur. This increases their vulnerability to the detrimental effects of bullying. Polly had become so demoralised by the bullying at her current mainstream secondary that she thought only a change in provision would provide her with an opportunity to build relationships.

Fidler, Lawson and Hodapp (2003) investigated whether the parents of children with a genetic syndrome would like education to be centred around their child's needs. Parents of children with PWS highlighted some aspects of education that reflected their child's phenotype such as adapted physical education. Fidler et al (2003) also found that parents expressed concerns about teacher perceptions of their children, both in terms of underestimating their capabilities, and sensitivity to their child's syndrome-related needs.

Interestingly, half of the parents or fewer within the syndrome groups raised issues regarding their child's relationships with peers (Fidler et al, 2003). All of the children had mild to moderate learning difficulties and the majority attended a mainstream school. It is possible that parents were simply unaware of the difficulties or the schools did not consider peer relationships important. However, it is concerning that parents were often unaware of their child's difficulties with their peers. Mrs Slayter suggested that although she had been aware of some difficulties Polly had at school,

she had been determined to keep Polly in mainstream education and had not realised how significant Polly's distress and social isolation had become, particularly over the last six months.

2.4.3 Summary

Research suggests that both the classroom and family microsystem have a range of significant, recursive influences on the individual or biosystem. I would argue that a consideration of how these systems are affecting the individual and how in turn the individual influences microsystems such as peer group at school and families is imperative for an EP. A change in one the microsystem is likely to have a direct or indirect impact on the individual. Further research is required into the families of PWS children as they experience high levels of stress. Professionals need to consider how families can be supported, as research indicates that this is likely to have an impact on the behaviours exhibited by the child. Also, parents characteristically show an awareness of the difficult behaviours associated with the syndrome but a lack of knowledge of the negative and positive cognitive characteristics that could support their child's education. Whittington et al (2004) suggest that an understanding of individuals, their unique attributes and the impact of specific disorders on strengths and weaknesses may provide a guide to education. This view will be considered further at the mesosystemic level.

Further research is also required into how children with PWS manage both academically and socially at school. Present research seems to indicate that relationships with peers often have a detrimental effect on the functioning of individuals with PWS. As with other children with learning difficulties, children with PWS find it difficult to build relationships with typically developing peers. The contingent isolation and rejection can lead to bullying in many cases. The difficult behaviours and subsequent psychiatric difficulties associated with the individual phenotype of PWS are likely to be caused or contributed to through these experiences. This is supported by research findings that children with PWS are often moved to specialist provision but not principally due to academic difficulties.

2.5 MESOSYSTEM: INFLUENCES THAT OCCUR BETWEEN MICROSYSTEMS

An individual usually participates in multiple microsystems such as the classroom and the family. The interaction between the microsystems is defined as the mesosystem (Bronfenbrenner, 1974). This may include the interaction between teachers (in the classroom microsystem) and parents (family microsystem). Some research indicates that parents would like educators to consider more fully the phenotype of their child's particular syndrome (e.g. Fidler et al, 2003).

Findings suggest that parents of children with genetic syndromes would support educational programs that addressed the specific needs of their children as defined by the phenotype (Fidler et al, 2003). This suggests that syndrome related education

should be explored further. However, this would promote the categorisation and labelling of children, educational practice that occurred prior to the Warnock Report (DES, 1978). Programs defined by a phenotype may also facilitate a culture of labelling and low expectations that education professionals are keen to reduce.

Fidler et al (2002) completed the first study to determine the extent to which parents were aware of educational behaviours related to children with genetic syndromes. Fidler et al (2002) found that parents were informed about the “visible features” of their children’s syndromes such as overeating or maladaptive behaviours, but were less aware of the complex cognitive-linguistic features of the child’s syndrome or how these could affect education.

Fidler et al (2003) found that parents were the principal source of information for schools regarding their child’s syndrome. It is therefore concerning that parental knowledge may be restricted to visible features of the syndrome. Limited parental knowledge could potentially have a detrimental impact when considering the appropriate educational provision for their children. Mrs Slayter suggested that if she had been aware of Polly’s difficulties earlier, she may have considered a different educational setting as more appropriate.

Fidler et al (2003) suggest that although parents may not be aware of the “aetiology-related” versus “non-categorical programming” forms of education, some parents attempt to support their child’s education by emphasising aetiological strengths and

supporting their weaknesses. In the present case, Mrs Slayter was particularly aware of Polly's aetiological strengths and weaknesses. However, I reflected whether this could lead to a self-fulfilling prophecy through parental and teacher expectation from a predefined phenotype. I would argue that education should be constructed around the individual's strengths and weaknesses rather than a predetermined phenotype. However, an understanding of phenotype characteristics expressed by individuals with particular syndromes may help focus parental and professional attention, increasing the probability of accurate assessment and appropriate educational provision.

2.6 EXOSYSTEM: EDUCATIONAL POLICY

The exosystem consists of events that affect microsystems but occur in settings that do not necessarily include those members (Bronfenbrenner, 1979). This is particularly important when considering a child with special educational needs. The policy of inclusion is a government drive, which influences the provision of education and the ethos of schools. Interestingly, the principles of inclusion can also be considered as elements of the macrosystem as they are a set of beliefs or rights for children; this is addressed in the following section. However, the exosystem considers how this policy could impact on the school classroom, family and individual.

In the UK the Warnock report (DES, 1978) strengthened the policy of integration. Warnock promoted the educational inclusion of pupils with SEN but acknowledged that special schools were appropriate for some children. However the Salamanca Statement (UNESCO, 1994) recognised that education for children with special educational needs should be “within the regular education system”. In the UK, the Green Paper, “Excellence for all children” (DfEE, 1997) outlined the government commitment to inclusive education. This was followed by the SEN strategy document “Removing Barriers to Achievement” (2004) that also further defined the vision of inclusion and how this could be achieved.

Although the principle of inclusion has been endorsed by most Local Authorities, schools and teachers, there is less consensus about how this is to be achieved in practice (Swann, 1991). A review by Swann (1991) found that the number of children educated in special schools had decreased in forty-four of the 150 Local Authorities and that in fifteen of these the decrease was greater than twenty-five percent. However, OFSTED (2002) suggested that inclusion should be evaluated in terms of educational attainment, self-esteem and improved relationships between SEN pupils and peers, while a subsequent report (OFSTED, 2004) suggested that few schools evaluate whether inclusion is effective.

Various research has investigated whether inclusion is “effective” for both those with SEN and the other children attending the mainstream school. Some authors have suggested that the government agenda for raising achievement and social inclusion

have created tensions for schools. Lindsay (1997) asks “Is it more important for a child to be educated in the local school or to be educated well?” (pg 57) which captures the tension between the philosophy of inclusion (considered in the macrosystem) and the reality of this in policy and practice.

Concerns were raised by schools about whether educational attainment is affected by inclusion. Recent research suggested that attainment is not affected by the inclusion of SEN children (Farrell et al, 2007). Authors suggested this could be due to inclusive schools not simply placing pupils in the classroom, but having systems to manage flexible, and where necessary, individualised educational provision. They conclude that inclusion and achievement are “independent of each other”. I would argue that although provision for children with special needs can be academically “managed” in mainstream settings this is often at the expense of social inclusion.

Warnock (2005) suggested that children with special educational needs in mainstream schools were likely to be “teased and bullied” particularly as they become older. Research indicates that children with SEN who are included are less accepted than their mainstream peers and that they struggle to build relationships (See section 2.42). Research literature also suggests higher levels of victimisation and bullying of children with special educational needs. Therefore children such as Polly are the victims of an idealistic policy that is not delivered effectively in practice. The difficulties that have been identified through research are often not addressed by schools and therefore many children’s needs are not being met.

Although teachers are not directly part of the exosystem in which policy decisions are made regarding inclusion, it could be argued that their attitudes and beliefs about inclusion in both philosophy and practice have a large impact on the microsystem within which they actively participate. Research indicates that teachers with positive attitudes towards inclusion were found to have higher levels of classroom satisfaction and lower levels of friction between pupils, than those teachers with less positive attitudes (Monsen and Fredrickson, 2004). Similarly “inflexible staff attitudes” were identified as a barrier to inclusion (Gibb et al, 2007). It is unclear how teacher attitudes are reflected in their classroom behaviour which contributes in turn to the type of social learning environment they create which then produces different pupil responses (Gibb et al, 2007).

Research suggests that over time, more positive attitudes develop through the experience of inclusion (Avramidis, Bayliss and Burden, 2000). Other research has considered whether the difficulties of the individual child have affected teacher attitudes. Clough and Lindsay (1991) found that teachers thought children with emotional and behavioural difficulties had the most difficult needs followed by those with learning difficulties. This research also found that teachers who prioritised the learning of subjects were less inclusive.

The secondary school environment, with less interactive and more didactic pedagogy, combined with the promotion of achievement and less emphasis on

emotional and social interactions, could therefore be considered as less conducive to inclusion than primary schools. This could reflect why Polly's social difficulties have emerged at secondary school. Research in secondary schools suggests differences in teacher attitudes towards inclusion depending on their department. Teachers within the core subjects of English, Mathematics and Science showed the least positive attitude towards inclusion. Authors suggest this could be due to the external pressure of having results nationally published. This is supported by the more positive attitudes of those teachers in other subjects (Ellins and Porter, 2005). This reflects an underlying tension between the government drive to raise standards and to promote social inclusion of children with special educational needs. From the core subjects, Science teachers were the only subject found to have an overall negative attitude towards inclusion. This particular subject was identified by Polly as a lesson in which she had experienced a particularly high level of negative peer attention. The school had moved her into a different set in response to the allegations but this had made little difference.

Research indicates that the government policy of inclusion, in practice may not be socially inclusive for pupils with special educational needs, particularly as children become older. Research suggests these pupils are bullied and teased by other children and staff retain low expectations. For inclusion to be truly inclusive a change in school ethos seems required that coincides with a change in the attitudes and beliefs of wider society.

2.7 MACROSYSTEM: CULTURE AND DIVERSITY

Inclusion is a term which encapsulates the basic human right of justice and equality (Wilson, 2000) and supporting diversity. These are core values accepted by a modern, liberal society. Therefore an extreme view would consider that opposing inclusion would compromise these fundamental rights. Ainscow (1997) suggests that the ideological shift from inclusion reflects a shift from “integration” to “inclusion” and coincided with the change from a needs-based agenda to a rights-based agenda. The term inclusion has therefore been accused of being based on philosophy and emotion rather than empirical evidence (Little and Witek, 1996). In reality therefore, it is difficult to visualise how truly effective inclusion would be operationalised (Pirrie and Head, 2007). Fredrickson et al, (2007) draw attention to the advocates of inclusion labelling unsuccessful placements in mainstream schools as simply “not inclusive”. They suggest this maintains the philosophy of inclusion but does not support the realisation of the ideal.

Lingard (1996) suggests that by promoting such a philosophical model of integration attention has been distracted from the task of designing innovations to improve the education for pupils with special educational needs. Hornby (1999) argues that children with special educational needs have a right to an appropriate education and the right to be fully integrated within their local community. He advocates the abandonment of full inclusion and argues that the degree of inclusion should be decided based upon each child’s individual needs.

Within the Exosystem and related Microsystems it is therefore difficult to conceptualise or monitor the degree to which “inclusion” is achievable. A meeting that I attended at Polly’s secondary school was emotionally charged. The school representatives were tense and defensive of the strategies they had employed to facilitate Polly’s inclusion. I reflected upon whether the tension was due to a conflict between the exosystem level and the reality of the microsystems. That inclusive education is an entitlement and an ideal to be achieved for all children but the conflicting reality of meeting the needs of children such as Polly remains a challenge.

2.8 IMPLICATIONS FOR EDUCATIONAL PSYCHOLOGISTS

There are various roles that an EP can undertake to support children with PWS. This can include working within the individual systems of the family or school, or across systems to effect change for the individual or for the wider population of diagnosed children, their families and wider communities. This could be at many different levels and may be in the form of consultation ranging from information sharing to implementing preventative interventions.

Miller (2003) suggests that the involvement of an EP forms a temporary overlapping system, including the school staff, family, pupil and EP. While this occurs, Miller suggests (2003) the teacher is able to suspend their norms and values of belonging

to the school system and consider the situation from the family perspective. Miller (2003) suggests that this is mutual and that the family is also able to reconstrue the school. This was the case with Mrs Slayter as she began to recognise the school was trying to support her daughter rather than simply being unaccommodating.

Research has identified a lack of support for families of children with PWS. Hodapp et al (1997) found that families identified a maximum of three different professionals who offered support. The majority of families (67%) suggested that no professionals were supporting the family system. Hodapp et al (1997) suggested that this is particularly concerning, considering the high level of emotional and behavioural needs of children with PWS.

Wigren and Hansen (2003a) found that 42 per cent of parents thought their children would benefit from external counselling about being affected by PWS. About a third of parents were unsure whether their children required this support. Additionally, James and Brown (1993) found that over half the children with PWS would like emotional support. There could be a role for the EP in supporting the family or at least, ensuring the family has access to the appropriate professionals. Also, through the temporary overlapping system additional understanding and support from school could occur.

Findings suggest that parent-child interactions are affected by phenotype knowledge of the particular genetic syndrome. Parents therefore require a more comprehensive

education about the strengths and weaknesses associated with the particular syndrome if they are to form accurate expectations (Ly and Hodapp, 2005). They also require educating about how their response to behaviour can influence behaviours.

It is concerning that parents are often the only informants for educational settings, regarding the difficulties associated with genetic syndromes. This incomplete knowledge and understanding is of particular concern if considered in view of research findings that parents only have partial knowledge about the behavioural and cognitive characteristics associated with particular genetic syndromes, even though these have been well established by research and could be particularly useful when considering educational provision (Fidler et al, 2002). I would consider it an EP's role to contribute to schools' and parents' understanding of the strengths and weaknesses, both academically and socially, of a child.

I would argue that information about a phenotype could be used as a preventative measure in education. For example if difficulties with social interactions are a typical feature of individuals with PWS, interventions that promote these skills could be beneficial at an early age. Descheemaeker et al (2002) found that towards the end of childhood, PWS children were often moved to a lower level of schooling, frequently below their intellectual capabilities and in contrast to expectations of professionals. This requires further research but could indicate that difficulties with

social interactions are the principal cause of children's educational failure as they progress through their education.

It is also important that participants in the different systems around the child are aware that they have an effect on the ontogenetic process. The school therefore needs to consider how it can adjust its environment and ethos to promote social interaction with peers; this needs to occur at macrosystemic and microsystemic levels. Similarly special education should be refocused to improve social interactions that occur on the playground (Sigman and Ruskin, 1999). Through their temporary involvement within an integrated system the EP could promote this alternative view of PWS.

Further research is required into how systems beyond the individual can support children with PWS, particularly in addressing the social difficulties. Repetitive, rigid and ritualistic behaviours can be particularly difficult for parents to manage. Behavioural interventions that have been effective for some children with autism could potentially be adapted for parents with children who have PWS (Greaves et al, 2006). Dykens (2002) suggests that splinter skills such as puzzle ability are similar to those of autistic children and could potentially be utilised as a strength for some individuals with PWS. Rosner et al (2004) suggests that puzzle abilities could be utilised to promote social competence.

James and Brown (1993) suggest a need for research in home, school and community environments. Adults with developmental delays are often unable to manage in vocational settings due to difficulties in working with colleagues, rather than the result of any limitation in their ability to fulfil work requirements (Sigman and Ruskin, 1999). If we consider those with PWS to have similar difficulties to these individuals, I would argue that it is the responsibility of those in education to prepare people with PWS not just academically but socially, with skills that will enable them to function in the wider community. I would argue that this can only be achieved through a consideration of the different systems in which the individual operates and how these can support the individual in maximising their potential.

In conclusion, further research is required to investigate how systems surrounding the individual potentially interact with their genetic predisposition, to facilitate the expression of particular behaviours and characteristics. If there are particular genetically-based difficulties that characterise the social interactions of individuals with PWS, then preventative interventions within the systems in which the individual participates could potentially be effective. If Polly had been given a structured opportunity to develop her social skills at primary school she may then have been more socially included at secondary school and this, in turn could potentially have prevented her difficulties with peer interactions and her subsequent mental health distress. Alternatively, if Polly had been placed in provision suited to her social needs it is likely that her social experience of her education would have been more positive. However, this may not have been appropriate for her academic needs.

Again the macrosystemic issue of what defines inclusion is a pertinent question, and the differing interpretations, beliefs and capabilities of schools, and the individual beliefs of teachers, parents and pupils are salient in informing provision planning. My role as an EP within this context was therefore to ensure that the individual needs of the pupil, Polly, were considered through temporarily building an overlapping system in which individuals could communicate more effectively and consider each other's point of view.

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CHAPTER 3

IMPLEMENTING A GROUP INTERVENTION TO SUPPORT ADOLESCENTS WITH AD/HD: IMPLICATIONS FOR EDUCATION AND EDUCATIONAL PSYCHOLOGISTS

3.1 ABSTRACT

Pupils with a diagnosis of Attention Deficit Hyperactivity Disorder (AD/HD) often have a negative experience at school. Various types of psychosocial and pharmaceutical intervention have been shown to be effective to a certain degree in supporting pupils. There have also been many educational interventions whose efficacy has an increasing evidence base. Research has mostly focussed on children; however with the increasing population of adolescents who have an AD/HD diagnosis interventions that address the needs of this population are also required. Many interventions are delivered to groups of children; whether this is an effective method to support children with AD/HD is considered, drawing on research from social skills groups. Throughout this report a group intervention for adolescents with AD/HD is outlined and discussed, to consider whether it was effective. It is concluded that group interventions often remain ineffective if completed in isolation from the wider school context. For children with an AD/HD diagnosis to be successful within the current education system pedagogy, staff attitudes and government policy also require change.

3.2 INTRODUCTION

Attention Deficit Hyperactivity Disorder (AD/HD) is a disorder with criteria outlined by the American Psychiatric Association (APA, 1994). Behavioural characteristics are inattention, impulsiveness and hyperactivity that significantly interfere with functioning in two or more settings. Three main subtypes of AD/HD are specified: those individuals characterised as predominantly hyperactive and impulsive, the mainly inattentive group; and the combined subtype of hyperactive, impulsive and inattentive. There is no single measure to diagnose AD/HD; therefore diagnoses are frequently made on the basis of subjective accounts of behaviour provided by teachers and parents (Purdie, Hattie and Carroll, 2002).

The estimated prevalence rate in the United Kingdom is between three and five per cent for school aged children (NICE, 2000). This makes AD/HD the most prevalent childhood disorder. AD/HD is positioned as a developmental disorder and behaviours are usually evident by the time a child is 3 or 4 years old. However some children show evidence of the disorder earlier and others not until they are 6 or 7 (Barkley, 1997). Although AD/HD was considered a disorder restricted to childhood, research has shown that between 30 to 70 per cent of people maintain the behaviours into adulthood (Barkley, 1997). There is also comorbidity with other behavioural and emotional disorders that generally emerge in late childhood or early adolescence (Purdie, Hattie, Carroll, 2002). Therefore throughout the education system there are pupils with a diagnosis of AD/HD.

The intervention referred to throughout this report is a group intervention, completed with secondary school pupils (see A3.1-4). A Special Educational Needs Coordinator (SENCO) had raised concerns about a group of year 7 pupils with me in my role as a Trainee Educational Psychologist (TEP) as they had been identified by various teachers as having “anger management difficulties”. I supported the SENCO to identify more specifically the needs of the group. The “strengths and difficulties questionnaire” (SDQ). (Goodman, 1997) was completed by form tutors, parents and pupils. The triangulated SDQ data indicated that “hyperactivity” and “conduct” were the particular difficulties for all of the boys within the group; four of the six boys also had a diagnosis of AD/HD. Further discussion with the SENCO and form tutors suggested that an underlying cause of the reported conduct difficulties was likely to be AD/HD (see A3.2).

To support these pupils the SENCO was hoping to run a group at school. As a TEP I drew on previous research to support the SENCO in considering what may be effective in terms of content for the sessions and how to run the group. In hindsight, the group intervention raised various questions regarding the efficacy of group interventions and the wider educational context surrounding interventions for pupils exhibiting AD/HD behaviours. These will be highlighted throughout the report.

3.2.1 Other difficulties associated with a diagnosis of AD/HD

There is usually a focus on considering the behaviours that characterise AD/HD. However other difficulties have been associated with the diagnosis such as social interactions.

Children with AD/HD typically experience difficulties in building and sustaining relationships with peers (Barkley, 1990). Some affected children show an overlap with the characteristics of other childhood disorders that affect social functioning such as oppositional defiance disorder (ODD), conduct disorder and pervasive developmental disorders (PDD) (Nijmeijer et al, 2008). Therefore research that investigates what interventions are effective with individuals who have AD/HD and another diagnosis (e.g. ODD) is required.

Peer interactions at secondary school and social relations are also different and more challenging than in primary schools. Nijmeijer et al (2008) argue that the distinction between AD/HD and PDD is not useful as many children with AD/HD could potentially remain undiagnosed. There are various studies supporting the presence of characteristics of PDD in children with AD/HD (see Nijmeijer et al, 2008 for further discussion).

Antshel and Remer (2003) also suggest that social skills may differ between children with differing subtypes of AD/HD. Research suggests that the combined subtype

may have difficulties with skill performance while those with inattention may have knowledge deficits in social skills (Wheeler and Carlson, 1994 cited in Antshel and Remer, 2003).

Hyperactive and impulsive behaviour can make social interactions difficult (Nijmeijer et al, 2008). The social interactions of children with AD/HD are also often negative and aggressive (Nijmeijer, 2008). Restless and intrusive behaviours such as interrupting children's play and talking inappropriately (Barkley, 1997) can make these children particularly unpopular. Research has compared peer ratings of children with AD/HD and their typically developing peers. The former group were less liked and more likely to be rejected by their peers (Hoza et al, 2005).

Research has indicated that psychostimulant medication alone has not been successful in leading to improved interactions in pupils with AD/HD (e.g. Pelham et al, 1998). Psychosocial interventions therefore appear to be necessary. Interventions that aim to improve social skills are typically delivered to children in a group format and include the explicit teaching of social skills and social problem solving (Daly et al, 2007).

3.3 ETIOLOGY OF AD/HD

There are many theories about the cause of AD/HD including biopsychological, psychological and social perspectives. The three broad domains of biopsychological research are cognitive, neurobiological and genetic that aim to identify a particular biological deficit that causes AD/HD, while the psychological research considers how cultural and social issues affect AD/HD. These perspectives are briefly outlined (for a more detailed discussion see Barkley (1997a, b) and Cooper (2001).

The majority of theories about AD/HD consider the “symptomatology” to be caused by an underlying neurobiological deficit (Graham, 2008a). However, research evidence currently remains inconsistent (Barkley, 1997). Some research has identified similarities between the behaviour of individuals with AD/HD and individuals with brain injuries to the prefrontal cortex (Barkley, 1997). Research using modern neuro-imaging techniques such as functional magnetic resonance imaging has also identified various abnormalities in particular brain regions of those diagnosed with AD/HD, which have not however, yet been directly linked to specific areas of the brain (Graham, 2008a).

Genetic research has also remained inconclusive. Levy, et al (1997) completed a large scale twin study and findings indicated that AD/HD could not decisively be regarded as a “discrete disorder” and should be considered as a continuum of symptomatology, present across the whole population to different degrees.

Opposing biopsychological views suggest that AD/HD is caused by a cognitive deficit. More specifically this theory proposes that children with AD/HD have difficulties in delaying or inhibiting behavioural responses: a deficit in the response inhibition system, located in the pre-frontal cortex is postulated as the underlying cause (Barkley, 1997a, b). Barkley (1997a, b) proposed that neurological problems directly result in cognitive difficulties in “working memory”, “internalised speech”, “motivational appraisal” and “behavioural synthesis”. These problems would lead to potential difficulties for affected children within the current British education system with its emphasis on self-regulation, passive listening and recall of information. The postulated difficulty in motivational appraisal is also likely to result in social difficulties.

Biopsychological explanations for AD/HD may become more conclusive in the future. However, this “within child” focus has implications when supporting these individuals within an educational setting: a point returned to later in this section. Other theories consider how the environment can exert an effect on AD/HD.

Some authors (e.g. Calhoun, 1997 cited in Graham, 2008a) argue that AD/HD should be redefined as a “cognitive style”, not conducive to the current education system or the modern way of life. Rather than a disorder the “difficulties” are considered an inability to conform to social and procedural rules (Forness and Kavale, 2001). Behaviours are therefore only “difficult” in environments that expect

predictable behavioural patterns, attention to tasks and obedience to rules as does the current education system (Forness and Kavale, 2001). Adams (2008) argues that pupils are expected to “fit in” to what is already provided.

There have been some attempts to integrate biological and psychological theories. Frith (1992) proposed a model that considers the biological causes of AD/HD but also how the behavioural outcomes are mediated by the environment and experiences of the individual. This model suggests that learning experiences can potentially provide opportunities for the individual to manage any cognitive difficulties that may exist, so in this way the environment mediates the degree to which neurological deficits are expressed. This model is helpful when considering how interventions at school and home can potentially support children.

Cooper (2001) calls for a holistic approach to AD/HD, suggesting multi-disciplinary research is necessary to expand our understanding of the difficulties. He also suggests that the bio-medical construct requires further expansion if institutions are to be empowered to manage AD/HD behaviours. If a teacher maintained the belief that AD/HD is a within child difficulty, consistent with the bio-medical construct, they would arguably maintain a view that the environment, including their own behaviours would have limited capacity to support the child.

The SENCO in the current case study (see A3.1, A3.2), running the group maintained the view that medication could potentially be helpful but that the

environment also had the potential to alter the behaviour of pupils with AD/HD. Therefore her view appeared conducive to supporting these pupils. However the SENCO raised the issue that the majority of school staff at the secondary school followed a bio-medical model. This had particular implications regarding the generalisation of skills to a wider context, a point returned to later in this report.

3.4 INTERVENTIONS

Many interventions for children with AD/HD have been trialled with varying degrees of success. Interventions are delivered by numerous professionals; within health, education and social services settings, often with a different focus dependent on the professional's belief about the causes of AD/HD. Although there has been a significant volume of research completed with children, there is a limited number of studies with adolescents who have a diagnosis of AD/HD. There are limitations in generalising findings from children to adolescents as there are many developmental and environmental differences, particularly as, unlike the majority of younger children, adolescents spend a larger proportion of their time with peers than with either parents or teachers. This may legitimately lead to differences in both the focus and choice of intervention for differing age groups.

My own group intervention comprised of adolescents with characteristics of AD/HD, who were thus a relatively homogenous group. Some research into group interventions has indicated that groups which are homogenous are not conducive

towards positive intervention outcomes. Research indicates that peers in homogenous groups model negative behaviours and these are then sometimes adopted by others in the group. Arnold and Hughes (1999) suggest these effects may be particularly pertinent to teenagers as a greater importance is placed on peers during this stage of development. These iatrogenic effects may reduce the acquisition of positive skills and increase negative behaviour through modelling and reinforcement during group sessions (Dishion et al, 1999). This risk will be discussed later in this report.

As the intervention that I undertook was within a secondary school context, research with adolescents will primarily be discussed, with reference made to findings from children when directly relevant research is scarce. There will also be a broader focus on psycho-social group interventions, with a brief consideration of the issues surrounding use of medication and multi-modal interventions.

3.4.1 Medication

A biopsychological construct of AD/HD that has been widely, but not universally adopted by wider society, has led to medication being the principal form of “treatment” for many children. In the USA between 2 and 2.5 percent of children are prescribed medication for AD/HD, with 90 percent of these being prescribed psychostimulant medication, methylphenidate. In the United Kingdom figures are much lower, with less than 1 per cent receiving similar medication (NICE, 2000).

However in England between 1991 and 1996, the number of methylphenidate prescriptions increased by 2,000 per cent (Norris and Llyod, 2000).

Medication is hypothesised to increase the levels of dopamine and norepinephrine between the synapses or neurotransmitters in the brain (Barkley, 1997a) that are considered responsible for executive control. Attention must be drawn however, to the argument presented in the previous section; biopsychological theories have been unable to identify particular deficits and similarly research remains inconclusive regarding what stimulants do or how they work. The long-term implications that this medication may have on the developing brain also remain inconclusive (Graham, 2008b), although research is beginning to highlight some side-effects (e.g. Purdie et al 2002) including difficulties with digestion and fertility.

Purdie, et al (2002) completed a meta-analysis of interventions. They found that despite the lack of understanding about medication, it has been shown to be effective in managing hyperactivity, inattention and distractibility. However they raised concerns regarding the temporary “therapeutic effect” as once the medication has worn off behaviours re-emerge (Purdie et al, 2002). Additionally there is no evidence indicating long-term academic gains or an alteration in peer perceptions (Pelham et al, 1998). Further, one study has found decreased social engagement and behaviour due to medication (Burmester, 1992 cited in Daly et al, 2006).

The question therefore has to be raised as to whether teachers and parents actually benefit more from the medication than the child. Levine et al (1997) argue that the behaviour of these pupils may be communicating trauma or other difficulties that they can not articulate more directly. Purdie et al (2002) conclude that the medical construct of AD/HD has resulted in medication being considered the primary choice of intervention while educational solutions to difficulties at school are less fully considered.

Research is more limited regarding the effects of stimulant treatment for children with AD/HD aged 12 and older (Pelham et al, 1991). However, Pelham et al (1991) studied adolescents at a summer treatment program and found similar effects to those found with younger children. With medication there was a reduction in negative social behaviours, increased following of rules and some academic gains. However, contrary to younger children, the adolescents did not show an improvement in positive peer behaviour. Peer relations in adolescents are markedly different to younger children and peer pressure to conform to group norms may override the potential benefits of medication.

There are limitations to these findings; Pelham et al (1991) acknowledge that although there was a reduction in the young people's manifest conduct problems and negative verbalizations, this could have been due to the behavioural intervention that was concurrently running. I would also argue that these group findings may reflect an iatrogenic effect; where adolescents adopt the negative behaviours

displayed by other members of the group (a point returned to in section 3.6 of this report). There were further limitations to the study in terms of ecological validity as adolescents were in small classes that were atypical of a mainstream secondary school. Additionally 15 out of the 17 adolescents also had conduct disorder; results may therefore have limited generality to the wider population of secondary-aged pupils with AD/HD. However, Evans and Pelham (1991) extended the ecological validity of this study by re-creating a class to represent a secondary school History classroom and found comparable effects. Although ecological validity was extended, the small classes and homogeneity of pupil groupings are not representative of a mainstream secondary school classroom. To my knowledge research has not extended these findings and thus further consideration of the impact of medication on adolescents in an educational setting is required, in my opinion.

3.5 PSYCHOSOCIAL INTERVENTIONS

Research has shown that many psychosocial interventions are effective in educational settings. The difficulties exhibited by pupils diagnosed with AD/HD often interfere with classroom behaviour and their ability to learn. Interventions retain a different focus with the majority aiming to alter the behaviours associated with a diagnosis of AD/HD. However, an increasing amount of research has also considered how social skills can be improved. In this section of the report, some of these interventions will be highlighted. A recent review by Chronis, Jones and Ragi (2006) concluded that the majority of research with adolescents who have AD/HD

has focussed on how to support them in the school setting; however research remains very limited.

3.5.1 Altering AD/HD behaviours

Behavioural interventions have been widely applied to children in primary school settings. This typically includes either antecedent-based strategies, consequent-based strategies or self-management interventions. Antecedent-based interventions aim to manipulate the environment or events that may precede the behaviour. In an educational setting this may include manipulation of the learning environment to make it more conducive to learning, such as reducing noise or altering seating arrangements (Abramowitz and O’Leary, 1991). Children may have tasks reduced or broken into manageable parts and have class rules reiterated (Du Paul and Weyandt, 2006).

There has been a larger focus on consequent-based strategies. These interventions aim to manipulate events following undesirable behaviour by increasing the likelihood of an alternative behaviour occurring or reducing the difficult behaviour (Abramowitz and O’Leary, 1991). Interventions in the classroom such as a consistent rewards system using stickers or tokens, or verbal praise have been widely used for children with AD/HD behaviours (Daly et al, 2007). A consultant and the teacher collaboratively develop specific, individual and class wide strategies (Chronis et al, 2006). Du Paul and Weyandt (2006) argue that this should be based

on a functional assessment of the gains from a particular behaviour; which may, for example be to obtain attention or avoid particular classroom demands.

Research indicates that children with AD/HD respond to reinforcement to a greater extent than control groups (Luman et al, 2008). They are also less likely to respond to feedback alone (a less tangible reward). Children with AD/HD were also more likely to underestimate the time interval between rewards. Authors concluded that children with AD/HD have motivational problems when performance is not directly reinforced (Luman et al, 2008).

Self-management strategies are based on the assumption that children with AD/HD have difficulty in regulating and organising their own behaviour. A cognitive behavioural modification program, similar to cognitive behavioural therapy, therefore aims to teach a child to consider the steps necessary to perform a task successfully (Gordon et al, 1991). They are then rewarded for the successful steps. The difficulty with cognitive behavioural interventions is the problem in generalisation of strategies to other tasks and environments, this is particularly problematic with children who have AD/HD (Gordon et al, 1991).

Gordon et al (1991) used an electronic Attention Training System (ATS) with 6 pupils (aged 6-9 years), that automatically awarded a point to a pupil if they remained on task and deducted a point when he or she went off task (through a button pressed by the teacher). This was therefore a systematic use of a response cost strategy.

The intervention successfully increased the child's attention with significant increases between the baseline and post intervention. However, when the ATS was removed, attention levels reverted to baseline levels. Response cost strategies may thus be potentially useful as a short-term behaviour management intervention but long-term gains or generalisability of behaviours to other settings is limited.

Interventions based on behavioural psychology have shown some success with adolescents. These interventions typically focus on the management of difficult behaviour and increasing task engagement. Evans et al (1995) directly taught adolescents note taking through modelling and practice. Note taking was identified as an activity that required the pupil to attend and organise information. It was hypothesised that increased on-task behaviour (note taking) would reduce the opportunity for disruptive behaviours. Evans et al (1995) found significant increases in on-task behaviour, a greater understanding of the lesson content and higher scores in daily assignments. Although rates of disruptive behaviour were lower when pupils were on task differences were not statistically significant. This intervention was completed at a clinical summer school with small groups of adolescents. Researchers acknowledge that this particular intervention would require studying in a school setting. I would also argue that with homogenous groups of adolescent's iatrogenic effects, in the form of pupils adopting the negative behaviours of others within in the group, can not be ruled out and may have maintained levels of disruptive behaviours (see section 3.6 for a more detailed discussion).

Evans et al, (2004) utilised behavioural techniques including time out, a points system, shaping and generalisation tailored to individual adolescents in the “Challenging Horizons Program”. A mixture of group and individual support in note taking, study skills, organisation and social skills were targeted. Evans et al, (2005) in a follow up study found that there were large gains in the classroom but a limited improvement in social functioning. This comprehensive targeting of various different skills was an approach adopted in my own intervention with the adolescents (summarised in A3.3).

Although self-monitoring is successful for some adolescents, Morris (1993) found that a cognitive-behavioural therapy program, based in a clinic was ineffective with adolescents who had AD/HD but successful with those who had conduct disorder. This could have been due to the impulsivity that characterises AD/HD which therefore made it difficult for these individuals to self-monitor and control their behaviour.

The majority of research has been with younger children and there is a reliance on teachers and other school staff to implement the intervention (Daly et al, 2007). Research is required to consider how more intensive interventions such as token economies can be faded with their effects being sustained (Abramowitz and O’Leary, 1991). Research has been completed with pupils that have learning difficulties but whether these strategies can be generalised to individuals with AD/HD requires further investigation in real world settings.

When pupils attend secondary school the demands arguably alter from the primary school setting. The pedagogy of lessons changes, with more didactic rather than interactive teaching characterising secondary schools. I would argue that although behavioural interventions can be successful with staff in primary schools the secondary school context is less conducive to the consistency required for a behavioural intervention to be effective.

In secondary schools therefore an intervention that can support pupils with AD/HD to regulate their own behaviour may be more realistic. This is consistent with the theory proposed by Barkley, (1997, outlined briefly in section 3.5.2). Therefore AD/HD is conceptualised as a performance deficit rather than a skills deficit. Reid et al, (2005) completed a meta-analysis and found research limited for adolescents (out of 51 studies, only 3 studies had participants that were over 12 years old) with AD/HD. Self-regulation techniques such as self-assessment and self-recording were concluded to have positive behavioural and academic outcomes for children with AD/HD (Reid et al, 2005). Authors concluded that self-regulation was effective in increasing pupil on-task behaviour, accuracy when completing activities and in reducing disruptive behaviour (Reid et al, 2005).

The group run at the secondary school (see A3.3) focussed to a certain extent on altering the behaviour of the children. Behavioural and self-monitoring principles were utilised within the group. The SENCO used a token economy during the group

sessions to manage behaviour with tangible rewards. She also taught the pupils organisational strategies, and completed activities to increase pupils' attention to activities by rewarding them for particular time periods on task. Using solution-focussed brief therapy techniques the SENCO supported pupils in setting their own targets for behaviour during lessons and this was reviewed by the SENCO with pupils every week.

3.5.2 Altering social skills

Research has demonstrated that social skills training (SST) is not particularly effective for children with or without AD/HD. Following SST Antshel and Remer (2003) found that children (8-12 years) with AD/HD increased in measures of assertion but not across other social skills. Generalisation was planned for but was not demonstrated.

Royer et al, (1999) found that SST did not have an effect on behaviour difficulties, academic skills or social skills for adolescents with behavioural difficulties, although the adolescents themselves suggested they had improved in assertion and empathy. The authors suggest the intervention may have been more effective if the training had occurred across various settings such as the playground and classroom.

The issue of generalising social skills to a wider environment is frequently reported as a concern in SST. Guevremont and Foster (1993) completed a social skills

intervention with aggressive boys and found that even though problem solving skills increased in the intervention environment the skills did not generalise to either the playground or the classroom. Some interventions with pupils that have difficulties making friends have utilised parents and teachers to support the generalisation of skills beyond the group setting (Macdonald et al, 2003). Liaison with both teachers and parents provided information about the social skills training. A follow up three months post-intervention indicated that some transfer of skills had occurred. However, to date there is no evidence these findings can be generalised to pupils with AD/HD.

Group interventions for children with AD/HD that focus on teaching particular social skills have been relatively unsuccessful. This may be due to children with AD/HD not having a skills deficit, but rather difficulties with skill performance in context (Barkley, 1997a). Another possibility is that a homogenous group of children with AD/HD produces iatrogenic effects, with pupils adopting more negative behaviours that are displayed by other members of the group. Although research has found an increase in assertion skills as an outcome from SST (e.g. Royer et al, 1999) this could also be viewed as a negative trait. Perhaps children are adopting negative behaviours from one another (this point is considered further in section 3.6 of this report).

Further support for this hypothesis comes from a friendship intervention for children with AD/HD. Hoza et al, (2003) paired children with a “buddy” to increase positive social interactions. Children with AD/HD who were paired with their peers built

higher quality friendships and improved their academic performance. Also, parents were requested to arrange opportunities for the children to play with their buddy externally to the program. Peer reinforcement is likely to have supported the generalisation of skills to other settings and may have supported the consolidation of improved social behaviour reported in this study.

The difficulty with the majority of social skills interventions is that they target skills deficits rather than performance difficulties. Social performance difficulties occur across settings (DuPaul and Weyandt, 2006). The majority of the social skills training interventions for children with AD/HD have taken place in clinics rather than in school settings (DuPaul and Weyandt, 2006).

3.5.3 Academic interventions

Some research has begun to consider whether an academic intervention (such as the teaching of reading or mathematics) has a positive impact on social skills. Findings are once again inconsistent and the reduction of behavioural difficulties has typically been measured rather than social skill acquisition (Rutherford, DuPaul, Jitendra, 2008).

A reading intervention utilising peer tutoring with pupils that had AD/HD and their mainstream peers showed that a reading increase was correlated with an increase in the social skills of cooperation and assertion. Again this may indicate that the

aggregation of pupils with AD/HD as homogenous groups is counterproductive. The positive influence of peers in this intervention rather than the “academic focus” may account for social skills improvement.

Interestingly Rutherford et al (2008) found that reciprocal peer tutoring in Mathematics increased self-control in AD/HD children, whereas the peer tutoring in reading that was not reciprocal did not produce these changes. Authors conclude that the cooperation, turn taking as tutor and tutee that are necessary for reciprocal tutoring increased self-control. I would also argue that it increased the child’s self-esteem and is likely to have challenged the learned helplessness that may be characteristic of some children with AD/HD.

Research evidence of negative outcomes from education for pupils with AD/HD both socially and academically is limited. The impact of this could be that children develop a sense of learned helplessness (when a child believes that they are unable to affect the final outcome of a task and is therefore less likely to invest effort), when attempting tasks (Milich and Okazaki, 2004). Milich and Okazaki (2004) found that children with AD/HD were more likely than a control group to express personal inadequacies, negative feelings such as boredom, and to engage in task irrelevant verbalisations to enhance their own self-image. Children with AD/HD also gave up earlier on the insolvable task than control group children. Authors concluded that children with AD/HD were more likely to acquire a generalised learned helplessness response to tasks.

This research highlights some of the associated difficulties, other than simply behaviour characteristics, of children diagnosed with AD/HD. I would argue that these difficulties are likely to exacerbate the behaviours which are more directly associated with the effects of AD/HD. Therefore the group intervention developed in my own practice attempted to build self-esteem and increase the social skills of pupils through playing games and activities to increase cooperation and emotional awareness.

3.5.4 Multi-Modal Interventions

Multi-modal or combined interventions are generally considered to be more effective than either psychological or medical interventions alone. These arguably address the limitations that exist for each form of intervention when completed alone. However, again evidence for effectiveness remains variable.

A few studies have directly compared whether medication combined with a psychological intervention is more beneficial than either intervention alone (Carlson et al, 1992). Research was completed at a summer camp with children who had a diagnosis of AD/HD (Pelham et al, 1993). The boys received a behaviour modification program, medication or a combined intervention. The behaviour modification program included reinforcement using a points system for on task behaviour and a response cost system for breaking rules. Medication was either a

high or low dose of methylphenidate. Results showed that behaviour modification and methylphenidate separately improved classroom behaviour, however only medication alone improved academic performance (Carlson et al, 1992; Pelham et al, 1993).

The combined treatment (Carlson et al, 1992) indicated that a lower dosage of methylphenidate (0.3mg) was required when this was combined with a behavioural intervention, whereas a higher dosage (0.6mg) showed no added value. However in the condition with medication only, a higher dose (0.6mg) was required to attain similar levels of behaviour change.

In a direct comparison, Pelham et al (1993) found the combined intervention was more effective across measures than the behaviour modification program alone. Although the combined treatment was not more effective than the medical treatment alone. Pelham et al (1993) suggest that although the combined intervention was less effective over a short term period, it may be that this intervention is more successful at maintaining long term effects. Perhaps medication supports the pupil to control their behaviour in the short term but for long term change, particularly without medication, behavioural strategies are required.

The ecological validity of the study is questionable as class numbers were small and resembled a special school setting in terms of teacher pupil ratio and the behavioural system. Pelham et al (1993) conclude that as the behavioural

intervention had been unsuccessful in this structured environment, the mainstream schools that the boys currently attended would also find the behavioural intervention unsuccessful. However, I would argue that the findings could exemplify iatrogenic effects that can occur when grouping children with similar difficulties; this point is returned to later in the report. If this were the case, the intervention with heterogeneous peers in a mainstream classroom could potentially be more successful than initially predicted.

Carlson et al, (1992) also measured the self-perceptions of children and concluded that on days when they received medication rather than a placebo they liked themselves more, received fewer time outs and generally performed well. However, research does not outline whether teachers were aware of which children were receiving medication. Therefore these results may actually reflect higher teacher expectations due to the child being medicated. The child may have behaved more appropriately and felt happier due to a higher degree of acceptance by adults.

The “Multimodal Treatment Study of Children with AD/HD” (MTA cooperative group, 1999a,b) has arguably provided the most comprehensive data set regarding combined interventions. Longitudinal data were collected from 579 children diagnosed with AD/HD (7-10 years). Four separate interventions were compared; a behavioural intervention group, medication group, a combined medication and behavioural intervention group and a control group. Specifically, the behavioural

intervention included parent training and education, classroom behavioural management for teachers, and social skills training.

Preliminary results suggested that participants in all four conditions demonstrated reductions in hyperactivity and inattention. Confirming previous findings from Pelham et al (1993) the effects from the medication only group and the combined treatment group were superior to the behavioural intervention alone (1999a, b).

Contrary to Pelham et al's findings, however, the combined intervention from the MTA group was more successful than medication at reducing social skills deficits, poor academic achievement and defiant or oppositional behaviours. The combination of medication and self-regulation techniques appeared to stabilise behaviour (1999a). However, Hoza et al (2005) completed further analysis of the MTA research and asked class mates to rate the children with AD/HD who had participated in the interventions. Peer assessments remained unfavourable although the use of peer ratings as a measure is questionable, given risks of reputational bias. Similar to Pelham et al (1993), the combined treatment also required lower doses of medication. Interestingly parents also reported a preference for either the combined intervention or the behavioural intervention.

3.5.5 Conclusions

There is a lack of research consensus regarding what interventions are effective for adolescents with AD/HD (Chronis et al, 2006). This is a vulnerable period within the lifespan development process with both increased academic and social demands in the school context and different peer pressures and striving for increasing autonomy from the family. Although there have been some interventions in school settings, these are too few in number to inform definitive conclusions about what is effective. With the substantial number of children with AD/HD entering adolescence continuing to exhibit characteristics of the disorder, further research about how best to support this vulnerable group is imperative.

Within the studies reviewed above, there is an emphasis on experimental research following positivist methodology. Such studies can lack ecological validity. Although some interventions for children have been shown to be effective under controlled conditions, the challenge is how best to implement these interventions in real world school and community settings.

The question of how to alter behavioural characteristics associated with a diagnosis of AD/HD is an ongoing debate which remains controversial in nature, a point returned to later in this report. The associated difficulties such as poor peer relations have relatively limited research: the cyclical nature of difficulties with peer relations and escalating difficult behaviour has not been addressed. The negative

experiences of schooling are likely to contribute to low self-esteem and feelings associated with learned helplessness by the time pupils with AD/HD reach adolescence. Therefore interventions need to consider how these cumulative effects can be addressed.

Interventions that are multi-modal in nature can have some added benefit for children, but research still remains limited and by no means conclusive, and once again there is limited research with adolescents. In the future perhaps medication will be more effective at addressing specific symptoms associated with AD/HD while behavioural interventions are more successful at addressing some of the secondary associated difficulties such as social deficits (Daly et al, 2007). As adolescents spend more time with their peers than either parents or teachers, interventions should perhaps be focussed on self-monitoring and/or peer-mediated intervention.

Graham (2008a) raises the issue that while the biological paradigm assumes that children are unable to control their actions due to a neurological deficit, the core assumption of psychological interventions is that children can learn self-control. Until research becomes more conclusive regarding the causes of AD/HD multi-modal interventions may remain more appropriate.

3.6 GROUP INTERVENTIONS AND IATROGENIC EFFECTS

In the case study (see A3.3) the group intervention was run by the SENCO for 10 weeks with six, year 7 pupils, four of whom had a diagnosis of AD/HD. The sessions were based on social skills training, self-organisation, and behaviour management through reinforcement during the group and self-monitoring. The SENCO initially reported that there was an improvement in pupil behaviour and attention to tasks during the group sessions. However, after seven sessions the SENCO reported that the pupils behaviour was becoming more difficult to manage (see A3.4). We therefore decided that the SENCO would conduct individual sessions with the pupils, using a solution-focussed approach to psychology.

I reflected as a TEP about why the group had initially been successful and then become less productive. Considering the importance of group composition Adler (1995) suggested that group homogeneity (similar individuals within the group) was successful for support groups as individuals were then able to empathise with one another. However, if the group was aiming to create change, the group composition was more complex to define. The group composition in the present intervention had been homogenous, containing only pupils exhibiting difficulties with hyperactivity and conduct.

Dishion and Andrews (1995) provided evidence for iatrogenic effects that can occur in homogenous groups. They completed "The Adolescent Transitions Program"

(ATP) an intervention with “high-risk” 12 year olds. The different conditions were a parent- focussed group, adolescent- focussed group, both parent and adolescent focussed groups and self-directed change. Adolescents in the conditions with teen focussed groups reported higher levels of tobacco use, and teachers rated them with more behavioural difficulties. Authors concluded that findings could be due to iatrogenic effects, where by the teenagers adopted more negative behaviours from others within the intervention group.

To research these effects directly, Ang and Hughes (2001) compared the effects of group composition on intervention outcomes. The groups contained homogenous, heterogeneous or individual antisocial children (6-18 years). They found that the latter two intervention groups produced larger positive gains than the homogenous group; these effects were maintained at follow up.

Dishion et al, (1996) studied how peer influence during adolescence could increase deviant behaviour, by video-recording interactions between aggressive adolescents, non-aggressive adolescents and their close friends. They defined “deviancy training” as the positive reinforcement by peers of discussions about rule-breaking, and reported that these discussions then predicted subsequent behaviour. Adolescents may also have deviant values and beliefs reaffirmed or increased, therefore increasing deviant behaviour (Dishion et al, 1996). Prosocial peers can actively exclude children who are disruptive (Arnold and Hughes, 1999), so rendering such children more vulnerable to association with other peers who are disruptive or

aggressive, with a potentially negative impact on their behaviour, which could then contribute to the development of other conduct disorders in adolescents with AD/HD.

Arnold and Hughes (1999) completed a review of group based skills training with disaffected, challenging children. They concluded that there were negative effects from homogenous groups of disaffected children, suggesting that peers within the group were modelling negative behaviours which were then being adopted by others. Arnold and Hughes (1999) suggest these effects may be particularly pertinent to teenagers as a greater importance is placed on peers during this stage of development. These iatrogenic effects may reduce the acquisition of positive skills and increase negative behaviour through modelling and reinforcement during group sessions (Dishion et al, 1999).

These effects may occur to varying degrees with children in homogenous groups for intervention and could be generalised to adolescents with AD/HD. My own secondary school intervention may therefore have been less effective due to the group being homogenous. Perhaps if the group had been heterogeneous, containing typically developing peers, it would have been more successful as these pupils may have been positive role models and reduced risks of contagion of difficult behaviour. However, these group effects are complex and research has also contradicted the findings that claim to show iatrogenic effects.

Mager et al, (2005) suggest cautious interpretation of the conclusions drawn by Dishion and Andrews (1995), arguing that the iatrogenic effects were limited to only a few dependent variables and these effects therefore can not be considered conclusive. Handwerk et al (2001) suggest that even if peers influence behaviour on a daily basis these interactions do not necessarily translate directly into group interventions. They review various studies that do not support the hypothesis that homogeneity is harmful.

Mager et al (1995) directly compared homogenous and heterogeneous groups that aimed to teach adolescents with conduct disorder, problem solving skills. They found that homogenous groups produced lower ratings on externalising behaviours from both teachers and parents than the heterogeneous group. Also, behaviour during the sessions was more positive in the homogenous group, with members being supportive and participating more than adolescents with conduct disorder in the heterogeneous group. Mager et al (1995) found that more deviancy training occurred in heterogeneous groups as opposed to homogenous groups. Authors explain their findings by theorising that the group facilitator may have focussed more on the prosocial adolescents within the heterogeneous groups as they are likely to be more enjoyable to teach. This may have led the adolescents with conduct disorder to withdraw and form their own minority group.

The effects of grouping similar children together are therefore far from conclusive and situational factors relevant to each group intervention are likely to exert an

effect. From a review of the literature, Dishion and McCord (1999) concluded that children in early adolescence were particularly vulnerable to peer influences. The intervention group at the secondary school contained pupils who were young adolescents who may therefore be potentially more vulnerable developmentally to group effects than younger pupils.

Highly structured groups with strong leaders may reduce iatrogenic effects as there are fewer opportunities for peers to influence group norms and engage in talk that promotes antisocial behaviour and beliefs (Mager et al, 1995). Perhaps the SENCO leading the group within the secondary school context was not able to mediate between the group members and prevent iatrogenic effects.

There may be more studies that demonstrate iatrogenic effects; however interventions that are unsuccessful are frequently unpublished (Arnold and Hughes, 1999). There are thus potentially more group interventions that have found this effect. Further research is required as many group interventions that occur both in clinics and schools are usually directed toward homogenous groups. There is a need to determine whether the underlying beliefs of participants are altered by a group intervention and if this leads to negative changes in behaviour (Arnold and Hughes, 1999). However, the recruitment of prosocial peers to participate in heterogeneous groups raises ethical challenges. Perhaps therefore class wide or whole school interventions may be more realistic.

3.7 THE WIDER ROLE OF THE SCHOOL

Another difficulty from the group intervention, identified by the SENCO at the secondary school, was the challenge of supporting the generalisation of skills into the mainstream secondary context. To support the generalisation of behaviour and skills, she reinforced self-reports and teacher report cards with tangible rewards. However, generalisation to settings beyond the intervention group was minimal. Dupaul and Eckert (1994) identified the alteration of the consequences within the environment as a successful method of supporting generalisation for social skills groups. However, within the wider environment of a secondary school, consistency is particularly difficult to ensure. Also, maintenance and generalisation of skills may be particularly difficult for children with AD/HD as they may know how to perform skills but are unable to use these behaviours in a natural setting (see section 3.5.2).

For the generalisation of skills within the wider school, involvement from teachers and pupils, external to the group intervention would have been required. Within the secondary school there was inconsistent behaviour management of pupils by the teachers, and according to the SENCO a general intolerance of pupils who had a diagnosis of AD/HD, with the belief that they should be conforming to school rules. This school had recently been prosecuted successfully under the disability discrimination act for unfairly excluding a pupil with AD/HD. The wider school and curricular influences that need to be considered when intervening as an EP to support pupils with AD/HD in a secondary school will be highlighted in this section.

3.7.1 School culture, pedagogy and teacher perceptions

Lloyd and Norris (1999) argue that the education system has been a factor in the increasing number of pupils identified with AD/HD, suggesting that the prescribed curriculum, autonomy of schools, and league tables for performance have contributed to a climate likely to exacerbate vulnerability factors which may be all the more challenging in secondary schools. A more individualised curriculum that suited individual learning styles may be expected to benefit all pupils and particularly those with AD/HD. Graham (2008b) places a clear emphasis on the role of schools

“We need to look not just at the implications of AD/HD for education but to the rise of AD/HD as a symptom of the disorders of schooling” pg 17 (Graham, 2008b).

Graham (2008b) is interested in the role of schooling in the conceptualisation of disorderly behaviour and the recognition of particular children being defined as “disorderly”.

The expectations of schools that a child listens attentively, follows a succession of instructions, remains motivated when pursuing a difficult task and waits patiently are inconsistent with the defining characteristics of AD/HD (Forness and Kavale, 2001, Prosser, 2008). Graham (2008b) suggests that research into schools as institutions is “conspicuously absent”. She suggests that schooling methods and how these

effect the development of difficult behaviour require further investigation. Prosser (2008) argues that as curricula becomes increasingly standardised and narrow there will be an increasing number of marginalised pupils.

Prosser (2008) interviewed adolescents with a diagnosis of AD/HD to explore their experiences and views regarding their difficulties and the education system. Pupils suggested that medication was useful in primary school but not in secondary school. The behaviour management strategies, academic competition and traditional pedagogies associated with secondary schools were identified by the pupils as exacerbating their AD/HD characteristics, especially the passive and content driven lessons (Posser, 2008).

Graham (2008a) argues that pedagogic interventions that adjust teaching programs through altering instruction and the differentiation of the curriculum are required to support children with AD/HD. She argues that the focus on altering the child with medication and behaviour modification techniques masks the changes required to classroom environments, school practices and pedagogy.

Teacher beliefs, attitudes and pedagogical style also have a large influence on whether the behaviour of a child is considered as representing AD/HD (Graham, 2008b). Teachers will also be affected by wider government policy and perspectives (Adams, 2008). Adams (2008) suggests that teachers could potentially challenge the

medical model as their opinion sometimes has an important role when obtaining a diagnosis.

Evans (1995) argues that teachers rarely utilise techniques and interventions that have been previously identified by research as useful for particular populations of pupils. He also suggests that education staff rarely apply research to develop practical strategies. Research needs to identify particular tools and strategies (e.g. note taking) that are potentially useful within educational setting for these pupils.

As EPs therefore, perhaps we should be supporting schools in considering how they can alter pedagogy within the wider school context to support pupils with AD/HD alongside group interventions. The wider school initiative may potentially be more effective than group interventions for altering the school experiences of this group of pupils.

Part of the EP role may be to challenge conceptualisations of AD/HD and to support teachers in reflecting upon the definitions of this condition, its aetiology and the role of the environment in mediating the effects of any biogenetic vulnerability. Teachers may also benefit from a wider understanding of the potential implications of labelling a pupil with AD/HD.

3.8 CONCLUSION

The differing paradigms of psychology, biology and sociology propose divergent theories regarding the cause of AD/HD. These remain inconclusive and more recently theories considering the influence of multiple paradigms have been proposed. The emphasis on biological explanations has historically supported the adoption of a dominant medical paradigm within education and wider society, which has been associated with attempts to normalise behaviours associated with AD/HD through medication and psychological interventions.

The majority of research considering interventions for children with a diagnosis of AD/HD, has followed a positivist epistemology as studies have been conducted in controlled settings, utilising experimental methods. Research in educational settings, perhaps with a qualitative focus should provide a deeper understanding of the issues faced by this vulnerable group of adolescents and be more ecologically valid. This may enhance the effectiveness of interventions.

Intervention research (discussed in section 3.5.1) has focussed on modifying the behaviours associated with an AD/HD diagnosis that parents and teachers find challenging. Efforts to normalise these behaviours have varied success, with multi-modal interventions being the most effective. If pupils with AD/HD are to be effectively supported in educational settings interventions should also target academic difficulties and social interactions. This is likely to have a positive impact

on the manifestation of behaviours associated with an AD/HD diagnosis. Interventions vary in how effective they are, there is limited evidence to date that these can be generalised to secondary school contexts.

Medication and psychological interventions have shown some benefits for children and adolescents with a diagnosis of AD/HD. However, interventions that aim to enhance the social skills of children and adolescents have been relatively unsuccessful, this may be due to the difficulty of generalising learned skills. Alternatively, individuals with AD/HD may possess the skills necessary to interact but are unable to use them appropriately.

Research highlights the difficulties with group interventions and expanding research indicates that group composition may be important. In the current case study, the homogenous composition of the group exerted a negative effect. Individuals adopted some of the inappropriate behaviours exhibited by other participants. Therefore it may be beneficial for pupils without AD/HD to participate as “role models” in a group. Ang and Hughes (2001) found that the inclusion of a diverse peer group (heterogeneous) as opposed to a group of children with AD/HD (homogenous group) facilitated a larger behaviour change.

The principal challenge for researchers is how to provide practical strategies that can be utilised within a mainstream educational context. Daly et al (2007) suggest that few studies demonstrate the maintenance of post intervention gains following

the end of a psychological intervention. To obtain a diagnosis of AD/HD, symptoms should be present in at least two settings so it is plausible to argue that children would benefit from interventions that occur in more than one setting. A thorough assessment of the child's strengths and weaknesses and their surrounding environment could indicate how they can be supported.

Research suggests that generalisation of group interventions to other environments, such as the classroom context, is complex and often unsuccessful. Whether interventions that retain a school wide focus could be more successful, (such as peers becoming "tutors"), requires further research. This may support generalisation of skills and the reinforcement of positive skills.

The role of the school in supporting pupils with AD/HD is also important and research is beginning to highlight the key role that teachers retain in terms of their beliefs, attitudes and pedagogical style. Further research to determine what facilitates the learning of pupils with an AD/HD diagnosis is also required. The ethos and emphasis on curriculum driven standards may require altering if these vulnerable pupils are to succeed.

Although part of the EP role is to implement interventions to support pupils with AD/HD, the wider school context also requires consideration. EPs can potentially challenge current pedagogy and support schools to implement individualised learning for these pupils.

In conclusion, adolescents exhibiting characteristics of AD/HD poses a challenge to the current educational system, particularly secondary schools. Teachers find these pupils difficult and the pupils generally have a negative experience of school. Some interventions can potentially be successful but remain ineffective if completed in isolation from the wider environment. Therefore, school pedagogy, staff attitudes and government policy require change for more children with an AD/HD diagnosis to reach their potential within the current education system.

APPENDICES

A3.1: Referral

In the second half of the Autumn term, in my role as a year 2 TEP, the secondary school SENCO raised her concerns in a planning meeting regarding a group of pupils in year 7. Staff had reported to the SENCO that the behaviour of this group was difficult in class. All the pupils were described as disruptive, resulting in the use of frequent report cards. In response the SENCO thought that an anger management group intervention would be beneficial as pupils frequently became angry and confrontational when they were reprimanded or challenged by members of staff.

A3.2 Clarification of the referral

I discussed the different pupils with the SENCO and it became apparent that, apart from the teacher reports, she was unaware of the specific nature or frequency of the actual behaviours that pupils exhibited or what may be causing their behaviours. Therefore the SENCO agreed to observe the pupils in the classroom using a chart to record Antecedents, Behaviour and Consequences (Sasso et al, 1992). From this the SENCO concluded that it was not the pupil's anger that was causing the difficulties. It was apparent that their behaviours, (e.g. leaving their chairs, disrupting others, or being off task) caused the teachers to become upset and that they reprimanded the

pupils' which made them confrontational. Therefore to support the SENCO further in considering the pupils' difficulties, the form teachers, parents and pupils themselves completed the "Strengths and Difficulties" questionnaire (Goodman, 1997).

Analysis of the SDQ's indicated that the principal difficulty for all 7 pupils was hyperactivity, closely followed by conduct; additionally 4 out of the 7 pupils had a diagnosis of AD/HD. Therefore, the group intervention aimed to improve the difficult behaviours associated with hyperactivity and inattention.

A3.3: Intervention

The SENCO aimed to run the intervention group for 8 weeks. I supported her to plan the focus for the sessions by researching which group interventions had been successful (see section 3.5). The SENCO used behavioural psychology (see section 3.5.1) for behaviour management and aimed to teach the pupils self-monitoring skills (see section 3.5.1). The sessions aimed to enhance pupils' attention to tasks and to provide them with strategies to manage their own spontaneous behaviour. Pupils set themselves targets each week and these were reviewed by pupils themselves at the beginning of each session. At the end of each session pupils were also taught relaxation techniques.

A3.4: Outcomes

After 6 weeks the SENCO discontinued the group intervention due to an escalation in difficult behaviour during the group sessions and continued seeing pupils individually. She then used some activities based on solution focused psychology. In hindsight I returned to the research literature in order to develop my understanding of why group intervention had been unsuccessful. I decided that one of the influential factors may have been the homogeneity of the group and the iatrogenic effects, with pupils adopting negative behaviours promoted by other group members (see section 3.6).

Another difficulty for the target group was the generalisation of skills to the wider school context. The SENCO reported that school staff used behaviour management strategies that did not support the pupils in class and they also continued to reinforce negative behaviour. Staff expected pupils to attend to activities for long periods of time and quickly reprimanded spontaneous behaviour such as when a pupil shouted out an answer.

Staff also considered pupil behaviours as intentionally disruptive rather than a behaviour associated with an AD/HD diagnosis. These negative attitudes may have been partly because the school had been prosecuted a few years earlier, under the disability and discrimination act for not providing adequate support to include a pupil with ADHD.

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CHAPTER 4:

HOW DO ATTRIBUTIONS ABOUT CHILD BEHAVIOUR INFLUENCE BOTH PARENT AND TEACHER PERCEPTIONS ABOUT THEIR SUBSEQUENT BEHAVIOUR: IMPLICATIONS FOR EDUCATIONAL PSYCHOLOGISTS

4.1 ABSTRACT

The attributions that adults make for child behaviour affect the adults' subsequent behaviour and emotions. Research has focussed on the interaction between parents and children with findings indicating that attributions parents make may influence children's development directly and indirectly. More limited research has considered the attributions made by teachers for pupil behaviour. Particular attribution patterns are outlined in this report with certain patterns being associated with positive parenting such as discipline style. Valence effects or self-serving bias found in the wider attribution literature are also outlined for both teacher and parent attributions of child behaviour. This self-serving bias may require acknowledgement and alteration if interventions are to be successful. The implications from this research for interventions at school and for parents (such as parenting programs) are also discussed.

4.2 INTRODUCTION

The government document “Social Inclusion” (DfEE, 1999) seeks to promote better working relationships between schools and parents, particularly regarding children exhibiting difficult behaviour. The government position continues to shift regarding who is to “blame” and who should “take responsibility”. With the increasing number of parenting programs the focus could arguably be parents (Bunting, 2004). However, there is also increased pressure on schools to reduce exclusions and appropriately address the individual child’s needs.

Schools are encouraged to consult parents when devising Individual Behaviour Plans or a Pastoral Support Programme. By making expectations agreed and explicit it is hoped that pupil behaviour will be improved and a subsequent exclusion avoided (DfEE, 1999). However, these plans are frequently ineffective at altering behaviour and there is often a breakdown in communication between parents and school (Miller, 1999). It is important to reflect upon why this may occur if pupil behaviour is to be successfully altered. The psychological theory of attributions highlights the different assumptions that people make about the behaviour of others and provides some understanding of how difficult pupil behaviour may be viewed differently by parents and teachers.

Attributions are generally defined as the way we explain and evaluate both our own behaviours and those of others. Research has aimed to identify the processes by

which attributions are formed and how these affect human interactions and behaviour (Slep and O'Leary, 1998). Weiner (1979) suggested that attributions influenced both affective and behavioural reactions. He also proposed that expectations of other people's future behaviour were strongly influenced by attributions.

The focus of the majority of attribution research has been on interactions between adults. However, there is also an increasing body of research considering the interactions between adults (particularly parents) and children (Slep and O'Leary, 1998). There is also an emerging research interest in how teachers are affected by their attributions of child behaviour in the classroom (e.g. Miller, 1995).

Bugental et al (1998) distinguish between stimulus-dependent attributions and memory-dependent attributions of parents. Both types of attribution are elicited by parent's appraisal of situations, the attribution then has an effect on their subsequent emotions and behaviour. Therefore, different parenting behaviour will be elicited by different situations, dependent on perceptions of child behaviour and intentionality (Dix et al, 1986).

The principle distinction between memory-dependent and stimulus-dependent attributions are that parents have an awareness of the latter and these are more dependent on the situation (Bugental et al, 1998). Whereas, memory-dependent attributions are relatively stable and spontaneous with parents having little

awareness. However, the boundary between stimulus- dependent and memory- dependent attributions is difficult to establish as it is possible that over time the former accumulate and assume the latter form. Research rarely defines the particular attributions that are being studied.

It is also important to consider whether the accumulation of attributions over time effects the underlying assumptions or belief systems of the adult. Implicit theories are underlying frameworks through which judgements and behaviours are made. A person with an entity theory framework considers traits such as intelligence or morality to be fixed and non-malleable. Therefore, they assume that although people can learn new things, intelligence remains fixed. The opposing view is defined as an incremental theory and considers traits to be malleable. This view thus assumes that intelligence can be altered (Dweck et al, 1995a). The framework that an adult bases their assumptions has implications for interventions that aim to alter children's behaviour.

Interventions that aim to modify child behaviour are usually reliant on adults within the environment to both implement and sustain them. This includes interventions by teachers within the school context and parenting programs that require parents to alter their own perception and behaviour to affect a different response from the child. However, the success of these interventions varies and I would argue this is partly due to the underlying beliefs and attributions adults make and retain regarding child behaviour.

If both parents and teachers base their behaviours and emotions on attributions; as an EP it is important to understand the implications for interventions both at school and for parenting programs. With the government focus on parenting it is important to consider what influences parenting behaviour as this will have implications for parenting programs that aim to alter parent behaviours. Perhaps attributions or underlying beliefs require altering if parent skills are to become more effective.

In the following sections of the report some of the research findings from the attribution literature will be discussed. Research into teachers' attributions has mostly focussed on success and failure of children's academic achievement and the causal factors of either their effort or ability (Bibou-Nakou, 2000). There is less research considering teachers attributions regarding discipline and children's behaviour (Bibou-Nakou, 2000, Mavropoulou and Padeliadu, 2002). Therefore I will partly draw on my experiences as a Trainee Educational Psychologist (TEP) to consider the possible implications when working in a school context and when implementing interventions to support parents.

4.3 EFFECT OF ADULT ATTRIBUTIONS

The attributions that parents and teachers make about children's behaviour may influence their thoughts, emotional response or their actual behaviour towards children. Research has focussed on the interaction between parents and children

with findings indicating that attributions may influence children's development directly and indirectly. The following sections will draw principally on findings from research with parents to consider how the age and of the child and child characteristics affect parental attributions. The effect of attributions on the emotions of parents and their discipline style will then be considered. There is more limited research with teachers regarding their attributions for child behaviour (Bibou-Nakou, 2000). Therefore findings from the research with parents will be generalised to teachers and some examples from my experiences as a TEP will be highlighted. The implications from the research regarding interventions for parents and school will also be discussed.

4.3.1 Age of the Child

Research has investigated whether age of the child affects parental attributions for social behaviour. Dix et al (1986) used vignettes about negative behaviours (e.g. lying and stealing) and asked parents to rate these using specific causal factors and ratings across general attributional dimensions. With increasing age parents viewed behaviour as increasingly within the child's control (due to personality rather than environment) and something that the child should become increasingly responsible for (something the child could avoid). They also found that as children became older, negative behaviour elicited a stronger emotional and behavioural response from parents.

Gretarsson and Gelfand (1988) found different age effects from Dix et al (1986). They found that parents attributed negative characteristics as more innate in older than younger children, whereas prosocial behaviours were viewed as no more dispositional in older than younger children. Parents gave increasingly stable (therefore repeatable) attributions to daughters' behaviour as they became older but interestingly, not their sons' behaviour. Therefore individual and cultural parental perceptions are likely to influence when parents expect particular skills to develop and these could lead to differences in child rearing and discipline.

There has only been one longitudinal study of parents' attributions. Mills and Rubin, (1992) measured parental attributions when children were aged 4 and 6 years old. They asked mothers to rate hypothetical situations in which children were either socially withdrawn or aggressive. At both ages mothers attributed the behaviour as unstable and dependent on the situation. Therefore explanations for difficult social behaviour remain relatively stable over this time period. This research could indicate that parental attributions remain stable for a particular age band.

The research outlined above investigated stimulus-response attributions as parents were asked to rate their responses to hypothetical situations. It would be interesting to establish whether these accumulate over time to become more memory based. Further research about how these interact to alter beliefs would also be beneficial.

It would be interesting to investigate whether differently aged children elicit different attributions from teachers, particularly in terms of responsibility for their own behaviour. As children become older it may be that teachers consider them to be increasingly responsible for their actions. This is likely to influence how a teacher responds to the behaviour of pupils. These attributions may be stimulus dependent (reacting to the actual situation) if a teacher does not know a pupil or memory dependent (based on attributions from past experiences) when pupils become more familiar to the teacher. Again, this is likely to be influenced by teacher's underlying belief systems (considered in section 4.7)

If adult's stimulus-response attributions alter as children become older, interventions may need to acknowledge and challenge these perceptions. If a teacher is managing a child who is developmentally delayed it may be that their expectations for behaviour are inappropriate. Also, parenting programs aimed at early intervention (when children are younger) may potentially be targeting stimulus-response attributions while those parents with older children may require a different focus, altering attributions that have become memory based. This could potentially result in parenting programs with different aims and delivery methods.

4.3.2 Summary

Research indicates that parent attributions for child behaviour differ depending on the child's age. Parents expect children to take greater responsibility for their own behaviour as they become older. When parents attribute greater responsibility to the child for their behaviour, this coincides with a higher emotional and more extreme behavioural response from the parent (Dix et al, 1986). To my knowledge no research has yet considered how teacher attributions vary as a child becomes older, and the effect this may have on their behavioural or emotional responses.

4.4 VALENCE EFFECTS OR HEDONIC BIAS

Attribution research has often focussed on the outcomes of negative behaviour (e.g. aggression) rather than considering prosocial behaviours (Miller, 1995a). However, this could be in response to parents and wider society who are more concerned about negative behaviour. Parent attributions are more likely to be elicited by negative behaviour. Therefore research is limited about how parents view or reason about prosocial behaviours and this information is principally based on studies that reflect valence effects or hedonic bias, explained further below (e.g. Miller, 1995a, Himelstein et al, 1991).

Within general attribution literature valence effects or hedonic bias are well researched and reflect a tendency to protect self-worth or self-esteem through taking

credit for positive outcomes while avoiding the blame for negative outcomes (Himelstein et al, 1991). Children also may be considered as reflecting parental “success” or “failure”; parents would therefore be expected to attribute desirable child traits as due to themselves while undesirable traits would be attributed to external parental factors such as school (Himelstein et al, 1991). Teachers may therefore be expected to attribute child success as due to school while negative outcomes such as difficult behaviour would be considered as due to parents or home influences.

4.4.1 Valence effects in parent attributions

Research shows that the parents with “typical” children reflect a particular attribution pattern (Johnston and Freeman, 1997). Valence effects highlight that parents tend to attribute different reasons for positive behaviours exhibited by their children in comparison to negative behaviours. Dix et al (1986) found that mothers were more likely to judge prosocial behaviour as more intentional, due to personality, more stable and under the child’s control. Using a method with arguably more ecological validity than vignettes, Gretarsson and Gelfand (1988) asked parents to provide examples of two prosocial and two antisocial behaviours of their children. They were then asked to make a series of attributional judgements. Findings reflected Dix et al (1986) with parents more likely to attribute positive behaviours to stable and internal factors whereas external influences were offered for negative behaviours.

Himelstein et al (1991) considered what determined parental attributions about social behaviour and whether mothers rated hereditary, environmental or parental rearing as important. They found that mothers attributed more importance to parent rearing when a child was perceived as “successful”. These findings were reflected across groups of gifted and typical children and those with special educational needs. Himelstein et al (1991) suggest that this denial of responsibility for negative child outcomes could reduce parent motivation to alter their own behaviour in order to achieve improvements in child behaviours.

Gretarsson and Gelfand (1988) suggest that these effects could reflect a parent’s effort to preserve self-worth. There are various implications for interventions from this research finding. As this effect seems to occur across populations, all parenting programs may need to aim to alter the beliefs parents have about negative behaviour prior to attempting an intervention.

A different attribution pattern of parents with children who have behavioural difficulties has been identified by research. Dix and Lochman (1990) compared mothers of aggressive boys and those of non-aggressive boys. Findings showed that the former group of mothers showed they were more likely to attribute personality and intention to negative behaviours than the latter group. Baden and Howe (1992) studied parents of conduct-disordered children and found similar effects.

Johnston and Freeman, (1997) completed research with children diagnosed with Attention Deficit Hyperactivity Disorder (ADHD) and their children. They found parents attributed the characteristics of ADHD (Oppositional-defiance and Inattentive-Overactive, identified by researchers) as more internally caused, stable over time and uncontrollable by the child. Parents also perceived themselves as less responsible for these characteristics. Although it could be considered that parents are correct with these attributions, these parents also rated prosocial behaviours as less internal, less controllable and less stable over time, contrary to parents of children without behavioural difficulties (Johnston and Freeman,1997).

Gertarsson and Gelfand (1988) suggest that the positive perceptual bias or valence effect that is absent when children are difficult to manage could also be functional to parents. Considering difficult behaviour as due to within-child factors can relieve parents of the responsibility for the child, thereby protecting parents' self-esteem. However, whether this attribution style develops in response to child characteristics or whether it exists and contributes towards difficult child behaviour is yet to be established.

It is therefore possible to consider parents with a "faulty" attribution style as at risk of having children with difficult behaviour. Arguably parenting programs and other interventions involving parents need to alter these cognitions for an intervention to be successful. Valence effects have also been found in the attributions that teachers make for children's behaviour.

4.4.2 Valence effects in teachers attributions

Miller (1995b) completed research with 24 primary teachers regarding their attributions for child behaviour. He found that teachers were more likely to attribute difficult pupil behaviour to physical or medical factors, the child's lack of acceptance of social norms, personality or a need for praise. He found the valence effect or self-serving bias present in parental attributions. Teachers identified 71 per cent of child difficulties as within parent control, but only 17 per cent of successes to parents. Following the intervention teachers attributed themselves as having improved child behaviour in 87 per cent of cases even though both parents and pupils had contributed. When asked for their attributions about the parents of pupils with difficult behaviour, teachers suggested poor general child management, a violent home and lack of parental attention as the most common attributions (Miller, 1995b).

The limitations of this study are that teachers were asked about their attributions retrospectively. Miller (1995b) suggests that they may have been more likely to attribute influences on pupil behaviour as within their own control following a successful intervention. If the intervention had been unsuccessful teachers may have been more likely to attribute this to parents.

The valence effects found for both parents and teachers could potentially result in the abdication of responsibility for negative pupil behaviour. The role for the EP may therefore be to support the development of a shared understanding between the

parents and school by challenging attributions and perceptions about a pupil or situation. If attributions can be altered perhaps both parties may then retain a degree of responsibility

Miller (1995b) argues that parent-teacher co-operation is more achievable with pupils who have special educational needs than those with behavioural difficulties. Perhaps parents and teachers have a shared understanding that these children have less control over their behaviour. This may elicit more feelings of empathy and behaviour from adults that support the child.

The research findings highlighted above indicate that adults may not take responsibility for children's difficult behaviour. However, some school interventions and parenting programs successfully alter adult behaviour (e.g. Sanders, 2004). If parents and teachers truly believed they had little influence over a child's behaviour they would be unlikely to participate in interventions that aim to alter their own behaviour. This could indicate that stimulus response attributions (a response to a situation) and memory-based attributions (based on past experiences) are not congruent. Perhaps memory-based attributions in some situations, override stimulus-based attributions. Therefore although the initial adult's response may be to attribute a behaviour as due to the child (internal) with further education or knowledge they are able to attribute a behaviour to a cause within the environment (external).

Teachers may retain the same attribution pattern for all children in that negative child behaviours are due to home whereas positive ones are due to themselves. However, they may also adopt a similar style to parents in attributing within child factors as responsible for difficult behaviours. In my experiences as a TEP this has certainly been the case for children that have an ADHD diagnosis. With “typical” children the opposing attribution styles of parents and teachers may balance out and have a less negative effect. However, a child may begin to internalise the within child attributions for their behaviour if this is reinforced by both teachers and parents. These patterns could be particularly detrimental to a pupil and may exacerbate difficult behaviour both at home and school.

4.4.3 Summary

Valence effects have been found for the attributions that parents and teachers make for children’s behaviour. Therefore parents and teachers are more likely to accept responsibility for positive outcomes while attributing negative outcomes to either other people or due to the situation. This has particular implications for an EP implementing interventions at school with parents and teachers as neither party may take responsibility for implementing the intervention if they view the behaviour to be the fault of the other.

Interestingly, research outlines a different attribution pattern for parents of children with behavioural difficulties who are more likely to attribute negative behaviours to

child intent and within-child factors. Findings also indicate that parents attribute their child's prosocial behaviours as less within-child and less stable over time than the parents of children where behavioural difficulties are absent.

Further research is required to establish how these attribution patterns emerge and whether they affect both the behaviour of parents and children. Additional research is required to establish whether, like parents, teachers display a different attribution pattern towards children with difficult behaviour.

4.5 DISCIPLINE STYLE

Research about how parent behaviour is affected by their attributions about children's behaviour has mostly focussed on discipline strategies. Research has been completed with the parents of children who are typically developing and those that have behavioural difficulties. There is also research that considers how teachers' behaviour in the classroom is affected by their attributions for children's behaviour.

4.5.1 Parent attributions

Geller and Johnston (1995) found that if parents perceived negative behaviour to be internal to the child and more controllable mothers' reacted more strongly both emotionally and in their parenting. Interestingly mothers' predictions about stability

(whether the response was just to that particular situation) and globality (whether the response was typical of the child) of child behaviour did not predict responses to difficult child behaviour. Authors therefore concluded that mothers' responses were affected more by immediate attributions (stimulus-response) than those about the cause of a particular behaviour (memory-response).

Slep and O'Leary (1998) completed the first study to examine causality beyond correlation research. They experimentally induced differences in mothers' attributions. Mothers who were informed that their children's negative behaviours were intentional and that the child could be held responsible for their actions responded with a particular pattern. They displayed significantly higher levels of anger and displayed overactive discipline and the children subsequently became upset. Slep and O'Leary (1998) predicted that cognitions, behaviour and emotions may then form a self-maintaining interaction.

Researchers theorised about the cumulative effect and subsequent forming of memory-based attributions (e.g. Slep and O'Leary, 1998). If there are repeated incidents in which children are perceived responsible for their difficult behaviour, perhaps over time this accumulates. Memory-based attributions may then be automatically generalised to other incidents of difficult behaviour rather than the parent simply reacting to the situation. Parents may then perceive the child as "responsible" for most aspects of their behaviour. The subsequent response from

parents with higher levels of anger and overactive discipline (Slep and O’Leary, 1998) may then lead to an escalation of behavioural difficulties in children.

Research indicates that different parenting behaviours characterise the parents of children who show a high level of externalising or internalising behaviours. Parents were more likely to utilise moderate to high power strategies (e.g. strong commands, coercion, threats) with aggressive children but were more likely to use low power strategies (e.g. asking for information or redirecting the child) with withdrawn children (Mills and Rubin, 1990). Therefore different behaviours from children elicit different attributions from parents, with parents responding more negatively to externalising behaviours.

Similar findings are indicated by Johnston and Patenaude (1994) who investigated behaviours associated with a diagnosis of Attention Deficit Hyperactivity Disorder (ADHD). Johnston and Patenaude (1994) used written scenarios to consider the “inattentive-overactive” and “oppositional- defiant” behaviours of children with ADHD. Mothers considered children to have greater control over the latter behaviour than the former and these behaviours elicited stronger negative reactions in mothers. Parents of children with ADHD rated prosocial behaviours as less internal, less controllable and less stable over time, contrary to parents of children without behavioural difficulties.

Chavira et al (2000) provide some explanation for the findings of Johnston and Patenaude (1994). They found that specific child behaviours were more likely to lead to parents attributing responsibility for child behaviour as within child. They found that mothers were more likely to consider children responsible for behaviour difficulties (e.g. temper tantrums) rather than behavioural deficits (e.g. no speech). Parents subsequent reaction was more likely to be negative towards the former category.

Strassberg (1995) extended research by Johnston and Patenaude (1994) as he used a control group. Mothers for the control group were identified by teachers as having boys within the “normal” range for measures of compliance. Mothers of boys with behaviour difficulties were recruited by specialist teachers and case managers who worked with “socially maladapted youth”. They were identified as having clinical levels of non-compliance and parent opposition. The Mothers from the latter group were more physically and verbally aggressive towards their sons than mothers of average boys. They were also more likely to process their sons’ behaviour negatively, particularly if child behaviour cues were ambiguous (when behaviour did not indicate a positive or negative response). Also, the mothers of aggressive boys were more likely to anticipate that the resistance to instructions would continue if behaviour was ambiguous. In a subsequent study Johnston and Freeman (1997) increased the realism of the study by asking parents to recall their own child’s behaviour rather than focus on a hypothetical child. Findings confirmed previous research (Johnston and Patenaude, 1994, Strassberg, 1995).

Johnston and Patenaude (1994) draw attention to the complexity of parent child exchanges and the importance of considering these within a bidirectional relationship. Child behaviour is likely to influence behaviour and also serves as the basis for more general parental attitudes and beliefs. Strassberg (1995) theorises that in ambiguous situations, individuals are required to search beyond the immediate situation to explain or understand child behaviour. Previous experiences may then be accessed which for mothers of aggressive sons, are likely to be negative, leading to an increased likelihood that mothers will interpret present events negatively. With repeated association, over time, of oppositional behaviours reflecting defiance, mothers could eventually perceive defiance as underlying the majority of behaviours. They may then begin reacting to behaviours that reliably precede opposition. This self-fulfilling prophecy occurs when beliefs are followed with a behavioural response; the belief is then affirmed through interactions with the social world.

Rubin and Mills (2004) extended research by comparing mothers with normal, aggressive-externalising and withdrawn-internalising infants and found different patterns of attributions and feelings. The mothers of aggressive-externalising children believed more strongly in taking a direct approach. However, they were more likely to use indirect strategies or no strategies at all to manage child behaviour. Mothers of withdrawn-internalising infants were defined as over controlling and were over directive. They were more likely to blame themselves as parents; feeling guilty and embarrassed.

Authors explain results by suggesting parents may attribute the behaviour to the young age of the children and may hope that it will only occur for a short time period. To reduce their anxiety and confrontation they respond with erratic discipline, mostly based on stimulus based attributions. Negative children's behaviour may then reinforce these assumptions and perhaps they become more memory based. Once this coercive cycle is established negative parent responses (affect and parenting behaviour) based on memory based attributions then influence the coercive relationship. This supports the coercion theory proposed by Patterson et al (1989)

Most of the findings from attribution research in this section of the report lends support to the coercion theory proposed by Patterson (1982 cited in Patterson et al, 1989). For example, Baden and Howe (1992) studied a group of conduct-disordered children and found these parents were more likely to consider their child's behaviour as out of their control and that their own discipline strategies were ineffective. Patterson et al (1989) suggested that parents who engage in coercive exchanges with children typically blame their children for difficult behaviours and they are more likely to attend to negative than positive behaviours of their children. The reinforcement increases the coercive cycle with children increasing the intensity of their actions. Patterson et al (1989) suggest that these attributions elicit beliefs of helplessness which could lead to withdrawal of parental efforts to discipline children.

Interestingly, Patterson et al (1989) distinguish between enmeshed and lax discipline. Enmeshed discipline is when parents continually reprimand a child

leading to coercive communication patterns within the family. Lax discipline can lead to low levels of control and can result in a failure to internalise behavioural constraints. When children are young, close supervision facilitates the parent child bond. This provides opportunities to teach children societal norms and the internalisation of behaviours that become increasingly important as the child becomes older and supervision becomes more indirect (Palmer, 2000). Attribution research is able to suggest to a certain extent how enmeshed discipline occurs, perhaps leading to authoritarian parenting styles. However research does not explain how a more lax discipline or laissez faire style could develop.

Baden and Howe (1992) suggest that further research is required to establish causality in Patterson et al's coercion theory (1989). However, other authors argue that the picture is more complex and there is a non-linear relationship between difficult child behaviour and discipline (see Deater-Deckard and Dodge for a full discussion). Research from other areas of psychology has also highlighted other factors that effect parenting behaviours such as social learning theory and levels of parenting self-efficacy.

Chivira et al (2000) suggest that work with parents to alter their attributions for child behaviours may change the subsequent parent behaviours towards children. This may then alter or prevent the coercive cycle of behaviours highlighted by Patterson (1989).

The reliance on memory-based attributions will require different interventions than if the focus is simply upon stimulus based attributions. Parenting programs or work with teachers may need to focus on altering underlying beliefs rather than on stimulus-dependent attributions, particularly if the child has behavioural difficulties.

4.5.2 Teachers attributions

If a teachers attributes child behaviour to be due to within child factors or the result of external factors such as the family circumstances (see section 4.4.2) their expectations for a successful educational intervention are likely to be low (Mavropoulou and Padeliadu, 2002). Therefore it is also important to understand how teacher responses are influenced by their attributions for children's behaviour.

Bibou-Nakou et al (2000) used a questionnaire to assess the causal attributions of two hundred elementary school teachers for difficult child behaviour. The teachers highlighted "disobedience" and "off-task" behaviour as the most frequent and intense pupil behaviours they were required to manage. Teachers attributed these behaviours to within child difficulties. They also attributed the reason for behaviour difficulties as due to the child's family (e.g. child upbringing). Bibou-Nakou et al (2000) reported that teachers did not consider their own role in creating or maintaining behaviour. These findings support previous research (e.g. Oswald, 1995 and Ho, 2004) who concluded that these attributions may protect teachers levels of self-esteem (see section 4.4.2). Mavropoulou and Padeliadu (2002) also reported

that teachers did not recognise the contribution of school-related factors to behavioural difficulties.

Similar to parents, Bibou-Nakou (2000) found that when teachers considered children to have control over their own behaviour they are more likely to respond with punitive measures. Teachers responded more sympathetically to children if they were considered victims to circumstances.

Research with parents could also reflect teacher responses to child behaviour and help to explain how and why teachers react with particular discipline strategies. Perhaps a teacher initially relies on stimulus based attributions and particular discipline strategies. However, as they have increasingly negative interactions with a child, an increasingly negative cycle, similar to Patterson et al's coercion cycle (1989) may develop. There may thus be an increasing reliance on memory-based attributions, with little analysis of the actual situation or event that has occurred. The reliance on memory based attributions could result in negative interpretations of behaviour particularly if the behaviour is ambiguous. Alternatively, a child that already has a reputation for difficult behaviour or who has a label familiar to the teacher such as ADHD may elicit a particular behaviour pattern or certain discipline strategies from teachers towards the pupil.

Teachers consider pupils rather than teacher-related factors to be responsible for difficult child behaviour. This is not conducive to effective problem-solving and it is necessary to challenge these attributions if teachers are to consider themselves as in control, otherwise they may begin to develop a sense of helplessness (Mavropoulou and Padelidu, 2002; Ho, 2004). Soodak and Podell (1994) reported that teachers who attributed behaviour difficulties as due to home circumstances, considered parental involvement to be an appropriate intervention, whereas those who attributed behaviour difficulties to be due to school-based factors suggested school based interventions. Mavropoulou and Padelidu (2002) suggest that in-service training is required to extend teachers knowledge about children's behaviour.

4.5.3 Summary

Research with parent's shows that they respond with a greater emotional and behavioural response if the mother considers the child responsible for their own behaviour. The accumulation of these stimulus-based attributions and behavioural reactions over time may then lead to reactions based on memory-based attributions. This is highlighted by mothers who respond negatively to cues that are ambiguous indicating that they could be using memory-based attributions about past experiences with their child to understand behaviour.

Research indicates that mothers with children, who have behavioural difficulties, respond with more negative behaviours both physically and verbally. However it is not clear whether attributions cause children's behaviour to deteriorate or whether difficult behaviour causes parents and teachers to respond with particular attributions. It may be that difficult child behaviour causes negative responses in parents or that these attributions become part of a coercion cycle outlined by Patterson where parent behaviour escalates as children continue to respond negatively.

Teachers attribute difficult child behaviour to within child factors and do not consider themselves or the school system as influencing difficult behaviour. Also, when teachers consider the child as exerting control over their own behaviour they are more likely to respond with punitive sanctions. Further research is required to consider teacher responses related to their attributions. It would also be useful to consider how ideologies and beliefs potentially bias information processing (see section 4.7).

4.6 EMOTIONS AND ATTRIBUTIONS

Attributions that elicit particular emotions could affect adult behaviour directly and therefore alter responses toward children. Some authors have theorised that emotions may be an important mediator between thinking processes and behaviours (Dix et al, 1986). Parental emotions may also directly affect the behaviour of

children. Authors (Dix et al, 1986) suggest that emotional reactions to children may be dependent on analysis of particular situations and behaviours rather than negative affect being a stable parenting quality (e.g. Maccoby and Martin, 1983).

Dix and Grusec (1985 cited in Dix et al, 1986) found that when parents attributed negative behaviours as within-child, stable and controllable, it was more likely to elicit a negative emotional response. Positive behaviours attributed to the same reasons were found to be rewarding and elicited positive emotions. Authors draw the conclusion that child behaviour leads to parental attributions, which then lead to particular emotional responses and subsequently particular parental behaviour. However, causality is not established due to the correlational nature of research. Also, further research has shown that emotions can affect the attributions made by parents.

Bolton et al (2003) used the Camberwell Family Interview to divide mothers into groups with either high or low expressed emotion. Findings supported previous research and Mothers with high levels of expressed emotion were more likely to attribute difficult child behaviour as personal and controllable by the child. High levels of depression were also found to be associated with a higher level of maternal criticism.

Dix and Lochman (1990) researched the effect of mood on parent explanations for their children's negative behaviours. Findings suggested that when mothers were angry or extremely happy they made more negative attributions about their children's behaviour. Therefore if the mother experiences more extreme emotions they are more likely to attribute negative explanations for child behaviours. Dix and Reinhold (1991) further explain this finding by suggesting that people in positive moods are particularly sensitive to negative events that they consider threatening to their happy state. Therefore reactions are negative as the mother's positive mood is threatened by the child's negative behaviours.

Mills and Rubin (1990) considered whether parent attributions of child behaviour could be a predictor of parent emotions and behaviour. If children were socially withdrawn parents were more likely to be puzzled, whereas parents reacted to aggressive behaviour with stronger, negative emotions such as disappointment or embarrassment. These feelings were, in turn, more likely to lead to coercive behaviour management.

Dix et al (1985, 1990, 1991) used verbal self-reports as a method of data collection and results should therefore be considered with caution. Relations were established using correlations therefore direction can not reliably be established. It is therefore possible that stimulus-response attributions follow emotions rather than attributions leading to emotions. Emotions could lead to different memory based attributions or beliefs being formed or elicited in particular situations.

4.6.1 Summary

The effect of emotions on parental attributions has been less well researched than the effects of discipline. To my knowledge there has been no research considering how emotion may affect teachers' attributions. It is very likely that teachers' stimulus-based attributions for child behaviour elicit an emotional response. Perhaps memory-based attributions for particular pupils also elicit an emotional response from previous interactions. Further research is required into how emotions affect both stimulus- dependent and memory-based attributions. Emotions are likely to have a large influence on how a situation is interpreted and memory-based attributions may enhance subsequent emotional and behavioural responses of teachers and parents.

4.7 IMPLICIT THEORIES

Although stimulus-dependent and memory-based attributions have been researched, there is little consideration about the underlying assumptions or belief systems upon which these are based. Implicit theories represent two opposing perspectives about whether attributes are malleable or fixed (Dweck et al, 1995a). These are defined as core assumptions and comparable to the core constructs outlined by Kelly (1955). They provide a framework through which judgements and behaviours are made.

In my view this approach is fundamental as it may underpin the stimulus and memory based attributions outlined in previous sections of this report. When a person views reality from an entity theory framework he or she consider traits such as intelligence or morality to be fixed and non-malleable. Therefore they assume that although people can learn new things, intelligence remains fixed. The opposing view is defined as an incremental theory and considers traits to be malleable. This view thus assumes that intelligence can be altered (Dweck et al, 1995a). Research has begun to investigate the behaviours and attributions associated with each underlying way of viewing the world.

Henderson and Dweck (1990, cited in Dweck et al, 1995a) found that entity theorists were more likely to feel helpless during achievement setbacks, whereas incremental theorists attributed behavioural factors such as effort or strategies to be the cause of negative achievements. This effect has also been found with how people judge and understand behaviour. Dweck et al (1993) found that people with an entity theory judged an individuals' social or moral traits from a limited number of behaviours that exemplified the moral or social values of that person. Subsequent behaviour towards that person then followed their belief of how to respond to someone with that particular label. In contrast, people maintaining an incremental theory focussed on the cause of such behaviours and how to educate or alter behaviour rather than simply labelling the individual.

Research has considered how implicit theories originate and develop this has highlighted the role of the environment and socialisation process (Dweck et al, 1995b). Studies with young children (e.g. Kamins and Dweck cited in Dweck et al, 1995b) have indicated that the feedback they receive when completing tasks (responsibility was either placed on them personally or orientated towards future strategies) significantly influenced how children judged themselves and whether they were constructive at approaching the final task. Children who had received person centred judgements were more likely to demonstrate characteristics of an entity theory framework. They displayed more negative self-assessments and were less constructive at solving the task.

Dweck et al (1995a) highlight the advantages and disadvantages of viewing the world from these opposing perspectives. An entity theory creates a relatively static ontological view of reality and considers individual traits as measurable through their association with particular behaviours. This creates an environment for that individual which has the advantage of being predictable. However it can also lead to static labels for the self and others which can be limiting and ultimately detrimental.

An incremental theory has the advantage of viewing human attributes as dynamic and changeable which facilitates both the self and others' development. However, this creates an unpredictable reality when considering the behaviour of others. To achieve a similar certainty about the world to entity theorists', incremental theorists need to experience various behaviours, in a variety of situations over an extended

time period. This is time consuming and requires more complex analysis. However, this theory promotes positive responses to tasks and maintains that an individual's behaviour is changeable. Dweck et al (1995b) propose that although some people have one generalised theory (entity or incremental), others retain different frameworks for different attributes. The theory may therefore be domain specific rather than a generalised cognitive style.

I would argue that implicit theories form the underlying belief system that informs and effects stimulus-dependent attributions and memory-dependent attributions (discussed in sections 4.4 and 4.5). It is also likely that information from stimulus-dependent and memory-dependent attributions provide information for the underlying belief system. Knowledge and interactions that challenge core beliefs are more likely to be disregarded as this is challenging to the person's construing and understanding of the world.

Implicit theories require further extension to consider how stimulus-based attributions and long-term attributions are incorporated within and affect the incremental framework. There may be a linear relationship or a more bidirectional relationship between these systems, which requires further clarification. Dweck et al (1995b) acknowledge that further consideration of how emotions and motivation influence perceptions and interactions is required. Also the issue of whether it is possible for people to maintain both entity and incremental theories and in what circumstances also requires further consideration and research.

Teachers and parents are likely to respond to children differently depending on which implicit theory they hold. A teacher or parent with an entity theory is likely to respond rigidly to a child with difficult behaviour and consider this as a within child characteristic. This view is unlikely to be conducive towards intervention or change as environmental changes would be considered irrelevant. Alternatively, an adult with an incremental theory is more likely to believe that behaviour can be altered and that interventions can potentially be successful. They are also more likely to accept that a child's behaviour may differ depending on the situation and context. A child is therefore less likely to be labelled for their difficult behaviour. They are also more likely to encourage children and believe that effort towards tasks can make them successful, thus building self-esteem.

As an EP it is important to be aware of what implicit theory (either incremental or entity) is retained by adults and the pupil when working with children that display difficult behaviour. For an intervention to be successful it is arguably productive or even necessary, for adults to retain an incremental theory.

4.8 APPLICATION OF ATTRIBUTION THEORY TO PARENTING PROGRAMMES

In this report the implications for parenting program interventions from research into attributions has been highlighted. Stimulus and memory-based attributions made by adults, for child behaviour, influence the subsequent behaviours and emotions of

adults. It is therefore important to consider whether these attributions can be altered so they are conducive to the adult behaviours that are more likely to support positive outcomes for children. There is limited research considering whether parental attributions can be altered through parenting programs.

The importance of parenting to child wellbeing has resulted in a large variety of parenting programmes that aim to educate and enhance parenting skills. A review of international evidence for parenting support by Moran et al (2004) identified the target population of parents varying from those with newborns (with no specific difficulties) to the parents of children defined as within a clinic population (with conduct disorder or attention deficit hyperactivity disorder). In practice the numerous parenting programs, some of which are manual-based, differ in the quality and quantity of research evaluating their effectiveness.

Barlow and Stewart-Brown (2001) evaluated whether a program targeting both parents and children was effective. After the program, parents demonstrated an increase in knowledge about positive parenting strategies. They also reported increased empathy and an increase in their abilities to identify with their children. This was especially the case when considering the reasons for their children's behaviour and subsequent discipline strategies. Therefore it could be argued that the program altered attribution style, although this was not targeted or specifically measured.

More direct evidence comes from enhancement of the Triple-P positive parenting program with attribution retraining. This provides evidence that specific attribution training would be beneficial to parents. Authors suggested this was the first study to target parent attributions and anger, to enhance outcomes for parents and children (Sanders et al, 2004). They compared an enhanced intervention (with attribution retraining) to the standard Triple-P program with parents at risk of child maltreatment. Findings suggested a greater reduction in dysfunctional attributions in the former group, maintained at a 6 month follow up. Parents were less likely to blame and attribute mal-intent to children in ambiguous situations and when child behaviour was more deliberate.

Research thus indicates that programs which aim to alter the attributions of parents can be successful at changing both attribution style and subsequent behaviour. Perhaps parenting programs such as the Triple P are enhanced by attribution retraining. The type of intervention may be more effective for parents that have children exhibiting challenging behaviour. However, research that has applied attribution theory to interventions and wider world context to date is relatively limited. Therefore further research is required to identify successful interventions that alter attributions and whether this results in long- term benefits such as changes in parenting behaviour and emotions.

4.9 METHODOLOGICAL FACTORS INFLUENCING THE RELIABILITY OF ATTRIBUTION RESEARCH

The methodological challenges of researching stimulus and memory based attributions (research findings were outlined in sections 4.3-4.5) will be discussed in this section. A criticism of research in the general attribution literature is that participants are usually required to provide their hypothetical judgements, regarding the hypothetical behaviours of an unknown person, in scenarios that have little relevance or meaning. The degree to which these findings can then be generalised to a real-world setting is therefore limited. Hypothetical situations are less emotive to participants and they have more time to consider their judgements than in a real-world setting.

There are a number of ways that research has conceptualised and measured parental attributions (see Bugental, 1998 for a more detailed discussion). Memory-based parental and teacher attributions are usually measured through questionnaires using a Likert scale. Some studies ask for agreement with attributional statements while others consider attributions about a vignette (hypothetical scenario). Vignettes are advantageous in that they elicit vivid images of events and situations (Bugental et al, 1998). However, there is lack of ecological validity in using these methods and research shows that interactions between parents and their own children are understandably different from hypothetical interactions with fictitious children (e.g. Katsurada and Sugawara 2000).

The measures of memory-based attributions require further attention to test-retest reliability, as parents would be expected to use the same explanatory system across time if using a process from memory (Bugental et al, 1998). The concept of memory-based attributions is that the parent or teacher remains unaware of their processing. It could therefore arguably be invalid to rely on direct report of these attributions.

Stimulus-dependent measures have focussed on causal reasoning that occurs in response to specific parenting situations or events. Research methods have relied upon researcher manipulation of a stimulus to convey particular behaviour or situational information (Bugental, 1998). Methods are similar to those used when researching memory-based attributions, including written vignettes of hypothetical child behaviours, asking parents to recall behaviours of their children and requesting parents to make attributions of videotaped behaviours. Parents are then asked to respond with the attributions they would make using Likert scales. There has been an emphasis on control of stimulus rather than realism. Johnston and Freeman (1997) compared the three stimulus conditions; although findings reflected similar behaviours of parents they were only moderately correlated. If different methods elicit different information, they could be measuring slightly different constructs.

Research methods for eliciting parent and teacher attributions have focussed on closed-choice methods. There is a need for more open-ended methods, particularly in areas where factors have not yet been established such as attributions made for

positive child behaviour (Miller, 1995a). Using more qualitative techniques, children and adults could be asked about the thought processes that may form or maintain attributions.

Bugental et al (1998) also raise the concern that attribution measures are susceptible to bias as parents or teachers may answer with what they perceive to be socially acceptable attributions and this could reflect the valence effects.

4.10 CONCLUSION

Research shows that parent attributions for child behaviour differ depending on the child's age (e.g. Gretarsson and Gelfand, 1988) as parents expect children to take greater responsibility for their own behaviour as they become older. Research (e.g. Geller and Johnston, 1995) also shows that when parents attribute greater responsibility to the child for their behaviour, this coincides with a higher emotional and more extreme behavioural response from the parent.

Valence effects highlight that parents tend to attribute different reasons for positive behaviours exhibited by their children in comparison to negative behaviours. Mothers with typically developing children are more likely to judge prosocial behaviour as more intentional, due to personality, more stable and under the child's control. Whereas they attribute negative behaviours to be due to factors external to the child.

These effects seem to be reversed for the parents of children that have behavioural difficulties. Parents are more likely to attribute negative behaviours to child intent and within-child factors. Findings also indicate that parents attribute their child's prosocial behaviours as less within-child and less stable over time than the parents of children where behavioural difficulties are absent. It is possible that these responses are based on memory based attributions that are based on previous interactions with their children and formed over time. Research that considers how parent discipline is influenced by attributions provides additional insight into how these different valence effects may develop.

Research findings show that mothers of children with behavioural difficulties are more physically and verbally aggressive towards their sons than mothers of average boys. They are also more likely to process their sons' behaviour negatively, particularly if child behaviour cues were ambiguous (when behaviour did not indicate a positive or negative response). Also, the mothers of aggressive boys are more likely to anticipate that the resistance to instructions would continue if behaviour was ambiguous. This supports the theory that repeated incidents over time (stimulus based attributions) in which children are perceived responsible for their difficult behaviour may accumulate to form memory based attributions. These attribution patterns may then assume the valence effects found in mothers that have children with behavioural difficulties.

It is difficult to conclude whether parent attributions cause difficult behaviour in children or whether the experience of children's behaviour over time causes parent behaviour to escalate. It is more likely that a bi-directional or cyclical interaction between mothers and their children occur. Patterson et al (1989) suggest that reinforcement of negative parenting behaviour, increases the coercive cycle with children in turn, increasing the intensity of their actions.

Interventions that aim to alter parenting behaviours, such as parenting programs will need to consider how they can alter attributions that parents have about difficult child behaviour if parents are to alter and sustain a change in their own parenting behaviour. A few parenting interventions have demonstrated that parent attributions can be successfully altered although whether this supports parents in maintaining a change in their behaviour is unknown. Further research into how parent attributions develop may support the development of effective interventions with parents. It may be, that early intervention is more effective as parents are basing their responses on stimulus based attributions rather than memory based attributions.

Although research is more limited with teacher's findings indicate that teachers attribute difficult child behaviour to within child factors and do not consider themselves or the school system as influencing difficult behaviour. They also attributed the reason for behaviour difficulties as due to the child's family (e.g. child upbringing). Research also shows that when teachers consider the child as exerting control over their own behaviour they are more likely to respond with punitive

sanctions, similar to parents. To my knowledge no research has yet considered how teacher attributions vary as a child becomes older, and the effect this may have on their behavioural or emotional responses. It may be that teacher's responses vary in a similar way to parents and that as children become older they consider them to be more responsible for their own behaviour.

Parents and teachers are more likely to accept responsibility for positive outcomes while attributing negative outcomes to either other people or due to the situation. This has particular implications for an EP implementing interventions at school with parents and teachers, as neither party may take responsibility for implementing the intervention if they view the behaviour to be the fault of the other.

The valence effects found for both parents and teachers could potentially result in the abdication of responsibility for negative pupil behaviour. The role for the EP may therefore be to support the development of a shared understanding between the parents and school by challenging attributions and perceptions about a pupil or situation. If attributions can be altered perhaps both parties may then retain a degree of responsibility. Additionally, EP's should be aware that if teachers attribute difficult pupil behaviour as principally due to home then school policy and guidance is likely to reflect this both implicitly or explicitly (Miller, 1999).

Bibou-Nakou et al (2000) suggest that the study of teacher perceptions is important if recommendations for educational settings are to be based on psychological principles. Therefore further research is required to establish the influence of attributions on teacher's behaviour, emotions and cognitions in the classroom.

Literature to date rarely distinguishes between stimulus-based and memory-based attributions. Further research is required to consider how stimulus based attributions may develop and subsequently accumulate to influence attributions that are more memory based. This will provide important information for professionals and support the development of effective interventions.

It is possible that attributions reflect the underlying implicit framework held by that particular person. When a person views reality from an entity theory framework, he or she considers traits such as intelligence or morality to be fixed and non-malleable. Therefore they assume that although people can learn new things, intelligence remains fixed. A teacher or parent with this underlying belief is more likely to attribute difficulties as within child and probably consider interventions to have little impact. However an adult with an incremental theory who considers traits to be malleable is more likely to view interventions positively and consider them as having the potential to effect change. EP's therefore need to be aware of these frameworks and perhaps aim to challenge or alter them.

Research suggests there are benefits from involving parents, pupils and teachers in intervention strategies for behaviour. However, attribution research highlights that they retain different perceptions of child behaviour. Attribution theory is rarely used in EP practice when considering interventions. However, the research highlighted in this reports indicates that careful mediation by the EP between these views may be necessary for interventions to be successful. Perhaps this allows attributions for behaviour to be altered prior to interventions. If this is not achieved arguably neither pupil, parent or teacher will take responsibility for the intervention and it is therefore likely to be unsuccessful. Miller (1999) suggests that government legislation moves the responsibility around the triangle of pupil, parent and teacher. He argues that psychological research and practice can potentially move practice forwards.

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CHAPTER 5:

USING COGNITIVE BEHAVIOURAL THERAPY IN AN EDUCATIONAL SETTING TO SUPPORT A CHILD WITH ANGER MANAGEMENT DIFFICULTIES

5.1 ABSTRACT

Various children have difficulty managing their anger in an educational setting. This report considers whether a cognitive-behavioural therapy (CBT) intervention in an educational setting is effective at supporting a child to manage his anger. The case study will be outlined and referred to throughout this report. The theoretical underpinnings to CBT and how this applies to anger will also be highlighted. Research using CBT with children who have anger difficulties will be discussed, the issues highlighted and considered alongside the case study. This report also discusses which components of CBT make it an effective intervention and the difficulties of using it as an Educational Psychologist in an educational setting.

5.2 INTRODUCTION

This report focuses on the practicalities of using cognitive-behavioural therapy (CBT) as an intervention for children in schools with anger difficulties. Research considering whether CBT is an effective intervention for children with anger

difficulties remains relatively limited. This report will outline a CBT intervention for a primary school aged pupil with difficulties managing his anger.

James was a 10 year old boy in year 6, at a local primary school. He was referred to the Educational Psychology Service because of difficulties in managing his anger that had escalated over the previous six months. School staff were finding his behaviour difficult as his reaction to situations and other pupils was unpredictable. He was also finding it increasingly difficult to calm down following episodes in which he became angry. His mother was also a teacher in his year group at the school and she reported that he was also becoming increasingly difficult to manage at home.

The wider context of using CBT as an intervention in schools will firstly be considered in this report. The following sections consider the theoretical underpinnings of CBT and whether it is an appropriate intervention for pupils with anger difficulties. The intervention used with James (outlined briefly above), will also be discussed and the implications from previous research considered. This report argues that the behavioural component of CBT facilitates short-term changes in behaviour but that an emphasis on the cognitive component, during CBT, may be required to alter underlying thoughts and beliefs that could maintain feelings and behaviours over a longer period of time. Other considerations, highlighted by the case study, when using CBT with children are also discussed in the final section of the report.

5.2.1 Wider context

Schools are identifying increasing numbers of pupils that have emotional, social and behavioural difficulties; many of these children find it hard to manage their anger. This can have a detrimental impact across a child's capacity to learn, develop social-emotional skills and interact appropriately with peers. There are also implications for other pupils and school staff if a pupil has difficulty managing their anger. In the short term these pupils are at greater risk of temporary and permanent exclusion. In the longer term they are more likely to become involved in delinquent behaviour (Aseltine et al, 2000). The UK government are committed to developing inclusive educational practice and reducing the number of pupils who are excluded, therefore pupils with anger management difficulties require support (DfEE, 1997).

Many children are raised as a concern to external agencies including Educational Psychologists due to behaviour associated with anger. However, these behaviours and emotions are subjectively identified by individuals and their construct of "anger" is likely to differ. Anger can be defined as a separate but related entity to hostility and aggression. Martin et al (2000) outline a trait model of anger that includes affect, cognition and behaviour. They suggest that although these are interrelated dimensions they should also be considered as separate entities. They define anger as corresponding to affect, aggression to behaviour and hostility to cognition. Martin et al (2000) suggest that not all angry (affective component) people become aggressive (behavioural component). Research often uses these definitions

interchangeably and without clearly outlining how the construct is to be operationalised. Perhaps different interventions are more appropriate for anger and others for aggression.

Various psychological paradigms theorise about the origins and factors that maintain anger, there are numerous interventions with a different focus, based on these theories. Different professionals from health, education and social care, lead both group and individual interventions and they occur in a variety of settings, including clinics and schools. Anger management programs vary in their content, length and subsequent effectiveness. Local Authorities are being encouraged to use strategies that have an evidence base (Davis and Florian, 2004). Cognitive Behavioural Therapy (CBT) has an expanding research base as an effective intervention for various difficulties, including anger, across various populations, in different settings (Beck, 1993).

In a survey of the literature on interventions to address anger it was found that a large number have utilised CBT (Beck and Fernandez, 1998). However, the use of CBT interventions for anger difficulties has a more limited research base in comparison to other emotional disorders (DiGiuseppe, 1999). In various Local Authorities, Educational Psychology Service's have been training EP's to use CBT techniques for intervention purposes. The practicalities of using this technique with children in schools and the theoretical underpinnings to using CBT as an intervention for anger difficulties are discussed in this report.

5.3 THEORETICAL UNDERPINNINGS OF CBT AND ITS APPLICATION TO ANGER DIFFICULTIES

CBT was developed by Beck et al (1979) who initially highlighted the role of cognitive distortions in the maintenance and development of depression. CBT was developed and defined by Beck (1993) as

“the application of the cognitive model of a particular disorder with the use of a variety of techniques designed to modify the dysfunctional beliefs and faulty information processing” (Beck, 1993 pg 194).

Therefore the principles of CBT require the participant and therapist to work collaboratively; with the participant assuming an active role, testing out hypotheses in the real world. Although CBT has its roots in psychotherapy there is a focus on the present rather than on past childhood recollections. Although the goal is to modify the internal state of the participant, the setting of specific goals and the measurement of progress towards these goals has its roots in behaviourism (Beck, 1995). The systematic investigation of automatic thoughts through the formulation of hypotheses therefore combines psychotherapy and behaviourism (Beck, 1995).

CBT has been widely applied to mental health difficulties such as depression and anxiety. It could be argued that these states are more likely than anger to be triggered by internal stimuli and maintained internally by thought processes

(Papageorgiou and Wells). Feelings associated with anger vary in intensity from mild irritation to fury and rage. Physiologically it includes tension of muscles and release of adrenal hormones characteristic of the “fight or flight” response. Anger is more likely than depression or anxiety to be elicited by external than internal stimuli (Deffenbacher, 1999). External stimuli may be circumstances or situations in which the individual becomes involved. If anger is triggered by factors in the environment, simply working with the individual to change their interpretation of an event may not be enough to cause a positive, long term change. It may be that certain people or situations also need to change for the individual to manage their anger effectively.

Anger can also be triggered by internal stimuli such as emotions or thoughts that the person has, perhaps through remembering a situation or through feelings of anxiety or rejection. However, these internal stimuli usually require a situation to have arisen externally for them to be elicited. The intensity of the anger is then likely to increase if an event is interpreted “as i) unwarranted or unjustified, ii) intentional, iii) preventable and iv) blame-worthy” (Deffenbacher, 1999 pg 298). This illustrates the biased information processing identified in individuals with anger difficulties.

Kendall (1991) made a distinction between cognitive distortions and cognitive deficiencies. Cognitive deficiencies involve insufficient cognitive activity in situations that require more forethought prior to actions, such as thinking about the consequences of a behaviour. Whereas distortions such as a hostile attribution bias, refers to inaccurate processing of social information. Research has highlighted that

children who exhibit aggressive behaviours have particular cognitive distortions and deficiencies. They are less skilled at using prosocial and assertive skills to manage conflict and therefore resort to using aggression. These children are also more likely to retain an attribution bias that distorts their perception of social situations (for a review see Crick and Dodge, 1994).

Whether this reflects the thinking patterns of children who become angry rather than aggressive is not highlighted. These children may have different cognitive biases to children who become physically aggressive. Perhaps children who become aggressive use this as a release for the emotions associated with anger. However, if a child internalises the feelings of anger rather than exhibiting or acting out, they may have a different set of cognitive distortions in terms of blaming themselves or something internal.

Cognitive-behavioural interventions target different elements within the theoretical model outlined above. Some focus on altering dysfunctional cognitions, the biased appraisal of situations and anger evoking schemas. Whereas relaxation interventions target emotional and physiological arousal, to increase the degree of control and calmness in a child (for a thorough discussion see Sukhodolsky et al, 2004). Although external stimuli have a large impact on feelings and subsequent behaviours associated with anger. It may be that that these feelings are maintained by cognitions and underlying belief systems (discussed further in sections, 5.4.5, 5.5). CBT may therefore be effective at altering the internal processing that may

escalate feelings associated with anger. Perhaps it is particularly important to identify these thoughts and beliefs to support an individual in making long-term changes. Even if behaviours associated with anger are successfully altered it may be that these thoughts and beliefs find a different emotional outlet highlighted by the case study in this report (see section 5.4.5).

5.4 USING CBT AS AN INTERVENTION

5.4.1 Considerations when using CBT with children

Research suggests that for an intervention to be successful the individual's stage of readiness should be determined. It may be necessary to increase the person's awareness of anger and its consequences prior to beginning an intervention (Deffenbacher, 1999).

I used my initial session with James to establish what intervention would be appropriate to support him to manage his anger. James considered his anger as his responsibility although he also thought it was partly in reaction to external situations or circumstances. However, he realised that sometimes his reaction could be more extreme than was necessary. As James did not consider his anger to be simply a reaction to others and therefore solely the responsibility of external sources he could be considered as "ready" for an intervention (Deffenbacher, 1999).

Various interventions were considered such as an anger management group to increase James's knowledge and awareness of anger. However, upon reflection and further discussion with his mother and teachers, his anger was usually aimed towards himself as a person rather than other people. If considered by the earlier definition (Martin et al, 2000), James had the emotion or affective component of the construct "anger". However, he did not become aggressive towards others (behavioural component). To establish and alter the underlying cause of James's anger it seemed appropriate to use CBT to consider the thoughts, behaviours and emotions that could be maintaining his anger.

There is a debate within the literature about whether CBT is appropriate for children. A core requirement is that the individual can recognise their own cognitions, feelings and behaviours. An individual also needs to have the capacity to reflect upon their own thinking processes. A meta-analysis of CBT interventions by Durlak et al (1991) analysed data to show that children's developmental level moderated the degree to which CBT was effective. They found that older children (11-13 years) benefited significantly more than younger children (5-11) from this type of intervention. Further research by Quakley et al (2003) found that 80 percent of 7 to 8 year olds could discriminate between thoughts, feelings and behaviours compared with 100 percent of 10 to 11 year olds. James was an articulate 10 year old, who was attaining a higher academic level than many of his peers. In the initial session he demonstrated that he could be reflective and was able to consider his own thought processes. Therefore James could be considered appropriate for a CBT intervention.

5.4.2 Outline of the programme used in the case of James

Research highlights the importance of the “therapeutic alliance” to re-orientating the individual towards change (Deffenbacher, 1999). It is important to build rapport and show sympathy towards the individual’s difficulties. It is also important to establish the individual’s goal. As James had been referred by his Mother and the SENCO it was important to discuss and establish his own goals rather than the goals of those who had referred him for support.

The CBT therapist is defined as a “consultant, diagnostician and educator” (Kendall, 1993). As a consultant, the therapist works with the individual rather than simply providing answers. The goal is to empower the client to move towards positive, independent thinking. Behavioural experiments test some of the dysfunctional beliefs of the participant and the therapist supports them to understand the experience. As a diagnostician the CBT therapist considers information from the individual’s, environment and other people around the individual. The therapist then uses this knowledge and prior psychological knowledge to consider the problem and guide the therapeutic process. As an educator, the therapist supports the individual to maximise their strengths and minimise their weaknesses. The therapist supports the individual to learn behaviour control and develop their awareness of cognitions and emotions (Kendall, 1993).

5.4.3 Initial formulation of the problem

In the second session that I completed with James I used an assessment to gather information about his Behaviour, Affective states, Sensations, Interpersonal skills, Cognitions and Drugs/Biology (BASIC-ID) by Lazarus (cited in Miller, 1987). This informed the preliminary formulation of the problem, which is an initial description of the problem, how it develops and hypotheses about what maintains the problem (Kirk, 2006).

James lived with his Mother, her long-term partner and his older brother and sister who were at the local secondary school. He also saw his Father regularly, who lived nearby.

James described various incidents that had made him angry. He said that sometimes other people made him feel frustrated like when someone (a teacher or pupil) had been “unfair” towards him. James reported that he had often felt frustrated when he was younger but that he had been able to control his anger. He reported that since the beginning of year 6, his anger had increased in frequency and intensity. He also found it difficult to make himself feel calm again once he became upset. James said that although other people made him feel angry he realised that he “overreacted” to the situation. When he felt angry James reported that he often clenched his fists, felt hot and sweaty and also felt fidgety. He said that when he was angry he thought about “bad things”, like when his Mum and Dad split up. Although his reaction was initiated by external stimuli, James’s negative thoughts maintained

or escalated his angry state. This seemed to be maintaining or possibly increasing his feelings of anger. Following his angry episodes James reported that he felt guilty, frustrated and sometimes sad. We initially agreed that the goals for the therapy sessions would be for James to learn strategies to calm himself down both prior to the anger escalating and for when he had become angry. Another goal was to reduce the frequency and intensity that he reacted to situations with feelings and behaviour associated with anger.

5.4.4 CBT programme

The cognitive behavioural program that I completed with James followed the key principles of CBT providing information about cognitive and behavioural components of anger, teaching techniques to manage anger and facilitating the acquisition of new skills (Humphrey and Brooks, 2006). I used some of the materials by Stallard (2005a, 2005b) at the beginning of the intervention. These were selected because they provided a framework for the sessions that was accessible to children. The worksheets can also be downloaded from the internet and customised (if necessary) for the individual child.

Table 1: Outline of the CBT programme

Week	Focus for the week and outcome from the session
1	<ul style="list-style-type: none"> Initial introductions and to establish good rapport with James. To consider whether James was motivated to change his anger and whether he was “ready”. To assess whether James was at a cognitive level that would make CBT an appropriate intervention. James responded positively to the first session and he was articulate and reflective a CBT intervention was therefore appropriate.
2	<ul style="list-style-type: none"> Completion of the Behaviour, Affect, Sensation, Interpersonal, Cognitions, Drugs/Biology (BASIC-ID) by Lazarus (cited in Miller, 1987) Frequency, Intensity, Duration and Onset (FIDO) to establish the levels of anger that he thought he may have in a week. Discussion about when, who, what, why and how the anger occurred. James was reflective and open with his responses. He seemed to like the opportunity to talk about his difficulties and he seemed to think carefully about the questions.
3	<ul style="list-style-type: none"> Discussion about the 4 buttons (Emotions, Thoughts, Behaviour, Physiology). Consideration of a recent time when James became angry and identification of the 4 buttons. James was interested in the 4 buttons and was able to identify these in a situation. He had more difficulty identifying his thoughts because when he became angry he didn’t think he thought about anything.
4	<ul style="list-style-type: none"> Discussion about automatic thoughts. James identified the positive thoughts he had about himself. He found this difficult and reflected on the activity for a while. We also considered a recent incident when James had become angry and identified thoughts, behaviours, emotions and physiology. James reported that he frequently thought about why his parents split up when he became angry and this often maintained his anger and made him increasingly upset.

	<ul style="list-style-type: none"> • James's homework was to consider what job he would like to do in the future and to check on the internet what qualifications and qualities he would need. • We discussed what James could do if he was in a situation when he became angry. He decided that a good strategy would be to walk away. We practiced this as a strategy and he agreed to do this as an experiment for the week.
5	<ul style="list-style-type: none"> • James rated his anger as less intense this week as he had successfully walked away from 2 out of 4 situations. • We discussed negative thoughts and how these could be automatic. We discussed the importance of recognising these so that we could change them. • He again raised the issue of his parents breaking up. We discussed all of the reasons he could provide for the break up. Interestingly they had split up prior to his birth so he did not have any recollection of them being together. However, his lack of knowledge about when they split up and whether him or his siblings had caused it were thoughts that he returned to when he was angry. • We discussed whether the thoughts he had identified were accurate and he did not think they were. • I asked whether I could discuss his concerns with his Mother and he agreed. • James's homework was to walk away from more than 2 situations and to sit in a quiet place to calm down. • I therefore taught him a relaxation technique.
6	<ul style="list-style-type: none"> • I had a discussion with James's Mother about his preoccupation with his parents breaking up. She agreed to raise the issue about it with him and we talked about how much detail she should tell him.
7	<ul style="list-style-type: none"> • We discussed the information that James had been given by his Mother about the break up of his parents. • James reported that he had managed to walk away from all of the situations that had made him angry. • However, he was finding it difficult to reduce his levels of anger after removing himself from the situation. He was also remaining emotional for quite a while after the situation. • We thought about the negative thoughts he had about his parents and we discussed how he could change it to something different to

	<p>prevent him increasing his levels of anger. We discussed whether he could stop the negative cycle by thinking of something that made him happy.</p> <ul style="list-style-type: none"> James's homework was to keep a diary of his thoughts, feelings and behaviours when he became angry.
8	<ul style="list-style-type: none"> During the writing SAT's test James became very angry and scribbled over his work. He then walked out of the classroom. We discussed the thoughts that had occurred prior to this. He realised that he had used the wrong writing style for the test and he then became really angry with himself. He reported that he had then thought things such as "I'm going to fail", "I always do it wrong" and "I'm stupid". This negative self-image was having an impact on his self-esteem and sense of worth. James had not completed the thoughts, feelings and behaviour diary. We went through it again with me reiterating how important it was for us to have a log.
9.	<ul style="list-style-type: none"> Due to a Year 6 residential trip I had been unable to see James for 2 weeks. I also discussed James's strategies with the teachers so they could support him. He had managed his anger appropriately on the trip and had removed himself from any situations to calm himself down. He had won a Science competition that I praised him for but he looked at the floor and found it very difficult to accept the praise. This had also occurred at other times. I asked his Mother and the teachers whether he also found it difficult to receive praise and they reported that he refused to accept achievement awards in assembly although he was confident to act the principle part in a play in front of an audience. James had chosen not to complete the diary and staff were concerned that his behaviour had become part of his identity. From working with James I hypothesised that he retained a core belief that he considered himself as worthless. Although James could manage his anger to a certain degree I was concerned that CBT was not addressing the underlying issues.
10	<ul style="list-style-type: none"> During this session James reported that he had only felt a little bit frustrated once and that he had visualised doing something he enjoyed and that had stopped him thinking negatively. This was my last session with James prior to his transfer to

	<p>Secondary school.</p> <ul style="list-style-type: none"> • I had agreed to visit him towards half term in the autumn at his new school. • I thought that a change of context could potentially exert a positive influence over James's anger. Particularly as his Mother would not be present at school.
Follow Up session (3 months later)	<ul style="list-style-type: none"> • James reported that he never felt angry at school anymore. • He suggested that he became upset rather than angry. He had been bullied at his new secondary school; staff were aware of this and had prevented it occurring for the last 2 weeks. • James seemed anxious and upset; he found it difficult to hold eye contact with me. • We discussed how often he felt upset and the intensity of these feelings. He reported that if he was sad on Friday then he could remain sad for at least half of the weekend. • I was concerned that James was developing depression and I therefore suggested to him that a referral to the Child and Adolescent Mental Health Service may be helpful to him. He agreed that he would like someone to talk to.

5.4.5 Re-formulation of the hypotheses

Through the sessions James and I reformulated the hypotheses about the factors that maintained or escalated James's anger. We explored his understanding of his Mother and Father getting divorced which was related to various negative thoughts. He had various questions and misconceptions regarding why they had split up. He could not remember when it had occurred and considered himself responsible for their break up. A discussion with his Mother revealed that the break up had actually occurred before he had been born and I was able to challenge James's misconceptions.

Through other sessions with James it was apparent that he found it difficult to acknowledge his successes or accept praise. He also found it very difficult to identify and appreciate the positive things about himself. It became apparent that James retained a belief that he was “worthless”. Although external situations or events triggered his anger, it seemed that negative internal thoughts about himself increased his angry feelings. An exemplified by his response in a year 6 Standard Assessment Tests (SAT’s). James was a more able pupil and he was capable of achieving high levels. He completed his writing test and then re-read the question and realised that he had written in the wrong style to answer that particular question. He reported that he became very angry, scribbled out his work and left the exam room rather than correcting what he had written. He reported that his internal thoughts included “you’re so stupid”, “it’s all wrong”, “you’re no good”, “mum will be so cross”. He said that these thoughts had made him so angry that he lost control.

5.5 THE COMPONENTS OF CBT THAT MAKE IT EFFECTIVE

There have been attempts by researchers to establish which components of CBT produce effective change for children with anger difficulties. The outcomes of CBT vary across studies and the factors that moderate the effects, such as the individual characteristics of the participant, particular CBT programmes, or how the effectiveness of interventions are measured, requires further research. The cognitive components that are effective within CBT are yet to be identified and evaluated. Further research into this would inform theory and practice (Durlak et al, 1991).

5.5.1 Research that used CBT with children that have anger difficulties

There are many different components to CBT and these vary depending on the emphasis of the CBT program. Stallard (2002) suggests that there are a wide range of programs defined as CBT and this variation is unhelpful when considering which components of CBT are effective with children. Programs use different methods such as self-instruction, role play, imagery and various reinforcement procedures. Particular methods could be more effective than others. For example, Lochman (1992) emphasises encoding of social stimuli and problem solving within a social context, whereas the program by Deffenbacher et al (1996) emphasise cognitive relaxation. Perhaps different components are more or less effective, with different emotional difficulties (anger, depression, anxiety). Also, further research is required with children, as the components that make CBT effective with children are likely to be different to adults due to their developmental level.

In their meta-analysis of CBT interventions for children with anger difficulties, Sukhodolsky et al (2004) classified the different types of CBT program depending on their focus. The “Skills development” category incorporated interventions that used modelling and behaviour rehearsal. The “Affective education” interventions focussed on emotional identification, monitoring of anger and relaxation. The “Problem solving” category targeted cognitive deficits and used techniques such as attribution retraining and self-instruction. The final category, “Eclectic treatments” incorporated multiple procedures and targeted more than one component of anger.

Sukhodolsky et al (2004) found that skills development and eclectic treatments were significantly more effective than either affective education or problem solving. Sukhodolsky et al (2004) suggested the programs that were more effective incorporated a higher behavioural component and aimed to teach actual behaviours and skills. This was contrary to programs that aim to alter internal constructs that are related to targeted behaviours.

The program used with James (outlined above) retained a behavioural focus and effectively taught him new behaviours and skills. CBT supported him to remove himself from situations that could potentially escalate. He responded well to rehearsing strategies during the sessions and seemed able to generalise some of these to situations in which he became angry. James was able to use strategies learned during CBT to calm himself when he became angry.

James was also able to consider situations or events and identify the four buttons (cognitions, emotions, behaviours and physiological sensations). Although James made some progress, in my view the underlying cause of his anger were the underlying negative beliefs regarding his self-worth. Although the intervention began to challenge these beliefs James began to feel depressed when he transferred to secondary school. Instead of negative externalising behaviours he began to display negative internalising, that made him depressed.

If behavioural measures were used to indicate whether the case study intervention was successful; James, the teachers and his Mother would have reported a positive change. However, the underlying thought processes, especially James's core beliefs had remained the same and these continued to cause internal emotional difficulties. Therefore, the behavioural component of CBT was effective in the short term, but for impact over a longer time period perhaps the cognitive component of CBT assumes more importance. Some of the studies included in the meta-analysis by Sukhodolsky et al (2004) were completed over a short period of time and may therefore only reflect a short term behavioural change rather than a long-term change. A few research studies have attempted to establish whether the cognitive or behavioural component of CBT is what makes it effective, this is discussed below.

5.5.2 The cognitive and behavioural components of CBT

There is limited research with children that has directly compared interventions to establish whether the cognitive or behavioural elements of a program are more effective for children in managing anger. Forman (1980) directly compared a cognitive training program and a behavioural intervention based on a response cost program to reduce aggression in children. Both interventions showed a significant reduction in the difficult behaviour of pupils. Although there were no significant differences between the interventions, there were greater gains for children in the behavioural intervention. As teacher ratings were used, Forman (1980) suggested that the results could reflect teacher bias as they were more involved in the

response cost intervention. Perhaps teachers respond more positively to pupils if they are directly part of the intervention. If teacher involvement is important there are implications for interventions such as CBT, as it this is often completed in isolation with individual pupils.

The results above highlight that the behavioural component of CBT is perhaps more effective. However the research can be criticised as it is possible that the gains shown by children in the behavioural intervention would not have been sustained over a longer time period. Perhaps the cognitive intervention would have been more effective in the long term. Although this study was completed over 20 years ago research has only moved forwards slightly in considering these important questions.

In their meta-analysis of CBT interventions for children with anger difficulties, Sukhodolsky et al (2004) coded the key teaching components within CBT programs such as emotion identification, relaxation and role play. They found that as the amount of modelling key adaptive behaviour and feedback in the form of acquisition and subsequent reinforcement of skills increased, the intervention was correspondingly more effective. These components are based on behavioural psychology and therefore support the argument that it is the behavioural component of CBT that makes it effective. It is possible that for some children thoughts are altered through changes in behaviour. However, these studies focus on measuring behavioural changes in participants with little consideration or measurement to

establish whether the intervention has altered thought processes or underlying beliefs.

Sukhodolsky et al (2004) found that improvement in the anger domain was twice as high for participants that completed programs with a high level of problem solving than those with a focus on affective education. Therefore a greater understanding of emotions does not successfully provide children with control over their subsequent thoughts or behaviours. This indicates that the cognitive component is more important than children's awareness of their own emotions. Perhaps the feelings associated with anger are therefore controlled or maintained by cognitions and underlying beliefs.

This is interesting as anger is generally considered an emotion rather than a thinking state. However, interventions that focussed on learning how to think about causes, consequences and solutions for situations in which anger was elicited were more effective than interventions with relaxation, positive imagery and education about emotions (Sukhodolsky et al, 2004). This has implications for many anger management programs that aim to educate individuals about their anger and focus on emotional coping rather than changing the way that an individual processes a situation.

The case outlined above indicates that interventions which aim to change the cognitions and beliefs that maintain or increase the angry feelings may be more

effective at reducing anger long-term rather than simply interventions that change the behaviour of the person or alter the external stimulus. The case study supports research to a certain extent as there was a behaviour change and James responded well to the behavioural component of CBT. However, the case study also highlights the potential importance of the cognitive component. In hindsight, perhaps an alternative intervention that directly aimed to alter core beliefs may have been more appropriate for James. Therapy based on personal construct psychology may have been more effective for improved, long-term emotional wellbeing.

Lochman (1992) completed the first long-term follow up study, to establish whether aggressive boys maintained the gains from CBT treatment after three years, in comparison to a control group. After the follow up, the boys who had completed the CBT showed reduced drug taking in comparison to the control group, they also performed better on vignettes about social problems. The boys who completed the CBT intervention also had higher levels of self-esteem directly following the intervention and at follow up. However; at long term follow up these children did not demonstrate markedly lower levels of difficult behaviour in the classroom in comparison to the control group.

These findings are interesting when considering the impact of both the behavioural and cognitive components of CBT. Although initially the behavioural component of the program seems to improve behaviour the long-term gains of this are not necessarily sustained. Perhaps if Lochman's (1992) program had included schema

re-structuring, changes would have occurred on a more long-term basis. Perhaps therefore the gains from cognitive restructuring occur over a longer time period; therefore interventions that do not include a longer term follow-up may not highlight the potential importance of the cognitive component of CBT.

It is rare for CBT interventions with children to report negative outcomes however some authors have begun to highlight that CBT may not be appropriate for all children. Squires (2001, study further outlined in section 5.6.1) found that although some of the children in his group rated their behaviour as improved there were also some children who rate it as having deteriorated following the CBT program. Squires (2001) suggested this may indicate a higher degree of self-awareness. Durlak et al (1991) highlighted instances where CBT interventions had improved circumstances considerably for the child but the difficulties still remained and were in need of further intervention. Durlak et al (1991) suggested that meta-analyses did not highlight whether the child's behaviour was within normative limits following the intervention.

Perhaps for some children a longer intervention is required for improvement in behaviour. Although James's anger improved from the short-term intervention he required a longer CBT intervention to restructure his schemas and alter his cognitions. This may have implications for EP's because of time constraints. In some services there is limited flexibility to deliver intensive, long term interventions that some children require (discussed further in section 5.7).

The review by Durlak et al (1991) did not find a significant relationship between cognition and behaviour. The theory underlying CBT assumes that there is a link between cognitions and behaviour. Therefore CBT would be expected to facilitate a change in cognitive processes that would also elicit a change in behaviour. However, it may be a reciprocal relationship in that changes in behaviour alter cognition. The underlying mechanism for change through CBT therefore remains unknown and is yet to be firmly established. Some research (see section 5.5.1) and the case outlined in this report indicate that although changes in behaviour occur in the short-term, to improve emotional wellbeing over a longer time period, changes in cognitions are required.

Stallard (2002) highlights research (Hobbs, Bell and Reynolds, 2000 cited by Stallard, 2002) with depressed and non-depressed adolescents that found dysfunctional assumptions more often in non-depressed adolescents whereas negative cognitions were found in depressed adolescents. This may indicate that dysfunctional assumptions are in some way part of typical development. Stallard (2002) suggests that this questions whether the theoretical model of CBT, developed for adults can be applied to children. He suggests that further research is required to establish whether there is an underlying cause and maintenance of psychological disorders by cognitions that are found in some children.

The outcome measures used to assess whether the intervention is effective for the child vary widely between studies. Therefore outcomes may actually be due to

variance in the measures used to assess outcome rather than a true reflection of change (Durlak et al, 1991). Also, many interventions utilise similar tasks that were completed during the treatment program for the subsequent evaluation of effectiveness. Therefore the child may simply have learned how to complete the activity rather than the CBT actually having an effect on behaviour or cognitions. Although interventions assess whether there has been a change in behaviour, relatively few interventions assess whether there has been a change in cognition following a CBT intervention. Further research to establish how the link between behaviour and cognitions changes following CBT would widen the research base and expand theory underlying CBT.

5.5.3 Conclusions

Little is known about the moderators and mechanisms required for change to optimise outcomes from CBT (Sukholdolsky et al, 2004). Further research to investigate the link between emotion, angry behaviour and thoughts would provide additional information for theory and practice. The cognitive component of many CBT programs is often lacking (Stallard, 2002) or remains undefined. Further research into how cognitions develop in children would be beneficial as this could indicate whether there is an optimum developmental period during which children are more likely to develop cognitive distortions or deficiencies. If this could be established preventative interventions could be implemented. A greater

understanding of cognitive distortions or deficiencies may also facilitate the development of interventions that have longer term benefits.

5.6 OTHER CONSIDERATIONS WHEN USING CBT WITH CHILDREN RAISED BY THE CASE STUDY

5.6.1 Using CBT with groups of pupils

The intervention completed with James required a high level of time investment by me as a TEP acting as a therapist. Perhaps delivering CBT to groups rather than just individual children would be more cost effective in schools. Particularly as it would maximise an EP's time and may be considered as less threatening to the individuals. The groups also provide an opportunity for positive social interactions. However, it must also be acknowledged, that group interactions may be counterproductive, particularly if children are angry or aggressive. Some research findings suggest that children can potentially adopt the negative values and attitudes of other members when participating in a group intervention (Dishion and Andrews, 1995).

Research directly comparing whether CBT is more effective when delivered to individuals or groups of children is limited. Kendall and Zupan (1981) directly compared whether context affected a CBT intervention, delivered to primary aged children. They delivered self-control training to primary school children who were

assigned to either individual CBT, group CBT or a control group. During sessions the children receiving CBT were taught verbal self-instructional training through modelling. A response cost system was used where children were rewarded for appropriate responses and behaviour whereas they lost points for inappropriate responses. The research found that CBT delivered in either a group or individual context was comparably effective in comparison to a control condition as rated by teachers of self-control and a perspective taking test.

More recent findings by Shechtman and Ben-David (1999) supported this research. They found that therapy for both groups and individuals, with aggression, was comparably effective at reducing aggressive behaviour when compared to a control group. The groups within this study comprised of heterogeneous groups and therefore contained aggressive and non-aggressive children. Children may therefore benefit from the positive role models.

However, results from group interventions may be more complex. Squires (2001) completed a CBT intervention with 3 groups containing 6 to 9 pupils from year 5 to year 8. Squires (2001). Following the intervention there was a significant change in self-control and classroom behaviour rated by teachers and pupils. Additionally, teachers reported improvements for some pupils in their peer relationships. Squires (2001) suggested that the group results masked the individual gains for some pupils as some made a lot of progress while others actually rated themselves as worse. This could indicate that group interventions may not be effective for all children.

The importance of the therapeutic alliance between the therapist and the individual completing CBT has been emphasised. Deffenbacher (1999) suggested a need for good rapport; with the therapist also demonstrating empathy and actively communicating with the individual. The therapeutic alliance would be different in a group situation as there are other people present and interacting during the CBT sessions. It may be that rapport and trust is more difficult to establish. These dynamics require further research to optimise group interventions.

Additionally, the degree to which individual cognitive schemas can be challenged during group sessions may be more limited than if therapy is individualised. I believe that James, the pupil I worked with would have felt uncomfortable discussing his personal concerns regarding his family in a group situation and this formed part of his dysfunctional cognitions. It would also have been difficult to discuss and challenge individual dysfunctional schemas within a group situation. Perhaps group interventions using CBT are more appropriate if the individual's cognitive schemas do not require a high level of restructuring and this would be difficult to determine prior to beginning therapy.

5.6.2 The difficulty of “referring” children for CBT

Identifying children that require therapy is more complex than with adults because children typically do not refer themselves for support from an EP. When considering

whether children should be referred for anger management, it is important to acknowledge that some children present with emotional and behavioural problems as part of normal development, while they learn to develop emotional awareness and skills to manage their own thoughts and emotions (Stallard, 2002). Referrals are made by the teacher, SENCO or raised primarily as a concern by the parent. The child may not consider the problem identified by others as an issue. The “problem” identified by others may actually be considered beneficial from the child’s point of view.

Howells and Day (2003) suggest that emotions related to anxiety and depression usually prompt the individual with the difficulty to seek help. However, for emotions such as anger, behaviour usually affects other people and help-seeking is therefore prompted by others. The extent to which CBT is effective, if individuals are mandated to attend is unknown.

CBT assumes that the individual is ready to change. There is an assumption, that the individual considers anger, to be a personal problem and that they would like to reduce it. However, in the present case one of the reasons for James failing to complete the thought diary may have been that he had not taken ownership of his anger. His anger may have become part of a role or identity that he had assumed within his peer group. When anger becomes part of identity, considering anger as a difficulty is incongruent with the self and therapy is subsequently deemed

unnecessary by the individual (Deffenbacher, 1999). The degree to which anger therefore assumes a functional role for that individual requires consideration.

Howells and Day (2003) suggest that anger has potentially more positive functions than either sadness or fear. Therefore CBT for anger difficulties may be less effective than if it is used for either anxiety or depression. If anger becomes functional to the individual it would be necessary for an intervention to return to whether the individual is ready to change. Motivational interviewing (see Traxon, 1994) techniques or challenging the positive assumptions the individual associates with anger would be required before the intervention could continue.

More recently, CBT has been implemented as a preventative intervention for large populations of children. The adoption of a class-wide cognitive-behavioural intervention may be more appropriate than targeting either individual or groups pupils. Daunic et al (2006) used a class wide cognitive-behavioural, problem-solving curriculum. They measured whether pupil's angry behaviour was reduced and whether pupils had increased control over their anger. They found that pupils identified by teachers as aggressive or at risk of becoming aggressive exhibited reduced reactive and proactive aggression. They also improved in problem solving skills following the intervention.

This study exemplifies the difficulty in reliably measuring behaviour and aggression. The other teacher rated measures utilised by Daunic et al (2006) such as externalising behaviours and self-control did not show a significant change. If levels of anger and aggression had actually changed it would be expected that self-control and externalising behaviours would also show a change following the intervention.

5.6.3 The influence of the environment when using CBT for anger difficulties

Contrary to other difficulties that are often targeted by CBT such as depression or anxiety that may be considered as triggered internally, anger is invariably a response to an event or situation that occurs within the environment. Due to these external triggers, for interventions to have long-term success, support from the surrounding environment seems particularly important. It is possible that James's angry behaviour was partly associated with the context of the primary school. Therefore, external stimuli (such as peers) may have been the trigger for the anger.

Children are dependent on adults and others from within the various systems in which they operate. A child is seen individually for CBT and this assumes the difficulties are within the individual's control. However, this discounts the influence of peers, parents and others within a child's life who are likely to affect the child both positively and negatively (Kazdin and Weisz, 1998). Anger can be triggered by these external stimuli, perhaps CBT interventions should also consider and address these

external influences. This may also support the generalisation of strategies from CBT sessions to other environments.

Beck and Fernandez (1998) suggested that many of the studies they had used for their meta-analysis occurred within a laboratory setting. The generalisability of findings to wider more ecologically valid situations is therefore questionable, especially as anger is elicited within various contexts as a response to various people or situations. This obviously has implications for the durability of interventions for people with anger difficulties.

Weisz et al (1995) reviewed psychotherapy outcomes for children and adolescents. They found that peer perceptions of the individuals' externalising behaviours, who completed therapy remained relatively unchanged. They suggest this could be due to children having difficulties altering the reputation that they have at school. Interestingly, peers reported positive changes in children's internalised difficulties. Therefore, although children identified changes in the individuals they continued to describe children by their reputation prior to the intervention. This again indicates that additional intervention, perhaps with peers or adults around the targeted individual is required, for skills or behaviour learned in CBT to be generalised to a wider setting. It may be that others perceptions also require changing. This could be achieved through interventions that target peers or adults alongside the individualised CBT sessions.

Averill (1993, cited in Howells and Day 2003), argues that anger is affected by social and cultural rules. Cultures therefore vary in their definition of anger and the degree and times that anger is accepted. Daunic et al (2006) suggested that many teachers believed that pupils knew how to control their behaviour but would choose not to act upon their knowledge because of the competing models at home, school and within the local community. This is a point that would require addressing in CBT if changes were to be expected across the many systems in which children operate within. These systems may require addressing separately if skills were to be generalised from a therapy session.

Many children who become angry often have underlying emotional and social difficulties that lead to mental health issues in the longer term. Perhaps the environment that children occupy can use CBT as a preventative measure. The school setting plays a key role in the lives of children and could be considered ideally placed to support the mental health of children at multiple levels (Christner et al, 2007). Schools vary in their commitment towards preventative mental health but they frequently request the involvement of external agencies to support either individuals or groups of pupils to manage their anger.

Christner et al (2007) propose a model to consider how schools can support pupils. “Universal services” are sometimes delivered through school-wide curriculum in the classroom such as using the Social and Emotional Aspects of Learning (SEAL) materials. Pupils at risk of developing emotional, social behavioural difficulties could

then become part of a “targeted intervention” within school in small groups, or individually. The more “intensive intervention” for pupils with more severe difficulties would involve outside agencies. Therefore Educational Psychologists could be considered as well placed to offer support at multiple levels to pupils.

Longer-term studies are required to consider whether the principles of CBT can be incorporated into more preventative programs. Interestingly, Daunic et al (2006) found that pupils, who received additional sessions, did not demonstrate comparatively additional gains than pupils who received fewer opportunities to practice skills. Further research is required to determine whether there are an optimum number of sessions to facilitate the effectiveness of an intervention.

Having highlighted the importance of considering the child within the many systems that they operate, it is important to consider how CBT can involve the parent. In the intervention outlined in this report, it was particularly important to involve James’s Mother in the intervention as the family history had an impact on James. Also, he would sometimes become angry at home, she could therefore support him with strategies that we had discussed in the therapy sessions. However, as Kendall (1994) highlights this facilitator role typically involves information sessions with the parent while the child remains the focus of the intervention. In some situations working with the parent may also be particularly important to support the child to change.

5.7 DISCUSSION

Research shows that CBT interventions have a positive impact when used to support children who have difficulties managing their anger. Research with both individuals and groups of children demonstrate that CBT can have a positive impact on behaviour, although research remains relatively limited and there are few long term studies. It is important that classroom practitioners and those professionals working with children who have anger management difficulties have access to evidence-based practice to avoid the use of programs that may not be particularly effective; therefore further research is required.

There is little consensus about what components of a CBT program facilitate change. The majority of research indicates that the behavioural component is perhaps more important in eliciting change. This is supported by the case outlined in this report. However, the majority of previous research focuses on measuring the behavioural component with some studies also using activities that were taught within the program as a measure of effective outcomes, which is unlikely to be reliable. In the case outlined in this report the cognitive schemas were part of the underlying cause for the anger. So although James began to manage his anger more effectively, his dysfunctional cognitions remained. These then became more internalised in the form of depressive thoughts. As there are a limited number of studies that have considered the longer term effects of CBT with children who have anger difficulties, it may be that cognitions take more intervention time to change.

Also, the behavioural change may be short-term if the underlying cognitions remain and may actually revert back to pre-intervention levels or become manifested in a different way.

Further research is required into the cognitive component of CBT, both in terms of establishing whether there are changes post intervention and whether long term change can be sustained if dysfunctional cognitions are altered. This would also inform theory about the interaction between behaviour and cognitions in children. Stallard (2002) suggests that directly applying theoretical models, which explain adult mental health difficulties to children, may not be appropriate. It is possible that some dysfunctional cognitions are also part of typical development in children and adolescents.

Weisz et al, (1995) reviewed child and adolescent psychotherapy effects and concluded that there was a publication bias in favour of research that showed statistically significant treatment effects. This may also be the case for research completed with CBT, thus it is important that programs which are less effective are also published so that further theory and subsequent interventions can be refined.

One of the limitations of using CBT as an intervention is the assumption that it is the individual with the difficulty and therefore the individual that requires “fixing”. Children are referred by an adult such as a teacher or parent to an EP. The child may therefore not share the views of others that their anger is a “problem”. For CBT

to be effective the child needs to take ownership and be motivated to change. Although CBT can be potentially useful, the difficulty in assuming the individual is solely responsible for their behaviour and completing individual therapy in schools, is that schools can then relinquish their responsibility for the problem. Squires (2001) highlights the importance of involving a staff member from school in the group intervention process to ensure that school retain some ownership of the problem.

Children's development, particularly cognitions are likely to be influenced by parents, carers, peers and the educational environment. Stallard (2002) highlights the importance of considering the protective and risk factors for each individual child. Christner et al (2007) argue that providing services to individual pupils is only part of the role in which schools should facilitate positive mental health in children. They suggest that schools are in a prominent position to offer a preventative program for all pupils. Whether the principles of CBT can be applied to a wider population in an intervention has been attempted in a class-wide program with some success. Further research could identify how this could potentially be used in a preventative manner, rather than simply a reactive response.

Working preventatively using CBT could be considered as cost effective for the Local Authority in the long term as there may be fewer children who require subsequent statements and support for emotional, social and behavioural difficulties. However, there will also be individuals that require additional, more intensive support. CBT could be a potentially successful intervention to use with children who

have anger difficulties in school. However, further research and refinement of effective programs is necessary if they are to be widely used by EP's as interventions in an educational setting.

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