The Development of Empathy in Childhood

by

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Abbreviations

ADHD	Attention Deficit Hyperactivity Disorder
ANCOVA	Analysis of Covariance
ASD	Autistic Spectrum Disorder
CAMHS	Child and Adolescent Mental Health Service
CD	Conduct Disorder
DBD	Disruptive Behaviour Disorder
DSM-IV	Diagnostic Statistical Manual, 4th Edition
EBD	Emotional and Behavioural Difficulties
HR	Heart Rate
IRI	Interpersonal Reactivity Index
MANCOVA	Multivariate Analysis of Covariance
NICE	National Institute of Clinical Excellence
SC	Skin Conductance
WASI	Wechsler Abbreviated Scale of Intelligence

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Declaration

This thesis has not been submitted for any other degree or to any other institution and is the named authors own work. This thesis was carried out under the supervision of Dr Eve Knight, Consultant Clinical Psychologist, and Dr James Bickley, Consultant Clinical Psychologist. Analysis of data was performed in collaboration with Dr Tony Lawrence and Dr Sarah Kent, Clinical Psychologist.

The thesis has been written for submission to the following journals (see appendix 15 for instructions to authors).

Chapter 1: How parental factors might affect the development of empathy in the typically developing child: A review. *Journal of Personality and Social Psychology.*

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Chapter 2: Empathy in boys with behavioural difficulties: Does the nature of the relationship matter? *Journal of Emotional and Behavioural Difficulties.*

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Chapter 3: Reductionism versus holism in research and practice.

(word count: 2495)

Summary

Previous research has identified that children and adolescents, typically males, with behaviour problems have poorer empathic skills than their non-behaviour disordered peers (e.g. De Wied, Goudena & Matthys, 2005). Since increased empathy is positively associated with prosocial behaviour and negatively associated with aggression (Strayer & Roberts, 2004) investigating what factors might affect child empathy might be of value in developing proactive and reactive interventions.

Chapter 1 aims to review the current knowledge-base and to highlight the variety of parental factors which may affect empathy development in the typically developing child. Limitations of the research and suggestions for future research are discussed. Understanding how empathy develops in the typically developing child is important in order to understand where and why empathy development goes wrong.

Chapter 2 presents an empirical study investigating empathy in boys with behavioural problems. This study aimed to investigate whether empathy scores were dependant on the relationship between the observer and the observed person. The findings offer some support for the prediction that empathy scores are enhanced when participants empathise with someone they have a positive relationship with. The thesis concludes with a reflective paper (Chapter 3) which considers the controversy between reductionism and holism in research and practice.

References

De Wied, M., Goudena, P.P., & Matthys, W. (2005). Empathy in boys with disruptive behaviour disorders. *Journal of Child Psychology and Psychiatry.* 46 (8) 867-880.

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Chapter 1: How parental factors might affect the development of empathy in the typically developing child: A review.

1.1 Abstract

Research indicates that healthy empathy is linked to good social awareness, moral understanding and successful interpersonal relationships. Poor empathy has been associated with a variety of psychopathologies including behavioural problems. Understanding how empathy develops in the typically developing child is important in order to understand where and why empathy development goes wrong.

Considerable research exists which considers specific parental factors and their impact on child empathy development. This article reviews the current knowledge-base and attempts to highlight the variety of parental factors which may affect empathy development in the typically developing child. Limitations of the research and suggestions for future research are discussed.

Keywords: empathy, mother, parents, children

1.2 Introduction

Empathy has long been thought to be one of the crucial building blocks for successful interpersonal development. Empathy has been defined as;

"an affective reaction that stems from the apprehension or comprehension of another's emotional state or condition, and that is identical or very similar to what the other person is feeling or would be expected to feel."

(Liew et al., 2003, p.584)

The term 'empathy' has been used to describe a variety of phenomena including cognitive abilities to predict another person's emotional feelings to emotional contagion. The prevailing view of empathy over the last two centuries has been that empathy is comprised of a perspective taking (cognitive) component and an affective component. Whilst this is not disputed, it is now generally agreed that empathy is a multidimensional construct and attempts have been made to define further the individual elements of empathy. Davis (1983) suggests that empathy should be considered as a set of constructs, related in that they all reflect responsivity to others, but also as discriminable from each other. For Davis, empathy is comprised of empathic concern (other-oriented feelings of sympathy or concern), perspective taking (the tendency to adopt another's psychological point of view), fantasy (tendencies to transpose oneself into the feelings and actions of fictitious characters) and personal distress (self-oriented feelings of distress or unease in emotional situations). Marshall, Hudson, Jones & Fernandez (1995) reconceptualised empathy as a staged process. The first stage is emotion recognition which requires the observer accurately to identify the emotional state of another person. If this is achieved, the second

stage is perspective taking which describes the ability to put oneself in the other person's place and see the world as they do. The third stage is emotion replication which describes the vicarious emotional response that replicates the emotional experience of the other person. Finally is the response decision stage which is the observer's decision to act or not act on the basis of their feelings. This final stage importantly allows for the impact of situational components which are not considered in other models of empathy e.g. Davis (1983).

Clinically, research into empathy development is of paramount importance since empathy deficits are indicated in a variety of psychopathologies. Previous research has linked high levels of empathy to prosocial behaviour, moral development and social competence (Roberts & Strayer, 1996; Strayer & Roberts, 2004b). Low levels of empathy are linked to conduct disorder (Cohen & Strayer, 1996), aggressive behaviours (de Wied, Goudena & Matthys, 2005) and psychopathy (Soderstrom, 2003). In today's society conduct disorders and associated antisocial behaviours are a high profile concern. The government has responded to the problem with their 'Respect' agenda. This cross government strategy aims to tackle bad behaviour and nurture good and has become synonymous with the ASBO (antisocial behaviour order) generation who exhibit many of the characteristics of conduct disorder (www.respect.gov.uk).

Research suggests that genetic factors can explain some of the individual differences in empathy. Research with monozygotic and dizygotic twins estimates the heredity of empathy to be .30 - .40 (Zahn-Waxler et al, 1992). Given the input of heritability, fundamental questions remain as to how empathy develops and how empathic responses are generated and constructed within the child. Peer influences, sibling illness and pet ownership have all been cited within the socialisation of empathy (Laible, Carlo & Roesch, 2004; Labay & Walco, 2004; Daly & Morton, 2006). Overarching each of these factors is the context of the family, more specifically the parents. Having accounted for any genetic component, what other parental factors may contribute to the development of empathy in the child? This review aimed firstly to identify differences in parenting which may impact on empathy development and secondly to review the literature in this area to look at the specific impact of each factor. Thus, the focus of this paper is to examine the role of various parental factors on the development of empathy in the typical child.

There is considerable literature that looks at the impact of atypical childhood events and disorders on empathy development, for example, child abuse and neurodevelopmental disorders (Autistic Spectrum disorders, Attention Deficit Hyperactivity Disorder). Whilst undoubtedly of great value in the understanding of empathic development there is a need to understand how empathy develops in the typical child before we can understand how atypical

events might impact on this development. Therefore atypical events and disorders have been considered outside of the realm of this review and have not been included within this paper.

1.2.1 Literature Search Strategies

Two search strategies were used to establish the literature to be used in this review. Initially two major databases (SCOPUS and PsycInfo) were searched for peer-reviewed literature published over the last 20 years (1987-2006). Title searches were made using the following specific search terms; empath* AND (adolesc* OR child* OR boy* OR girl*) combined with (parent* OR maternal OR paternal OR mother OR father[1]) or attachment.

Since the review aimed to focus on typical empathy development, of the literature obtained, any articles relating to factors outside of typical childhood experiences were discounted. For this reason articles relating to child abuse, autistic spectrum disorders, attention deficit hyperactivity disorder, severe childhood illnesses and conduct disorders were not included in the review. As such 19 of 48 articles were deemed to be relevant to the review question.

The second phase was to check the references of all articles identified for inclusion in the review, for any further articles that would be relevant to the review. In this phase articles were included which were outside of the scope

[1] (*) is a truncation term.

of the original search terms because of the relevancy of the subject matter to the review. These articles were collated and searched again until no further articles were identified. This phase revealed 7 further articles. On further reading, one article was subsequently deemed inappropriate for inclusion in this review. In total, this paper will review 25 papers identified with an asterisk in the reference section.

1.3.1 Is parental empathy related to child empathy?

It would be reasonable to assume that parents are the primary agent in the socialisation of empathic behaviour. Based on Social Learning Theory concepts of modelling we can hypothesise that parental empathy and related characteristics will influence whether or not children respond with empathy when they observe someone in a distressing situation; "Personality patterns are primarily acquired through the child's active imitation of parental attitudes and behaviour" (Bandura, 1972). Thus supportive and empathic carers are likely to model and encourage the capacity for empathy in their child.

Eight papers within this review specifically compared the relationship between parental empathy and child empathy, the results are equivocal. Part of the problem in ascertaining links between parent and child empathy may be due to the different methodologies used to measure adults' and childrens' empathy. Of the papers considered here methodologies include self-report,

physiological measures of heart rate and skin conductance and observations of facial expressions. These will be considered separately.

In many of the studies in this area, empathy has been assessed using questionnaires. Two studies that compared self-report questionnaires of child and parents, found no correlations between child empathy and parental empathy (Bernadett-Shapiro et al, 1996; Strayer & Roberts, 1989). Eisenberg et al. (1991) found significant correlations between fathers' empathy and sons' empathy, but no correlations between mothers' and daughters' empathy. They suggest that this may be an artefact of the finding that there were few low-empathy mothers in the sample which may have precluded finding correlations between mothers' and daughters' empathy. Trommsdorf (1991), however, found strong correlations between teacher reports of child empathy and maternal self-reports of empathy.

Self-report methodology with children has been criticised in the literature for several reasons. Firstly, self-reports of empathy following viewing evocative stimuli have been criticised because it is suggested that children find it difficult to switch from one emotion to another in quick succession and that the task does not measure intensity of emotion (Kestenbaum, Farber & Sroufe, 1989). Self-reports of empathy have also been criticised because of participants' desire to behave in a socially acceptable manner. This is particularly pertinent to young children's self-reports of empathy in

experimental settings (Eisenberg et al 1991; Zhou et al 2002). Indeed, assessing self-report of empathy towards film stimuli, Eisenberg et al (1992) found strong associations between mothers' and children's empathy for younger children only. They postulate that this is because older children are less likely to engage in social referencing and were less concerned about reacting in a manner similar to their mother's. In order to address this criticism, several studies have included a social desirability measure (Eisenberg et al, 1991; Eisenberg et al, 1992; Eisenberg et al, 1993) but also suggest there is a need to measure empathy with a multi-method approach including self-report and non-self-report indexes.

Thus, three papers in the review used physiological measures to obtain an additional measure of empathy. Researchers assume that heart rate (HR) deceleration is evidence of a sympathetic empathic response whilst HR acceleration is evidence of a personal distress response. Skin Conductance (SC) is viewed as an indirect marker of intensity of emotional arousal. Based on the literature, SC is assumed to correlate with personal distress since empathic sympathy and sadness are less physiologically arousing than the feelings of personal distress.[2] Eisenberg et al. (1992) advise that these are indirect markers of sympathy and personal distress, and must be interpreted with caution.

[2] See Eisenberg et al (1991) for in depth review of SC literature.

Fabes, Eisenberg & Miller (1990) found that girls' heart rate deceleration correlated with mothers' scores on the empathic concern scale of the Interpersonal Reactivity Index (IRI; Davies, 1980), but not for perspective taking or personal distress. Boys' HR did not correlate with mothers' scores on any of the IRI scales. Eisenberg et al. (1991) identified significant correlations between children's empathy, as measured by HR, SC and facial reaction, and parental empathy for same sex parent-child dyads only. Mothers who were high in perspective taking had daughters who had higher empathy, as measured by HR deceleration. Eisenberg et al. (1992) aimed to further this method of investigation by also gathering data on mothers' physiological arousal to empathy inducing film stimuli. They found that mothers' and children's HR correlated. Beyond this there were no correlations for mothers' empathy and sons' empathy.

Facial reaction to empathy inducing film stimuli has also been used as a non-self-report index of empathy. Although responses are likely to be more spontaneous and less likely to be influenced by social desirability, the method has been criticised for failing to create sufficient arousal (Kestenbaum, Farber & Sroufe; 1989). These authors also suggest that younger children may be at a disadvantage as they are less able facially to express emotions, and older children may not reflect true emotions facially because of increasing abilities to control emotions. Zhou et al. (2002) comment that younger children's facial reactions may represent a broader

array of negative emotions, and may not simply reflect empathy. Once again the results from these studies are difficult to conclude from and seem to differ depending on which aspect of empathy is being studied or measured. For example when considering personal distress, studies found that parental empathy correlated negatively with children's facial expression of personal distress (Eisenberg et al., 1991) and that correlations were stronger for same sex parent-child dyads (Eisenberg et al., 1992; Eisenberg et al., 1993). Looking at the more central components of empathy, Eisenberg et al. (1992) found that maternal sympathy and perspective taking were associated with higher incidence of facial markers of empathy. Contradicting this, in their study, Fabes, Eisenberg & Miller (1990) found that facial expressions of sympathy for both boys and girls did not correlate with mothers' empathy. Both studies used the IRI to measure mothers' empathy.

Thus, the evidence so far indicates no relationship, or very a weak relationship between parents' and children's empathic capacity. Associations that exist appear to be stronger for daughters and much weaker for sons. Strayer & Roberts (2004) suggest that parent and child empathy is linked but is mediated via other parent or child variables. In their wide ranging study of 50 children and their biological mothers and fathers, they used a path analysis to summarise and integrate multiple measures across diverse conceptual domains. They maintain that the pathway from parent empathy to child empathy is focused largely through child anger.

They found that empathic parents were less controlling and had children who were less angry, however, other high empathy parents had children who showed higher levels of anger. They suggest that this may be because empathic parents tolerate or encourage the expression of all emotions in their children, including anger. Since these two paths cancel each other out, there is a near zero correlation between parent empathy and child empathy overall even though the individual paths produced moderately strong correlations (mean absolute coefficient = .36). Strayer and Roberts suggest that previous null findings can be explained in terms of these possible mediating variables, and that in fact there is a strong link between parent empathy and child empathy. Whilst this provides an explanation for the mixed results found previously, this study needs replicating in order to draw firm conclusions about the mediating effects of anger.

In summary, although there may be a moderate relationship between parents and children's empathic capacity, the existing literature suggests that is not a straightforward relationship indicating that other factors should be taken into consideration. Papers identified in the literature search have considered a variety of other parental factors which may influence the development of empathy in children, these include attachment style, emotional expressiveness and methods of discipline. This paper will consider each variable individually before discussing limitations of the research and areas for future research.

1.3.2 Attachment

Several studies have investigated how the quality of early relationships, attachment, predicts later empathic responding. Based on Bowlby's attachment theory (Bowlby, 1979) researchers hypothesise that the ability to feel empathy towards another in distress will be enhanced if there is a secure, trusting attachment relationship between the parent and child.

Three papers in this review have considered the relationship between attachment and empathy in the child. In a thorough study, Kestenbaum et al. (1989) compared equal numbers of securely attached, anxious-avoidantly attached and anxious-resistantly attached preschoolers. They hypothesised that because securely attached children will have received responsive and empathic caring, they will have developed the capacity for empathic responding. Children who have an avoidant pattern of attachment have experienced rejection in response to emotional need and consequently they have no framework for responding to another's distress. They are the group most likely to appear unempathic. Children with an anxious-resistant attachment have experienced inconsistent care and therefore will show a disorganised response to another's distress.

In Kestenbaum's et al. (1989) study, participants were observed in a naturalistic setting at nursery. Fifty hours of unstructured playtime was captured on video. Incidents were coded on a 7 point empathy scale and 3

point anti-empathy scale. In line with expectations, securely attached children were significantly more empathic than anxious-avoidant children. Anxious-resistant children however, did not differ significantly from either group in terms of empathic responding. Out of 12 anti-empathy incidents observed, 9 were by children with an anxious-avoidant attachment. The researchers point out that few studies have been done using a naturalistic methodology. Whilst this gives perhaps a richer account of children's empathy, they acknowledge that the study has some limitations. It can be difficult to capture facial expressions on camera, and some may be missed by the camera as it is not possible to focus on all the children all of the time. Similarly, this methodology is likely to be skewed towards capturing behavioural empathic responses; the child who stood still and looked upset was likely to be missed by the camera compared to the child who approached the upset child.

In support of these findings, Laible, Carlo & Roesch (2004) looked at empathy as a mediator between attachment style and self-esteem in adolescents. In this study there was a positive correlation between strength of parental attachment and empathy as measured by questionnaires. In developing a predictive model however, parent attachment was not a significant predictor of child empathy when combined with 4 other variables (peer attachment, prosocial behaviour, aggression and self-esteem).

Van der Mark et al. (2002) studied girls in the second year of life as they suggest that at this age, the cognitive and emotional conditions for the development of empathy are in place and individual differences can be observed. Attachment style was assessed using the Strange Situation (Ainsworth & Bell, 1970). Empathy was assessed through children's facial expressions in response to mothers' or strangers' simulated distress. This team of researchers was interested in whether the relationship between attachment style and empathy was mediated through children's temperament, namely fearfulness. Attachment per se did not correlate with empathy towards the mother or the experimenter, similarly empathy towards mother did not correlate with empathy towards the stranger. A more fearful temperament and less secure attachment did however predict lower empathy towards the stranger, but not towards the mother.

These results do not support the hypothesis that security of attachment predicts greater empathy. The authors caution however, that participants came from a predominantly middle/upper class group. Although we cannot assume that all children from a middle/upper class background will experience similar parenting, they suggest their sample may not have demonstrated the range of parenting styles required to identify differences between attachment styles and child empathy.

Overall the research reviewed here indicates that children with a secure attachment are better able to empathise with others in distress. At a young age this may be mediated by temperament, and at adolescence, other factors may influence empathy over and above the influence of attachment. These findings make common sense given the extensive research on attachment to date, however, the results suggests that other variables need to be taken into consideration as well.

1.3.3 Attitudes towards parenting

Considerable literature is to be found on the general influence of maternal attitudes on parenting behaviours and children's adjustment. Within this review, one paper looked at maternal preconceptions about parenting and the relationship to children's empathy (Kiang, Moreno & Robinson, 2004). The authors suggest that maternal preconceptions about parenting represent enduring features of the child's caregiving environment. They maintain that they are stable and resistant to change and can affect the way parents interpret and respond to their children's cues.

In this study, Kiang et al. (2004) aimed to examine the impact of maternal preconceptions about parenting on child temperament and maternal sensitivity and whether all three variables predicted child empathy at around 2 years old. Direct effects between maternal preconceptions and child empathy were identified; increased negative preconceptions related to

increased indifference towards mothers' distress. Indirect effects were also found; the relationship between maternal preconceptions and children's empathy was mediated by maternal sensitivity, more sensitive mothers had children who demonstrated more empathic behaviours.

There were several strengths to this study, firstly the use of a low-income, ethnically diverse sample. A limitation of other studies in this review has been the over reliance on Caucasian middle class families which do not reflect the diversity of predictors or outcomes seen across the population. Secondly, this study used a longitudinal design giving valuable information about the stability of variables across time. The authors note however that without further replication, it is not clear whether these results can be extended to older children. The study did not include information about paternal preconceptions about parenting. We cannot therefore say what impact these might have on child empathy development. For example, could paternal positive preconceptions mediate the impact of maternal negative preconceptions on empathy development in the child. Nevertheless, this piece of research presents thought provoking results on the influence of maternal preconceptions on the child's empathy development.

1.3.4 Parental warmth

Several papers have looked at a more global aspect to parenting that has been described as warmth, responsivity or sensitivity. It is usually viewed as

an aspect of parenting style that is manifest in interactions with the child and reflects the parents' tendency to be supportive, affectionate and sensitive to the child, as well as displaying praise, affection and direct positive emotions towards the child. From hereon this factor will be referred to as 'parental warmth' unless papers have used a more specific term. It is hypothesised that parental warmth promotes children's empathy because it gives children feelings of security, control and trust in their environment, which would minimise self-concern and leave room to consider and respond to others' feelings. Six papers in this review considered the impact of parental warmth on children's empathy.

Links between parental warmth and children's empathy have been found across methodologies. Trommsdorf (1991) found a strong correlation between children's empathy and mothers' 'understanding of child' as measured by a semiprojective test. Strayer & Roberts (2004) found a modest correlation when empathy in the child was measured by facial responses and warmth was measured using a questionnaire. In a longitudinal study, Zhou et al. (2002) compared children's facial reactions to evocative film stimuli and self reports of empathy at two years apart. Parental warmth was related to some, but not all, measures of child empathy. The authors also draw our attention to the fact that parental warmth was assessed based on one observation session which may be insufficient.

In a novel study by Koestner, Franz & Weinberger (1990), 75 subjects who had been involved in a research project in 1957 were followed up at age 31. Empathy scores were regressed onto eleven parenting dimensions elicited from maternal interviews. Empathic concern at age 31 was, surprisingly, unrelated to parental affection at age 5. It should be considered however, that as an adult, other factors may have impacted on current scores for empathic concern, for example, romantic relationships and friendship experiences and becoming a parent themselves. Van der Mark, van IJzendoorn & Bakermans-Kranenburg (2002) also failed to find a relationship between parental warmth and child empathy. In this study however, warmth was measured as 'sensitive structuring' during completion of a difficult puzzle. This context perhaps gives limited opportunity to reveal a mother's sensitive or warm maternal behaviour.

These studies indicate that there is a relationship, albeit maybe modest, between parental warmth and children's empathy. Studies which have failed to find a relationship can be criticised in terms of their methodologies. It is likely, however, that parental warmth is linked to attachment and that there is an overlap between parental warmth and various other factors discussed in this review, e.g. emotional expressiveness and discipline style. In terms of the research into this area, it is possible that parental warmth in a 'pure' sense is difficult to measure.

1.3.5 Parental emotional expressiveness

Emotional expressiveness refers to the tendency to express emotions in situations which may not directly involve the child; it includes the expression of both positive and negative emotions. "Parental expressiveness reflects the parents' tendencies to express emotions in the presence of (but not necessarily directed towards) their children" (Liew et al, 2003, p.585). Social Learning theory predicts that expressive parents produce expressive children. Liew et al (2003) suggest the positive expressivity fosters feelings of security, control and trust in the child's world. It minimises the child's self-concern and leaves them available to consider and respond to the feelings of others. Children in expressive families learn that it is acceptable to experience and express a range of emotions, including vicarious emotions evoked by others. As such they are more likely to be empathic.

Evidence regarding the relationship between parental expressivity and children's empathy is equivocal. Eisenberg & McNally (1993) found that positive expressivity was positively related to children's perspective taking and girls' sympathy, and negatively related to boys' personal distress. Zhou et al. (2002) also found that positively expressive parents were more likely to have empathic children. Koestner et al. (1990) found marginally significant correlations between adult daughters' empathy and maternal restrictiveness and maternal inhibition of aggression. Other studies, however have found

little consistent evidence or only weak correlations between parental expressivity and child empathy (e.g. Liew et al., 2003; Valiente et al., 2004).

Valiente et al. (2004) suggest that the modest relationship between parental expressivity and children's empathy can be accounted for by parental negative expressivity. Children's situational sympathy was highest at moderate levels of parental negative expressivity (compared to high or low levels of expressivity). This indicates that a moderate amount of exposure to negative emotions promotes emotional understanding, and therefore empathy.

Differences in methodology may account for some of the differences in findings between these studies. Most studies used self-report accounts of parental expressivity, this review has already presented a critique of self-report methodology. Zhou et al. (2002) asked parents and children to look at evocative slides and used observer ratings of facial expression when parents were not looking at their child. It could be argued that facial reactions to slides aimed at evoking an emotional reaction may not accurately reflect parental expressivity in day to day situations. Zhou et al. (2002) report only low incidence of negative expressivity, making it difficult to draw conclusions on the basis of the narrow range of responses presented here.

Results indicated stronger relationships between parental expressivity and child empathy for girls than for boys (e.g. Eisenberg et al., 1992; Eisenberg & McNally, 1993). It has been suggested that parents express and socialise emotion differently for boys and girls, according to typical gender role stereotypes. Thus emotion expression is inhibited in boys and promoted in girls. In support of this, Zhou et al. (2002) found that parents of girls were more positively expressive than parents of boys. The relationship between negative dominant emotions and high levels of personal distress held for boys and girls (Eisenberg et al., 1992)

In summary, the evidence reviewed here gives some support to the hypothesis that increased emotional expressivity in parents promotes empathy in children. Valiente et al (2004) caution that expressivity promotes empathy as long as it does not lead to over-arousal, since over-arousal will compromise the child's ability to experience emotions and manage conflict. They hypothesise that high levels of negative dominant expressivity in the family will be related to high levels of personal distress and low levels of sympathy.

1.3.6 Family systems characteristics

Some research has explored how family systems characteristics relate to developmental outcomes in children. Three papers in this review have

considered how different aspects of family systems affect empathy development in offspring.

Henry, Sagar & Plunkett (1996) investigated how adolescents' perceptions of family cohesion (the feeling of unity and solidity within the family) and family adaptability (a family's ability to change its interaction patterns in response to situational stress) relate to their empathic qualities. They suggest that although traditional views emphasise the importance of separation from the family during adolescence, in fact a cohesive and adaptable family framework provides a sense of stability and connectedness from which adolescents can explore the world. In this study one hundred and forty-nine 13-18 year olds completed a battery of questionnaires.

The authors conclude that the results provide partial support for hypotheses regarding adolescents' perceptions of family systems characteristics and emotional empathy, but not cognitive empathy. Thus, a sense of family cohesion and adaptability was positively associated with scores on empathic concern. The authors suggest that this indicates that family cohesion is a potential point of intervention to promote empathic concern in adolescents.

Two studies investigated the ramifications of divorce on children's empathy. Since divorce has become increasingly commonplace, interest in the effects on children have received heightened attention. Mutchler et al. (1991)

attempted to investigate empathy of mothers and daughters following divorce as a mediator for relationship adjustment. Although there was an association between mothers' and daughters' empathy, daughters' empathy was not related to relationship adjustment. It should be noted that empathy was measured by the comparison of mothers' and daughters' responses for self and each other to the Interpersonal Adjective Checklist. It is not clear that this is a standardised measure of empathy and only looks at empathy towards each other and not general empathy.

In a study of empathy in children living with a parent and a stepparent, Henry, Nichols, Robinson & Neal (2005) found that empathy was only related to perceptions of the biological parents' support in daughters. There was no relation between daughters' or sons' perception of their stepparents' support or between sons and their perception of the biological parents' support. The authors note, however, that there were many more mother-daughter dyads in the sample which may account for the lack of significant findings for boys in this sample.

1.3.7 Parental Discipline

Differences in discipline practices and the impact on child empathy have also been investigated. Four papers in this review questioned whether methods of discipline had a differential impact on empathy development. In a longitudinal study investigating mothers' child rearing practices and

children's empathy, Eisenberg & McNally (1993) found that reluctance to discipline was negatively related to children's, particularly girls', personal distress, but was not significantly related to sympathy or perspective taking. They suggest that permissive parenting may communicate to the child that they do not need to be concerned about the feelings of others. This study, although longitudinal only measured children's empathy at time 5 – 15/16 years old. Thus, we cannot draw conclusions about the development of empathy over time in relation to discipline strategies.

Much research in this area has focused on parents' use of inductive reasoning, that is giving information about the impact of the child's behaviour on the other person. Henry, Sagar & Plunkett (1996) investigated adolescents' views of parental methods of discipline and empathy. They report a positive correlation between inductive reasoning and all four scales from the IRI – perspective taking, empathic concern, fantasy and personal distress. They found a negative correlation between parental punitiveness and perspective taking. Love withdrawal was not correlated with any of the scales from the IRI. Krevans & Gibbs (1996) found that in a group of early adolescents (mean age 12 years 3 months), inductive discipline as reported by mothers and children, was positively related to children's empathy scores. Power assertion was negatively correlated with empathy.

Thus, the research so far indicates that inductive discipline, more than any other method of discipline, promotes empathic responsiveness in children. Miller et al. (1989) suggest, however, that the intensity of the mother's emotional reaction can influence the impact of child rearing practices on the child's empathy. They suggest that the emotional reaction of the parent represents a form of evaluative criteria that regulates and promotes cohesion between the parent and the child, particularly in early childhood where parental affect contributes more to the meaning of the message than the semantic content of the message. In their study of seventy-three 4-5 year olds, they found that mothers' reports of induction and altruism significantly predicted empathy as measured by facial sadness. Mothers who used inductive reasoning and altruistic responding at high levels of affective arousal had children who showed lower levels of personal distress. Interestingly, mothers' use of physical control was associated with children's empathic responding when mothers' affective responding and reasoning were high, but not when used without these practices. This research indicates a complex moderating effect of maternal affective arousal which warrants further investigation. The researchers note however, that the vignettes used to elicit child empathy used a child in physical distress which is likely to elicit a distressed response as opposed to any other emotion. This makes it difficult therefore, to decipher between empathy and personal distress. This methodology does not take into account the level of emotional expression between parent and child outside of the disciplinary situation.

In summary, this research indicates that inductive reasoning is the best promoter of empathy in the child, probably because it encourages the child to perspective-take. Research by Miller et al. (1989) draws our attention towards the fact that within a mode of discipline, there may be individual differences affecting empathy development; they highlight maternal emotional arousal. Finally out of these three papers, only one includes information from the father (Henry, Sagar & Plunkett, 1996). Traditionally fathers take a disciplinarian role in the family; in order to understand how their input impacts on a child's empathy development in comparison and conjunction to mothers' discipline strategies, further research is required.

1.3.8 Parental emotional well-being

Considerable research has confirmed the adverse effects of parental mental health difficulties on the child. Most research has focused on maternal depression, which has been linked to behavioural problems, cognitive delay, emotional problems and physiological and biochemical deregulation in the child[3] . Two papers within this review considered the impact of parental emotional well-being on children's empathy.

Jones, Field & Davalos (2000) compared empathy in preschool children of depressed and non-depressed mothers, using a crying infant paradigm and maternal simulated distress paradigm. Children of mothers with depression exhibited more non-empathic behaviour (such as laughing at mothers'

[3] see Van Doesum, Hosman & Riksen-Walraven (2005) for review of the literature.

distress) and fewer empathic behaviours. They showed less prosocial behaviour, took longer to respond to the infant's cries and longer to offer help to the researcher. They conclude that children of depressed mothers are likely to be less empathic than children of non-depressed mothers. This study, however, only looked at preschool children, and does not consider whether this difference between the two groups of children is still present in older children or whether these children 'catch up' in their empathy development, for example, once they enter the education system. This study does not allow us to draw conclusions about the impact of other forms of mental health difficulties on children. We cannot be sure that development of empathy in children of depressed mothers is equivalent to empathy development in children of mothers with, for example, post-traumatic stress disorder. Finally, this paper does not include the role of the father. By ignoring the role of the father it serves to undermine their impact in their child's development. Is it possible that a non-depressed father can counteract some of the adverse effects of maternal depression on a child? In a review of the effects of parental depression on the child, Downey & Coyne (1990) noted that the spouses of depressed mothers remain shadowy figures and that comprehensive models of the ways in which fathers contribute positively and negatively to their child's well-being requires greater attention.

Solantaus-Simula et al. (2002) suggest that looking at children of well versus unwell mothers, in terms of mental health, ignores potentially rich information about how children respond to a range of mood variations within their parents. They suggest that parental mood might in some way relate to the capacity to empathise in some children. In their study of nine hundred and ninety 12 year olds and their mothers and fathers, children completed questionnaires about what they did and how they felt when their parents were feeling down. Child mental health and parental depressive symptoms were measured using standardised questionnaires. Cluster analysis revealed four different subgroups of response to parental low mood; Indifference, Active Empathy, Emotional Overinvolvement and Avoidance. Children reported feeling empathy for their parents as one of the two most common responses to parental low mood. Interestingly however, there was no association between parental symptoms and response type. Children were more empathic towards their mothers, which the authors suggest may reflect an emotionally closer relationship between mothers and children or that mothers are more open about feelings and emotions and validate children's emotions more readily than fathers.

This methodology provides a novel way of exploring the impact of parental mood on children's empathy by looking at normal mood variations. It also provides a more comprehensive account by including mothers and fathers within the research. Some limitations however, must be acknowledged.

Only two questions were asked to elicit information about children's behavioural and emotional responses to parental low mood, a choice of 6 response options were available. This can be considered a restricted exploration into a potentially rich area of research. Secondly, the authors do not present the results of the parental depressive symptoms questionnaire. Thus, we do not know what range of symptoms existed within the sample and how this may have related to child empathy. Finally, the authors distinguish between the responses 'feeling empathy for mother or father' and 'feels down him/herself'. It could be argued that 'feeling down him/herself' could be considered an empathic response since empathy is partly the vicarious experiencing of another's emotions.

It is somewhat difficult to draw comparisons between and conclusions from these two papers since the Jones et al. (2000) paper considers clinically diagnosed depression, whereas the Solantaus-Simula et al. (2002) paper considers normal mood variations. Jones et al. (2000) indicate that maternal depression can have a detrimental effect on the child's capacity to develop empathy. Research into the impact of parental mood within the normal range of experience presents preliminary findings to suggest that experiencing low parental mood can enable some children to develop more empathic responses. They conclude that;

"Empathic concern for others and metacognitive skills allowing children to recognize their emotional responses and to distinguish their own

experiences from those of their parents are beneficial to children in the ups and downs of ordinary family life, not only in families with a mentally disturbed parent."

(Solantaus-Simula et al, 2002, p. 285)

1.3.9 Father effects

So far in this review, the impact of the father on children's empathy development has been relatively ignored. Most of the studies only measured maternal factors in relation to children's empathy. Some papers have measured maternal factors and have suggested that they represent 'parental' factors. For example, Zhou et al. (2002) investigate "parent's empathy, emotional expressiveness and parenting practices" yet of 169 parents interviewed, only 14 were fathers. Father participation in childcare is an important and understudied area of parenting (Bernadett-Shapiro, Ehrensaft & Shapiro, 1996). Social changes in family life mean that there is a greater expectation for fathers to be more involved during pregnancy, and equally involved in childcare and parenting.

In a study investigating sons' empathy, boys demonstrated higher levels of empathy when both parents were equally involved in parenting, regardless of fathers' levels of empathy (Bernadett-Shapiro et al., 1996). It is not possible to generalise this finding to daughters, but it presents interesting reading. This finding is supported by the unique study by Koestner et al. (1990),

previously described, which found that paternal involvement in childcare was the strongest predictor of empathic concern in adulthood. As acknowledged before, however, this study did not measure empathy in childhood, only in adulthood.

These results present preliminary hypotheses that paternal involvement in childcare has positive consequences for the development of empathy in children. However, further investigation is needed to fully understand the nature of this finding.

1.3.10 Impact of the child on the parent

This review so far has considered the influence of parent factors on child outcomes. It has been noted however, that emotion socialisation is a reciprocal process in which parents and children influence each other. It is possible, therefore, that the effects of children's characteristics on parenting have been ignored in the research (Zhou et al., 2002). It may be the case that empathic children exhibit more socially appropriate behaviour and less problem behaviours which may evoke or facilitate positive parenting.

Gender is implicated specifically in this area. Children are more likely to model from same-sex parents which could mean that mothers receive more feedback from their daughters than from their sons and thus respond differently to them. This theory is supported by the finding that parents

(majority mothers) are warmer and more responsive towards their daughters than they are towards their sons (e.g. Zhou et al., 2002; Fabes et al., 1994).

One paper specifically considered the impact of the child on the mother. Fabes et al. (1994) examined how mothers' perceptions of their child's emotional reactivity impacted on mother-child interactions. They found that the way mothers reacted in telling an emotionally laden story depended on their perception of the child's tendency to become distressed. Similarly, mothers who perceive their child to have a difficult temperament showed less sensitivity towards the child (Kiang et al., 2004).

In their analysis of parental warmth and positive expressiveness and children's empathy-related responding and social functioning, Zhou et al. (2002) propose a parent-driven socialisation model and a child-driven alternative model. Both models fit the data, although the fit for the child-driven model was weaker than the fit for the parent-driven model. As such, the authors conclude that the results were "consistent with the view that relations between parenting and children's emotion and social behaviours are bidirectional" (Zhou et al., 2002, p.912).

The evidence cited here gives support to the notion that there is a bidirectional influence between parents and children in the factors affecting

empathy development. Future research should consider this interaction in advancing our understanding of the development of empathy in children.

1.4 Limitations of the existing literature and areas for future research

Attempts have been made to critique each of the papers reviewed here as they have been discussed. Presented here is a more generalised discussion of the limitations of these papers. The studies in this review can firstly be criticised for their over reliance on Caucasian middle class samples. Twelve papers indicate a predominantly middle or middle-upper class demographic in their sample. Only one paper specifically aimed to recruit a low-income, ethnically diverse sample (Kiang et al, 2004). Several studies identified that weak significant results may have been due to the homogeneity of the samples (e.g. van der Mark et al., 2002). This sampling is problematic since difficulties with empathy are typically seen in children who do not come from a stable and secure family background. Clearly we cannot assume that all children in middle or upper class families will experience a stable and secure family environment however, sampling across a wider demographic background is likely to ensure a wider range of parenting practices are represented.

It is difficult to draw conclusions across studies due to the wide range of ages used. The majority of studies used participants of school age, yet this

still spans 5 to 18 years of age. Three studies used pre-school participants (Kiang et al., 2004; Van der Mark et al., 2002; Kestenbaum et al., 1989), and one study used college students as participants, with a mean age of 18 years old (Laible et al., 2004). Although two studies reported using a longitudinal design, the Kiang et al. (2004) paper only considered children over the first two years of life. The Eisenberg & McNally (1993) paper only gathered data on children's empathic responses at the final time point when participants were 15 and 16 years old. Thus, it was not possible to look at the longitudinal development of empathy in relation to parental characteristics. It is important to understand the influences on empathy development across childhood, since it is indicated that parent characteristics might be more important in early childhood. In later childhood other factors such as peer relationships may have important consequences for empathy (Laible et al., 2004). Finally, from the studies reviewed we cannot surmise about the trajectory of empathy into adulthood. Although one study reviewed here considered adult empathy in relation to parental characteristics (Koestner et al., 1990), participants' empathy in childhood was not assessed. Thus, we cannot draw conclusions on the stability or changeability of empathy from childhood into adulthood.

Attention needs to focus on determining the most appropriate methods of measuring empathy in children. Since empathy is closely allied with other traits or feelings, such as sympathy, it needs to be clear that it is in fact

empathy which is being measured. For example, Zhou et al. (2002) question whether using facial expressions and self-reports, in response to evocative stimuli, might confound empathy with emotional expressiveness. Although empathic arousal may be the same in two children, the expressive child would be rated as more empathic than the less expressive child when using facial and self-reported measures to elicit empathic responding. Fabes et al. (1990) found relatively weak relations for non-verbal measures of empathy in their study and question whether this indicates that these measures are not in fact reliable indicators of empathy related responding.

To what extent comparisons can be drawn between different methodologies is also unclear. Can the facial reactions of a child watching an emotionally evocative film, with electrodes taped to their chest and head, be compared to the reactions of a child who responds to their friend falling over in the playground? Kiang et al (2004) highlight the importance of conceptualizing empathy as a collection of psychological and behavioural constructs rather than as a global construct. They maintain that empathic responses can be demonstrated affectively, through facial or verbal expressions of concern, through helping behaviour directed towards the person in need, or more cognitively by attempts to gain more information to understand the other person's distress. This suggests that methods of measurement which cannot capture this range of empathic responses are insufficient.

All of the studies in this review have used quantitative designs. They could be criticised therefore, for failing to capture potentially rich information that could be gleaned through use of qualitative methodologies. Quantitative methods are only as broad as the assessments they use, whereas qualitative methodologies allow for descriptions and information about the subject matter that is outside that of the researchers' original thinking. This represents a specific and considerable gap in the literature which warrants consideration in future research.

Along similar lines, only one study in this review used naturalistic observations as a method of measuring empathy. Whilst this methodology has some flaws, previously described, it would be interesting to see how this methodology compares to other methods, such as questionnaires and reactions to evocative stimuli to assess whether these are a true measure of empathy, or indeed whether empathy can be truly measured.

As previously discussed, most of the papers in this review have used only mother-child dyads. This can be criticised firstly for failing to include valuable information about the influence of the father on development of a child's empathic capacity. Secondly, several papers have drawn conclusions from the data about the influence of parental factors when in fact only mothers or majority mothers have appeared in the sample. Surely this is denying the role of the father. Perhaps future research should focus on

empathy development within the context of the family. Kiang et al. (2004) suggest that other variables contributing to children's empathic development warrant further research. They postulate that there may be an influence from caregivers other than the mother or parents, grandparents or siblings may also be having a direct or indirect influence on child empathic development.

1.5 Clinical Implications of the review

The research presented here suggests that there are several parenting factors that can influence the development of empathy in the child. Clinically, empathy or the lack of empathy is often implicated in behavioural problems. It is generally accepted that children with behavioural problems show a lack of empathy compared to their non-behaviour disordered peers (e.g. Cohen & Strayer, 1996). It is also understood that empathy promotes prosocial behaviour and inhibits aggression (Strayer & Roberts, 2004b). The National Institute of Clinical Excellence (NICE) guidelines recommend group-based parent-training or education programmes in the management of children with conduct disorders (www.guidance.nice.org.uk). As such, understanding what parental factors contribute to healthy empathy development might be of use in the development of these programmes.

The research presented here suggests several areas of parenting that may be worth consideration in such parenting programmes. In the early stages of parenthood, pre- and postnatal intervention geared towards the reduction of

negative parenting preconceptions could be an area of focus. Secondly, parental warmth has been highlighted as a strong predictor of child empathy. Strategies that can improve perspective taking in the parent in order for them to respond sensitively towards the child are suggested to enhance parental warmth. As stated previously, it is likely that parental warmth is closely linked to factors such as parental sensitivity and affection, thus focusing on this area of parenting may be wide reaching. Discipline styles have also been highlighted in this review. Parenting classes aimed at developing inductive methods of discipline may promote empathy development in the child. Educating parents about the negative consequences of love withdrawal or punitive methods of discipline are also of value. Finally, shared parenting within families has been implicated within this review as a promoter of empathy. Supporting parents to feel more equal in their roles and responsibilities as parents may serve to enhance empathy in the child.

1.6 Summary

This review suggests that empathy is not simply an inherited trait or that empathy in children is equivalent to empathy in their parents. A variety of parenting factors have been identified which seem to impact on empathy development in children. This has implications for clinical practice and interventions with children with poor empathy.

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Chapter 2: Empathy in boys with behavioural difficulties: Does the nature of the relationship matter?

2.1 Abstract

Previous literature has identified that boys with behavioural problems have poorer empathic skills than their non-behaviour disordered peers. This study aimed to investigate whether empathy scores would be increased by asking boys with behaviour problems to empathise with someone they had a positive relationship with. The present study compared empathy in 12-17 year old boys with emotional and behavioural difficulties (EBD) (*n*=25) and age matched controls (*n*=27). Empathy was assessed using two questionnaire measures of empathy, the Index of Empathy and the Interpersonal Reactivity Index (IRI). The Index of Empathy was also adapted so that it referred to someone the participant had a positive relationship with.

Group differences in empathic skills were not identified using the IRI but were evident using the Index of Empathy. A repeated measures ANCOVA did not show any effect of group, questionnaire or interaction, however, changing the target person significantly improved scores for low empathisers regardless of group. Implications for clinical practice and methodological limitations are discussed.

2.2 Introduction

2.2.1 What is empathy?

Empathy is a key human characteristic involved in the development of social awareness, moral understanding and positive relationships (Chlopan, McCain, Carbonell & Hagen, 1985). Despite its widespread recognition as a vital human characteristic, there has been confusion over its formal definition. Cognitive theorists maintain that empathy is the understanding of another person's point of view. This view suggests empathy is a cognitive process whereby the individual attempts to put himself in the shoes of another and imagine how the world appears to that person (Meharabian & Epstein, 1972). This requires the individual to have accurate social insight and proficient understanding of complex social situations, a concept which shares many elements with theory of mind definitions. Theory of mind describes the ability to recognise and correctly infer others' mental states (Cahill, Deater-Deckard, Pike & Hughes, 2007). Indeed, healthy theory of mind has been linked to emotional development, and deficits have been linked to behaviour and social adjustment problems (e.g. Hughes, Dunn & White, 1998). Cahill et al. (2007) suggested that although similar, they are different, since good theory of mind may be used to achieve self-serving, anti-social ends whereas high levels of empathy are associated with prosocial behaviour.

Affective theorists suggest that empathy is the affective state evoked in oneself by observing the situation of another. It has been described as;

"a vicarious emotional response to the perceived emotional experience of others" (Mehrabian & Epstein, 1972, p. 523). This view highlights the subconscious component of empathy, that emotions are involuntarily evoked within us as a consequence of observing the emotional reactions of others.

Current models of empathy propose a multidimensional approach incorporating both the cognitive and affective components of empathy. Davis (1983) maintained that rather than viewing empathy as a singular construct, it is best considered as a set of related but also discriminable constructs. He proposed four constructs which reflect the variety of reactions that have at some time been referred to as 'empathy'. These are; perspective taking – the tendency to adopt another's point of view; fantasy – the tendency to imagine oneself as a character within a book or film and to experience their emotions; empathic concern – the tendency to feel concern or sympathy for others observed as being unfortunate; personal distress – the tendency to experience 'self-oriented' feelings of anxiety and unease in tense situations. Marshall, Hudson, Jones & Fernandez (1995) reconceptualised empathy as a staged process. They suggest the first stage is emotion recognition which requires the observer to accurately identify the emotional state of the other person. If this is achieved, the second stage is perspective taking which describes the ability to put oneself in the other person's place and see the world as they do. The third stage is emotion replication which describes the vicarious emotional response that replicates the emotional experience of the other

person. Finally is the response decision stage in which the observer decides how to act or not act on the basis of their feelings. This final stage differentiates this model from Davis' construct model by recognising the impact of situational variables in an empathic response.

2.2.2 The development of empathy

Empathy is considered a relatively stable personal trait that follows a developmental trend whereby the child moves away from the younger self-focused perspective towards an other-oriented perspective. Bryant (1982) cautioned, however, against assuming that empathy development is simply a linear additive process. (In the development of her Index of Empathy (Bryant, 1982), she identified a dip in empathy at around 9 years old.) Although some research has looked at empathy in newborns, (e.g. Sagi & Hoffman, 1976) it is generally agreed that empathy can first be observed in children at around two years old (Zahn-Waxler & Radke-Yarrow, 1990). It is at this age that parents begin to assume intentionality in their children's actions and expect interpersonally appropriate behaviour.

Research has consistently identified significant gender differences. Girls typically show more empathy than boys (e.g. Henry, Nichols, Robinson and Neal, 2005; Eisenberg et al., 1992) and tend to show empathic responses earlier than boys (Eisenberg & Miller, 1987). Researchers have suggested that gender differences may be due to different socialisation practices for boys and girls, or due to modelling of same sex

parents. Girls tend to have more opportunity to model their mother since mothers are traditionally the main carer.

There is an assumption throughout the research that empathy is a trait that is revealed consistently across people, time and situations. Marshall et al. (1995) raised the possibility that situational or temporal factors, such as age or ethnicity of the observed person or the presence of peer group, may influence the display of empathy. They criticise the available literature for failing to consider this.

2.2.3 The links between prosocial behaviour and empathy

Research indicates that empathy has important consequences for prosocial behaviour. De Wied, Goudena & Matthys (2005) theorised that empathy functions as an inhibitor of aggressive behaviour. Being able to adopt another person's perspective results in better understanding of their position and prevents aggressive reactions accordingly. With their better understanding of others' feelings and points of view, more empathic children are better at social problem solving thereby reducing episodes of conflict or aggression. Meharabin & Epstein (1972) postulated that sharing the victim's distress may evoke sympathy or personal distress, which can serve to inhibit aggressive behaviour.

Empirical evidence supports these hypotheses. Roberts & Strayer (1996) reported that emotional expressiveness and anger were strong predictors of empathy, and that empathy strongly predicted prosocial behaviour.

This finding was replicated in a study which looked at children's behaviour in a more natural observational setting (Strayer & Roberts, 2004). Again empathy was negatively associated with aggression and positively associated with prosocial behaviour. Similarly, a significant inverse relationship between aggression and dispositional empathy was revealed in a meta-analytic review of studies (Miller & Eisenberg, 1988).

2.2.4 The link between behaviour problems and empathy

Over the years researchers have used a variety of terms to describe awkward, troublesome, aggressive and antisocial behaviours exhibited in childhood and adolescence – 'delinquency', 'maladjustment' and 'conduct disordered' to name but a few. Research has consistently identified a link between behaviour problems in childhood and aggressive behaviour, academic problems, substance abuse, schizophrenia, violence and criminality in later years (e.g. Hodgins, Tiihonen & Ross; 2005). A Department of Health survey, carried out in 1999, investigated the prevalence of mental health disorders in children between the ages of 5-15 years in Great Britain. The survey revealed that 5% of the sample had clinically significant Conduct Disorder (CD), as diagnosed by the Diagnostic and Statistical Manual, 4th Edition (DSM-IV; APA, 1994), and that the disorder was more prevalent in boys than in girls. (Meltzer, 1999). The evidence indicates that these issues span the individual's lifetime, making behaviour problems a societal problem as well as an individual one.

Treatment of behaviour problems today aims at early intervention, that is identifying children 'at risk' of developing clinical behaviour problems and offering families parenting programmes to prevent behaviour problems developing. Whilst there is evidence that such programmes can be effective (Williams et al, 2004), there is also a need for effective treatment of children whose parents do not receive this treatment, or for whom it is not effective. This type of treatment aims at directly training children and adolescents in social skills and problem solving. Adolescents who enter the youth justice system may be required to complete victim awareness or reparation programmes. Implicit within these programmes is the assumption that these adolescents have the capacity to regret or show remorse for previous actions, and require skills such as perspective taking, thus assuming the capacity to be empathic. In clinical practice, however, children with behavioural problems are believed to have little empathy and concern for the well being of others and consequently the effectiveness of such programmes is reported to be limited (e.g. Webster-Stratton & Reid, 2003).

Several studies have compared clinical groups of children (e.g. Disruptive Behaviour Disorder, Conduct Disorder) to control groups and found that the clinical groups scored lower on measures of empathy than the controls (e.g. De Wied, et al., 2005; Cohen & Strayer, 1996). Since behavioural problems are significantly more prevalent in boys than girls, most of the literature has focused on boys. De Wied, van Boxtel, Zaalberg, Goudena & Matthys (2006) looked at facial mimicry in their

comparison of boys diagnosed with Disruptive Behaviour Disorder (DBD) and a control group. Facial mimicry is considered a vital component of empathic responding. The facial responses to angry expressions were significantly less pronounced in boys in the DBD group. They also scored significantly lower on self-reports of empathy. Today, the DSM-IV diagnostic criterion includes deficient empathy as a feature of Conduct Disorder.

2.2.5 Why can't children with behaviour problems empathise?

Although research finds evidence for a lack of empathy in children with behaviour problems, the nature of this deficit is not fully understood. One area of research indicates that this type of child is not as proficient at identifying emotions as their non-behaviour disordered peers. Blair & Coles (2000) found that children with behaviour problems had particular difficulties recognising sad and fearful expressions. De Wied et al (2005) compared empathy in 8-12 year old boys with Disruptive Behaviour Disorder to an age matched control group. Empathy was assessed by participants' emotional and cognitive responses to empathy inducing vignettes. Results indicated that whilst the DBD group showed less empathic responses than the control group to sadness and anger, they showed equally empathic responses to happiness. This research indicates that whilst children with behavioural problems may not have difficulty recognising positive emotions, they may find it more difficult to

identify negative emotions, such as anger and sadness. This may result in a less empathic response to observed negative emotions.

Greenwald (2002) proposes a model of behavioural problems as an adaptive response to trauma. He suggests that traumatic experiences can account for many features of conduct disorder including lack of empathy, impulsivity, anger and resistance to treatment. Greenwald reports that between 70%-92% of antisocial youths have experienced a trauma. The model proposes that experiencing a trauma violates the young person's sense of safety to which they respond by developing a heightened alertness to threat and danger. Thus, empathy is inhibited by a tendency to misperceive the intentions of others as hostile or threatening. This hypothesis is supported by De Wied et al. (2005) who found that socially rejected and aggressive boys tend to attribute hostile intentions to peers in ambiguous situations and are less skilled at interpreting others intentions in unambiguous situations. Perceived threat debilitates the aggressive child's ability to interpret social cues in comparison to the non-aggressive child (Dodge & Somberg, 1987).

Greenwald also postulated that trauma impacts on empathy because of associations with experiences of intolerable emotions. In order to prevent the reliving of these negative emotions, empathy is suppressed in the child with behavioural problems. This theory is supported by Cohen & Strayer (1996) who suggested that the lack of empathy evidenced in children with behaviour problems was not related to an overall lack of

emotionality. In their study, the Conduct Disordered group tended to report higher levels of personal distress than controls, suggesting that they become more egocentrically distressed when involved in an emotional situation. The authors of this study postulated that the need to reduce personal distress inhibited the cognitive processing of empathy related stimuli resulting in a low empathic response.

Lanzetta & Englis (1989) found that the level of empathic response can be enhanced if there is a positive relationship between the observer and the target person. This study created an expectation that participants would feel either cooperation or competition with another participant. They found that the nature of the empathic response was determined in part by the feelings of the observer towards the target person, and that a positive relationship facilitated empathy whereas a negative relationship inhibited empathy. De Wied et al (2005) attempted to assess this in boys with Disruptive Behaviour Disorder (DBD) compared to a control group. Participants were shown 3 sadness vignettes of a girl, a boy and a little bear who loses his mother. The bear vignette was included to minimize the possibility of participants making negative attributions which could prevent or diminish an empathic response. Results revealed that whilst the DBD group showed lower levels of empathy across vignettes compared to age matched controls, both groups showed higher levels of empathy when they viewed a bear in distress than when they viewed children in distress. The DBD group did not view all three vignettes as affectively neutral which indicates that they do not completely lack the

ability to experience empathy in response to another's sadness or distress. This research suggests that although boys with behaviour problems have lower overall levels of empathy, they do not have a flat rate of empathy. Characteristics of the person they are observing can influence their level of empathic response.

2.2.6 Aim

Research to date indicates that children and adolescents with significant behaviour problems, predominantly males, show less empathy than their peers. There may be certain factors that inhibit empathy in children with behaviour problems, e.g. perception of threat or poor ability to read emotions. Evidence indicates that empathy may be dependent on the relationship between the observer and the target person.

The aim of this study was to compare empathy in male adolescents identified as having emotional and behavioural problems (EBD) and a control group. Groups were matched on gender and age. Verbal and nonverbal abilities were measured in order to be able to partial out any differences found between groups. Two measures of empathy were administered. The Interpersonal Reactivity Index (Davis, 1980) and the Index of Empathy (Bryant, 1982). Empathy is believed to be a multidimensional construct, whilst the IRI attempts to take this into account and measures the separate elements of empathy, the Index of Empathy does not. Because empathy is a difficult construct to define and

measure, this study also aimed to compare the two measures of empathy.

The Index of Empathy was administered in two forms; firstly as it stands and secondly, it was adapted so that it referred to people the participant had a positive relationship with. Previous research suggests that people show greater empathy towards someone they have a positive relationship with (Lanzetta & Englis, 1989; De Wied et al., 2005). This study aimed to compare scores on the two Indexes of Empathy within groups.

2.2.7 Hypotheses

1. Boys in the EBD group will score significantly lower on standard measures of empathy than boys in the control group?
    1.1. The degree of empathy reported will be associated with the degree of behavioural difficulties.
2. Changing the target person in the Index of Empathy will affect empathy scores.

In addition to these specific hypotheses, further research questions in relation to hypothesis 2 were explored;

2.1. Is the degree of change determined by group?

2.2. Does changing the target person affect high empathisers differently compared to low empathisers?

2.3. Does changing the target person move clinically low empathisers into the normal range of empathy?

2.4. Based on the IRI, what aspects of empathy predict scores on the Index of Empathy and adapted Index of Empathy?

2.3 Method

2.3.1 Design

This investigation used an intact groups design with a behaviour problems sample and a control sample. The study used an experimental design which manipulated the use of self-report questionnaires. Comparisons were made between and within groups.

2.3.2 Sample

2.3.2.1 Group classification

Within the education system children whose behaviour is regarded as problematic, challenging and inappropriate tend to be described as having emotional and behavioural difficulties (EBD). Whilst this is a predominantly educational term, Daniels & Cole (2002) noted that the term includes children who have also been described as 'delinquent', 'socially deprived' and 'mentally ill'. Visser (2003) acknowledged that there is an overlap between educational definitions of emotional and behavioural difficulties and Department of Health definitions of mental health problems or disorders, e.g. Conduct Disorder or Disruptive Behaviour Disorder. Despite differences in terminology, there is a considerable overlap in the behaviours displayed by these groups and therefore boys attending an EBD school were chosen to represent the 'behavioural problems' group in this study.

Inclusion criteria for both groups were kept as broad as possible to minimise difficulty recruiting participants. Individuals with an additional diagnosis of a learning disability or an Autistic Spectrum Disorder (ASD), however, were not included. Theory of mind is essential to the development of empathy and it is well established that Autistic Spectrum Disorders are closely linked to a theory of mind deficit. People with a learning disability tend to lag behind the general population in terms of cognitive development. Since empathy is a developmental process, it would be expected that participants with a learning disability would do less well on empathy tasks then those without a learning disability. In this study only boys were included since behavioural problems are more prevalent in boys than girls.

2.3.2.2 Participants

Initially 28 participants were recruited to the EBD group. Teachers of boys in the EBD group were asked to complete the Conners' questionnaire (Conners, 1996) to ensure that all participants met the criteria for significant behaviour problems. Inspection of scores on the oppositional-defiant scale indicated that the majority of participants were in the markedly atypical range (T=70+; *n*=19). One participant fell in the moderately atypical range (T=66-70) and five participants fell in the mildly atypical range (T=61-65).

Three participants were excluded from the final data set, one due to missing data and two for failing to meet the inclusion criteria. Of these

two, one participant's score fell within the normal range on the Conners' questionnaire, and one had a diagnosis of ASD.

The final experimental group consisted of 25 boys between the ages of 12:01 to 17:06 years (mean age = 14:06) attending a school for boys with emotional and behavioural difficulties. The control group consisted of 27 boys between the ages of 13:03 to 17:10 years (mean age = 14:10) attending a mainstream school. To control for behaviour problems in the control group, no boys were included who were on any special measures for behaviour problems (e.g. school action, school action plus, report). Independent samples t-tests were carried out to investigate differences between the groups on age, there were no significant differences, $t(50)=-1.101$, $p>0.05$.

The Wechsler Abbreviated Scale of Intelligence (WASI, Wechsler, 1999) was administered to compare the groups on cognitive functioning. Two measures from the WASI were administered, a nonverbal measure, matrix reasoning, and a verbal measure, vocabulary. The WASI reveals T scores for each individual measure, a full scale IQ score can also be calculated from the T scores. Independent samples t-tests were carried out to investigate differences between the groups. There was no significant difference between the groups on matrix reasoning, $t(50)=.135$, $p>0.05$, they were therefore matched on non-verbal ability. There was a significant difference between the groups on vocabulary, $t(50)=-3.186$, $p<0.01$, with the mainstream group scoring higher than the EBD group. Table 1 summarises the baseline data for both groups.

Table 1. *Baseline assessment of EBD group and mainstream group*

	Age	Vocabulary	Matrix Reasoning	Conners' Scales			
				Oppositional-defiant	Cognitive problems	Hyperactivity	ADHD
	Mean[a] (range)	Mean[b] (SD)	Mean[b] (SD)	Mean[b] (SD)	Mean[b] (SD)	Mean[b] (SD)	Mean[b] (SD)
EBD (*n*=25)	14:06 (12:01-17:06)	36.04 (8.26)	46.60 (9.94)	77 (11.05)	65.04 (14.61)	68.58 (11.04)	68.73 (10.14)
Mainstream (*n*=27)	14:10 (13:03-17:10)	44.63 (10.88)	46.26 (8.21)	-	-	-	-

Note.
[a]=years:months; [b]=T score

Since the measures used in this study were questionnaires and had a strong vocabulary component to them, and the two groups were not matched on these skills, it was decided vocabulary should be used as a covariate in further analysis when comparisons were made between groups.

2.3.3 Measures

Conners' Teachers Ratings Scale – Revised: Short Form (CTRS-R:S; Conners, 1996))

(See appendix 1)

The main use of the Conners' Ratings Scales-Revised (CRS-R) is the assessment of Attention Deficit Hyperactivity Disorder (ADHD). Conners (1996) reported, however, that the CRS-R has a broader scope since it contains a variety of subscales which can be used for the assessment of, for example, cognitive problems, conduct problems and emotional problems.

This study used the Conners' Teachers Rating Scale-Revised: Short Form (CTRS-R:S) which is suitable for use with teachers of students between the ages of 3-17 years old. The CTRS-R:S is a 28 item questionnaire comprised of four scales; oppositional-defiant, cognitive problems, hyperactivity and ADHD index. Conners (1996) reports excellent test-retest reliability (.60-.90) and validity (.75-.90) for his scales. Convergent, divergent and discriminant validity are also strongly supported. This questionnaire was completed by teachers.

Since 'emotional and behavioural difficulties' is not a psychiatric diagnosis, this questionnaire was used in order to assess clinical levels of behavioural problems in the EBD group. Conners (1996) suggests that a T score of 70+ on the oppositional–defiant scale indicates markedly atypical behavioural problems. It was not necessary to gather this data

for the mainstream group since inclusion criteria were designed to screen out behavioural problems in this group.

Index of Empathy for Children and Adolescents (Bryant, 1982)

(See appendix 2 & 2.1. Permission to use this measure was granted by the publisher, see appendix 3)

This is a 22–item questionnaire designed to assess affective empathy (see appendix 2). Bryant (1982) reported satisfactory test-retest reliability (0.79) and adequate convergent and discriminant validity. She reported that the scale meets the minimum requirements for construct validity. Bryant maintained that this questionnaire can be used with 'children and adolescents' but no age related norms are provided. Other studies, however, have used this questionnaire with adolescents up to 17 years of age (Cohen & Strayer, 1996) and up to 20 years of age (Palmeri Sams & Truscott, 2004). Bryant used a dichotomous true/false scoring system with younger children. Other studies have adopted the same Likert-response format as Meharabian & Epstein (1972) (from which the measure was developed). This is considered more appropriate for use with older children.

As part of the present study, a pilot study was carried out in order to ensure the language and scoring system was appropriate for use with British adolescents. This identified language that was considered too young for use with an adolescent age group or considered to be

'Americanisms'. The pilot confirmed the use of a Likert scoring system, however a 1 to 9 scale was approved, rather than the -4 to +4 scale recommended by Bryant. Alterations were made to the questionnaire accordingly (see appendix 2.1)

Adapted Index of Empathy

(see appendix 2.2)

Questions in the Index of Empathy refer to non specific people, e.g. "It would make me sad to see a girl who can't find anyone to hang around with". For the purposes of this study, questions in the Index of Empathy were adapted, using information from the assessment of positive relationships, such that they referred to someone the participant had a good relationship with. For example, if a participant said that he was particularly close to a younger sister called Becky, the question would read; "It would make me sad to see Becky couldn't find anyone to hang around with".

Scoring systems for the adapted Index of Empathy remained the same as for the Index of Empathy. Again, participants completed the questionnaire on their own although the researcher was present to read out questions if required to by the participant.

Interpersonal Reactivity Index (IRI, Davis; 1980)

(see appendix 4)

The IRI is a 28 item self-report questionnaire. Each item is answered on a 5-point response scale. The IRI is comprised of four subscales; empathic concern (other oriented feelings of sympathy or concern), perspective taking (the tendency to adopt another's psychological point of view), fantasy scale (tendencies to transpose oneself into the feelings and actions of fictitious characters) and personal distress (self-oriented feelings of distress or unease in emotional situations). Satisfactory test-retest reliabilities (.62-.71), internal consistencies (.71-.77) and convergent and predictive validity have been reported (Davis, 1980). The measure was originally standardised using college students. The author does not provide age related norms, however, other research has used this measure with adolescents (e.g. Henry, Sagar & Plunkett, 1996; Eisenberg & McNally, 1993).

Since the Index of Empathy only measures affective empathy, the IRI was included to capture other aspects of empathy not measured by the Index of Empathy. This questionnaire was completed by each participant, again the researcher read out items to participants if required.

Wechsler Abbreviated Scale of Intelligence (WASI; Wechsler, 1999)

This measure was administered to all participants in order to control groups for verbal and non-verbal skills. The WASI is a brief and reliable measure of general cognitive functioning. The short form of this measure

is comprised of two subtests, vocabulary and matrix reasoning, and yields a full scale IQ score. The manual recommends that it takes 15 minutes, on average, to complete two subtests.

This measure is suitable for people between 6 and 69 years and norms are provided for all age groups. Reliability of the FSIQ score for two subtests is good (0.96) as is test-retest reliability (0.88).

Assessment of positive relationships

(see appendix 5)

A semi-structured interview was devised to determine people with whom the participants had a positive relationship. The interview made use of a grid system which was divided up into different areas of life where an adolescent might be expected to develop close personal relationships. These areas were; family, friends, people at school and other. The 'people at school' section was included mainly for the behavioural problems group. Adolescents in this group were more likely to have dysfunctional family relationships and may not have been able to identify many family members with whom they had a close relationship with. Within the residential EBD education system they were more likely to find opportunities to develop relationships with members of staff. Participants were asked to visualise themselves in the centre of the grid and put people physically closer to themselves on the basis of the closeness of their relationship.

This semi-structured interview was completed with each participant first since it provided opportunity to develop rapport with participants.

Information from this questionnaire was used to manipulate the Index of Empathy into its adapted form.

2.3.4 Procedure

This research project was carried out in accordance with the Code of Conduct, Ethical Principles and Guidelines (British Psychological Society, 2004) and the Professional Practice Guidelines (British Psychological Society, 1995). Ethical approval for this study was granted by Coventry University (see appendix 6 for ethical approval letter).

Initially schools were contacted to explain the purpose of the current research emphasising relevance to clinical theory and practice. Letters and information sheets were sent to the parents and students, identified by the school as meeting the inclusion criteria, to explain the purpose and nature of the research and to ask for consent (see appendix 7-13). Once consent had been obtained, the experimenter arranged individual sessions with each participant within school time. All measures were administered during one session, lasting 40-60 minutes, in order to gain full data sets.

Before testing began, each participant had the nature of the research explained to him and was given the opportunity to ask any questions; participants were also asked to complete the participant consent form (see appendix 14). It was reinforced that information gathered would be kept confidential and would be destroyed in accordance with ethical guidelines (British Psychological Society, 2004). It was recognised that

some participants, particularly those in the EBD group, may have found some of the measures stressful to complete. It was therefore emphasised that it was not a test and that participants could stop at any time. The researcher aimed to be alert to signs of stress and stop administration of measures if necessary.

All participants completed assessments in the following order; assessment of positive relationships, Index of Empathy, vocabulary subtest, adapted Index of Empathy, matrix reasoning, Interpersonal Reactivity Index. Originally it was proposed to counterbalance presentation of the Index of Empathy and the adapted Index of Empathy in order to minimise order effects. In practice it was not possible to do this since some participants required the researcher to read out the questionnaires which impacted on time available to adapt the Index of Empathy. At the end of testing, participants were thanked and offered the opportunity to ask any questions about the process.

2.3.5 Analysis

Data was entered into SPSS version 14.0 and power calculations indicated a group size of 23. Numbers in each group exceeded this; as such the data met the required power. Preliminary assumption testing for use of parametric tests was conducted with no violations noted.

2.4 Results

Hypothesis 1: **Boys in the EBD group will score significantly lower on standard measures of empathy than boys in the control group?**

Figures 1 and 2 summarise the empathy scores for the EBD and mainstream groups on the IRI and Index of Empathy. Whilst the data shown by the graphs suggests that the EBD group scored lower on all subscales of the IRI and the Index of Empathy, the statistical significance of these differences was explored using a one-way between groups MANCOVA. Vocabulary scale scores were entered as a covariate. There was no difference between the two groups on the combined dependent variables (Index of Empathy and scales from the IRI): $F(1, 50)=1.58$, $p>0.1$. Since this hypothesis makes a one-tailed prediction however, it was possible to halve the p value. Using the new p values, when the results were considered separately, a significant difference was found between the two groups on the Index of Empathy, $F(1, 50)=3.129$, $p<0.05$, $MSE=1375.84$. There were no differences between the groups on any of the IRI subscales: empathic concern, $F(1, 50)=0.23$, $p>0.1$, $MSE=.39$; perspective taking, $F(1, 50)=2.23$, $p>0.05$, $MSE=56.80$; fantasy scale, $F(1, 50)=1.14$, $p>0.1$, $MSE=31.78$; or personal distress, $F(1, 50)=.041$, $p>0.1$, $MSE=.68$.

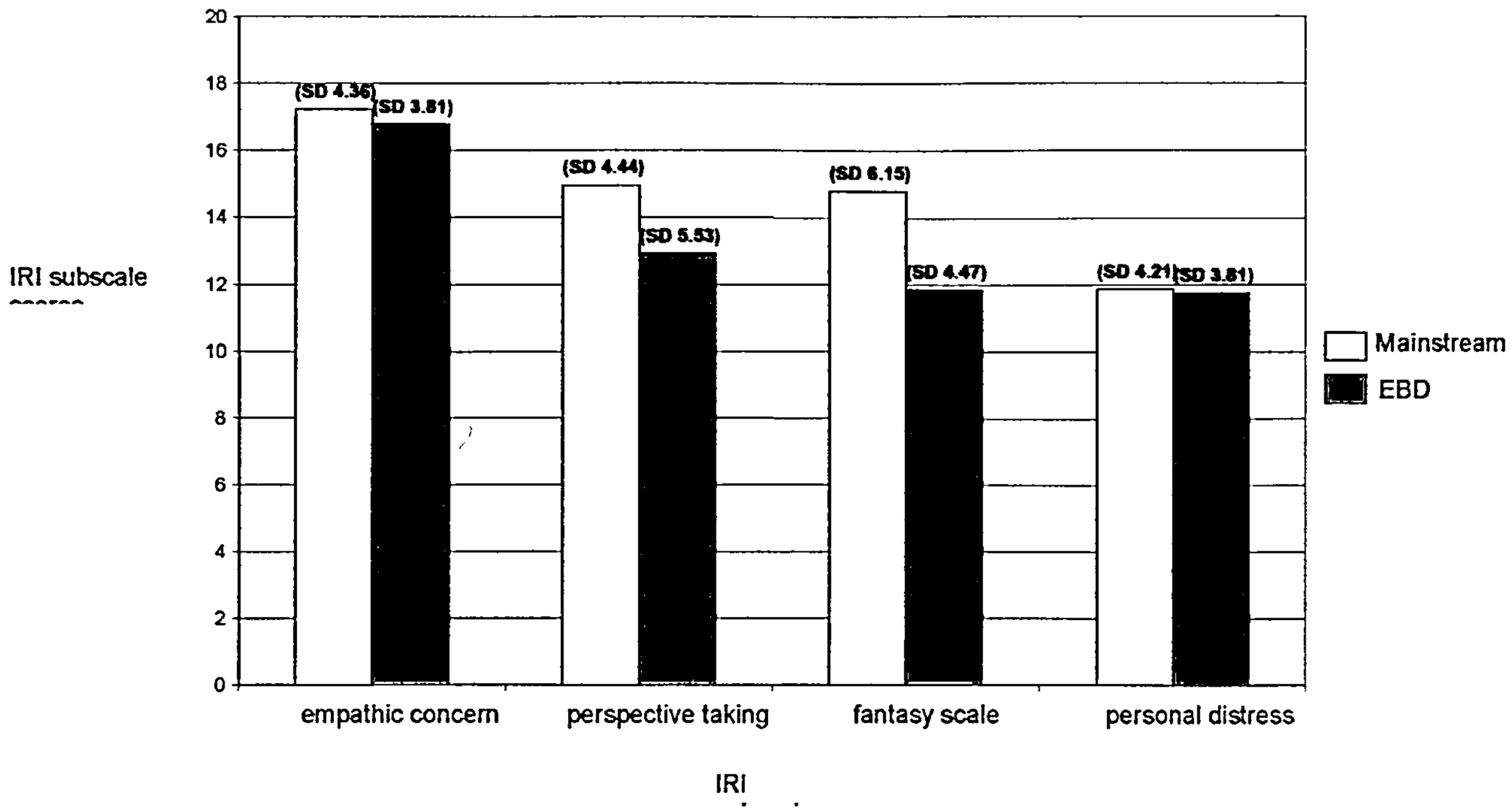

Figure 1: Bar chart indicating group means (SD) for the IRI subscales

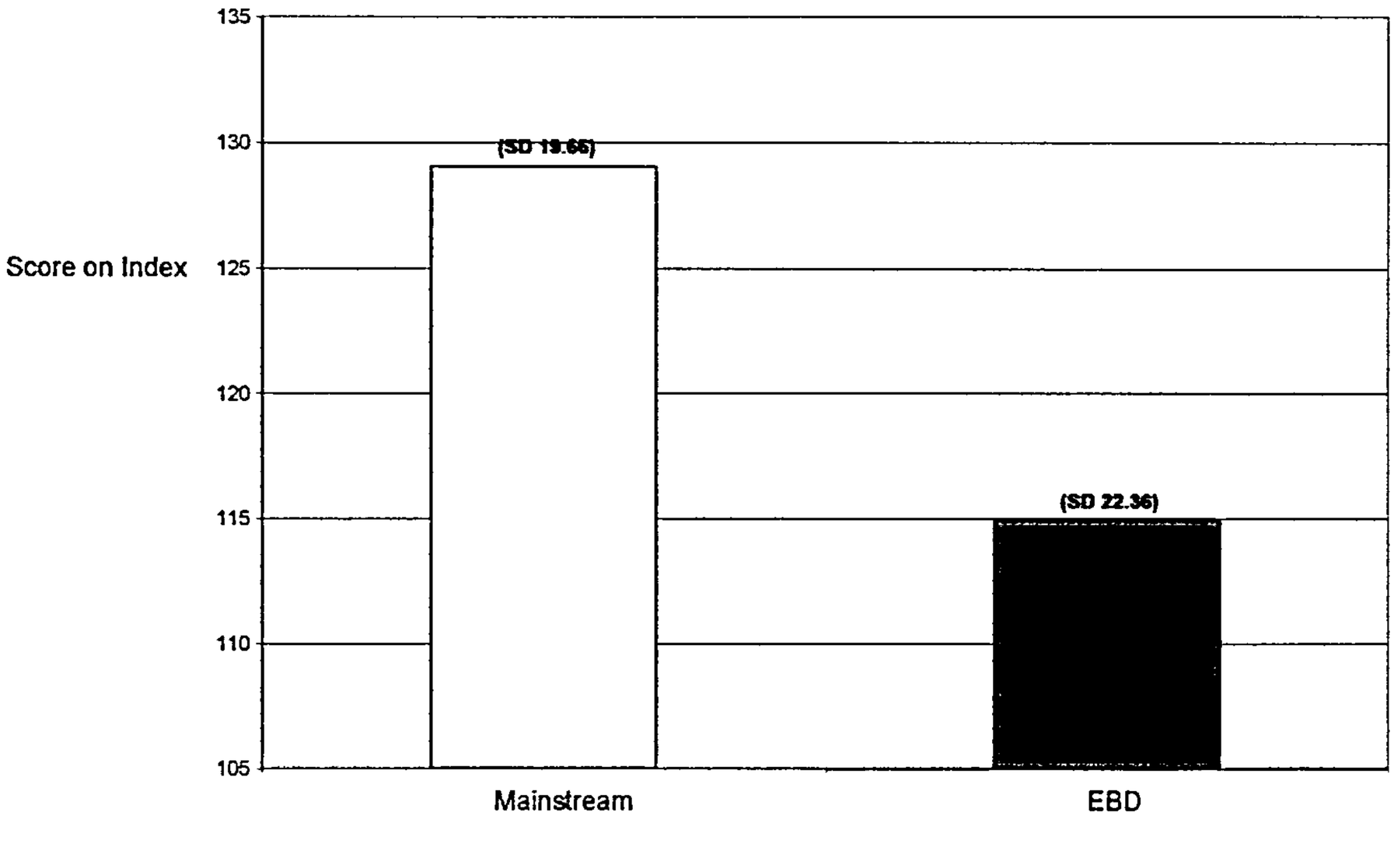

Figure 2: Bar chart indicating group means (SD) for the Index of Empathy.

In summary, this provides partial support for hypothesis 1. Although no differences were found between groups on subscales from the IRI, group differences were found on the Index of Empathy.

Hypothesis 1.1: **The degree of empathy reported will be associated with the degree of behavioural difficulties.**

In order to assess the relationship between empathy and behaviour problems, the scores from the Index of Empathy and all four scales from the IRI were correlated with the oppositional-defiant scale using Pearson product-moment correlation coefficient. Table 2 summarises the data.

Table 2: Correlations between oppositional-defiant scale and measures of empathy (EBD group only).

	Empathic concern	Perspective taking	Fantasy scale	Personal distress	Index of Empathy
Oppositional-defiant scale					
r	-.37	-.14	-.03	.38	-.19
p	.069	.493	.893	.064	.371

Although not statistically significant, there was a medium negative correlation between oppositional-defiant scale and empathic concern, r=-0.37, n=25, p>0.05, and a medium positive correlation between oppositional-defiant scale and personal distress, r=.376, n=25, p>0.05. Higher levels of behavioural problems indicated lower levels of empathic concern and higher levels of personal distress.

Hypothesis 2: **Changing the target person in the Index of Empathy will affect empathy scores across groups.**

The graph shown below in figure 3 suggests that both groups scored higher on the adapted Index of Empathy than on the Index of Empathy.

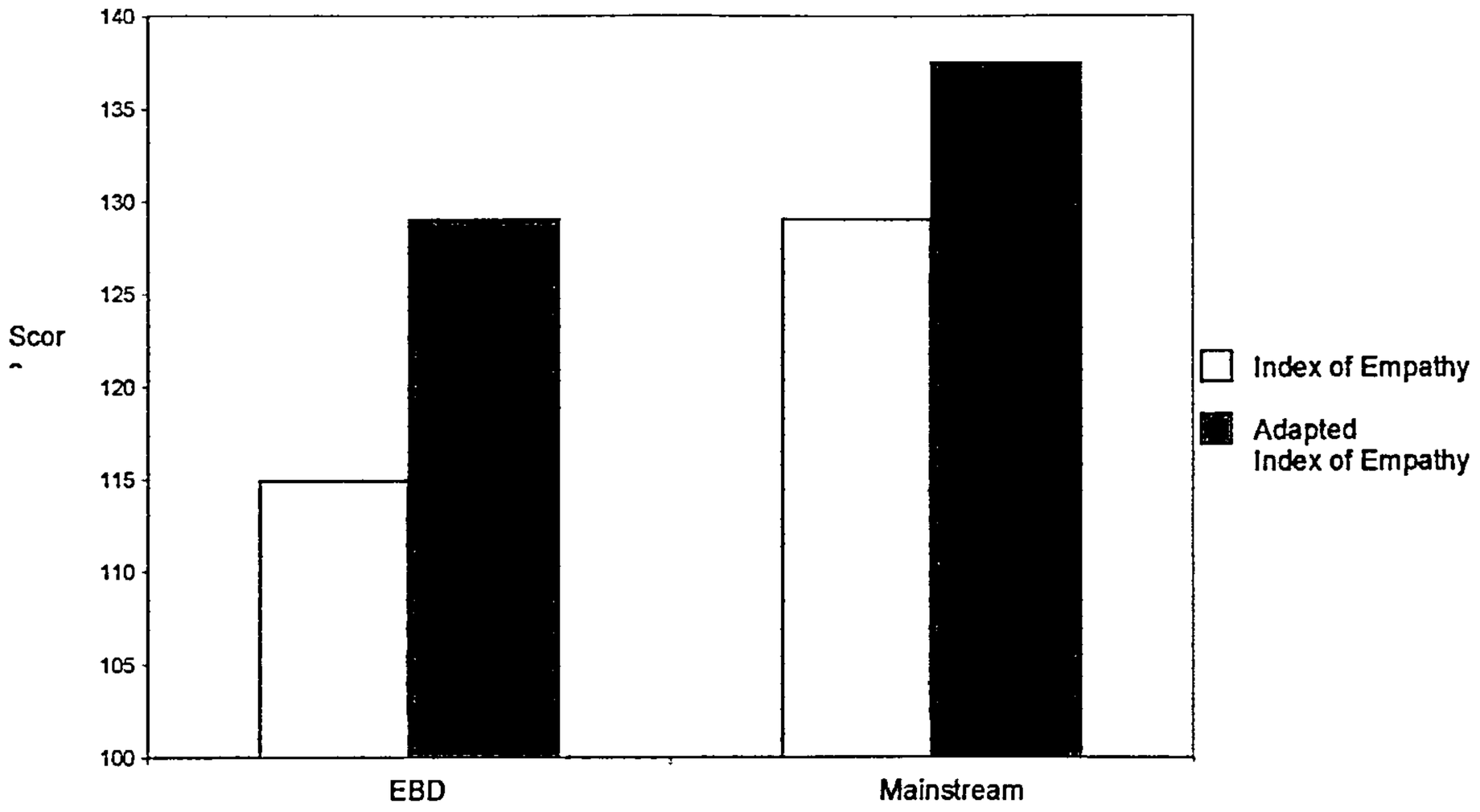

Figure 3: Bar chart to indicate mean scores of EBD and mainstream groups on the Index of Empathy and the adapted Index of Empathy

In order to investigate this statistically, a one-way repeated measures ANCOVA was conducted using vocabulary as the covariate. The main effect of test was not significant, $F(1, 49)=.53$, $p>0.1$, $MSE=48.09$. This indicated that there were no significant differences between participants' scores on the Index of Empathy compared to the adapted Index of Empathy.

Research question 2.1: **Is the degree of change determined by group?**

The data shown in figure 3 suggests that change in scores was greater for the EBD group than the mainstream group. The same ANCOVA was used to investigate whether the degree of change was determined by

group. Results indicated that the main effect of group was not significant, $F(1, 49)=1.99$, $p>0.1$, *MSE*=1341.05, and there was no interaction effect, $F(1, 49)=2.76$, $p>0.1$, *MSE* =250.78. This suggests that there was no difference between the groups on scores from the Index of Empathy or the adapted Index of Empathy and that neither group showed a significantly different increase in scores in comparison to the other group.

Research question 2.2: **Does changing the target person affect high empathisers differently compared to low empathisers?**

To investigate this, the EBD and mainstream group were amalgamated into one group. A new variable – improvement in empathy scores – was created by calculating the difference between each participant's score on Index of Empathy and adapted Index of Empathy. Original empathy scores, as measured by Index of Empathy, and improvement in empathy scores were correlated using Pearson product-moment correlation coefficient. There was a strong positive correlation ($r=.532$, $n=52$, $p<0.01$), with low scores on Index of Empathy associated with greater improvement between empathy scores. This indicates that changing the focus of the questionnaire to positive relationships has a greater impact on empathy scores for participants with a lower original empathy score compared to participants with a higher original empathy score.

Research question 2.3: **Does changing the target person move clinically low empathisers into the normal range of empathy?**

A normal range of empathy was assumed between two standard deviations above and below the mainstream group's mean score on the Index of Empathy. Participants below this score were assumed to have clinically low empathy skills. Of the four participants identified as lying outside the normal range on Index of Empathy (all within the EBD group), all moved into the normal range when assessed using the Adapted Index of Empathy.

Research question 2.4: **Based on the IRI, what aspects of empathy predict scores on the Index of Empathy and adapted Index of Empathy?**

In order to investigate this question, two standard multiple regressions were carried out. The standard multiple regression carried out on the Index of Empathy revealed a significant model, $F(4,47)=10.68$, $p<0.0005$. Adjusted $R^2=.432$. Significant predictor variables were perspective taking, $\beta=.0.306$, $p<0.0005$ and empathic concern, $\beta=0.498$, $p<0.0005$. Fantasy scale, $\beta=-0.084$, $p>0.5$ and personal distress, $\beta=-0.033$, $p>0.1$ were not significant predictors.

A standard multiple regression carried out on the adapted Index of Empathy also revealed a significant model, $F(4, 47)=13.77$, $p<0.005$. Adjusted $R^2=.489$. The only significant predictor variable was empathic concern, $\beta=0.703$, $p<0.0005$. Perspective taking, $\beta=0.136$, $p>0.1$, fantasy scale $\beta=-0.126$, $p>0.1$ and personal distress $\beta=0.080$, $p>0.1$ were not significant predictors.

This indicates that whilst empathic concern score and perspective taking scores can predict scores on the Index of Empathy, only empathic concern score can predict scores on the adapted Index of Empathy.

2.5 Discussion

2.5.1 Interpretation of findings

Previous research has found that adolescents with behaviour problems are less empathic than their non behaviour-disordered peers. It was predicted that this finding would be replicated in this study. Results, however, were equivocal. There was no difference between the two groups on any scales from the IRI but a difference was found on the Index of Empathy, with boys in the EBD group having significantly poorer empathy than those in the control group. It should be noted however, that previous studies did not use any performance measures as covariates, which may account for the more significant findings in these studies.

Significant group differences on the Index of Empathy might suggest that the difference between the two groups lies in their vicarious empathic responding, rather than in their ability to put themselves cognitively 'in the shoes' of a person in distress. Empathic concern scores on the IRI, however, do not support this since no group differences were found. But the definition and measurement of empathy is still relatively poorly understood. Although these measurement tools may be linked, they may not be measuring identical constructs.

This study found a medium negative correlation between behaviour problems and empathy. Although the correlation was not significant, it has been suggested that where there are small samples, researchers should focus on the strength of the correlation rather than the significance level (Pallant, 2001). This study supports Cohen & Strayer's (1996) research in identifying that increased behavioural problems are indeed associated with lower empathy. Cohen & Strayer (1996) also found that conduct disordered youth reported higher levels of personal distress than the control group. In the present study there was a medium positive correlation between behaviour problems and personal distress. These findings together give preliminary support to the proposed trauma model of behavioural problems (Greenwald, 2002), which hypothesises that empathy in boys with behavioural problems is inhibited in order to prevent the experience of intolerable negative emotions.

Research question 2 asked whether changing the target person in the questionnaire would change the empathy score of all participants. Reference to Figure 3 (see section 2.4), shows that scores went in the direction predicted. Results from the ANCOVA, however, found no differences *between* the groups on either the Index of Empathy or the adapted Index of Empathy; also there were no differences *within* groups on these measures, i.e. neither the EBD group nor the mainstream group scored *significantly* higher on the adapted Index of Empathy compared to their scores on the Index of Empathy. From this we cannot conclude that changing the target person significantly changes scores of empathy or

that the degree of change is affected by having emotional and behavioural problems. These findings do not therefore support the work of De Wied et al. (2005) who found that characteristics of the target person impacted on the empathic responses of behaviour disordered boys.

Results indicated that the effect of changing the target person was greater for low empathisers than for high empathisers, regardless of group. This means that asking people to empathise with someone they have a positive relationship with produces greater change in people with a lower empathy baseline. It was considered possible that this finding might simply represent a ceiling effect, i.e. that people with a high baseline empathy score were scoring at the top of the possible range. If so, this would artificially suggest that the technique was more beneficial for lower empathisers. Further investigation indicated that there was no ceiling effect since the maximum possible score on the Index of Empathy was 198 and the maximum score out of all participants was 164.

It was also of interest to investigate whether the technique of changing the target person was sufficient to move a person outside the normal range of empathy to within the normal range. Small numbers of people within the clinical range meant that statistical analysis was not possible. Of four participants who scored outside the 'normal' range on the Index of Empathy, all moved into the 'normal' range on the adapted Index of Empathy. This indicates that the technique has potential to move

clinically low empathisers into the normal range of empathy when asked to empathise with someone they have a positive relationship with.

Regression analysis indicated that empathic concern and perspective taking predicted scores on the Index of Empathy. Only empathic concern however was predictive of scores on the adapted Index of Empathy. This is interesting, since using the adapted Index of Empathy appears to compensate for people with low perspective taking abilities as measured by the IRI. It does not appear to account for poor empathic concern since this is still a predictor of scores on the adapted Index of Empathy. This suggests that the ability to vicariously experience another's emotion is not affected by changing the target person and that this is an ability that needs to be present in order to be able to empathise with strangers or with people one is close to.

2.5.2 Methodological Limitations

This study did not use a clinical sample. Although a strong case for using pupils attending an emotional and behavioural school was presented, there are some considerations to be made. Although there are likely to be considerable overlaps between the presentation of boys in an EBD school and a CAMHS (Child and Adolescent Mental Health Service) population, there may be some differences. For example, behavioural difficulties identified educationally may be more linked to academic achievement problems than behavioural problems presented to a CAMHS service. Thus the IQ differential may be greater in the population

that this study has chosen than in studies using a psychiatric population. It should be noted however, that previous studies have failed to covary for IQ even though it is commonly agreed that children with behavioural problems are likely to have a lower IQ than those without. As such, it is perhaps not surprising that previous studies have found greater group differences than this study which has used a more methodologically robust design.

Questionnaire measurements of empathy have been criticised in the literature because they do not take into account social desirability bias. Indeed, it was interesting to note that some participants in the EBD group commented that they could just give the answer 'they were meant to give', i.e. the socially desirable answer. This design flaw could have been rectified by including a social desirability measure. Due to differences in literacy skills between the groups, most of the participants in the EBD group asked for items in questionnaires to be read out to them whilst the majority of the mainstream group completed the questionnaires on their own. This may have exacerbated any social desirability factor with the EBD group since the researcher was much more involved in completing the questionnaires with this group. Marshall et al. (1995) has suggested that situational factors can impact on empathic responding.

More participants in the EBD group found the scoring system difficult to understand and were unfamiliar with the Likert scoring system, whereas most of the mainstream group reported having used a similar system

before. Some participants in the EBD group found negative statements combined with the scoring system somewhat confusing, e.g. "I wouldn't feel unhappy if I saw my friend being punished by a teacher for not obeying school rules". This may have led to some inaccuracies in the answers of those in the EBD group.

Use of the specific measures can be also be questioned. Davis' (1983) concept of empathy is as an enduring disposition apparently unmodified by context. None of the questions in the IRI or the Index of Empathy identify any individual or group characteristics. This implies that the specific characteristics of the person being observed are irrelevant to the empathic response of the observer (Marshall et al., 1995). Since research has implied that personal characteristics do impact on empathic responding it may be of value to use methods which can incorporate some personal characteristics when assessing baseline empathy. For example, describing a scenario or using photographs alongside questions would have enabled participants to know something about the target person before reporting their empathic response. Using this technique however would make it difficult to control for cultural biases.

It is also important to note that differences between the groups on the Index of Empathy were due to the research question making a one-tailed assumption. Some researchers argue it is rarely appropriate to make one-tailed assumptions (www.ats.ucla, retrieved 13.04.07). In this study

however, results from previous research led us to be confident in making a one-tailed prediction

Another limitation of this study was the order of presentation of the Index of Empathy and adapted index of Empathy. Originally it was planned to counterbalance presentation of these two questionnaires to avoid order effects. Practically, as mentioned previously, this proved to be impossible. This may have impacted on responses to the questionnaires since all participants completed the Index of Empathy first and the adapted Index of Empathy second. Boredom or memory of previous responses may have impacted on the accuracy of responses to the adapted Index of Empathy.

Finally, it should be noted that this study only included male participants. The literature indicates that behavioural problems are significantly more prevalent in boys than girls making it a predominantly male problem (Department of Health, 1999). Obviously this is not to deny that behaviour problems exist in girls but these results cannot be generalised to girls. Further research needs to be undertaken in order to see if the same patterns exist in this population. Similarly, this study did not collect demographic information about participants. Whilst some participants did come from an Afro-Caribbean or South-East Asian demographic, the majority of participants were Caucasian. We cannot, therefore, draw any conclusions about how empathy and behavioural problems present cross-culturally.

2.5.3 Recommendations for future research

As has been emphasised before, empathy is considered a multidimensional construct. The Index of Empathy only measures affective empathy and does not consider any of the other elements of empathy. Future research could usefully adapt the IRI, or other multidimensional measures of empathy, in the same way as the Index of Empathy in order to investigate whether the technique has any effect on, for example, perspective taking.

One of the research questions in this study asked whether changing the target person in the questionnaire could move clinically low empathisers into a 'normal' range of empathy. Small numbers in the clinical range prevented a comprehensive analysis of this question, although of the four participants in the clinically low range, all moved into the normal range with the adapted Index of Empathy. Evans, Margison & Barkham (1998) noted that to address this fully, two questions need to be answered; 1) has the patient changed sufficiently to be confident that it is not a measurement error - reliable change, 2) how does the end state compare with scores of a clinically meaningful comparison group – significant change. Future research with larger groups could usefully use this analysis to investigate the effectiveness of this technique in increasing empathy scores in boys with clinically low empathy.

2.5.4 Clinical Implications

The results from this study are difficult to interpret in terms of their clinical implications for adolescents with behaviour problems. Group comparisons showed little differences between the two groups on standard measures of empathy, and no within or between group differences on the standard and adapted Indexes of Empathy. When considered as a whole group however, results indicated that changing the target person does help low empathisers to empathise significantly more than high empathisers, regardless of the presence or absence of behavioural problems.

Clinical interventions which focus on improving empathy in adolescents with behavioural problems may have a knock-on effect for behavioural problems since evidence suggests that increased empathy is associated with increased prosocial behaviour and decreased aggressive behaviour, but we cannot conclude this from this study. These results, whilst not conclusive, do suggest that this technique could be incorporated into interventive programmes for young people with behavioural problems and certainly warrants further research. As such this research could usefully be disseminated to, for example, youth offending teams who provide victim awareness programmes or special educational needs co-ordinators in schools. Of course, the problem of translating empathic responding into the real world remains, and requires further investigation.

2.6 Summary

The aim of this study was to compare empathy in male adolescents with emotional and behavioural disorders and a mainstream group and to investigate the impact of a positive relationship on empathy scores. Previous researchers have suggested that situational factors affect empathy (De Wied, et al., 2005) and that this has not been sufficiently addressed in the research to date (Marshall et al. 1995). Whilst results from this study have not conclusively been able to support this hypothesis, it provides a starting point to link these ideas and presents a novel methodology to investigate these ideas further.

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Chapter 3: Reductionism versus holism in research and practice.

3.1 Introduction

The reflective chapter in the clinical doctorate thesis provides a space to look back over the process of completing a piece of research and reflect on the impact this has had personally and professionally. This chapter has been written at a point when my other two chapters are nearly complete. For me, this reflective chapter could not have been written any earlier. Whilst in the middle of the process, one's mind is filled with the practicalities of completing a project like this – gaining ethical approval, identifying participants, recruiting and testing enough participants, identifying a workable literature review, and spending days trying to get 'Word' to perform snazzy functions! For me, whilst mired in the middle of this process, it was impossible to be reflective about the process in any coherent and meaningful way. Thoughts that I had along the way I attempted to capture and make note of in order to put them together at a time when I was able to look back on the process as a whole. It is this very idea that underlies this paper, the debate between considering elements of a subject or looking at the whole within empirical research.

This paper will aim to, firstly, set the scene as to why I chose emotional and behavioural difficulties as an area of research. Secondly, I will consider how it felt to design and implement this research. I will discuss the personal

controversy between reductionism and holism in my research, and finally draw conclusions from the experience and reflections.

3.2 Why work with people with behavioural problems?

During my undergraduate course and following completion of it, I worked in a school for adolescent boys with emotional and behavioural problems. I gained immense satisfaction from this role. The students were interesting unique individuals with whom I developed individual and different relationships. These were boys who had experienced various abuses, came from broken families and had early neglectful experiences. Their previous history was evident in the way they engaged with people and conducted themselves, they could be aggressive, hurtful, and difficult. This was what was predicted given their history, yet within those difficulties there was always a boy who could be funny, thoughtful, expressive and interesting. These are the characteristics and findings that are not discussed in the literature.

As a member of staff, the emotional toll of this work was considerable, and the training to deal with the personal impact of the work and to work with these boys was unsatisfactory. I was not equipped to help these boys recognise and cope with the effects of their early experience which left me feeling impotent. After researching my options, clinical psychology training

seemed the best route to develop my skills to work more effectively with people who had been through such experiences.

Having come to my third year of clinical training and been given fairly free rein to develop a research project, I was keen to go back to this area where my interests and passions had been developed. I wanted to look at the literature regarding adolescents with emotional and behavioural disorders and add something to the research available. From my experience, boys who had developed these behavioural patterns had been through considerable traumatic experiences. Whilst they most likely became more aggressive and difficult to engage with, underneath it all they were still 'just kids' who could be a pleasure to be with. I was interested in finding out how this side of them could be tapped, rather than focusing on the behaviour problems. My aim was to develop a research project that moved away from typical research looking at the negative associations with emotional and behavioural disorders and to try to find ways to identify the 'normal boy' within that descriptor.

3.3 Gathering the data

I gathered my data in two phases spending an entire week at each school to do so. At the time, my concern was that I would not be able to interview enough participants to make the project workable, but as I became more relaxed and the data gathering began to flow more easily I thought more

about the process I was in the midst of and began to feel that I was missing something important during the short time I spent with each participant. The design of my project meant that I was able only to spend a finite amount of time with each participant. They were required to answer the questions set out in the questionnaires and complete the cognitive tests. Whilst each person was given the chance to ask questions about what they were doing, knowing teenage boys, I wasn't surprised when they did not! At the time, I was grateful since it gave me more time to interview more people. During the course of these two weeks I met fifty-five individuals all different and all with a wealth of history, personality, emotion, character and experiences. Yet none of this was explored. All this, for the purpose of this project, was boiled down to a series of numbers in a data set. Ultimately, I felt that there was a point I was probably missing. Each participant had something to offer me about my understanding of empathy in adolescent males and the impact of emotional and behavioural disorders, yet there was no space to explore this. Deciding to look into this paradox further, I found that my experiences have been debated amongst scientists and philosophers on a much larger scale for centuries.

3.4 Reductionism in research

The word I was looking for to capture what I was experiencing was 'reductionism'. All research can, to some extent, be considered to be reductionist in nature. Scientists look at and understand reality by

decomposing the subject into aspects and particles. Physicists examine the behaviour of atoms and protons and biologists try to unravel cells, cell structures and processes. Verschuren (2001) states;

> "reductionism is a doctrine that maintains that all objects and events are made up of indivisible basic elements, and that we can gain insight into these objects and events by analysing the elementary parts." (p. 391)

In designing an empirical research project, the object of research is fragmented as follows. A *domain* is identified, this is the area of reality that is to be studied. An *assertion* is made about the domain. The domain is conceived as a set of *research units*, each divided into *observation units*. The scores of these observation units are called *data* (Verschuren, 2001). Psychology as a science has tended to follow this pattern and take traits or brain structures as their object of research. This is most clearly seen in behavioural psychology where human behaviour is said to be motivated by positive or negative reinforcers. But, all quantitative methodologies ultimately pare down the individual to the specific element that is under the microscope.

My research project also followed this design, and it was this fragmentation of the participants that sat so awkwardly with me. In terms of my research project, the fragmentation of each participant can be seen as follows.

Domain	Behaviour problems
Assertion	Empathy is related to behaviour problems
Research units	Adolescent boys with behavioural problems
Observation units	Empathy questionnaires
Data	Scores on empathy questionnaires

The dissonance that I experienced has been explained more thoughtfully and clearly by dissenters to the reductionist school of thought who promote a more holistic approach. They question whether the reductionist approaches miss aspects of social reality because they fail to grasp the whole of the object. Can we draw conclusions about outcome based on the properties of the constituent elements of an object or being? Andersen (2001), for example, quotes the nineteenth century philosopher John Stuart Mill who states that; "Not a trace of the properties of hydrogen or of oxygen is observable in those of their compound, water." Whilst this is essentially a physical science debate, the questions extend to psychology and to my piece of research. I asked participants to complete questionnaires about empathy. Taking into account that this may be a crude measure, was it right for me to assume that these narrow measures will predict how these complex people will behave in their real life with real people given the myriad of other factors that are involved in any kind of human behaviour?

3.5 The fit between research and clinical practice.

Throughout my psychology career to date, I have been exposed to and worked with supervisors coming from a variety of psychological backgrounds. I have found that my way of working and beliefs I have about people and mental health fit most comfortably within a systemic framework. Systemic models have their foundations in social constructionism which proposes that realities are constructed socially between people in communication over time. This means that events and objects are not external 'found' things, they are the product of social action whose existence depends on their reconstruction in social, communicative contexts (Burnham, 1992). Systemic practice maintains the importance of listening to the clients' understanding or 'perspective' rather than fitting the client into the psychologist's frame or model.

In terms of research, a systemic belief or way of thinking does not fit well with the reductionist design of my empirical project. In fact, systems theory has provided a counter argument to the reductionist approach. Systems theory states that all levels of organisation are linked to one another, so changes in one are consequent of changes in another. As such, a system cannot be understood by characterising the elements within each level, but need to be understood within the context of the system (Andersen, 2001). For example, can complex patterns of human behaviour such as alcoholism or schizophrenia be explained by genetics alone?

These thoughts led me to question what meaningful information preconstructed questionnaires can really give us about the empathic qualities of an adolescent male who lives in a threatening, socially deprived neighbourhood where he is the responsible male for three younger sisters and a depressed and violent mother? Burck (2005) suggests that questionnaires highlight trends but are unable to manage the variability and richness of data available. She suggests that qualitative research which poses open-ended and exploratory questions is more suited to systemic theory and clinicians. Verschuren (2001) comments that there is a risk in reductionist research of observational bias which he calls 'tunnel view'. He describes this as isolating a subject from its historical context or detaching it from its physical or social context. In many ways I felt that I developed 'tunnel view' during this research project. All my efforts were concentrated at identifying links between empathy and behaviour problems, no real account was taken of the social context in which these behavioural problems existed, or when they existed and when they did not.

The reductionist approach also proscribes a serial linear process to research. The research is carried out in a strict order whereby the research question is formulated, hypotheses developed, methodology designed and so on. This again sits awkwardly with systemic thinking which would see the process as being created in the moment and open to change and modification as the process advances. It was this misfit between research

design and personal identity as a psychologist that made me question the methodology and, therefore, validity of the research I was carrying out.

3.6 The advantages of reductionism

Ultimately, it would be naïve for me to deny that reductionism and associated methodologies have contributed to and furthered our psychological understanding of people, both individually and culturally. Psychology is a science and psychologists are expected to be scientist-practioners carrying out psychological interventions based on scientific evidence of their validity. Reductionist methodologies have contributed to clinical psychology in a variety of ways, and I was aware that I was at risk of throwing out the baby with the bath water by not considering this. Firstly, by quantifying the elements to be researched, the standardisation of psychological assessments has been made possible. As such, researchers have been able to identify a range of 'normal' or 'typical' human behaviour. Without these benchmarks, our understanding and ability to assist those with mental health problems would be impaired. Secondly, these methodologies make it possible to compare results between different studies and to replicate studies. Thirdly, reductionist methods may help to reduce researcher bias in research. Reading back over this chapter, I am aware that I sometimes find it difficult to be objective when working with this type of child or adolescent, and have a tendency to look through rose tinted glasses. Whilst this may have some benefits in clinical practice, enabling me to be more empathic

and committed to the work, if I had used a more holistic approach in my research, there may have been more opportunity for researcher bias to creep in. Using questionnaires, I was much less involved in directing the course of the research.

Finally, I was also conscious that here was a bandwagon waiting for me to jump on. In the research field, 'reductionism' has become a somewhat pejorative term with negative connotations. To call someone a 'reductionist' is to suggest that they are intellectually naïve or backward. It was seductive to damn my research as being limited by its reductionist design when in fact the results were simply the results.

3.7 Where to from here?

Having reflected on the process and experience of this piece of research I am left at a crossroads, do I reject reductionism and embrace qualitative methods of research or continue with accepted quantitative methods? Of course, being a psychological paper, there is no simple answer!

Part of the work of a clinical psychologist is undoubtedly to contribute and develop psychological understanding through continuing research. Yet this paper suggests that typical modes of research contradict my ways of thinking. If I am not to be put off research how do I compromise the two? Firstly, this has motivated me to take part in qualitative research in the future

in order to be able to compare the two methodologies. Two of my comrades in training undertook qualitative research projects and I was impressed and interested with the kind of information that was elicited through their interviews. Secondly, I need to acknowledge that there was some disappointment in the outcome of my project. The results I found were, to put it bluntly, not what I wanted! This had the effect of making me question the way I designed implemented and evaluated the research. It is tempting to wonder whether, if the methodology had been different so may have the outcome been. If I had come up with more significant and invigorating results, my reflective paper may have been entirely different.

In summary, pursuing this line of reflection and debate has enabled me to clarify thoughts about myself as a psychologist. This is another piece of evidence, for me, that I am choosing the right paths in my areas of interest clinically and theoretically. It also focuses me to think about the future research projects I may be involved with.

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Appendix I

Conners' Teacher Rating Scale–Revised (S)

by C. Keith Conners, Ph.D.

Student's ID: _____ Gender: M F
(Circle One)

Birthdate: ___/___/___ Age: _____ School Grade: _____
Month Day Year

Teacher's ID: _____ Today's Date: ___/___/___
Month Day Year

Instructions: Below are a number of common problems that children have in school. Please rate each item according to how much of a problem it has been in the last month. For each item, ask yourself, "How much of a problem has this been in the last month?", and circle the best answer for each one. If none, not at all, seldom, or very infrequently, you would circle 0. If very much true, or it occurs very often or frequently, you would circle 3. You would circle 1 or 2 for ratings in between. Please respond to each item.

	NOT TRUE AT ALL (Never, Seldom)	JUST A LITTLE TRUE (Occasionally)	PRETTY MUCH TRUE (Often, Quite a Bit)	VERY MUCH TRUE (Very Often, Very Frequent)
1. Inattentive, easily distracted	0	1	2	3
2. Defiant	0	1	2	3
3. Restless in the "squirmy" sense	0	1	2	3
4. Forgets things he/she has already learned	0	1	2	3
5. Disturbs other children	0	1	2	3
6. Actively defies or refuses to comply with adults' requests	0	1	2	3
7. Is always "on the go" or acts as if driven by a motor	0	1	2	3
8. Poor in spelling	0	1	2	3
9. Cannot remain still	0	1	2	3
10. Spiteful or vindictive	0	1	2	3
11. Leaves seat in classroom or in other situations in which remaining seated is expected	0	1	2	3
12. Fidgets with hands or feet or squirms in seat	0	1	2	3
13. Not reading up to par	0	1	2	3
14. Short attention span	0	1	2	3
15. Argues with adults	0	1	2	3
16. Only pays attention to things he/she is really interested in	0	1	2	3
17. Has difficulty waiting his/her turn	0	1	2	3
18. Lacks interest in schoolwork	0	1	2	3
19. Distractibility or attention span a problem	0	1	2	3
20. Temper outbursts; explosive, unpredictable behavior	0	1	2	3
21. Runs about or climbs excessively in situations where it is inappropriate	0	1	2	3
22. Poor in arithmetic	0	1	2	3
23. Interrupts or intrudes on others (e.g., butts into others' conversations or games)	0	1	2	3
24. Has difficulty playing or engaging in leisure activities quietly	0	1	2	3
25. Fails to finish things he/she starts	0	1	2	3
26. Does not follow through on instructions and fails to finish schoolwork (not due to oppositional behavior or failure to understand instructions)	0	1	2	3
27. Excitable, impulsive	0	1	2	3
28. Restless, always up and on the go	0	1	2	3

Index of Empathy for Children & Adolescents (Bryant, 1982)

It makes me sad to see a girl who can't find anyone to play with.	Yes	No
People who kiss and hug in public are silly.	Yes	No
Boys who cry because they are happy are silly.	Yes	No
I really like to watch people open presents, even when I don't get a present myself.	Yes	No
Seeing a boy who is crying makes me feel like crying too.	Yes	No
I get upset when I see a girl being hurt.	Yes	No
Even when I don't know why someone is laughing, I laugh too.	Yes	No
Sometimes I cry when I watch TV.	Yes	No
Girls who cry because they are happy are silly.	Yes	No
It's hard for me to see why someone else gets upset.	Yes	No
I get upset when I see an animal being hurt.	Yes	No
It makes me sad to see a boy who can't find anyone to play with	Yes	No
Some songs make me so sad, I feel like crying.	Yes	No
I get upset when I see a boy being hurt.	Yes	No
Grown-ups sometimes cry even when they have nothing to be sad about.	Yes	No
It's silly to treat cats and dogs as though they have feelings like people.	Yes	No
I get mad when I see a classmate pretending to need help from the teacher all the time.	Yes	No
Kids who have no friends probably don't want any.	Yes	No
Seeing a girl who is crying makes me feel like crying.	Yes	No
I think it's funny that some people cry during a sad movie or while reading a sad book.	Yes	No
I am able to eat all my cookies even when I see someone looking at me wanting one.	Yes	No
I don't feel upset when I see a classmate being punished by a teacher for not obeying school rules.	Yes	No

Index of Empathy for Children & Adolescents	Strongly disagree				Neither agree nor disagree				Strongly agree
It would make me sad to see a girl who couldn't find anyone to hang around with.	1	2	3	4	5	6	7	8	9
If people were kissing and hugging in public it would be embarrassing.	1	2	3	4	5	6	7	8	9
If a boy was crying because he was happy it would be embarrassing.	1	2	3	4	5	6	7	8	9
If people are opening presents, I really like to watch, even when I don't get a present myself.	1	2	3	4	5	6	7	8	9
If I saw a boy who is unhappy, it would make me feel unhappy too.	1	2	3	4	5	6	7	8	9
I would feel unhappy if I saw a girl being hurt.	1	2	3	4	5	6	7	8	9
Even if I didn't know why someone is laughing, I would laugh too.	1	2	3	4	5	6	7	8	9
Sometimes I get unhappy when I watch TV.	1	2	3	4	5	6	7	8	9
If I saw a girl crying because she was happy, I'd think she was silly.	1	2	3	4	5	6	7	8	9
It would be hard for me to see why someone else gets upset.	1	2	3	4	5	6	7	8	9
I would get upset if I saw an animal being hurt.	1	2	3	4	5	6	7	8	9
I would feel sad if I saw a boy who couldn't find anyone to hang around with	1	2	3	4	5	6	7	8	9
Some songs can make me feel really sad.	1	2	3	4	5	6	7	8	9
I would get upset if I saw a boy being hurt.	1	2	3	4	5	6	7	8	9
Adults might sometimes cry even when they have nothing to be sad about.	1	2	3	4	5	6	7	8	9
It would be silly to treat cats and dogs as though they have feelings like people.	1	2	3	4	5	6	7	8	9
I would get annoyed if I saw a classmate pretending to need help from the teacher all the time.	1	2	3	4	5	6	7	8	9
If kids had no friends I'd think they probably didn't want any.	1	2	3	4	5	6	7	8	9
If I saw a girl crying I would feel upset.	1	2	3	4	5	6	7	8	9
I would think it's funny if some people cried during a sad film or while reading a sad book.	1	2	3	4	5	6	7	8	9
I would be able to eat all my sweets or chocolate even if I saw someone looking at me wanting one.	1	2	3	4	5	6	7	8	9
I wouldn't feel unhappy if I saw a classmate being punished by a teacher for not obeying school rules.	1	2	3	4	5	6	7	8	9

Index of Empathy for Children & Adolescents	Strongly disagree				Neither agree nor				Strongly agree
It would make me sad to see ..... couldn't find anyone to hang around with.	1	2	3	4	5	6	7	8	9
If ..... was kissing and hugging in public it would be embarrassing.	1	2	3	4	5	6	7	8	9
..... crying because he is happy would be embarrassing.	1	2	3	4	5	6	7	8	9
If ..... was opening presents, I would really like to watch, even when I don't get a present myself.	1	2	3	4	5	6	7	8	9
If I saw ..... was unhappy, it makes me feel unhappy too.	1	2	3	4	5	6	7	8	9
I would feel unhappy if I saw ..... being hurt.	1	2	3	4	5	6	7	8	9
Even when I don't know why ..... is laughing, I laugh too.	1	2	3	4	5	6	7	8	9
Sometimes I get unhappy when I watch TV.	1	2	3	4	5	6	7	8	9
If ..... was crying because she was happy, I'd think she was silly.	1	2	3	4	5	6	7	8	9
It would be hard for me to see why ..... gets upset.	1	2	3	4	5	6	7	8	9
I would get upset if I saw ..... being hurt.	1	2	3	4	5	6	7	8	9
It would feel sad if I saw ..... couldn't find anyone to hang around with	1	2	3	4	5	6	7	8	9
Some songs can make me feel really sad.	1	2	3	4	5	6	7	8	9
I would get upset if I saw ..... being hurt.	1	2	3	4	5	6	7	8	9
..... might sometimes cry even when they have nothing to be sad about.	1	2	3	4	5	6	7	8	9
It would be silly to treat ..... as though he/she had feelings like people.	1	2	3	4	5	6	7	8	9
I would get annoyed if I saw ..... pretending to need help from the teacher all the time.	1	2	3	4	5	6	7	8	9
If ..... had no friends I'd think he probably didn't want any.	1	2	3	4	5	6	7	8	9

If kids had no friends I'd think they probably didn't want any.	1	2	3	4	5	6	7	8	9
If I saw a girl crying I would feel upset.	1	2	3	4	5	6	7	8	9
I would think it's funny if some people cried during a sad film or while reading a sad book.	1	2	3	4	5	6	7	8	9
I would be able to eat all my sweets or chocolate even if I saw someone looking at me wanting one.	1	2	3	4	5	6	7	8	9
I wouldn't feel unhappy if I saw a classmate being punished by a teacher for not obeying school rules.	1	2	3	4	5	6	7	8	9

Date: Fri, 17 Feb 2006 10:29:02 +0000

From: "Journals Rights" <JournalsRights@oxon.blackwellpublishing.com> | | Show headers

Subject: RE: Index of Empathy (Bryant, 1982)

To:
"Woolston Amy (Solihull PCT)" <amy.woolston@nhs.net>

Dear Ms Woolston

Thank you for your email request. Permission is granted for you to use the material below for your research project subject to the usual acknowledgements and on the understanding that you will reapply for permission if you wish to distribute or publish your research project commercially.

Good luck!

Best Wishes
Zoë

Zoë Ellams (Miss)
Permissions Co-ordinator
Blackwell Publishing
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Oxford
OX4 2DQ
Tel: 00 44 1865 476149
Fax: 00 44 1865 471149
Zoe.Ellams@oxon.blackwellpublishing.com

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-----Original Message-----
From: Woolston Amy (Solihull PCT) [mailto:amy.woolston@nhs.net]
Posted At: 16 February 2006 15:42
Posted To: 13 Feb - 17 Feb
Conversation: Index of Empathy (Bryant, 1982)
Subject: Index of Empathy (Bryant, 1982)

Dear Sir/Madam

I am a clinical psychology trainee at Coventry/Warwick universities. I am writing to see if it is possible to photocopy the Index of Empathy for use in my research project;

Bryant, B. (1982) An index of empathy for children and adolescents, Child Development, 53, 413-425.

I will not need to reporoduce any other parts of the article apart from the actual Index

TO: Whom It May Concern

FROM: Brenda Bryant

RE: Empathy measure

After more than 20 years of personally answering requests concerning the empathy measure published, I am now sending out this memo.

The measure, including wording, scoring, reliability, and validity are included in:

Bryant, B.K. (1982). An index of empathy for children and adolescents. *Child Development, 53*, 413-425.

You might also want to read:

Bryant, B.K. (1987). Critique of comparable questionnaire methods in use to assess empathy in children and adults. In N. Eisenberg and J. Strayer (Eds.), *Empathy and its development.* New York: Cambridge University Press.

I do not hold the copyright to this measure. The journal *Child Development* holds the copyright. Personally, I consider the measure as public domain for anyone to use.

Best wishes.
Brenda Bryant

P.S. Below are the specific warm-up introduction to the measure that I gave to the 8-9 year olds:

To Be Read to the child

'm going to read to you some statements that may or may not describe you. want you to let me know if a statement describes you or not. These statements are about how you would think and feel in many different situations. There are no right or wrong answers, just let me know which statements describe you. No one but myself will see your answers to these statements; your parents won't see them, only me. Remember, this is not a test, so you can relax. Since there are no right or wrong answers, everyone will have different answers. That is O.K. I am just interested in how (boys/girls) your age feel about these things.

I will read you a statement, and I would like you to let me know how you think or feel by circling either "yes" or "no," whichever describes how you would feel about the statement. For example, look at example A at the top of your paper. "I like to eat Spinach." Are you able to find this example? Next to the statement "i like to eat spinach" are the words

"Yes" and "no." I would like you to circle the word which best describes how you would feel about eating spinach. Some people like to eat spinach, so they would circle "yes" and some people don't like to eat spinach and they would circle "no." Either answer is O.K. to make depending on how you feel about spinach. Do you understand how you would let me know what you think: Let's try another example. Here is example B, ."I don't like ice cream." Circle "Yes" if this statement describes you, and circle "No" if this statement does not describe you. O.K.? Let's try the next statement...

INTERPERSONAL REACTIVITY INDEX

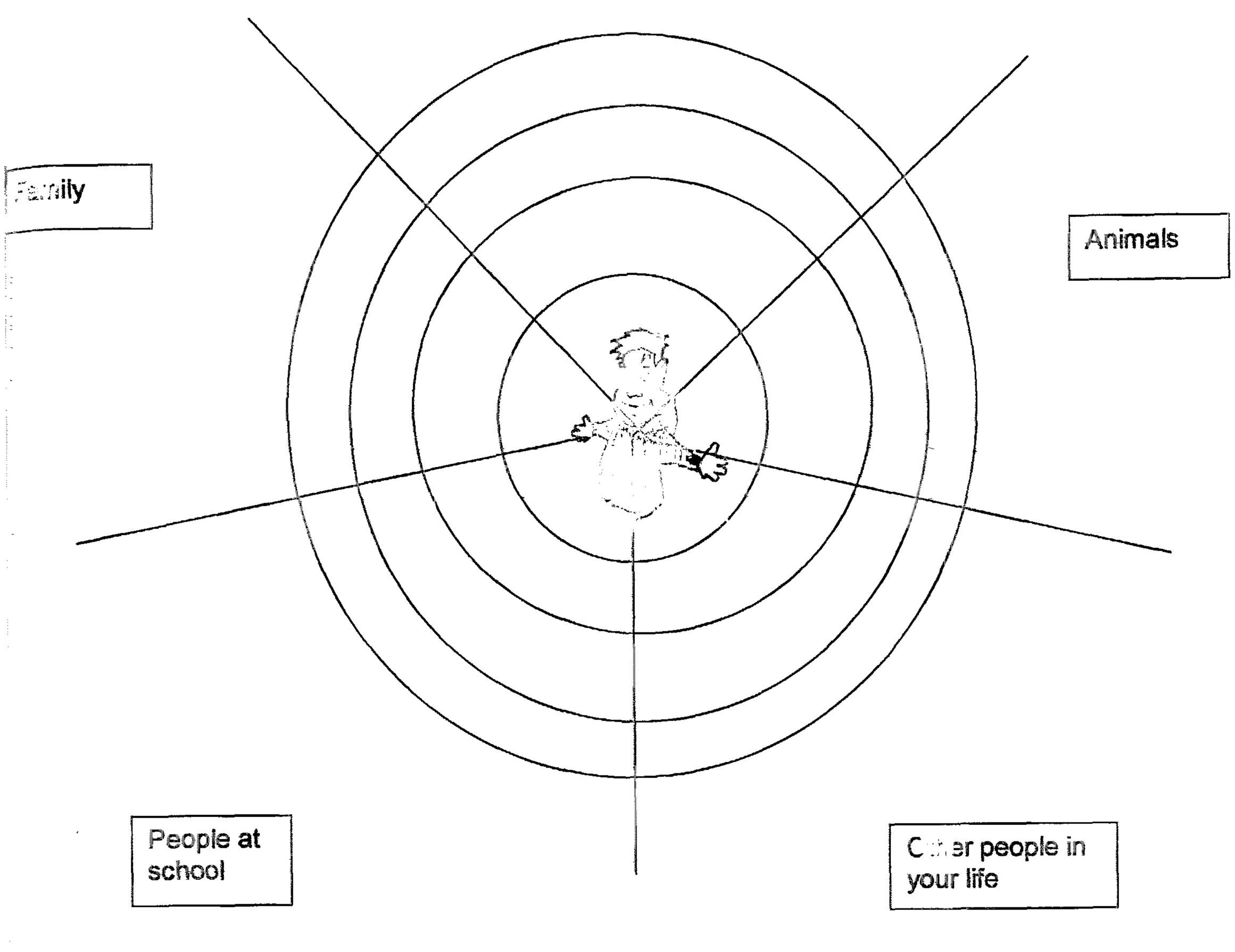
1 DOES NOT DESCRIBE ME WELL	2	3	4	5 DESCRIBES ME VERY WELL

I daydream and fantasize, with some regularity, about things that might happen to me.	1	2	3	4	5
I often have tender, concerned feelings for people less fortunate than me.	1	2	3	4	5
I sometimes find it difficult to see things from the "other person's" point of view	1	2	3	4	5
Sometimes I don't feel very sorry for other people when they are having problems.	1	2	3	4	5
I really get involved with the feelings of the characters in a book.	1	2	3	4	5
In emergency situations, I feel apprehensive and ill-at-ease.	1	2	3	4	5
I am usually objective when I watch a film or play, and I don't often get completely caught up in it.	1	2	3	4	5
I try to look at everybody's side of a disagreement before I make a decision.	1	2	3	4	5
When I see someone being taken advantage of, I feel kind of protective towards them.	1	2	3	4	5
I sometimes feel helpless when I am in the middle of a very emotional situation.	1	2	3	4	5
I sometimes try to understand my friends better by imagining how things look from their perspective.	1	2	3	4	5
Becoming extremely involved in a good book or film is quite rare for me.	1	2	3	4	5
When I see someone get hurt, I tend to remain calm.	1	2	3	4	5
Other people's misfortunes do not usually disturb me a great deal.	1	2	3	4	5
If I'm sure I'm right about something, I don't waste much time listening to other people's arguments.	1	2	3	4	5
After seeing a play or film, I have felt as though I were one of the characters	1	2	3	4	5
Being in a tense emotional situation scares me.	1	2	3	4	5
When I see someone being treated unfairly, I sometimes don't feel very much pity for them.	1	2	3	4	5
I am usually pretty effective in dealing with emergencies	1	2	3	4	5
I am often quite touched by things that I see happen.	1	2	3	4	5

Appendix 4

I believe that there are two sides to every question and try to look at them both.	1	2	3	4	5
I would describe myself as a pretty soft-hearted person.	1	2	3	4	5
When I watch a good film, I can very easily put myself in the place of a leading character.	1	2	3	4	5
I tend to lose control during emergencies.	1	2	3	4	5
When I'm upset at someone, I usually try to "put myself in his shoes" for a while.	1	2	3	4	5
When I am reading an interesting story or novel, I imagine how I would feel if the events in the story were happening to me.	1	2	3	4	5
When I see someone who badly needs help in an emergency, I go to pieces.	1	2	3	4	5
Before criticizing somebody, I try to imagine how I would feel if I were in their place.	1	2	3	4	5

People who are important to me



Assessment of Positive Relationships

I want to find out about people you have a good relationship with. I am going to ask you to fill in a questionnaire later which will use these people's names.

I'd like you to think about the people in your life that you feel close to, they may be people in your family, friends, people that work at your school or people you do other activities with. I want to find out about both males and females that you have a good relationship with..

Look at the diagram; it is divided up to include people from all parts of your life. Imagine that you are in the centre, people who you feel you have a good relationship, or friendship, with will be closer to you on the picture. People you aren't so close to, you will put further away.

Think about;

People who make you feel important

People who you have a laugh with

People who you look forward to seeing

People you enjoy spending time with

People who you trust

People you love

People you could turn to if you had a problem

Memorandum

Coventry University

Faculty of Health & Life Sciences

To Amy Woolston

Cc Eve Knight

From
Rhoda Morgan

Extension	email	Delivery Point
5985	r.morgan@coventry.ac.uk	WF104

Our Reference
PG55/06

Date
28 July 2006

Dear Amy,

Coventry University Ethics Committee

Thank you for submitting your application to Coventry University Ethics Committee.

I am pleased to inform you that your application has been approved subject to specific conditions. Please find a signed copy of Form 1 and a Peer review form for you reference.

It is required that you send in a letter from the school to the committee ASAP for your file.

Best wishes for your research project.

Regards,

Rhoda Morgan
Secretary
Coventry University Ethics Committee
Tel: 024 7679 5945

COVENTRY UNIVERSITY ETHICS COMMITTEE (Form 1)

POSTGRADUATE STUDENT & STAFF APPLICATION FOR ETHICAL APPROVAL

Name	Amy Woolston	**E-mail**	amy.woolston@nhs.net
Designation / Subject & Faculty	Trainee Clinical Psychologist Clinical Psychology Doctorate		
Title of Study	Investigation into empathy in children with behaviour difficulties		

1. Summary of proposal

Evidence indicates that adolescents with behaviour problems have poorer empathy skills than adolescents without behaviour difficulties. This study will compare the scores, on a questionnaire measure of empathy (Index of Empathy; Bryant, 1982), between two groups; adolescents with behaviour difficulties, and a control group. Manipulation of the questions in the Index of Empathy, to include people with whom participants have a positive relationship, will investigate the possibility that empathy deficits can be moderated in adolescents with behaviour problems.

2. Sample of participants	25 male adolescents with behaviour difficulties 25 male adolescents without behaviour difficulties
3. Site/s location	Grafham Grange School, Guildford, Surrey Arrow Vale Community High School, Matchborough West, Redditch

*Tick / Cross. *Where answered 'NO', please give reasons on separate page.*	**Yes**	**No***
4. Scientific background, design, method and conduct of the study. a) Have you given a justification for the research?	√	
b) Have you commented on the appropriateness of the design, the perceived benefits, risks and inconveniences to participants?	√	
5. Recruitment of participants. Have you provided a comprehensive account of the characteristics of the population including the process for obtaining access as well as the inclusion and exclusion criteria?	√	
6. Care and protection of research participants and researcher. Have you given an account of any interventions, situations and risks which have the potential to cause harm to the participants and researchers?	√	
7. Access, storage, security and protection of participants' confidentiality. Have you identified who will have access to the data and what measures have been taken to ensure confidentiality and compliance with the Data Protection Act?	√	
8. Informed Consent. Have you given a full description of the process for requesting and obtaining informed consent?	√	
9. Community considerations. Have you considered how this study will benefit the participants or the community from which they have been drawn?	√	
10. Participant information Sheet and consent form. Are these attached?	√	

11. Source of External Funding if any

Signature of student / staff Amy Woolston.	Address 8 Church Court, Church Road, Redditch, Worcs, B96 6DJ	Date 14/7/06.
Signature of Supervisor	Print Name Eve Knight Internal Address JS425	Date 6/7/06
Signature of Chair R. K. Curran	☐ Approved. ☐ Approved with the conditions below:	Date 26/7/06
Conditions / Comments: Permission must be obtained from the schools in writing.		

Please complete in full and return to: **Research Manager, CU Ethics Committee, Whitefriars 124, Coventry University.**

This form should be accompanied by the full research study proposal, or the COREC form if applicable. Further help & information can be found on W / HLS / Student / Ethics or call Lesley Watts on 024 7679 5945, or e-mail l.watts@coventry.ac.uk.

COVENTRY UNIVERSITY ETHICS COMMITTEE (FORM 4)

PEER REVIEW FORM

1. Reference No. Amy Woolston amy.woolston@nhs.net PG55/06
2. Title of study. Investigation into empathy in children with behaviour difficulties.
3. Scientific background, design, method and conduct of the study. A suitable background is provided with reference to relevant literature. There is sufficient evidence here concerning the role of empathy on behaviour, especially in relation to adolescents and young children although the key aspect of the relationship between the observer and the target could be enhanced. Design, hypotheses, participants and measure used are appropriate for study. Student should consider the validity of adapted questionnaires. Student is aware of the potential issue of attention if participants are asked to complete 4 scales and an interview and should also provide an alternative to procedure if this is found to be the case in the pilot study. Conduct of the study is clearly outlined and suitable.
4. Recruitment of participants. Participants with behaviour difficulties will be recruited from Surrey and age matched controls from the Worcestershire area. Care is taken to ensure that participants with behaviour difficulties do not also have other confounding learning disabilities. Appropriate exclusion criteria are included for age matched controls.
5. Care of researcher and participants and protection of research participants' confidentiality. Participants are provided with an information and consent sheet. Parental and school consent is also sought. Confidentiality and anonymity is discussed in ethical section.
6. Informed consent. Informed consent sheets are provided for participant, parent and school.
7. Community considerations: Potential benefits for other children with behaviour difficulties or those schools who work with them.
8. Information sheet. Included and appropriate
9. Consent form. Included and appropriate
10. Comments on the ethical aspects of the proposal. This study has considered the ethical considerations effectively and provided suitable explanations for the inclusion of each measure. The student MUST ensure that the school approves this research before contacting parents or participants.
11.Recommendation Approval with no amendments. ☐ Approval subject to specified conditions. X MUST WAIT UNTIL APPROVAL LETTER FROM SCHOOLS HAS BEEN RECEIVED. Reject. ☐
Completed by: Kate Russell / **Date** 26.7.06

Please return this form electronically to r.morgan@coventry.ac.uk

G.G.S.

Grafham Grange School

CHARTER STANDARD SCHOOLS

Grafham, Nr Bramley, Guildford, Surrey, GU5 0LH

Headteacher: Richard Norman, B.A. Cert. Ed.

Tel: 01483 892214 **Fax: 01483 894297**

Email: schooloffice@grafham-grange.co.uk **Website:** www.grafham-grange.co.uk

25 July 2006

To whom it may concern:

I confirm that Amy Woolston (Trainee Clinical Psychologist) has permission to carry out interviews with students as part of her Clin. Psy. D. research project at Grafham Grange School.

Yours sincerely

Richard Norman
Headteacher
Grafham Grange School

Grafham Grange School is part of Grafham Grange Special Educational Trust Ltd.
Registered Charity No. 1039938 Company No 2919225
Registered Office: The Company Office, Grafham Grange, Nr. Bramley, Guildford, Surrey, GU5 0LH

Date: Mon, 02 Oct 2006 20:33:13 +0100

From: "Roger Satterthwaite" <rsatter@arrowvale.worcs.sch.uk> | | Show headers

To:
<amy.woolston@nhs.net>

Arrowvale Community High School
Green Sward Lane
Matchborough
Redditch
B98OEN
Tel 01527526800 Fax 01527 514255 Headteacher Mr P.Woodman

02-10-06

Ref Amy Woolston

To Whom It May Concern

This e mail is to state that following Amy's provision of information of how she wished to carry out a research project which would involve interviewing boys who attend our school, I have been authorised by Mr Woodman (Headteacher) to approve the project. Amy will be allowed to interview students at the school under the conditions agreed by myself and Amy. She will be under my supervision during the time she is working within the school. Thhis can be confirmed in writing on headed school notepaper if required.

Yours faithfully

Roger Satterthwaite
Assistant Headteacher (Head of Students)

Coventry University
Priory Street, Coventry CV1 5FB
Telephone 024 7688 8328
Fax 024 7688 8702

Programme Director
Doctorate Course in Clinical Psychology
Professor Delia Cushway
BA (Hons) MSc PhD AFBPS CPsychol (Clin Foren)

Appendix 7

THE UNIVERSITY OF WARWICK

Coventry University

Clinical Psychology Research Project

Dear Parents/Guardians

Your son's school has agreed to take part in a research project that is looking at how teenage boys with behaviour difficulties empathise with other people. Please find enclosed an information sheet which gives details on the research project and a consent form.

If you are happy for your son to take part in the research project, I would be grateful if you could sign the consent form and return it in the pre-paid envelope provided.

Thank you for taking the time to read the information.

Yours sincerely

Amy Woolston
Trainee Clinical Psychologist
Universities of Coventry & Warwick

Enc.

Dean of Faculty of Health and Life Sciences
Dr Linda Merriman Mphil PhD DpodM CertEd Coventry University Priory Street Coventry CV1 5FB Tel 024 7679 5805

Chair of Department of Psychology
Professor Koen Lamberts BA BSc MSc PhD University of Warwick Coventry CV4 7AL Tel 024 7652 3096

Coventry University
Priory Street, Coventry CV1 5FB
Telephone 024 7688 8328
Fax 024 7688 8702

Programme Director
Doctorate Course in Clinical Psychology
Professor Delia Cushway
BA (Hons) MSc PhD AFBPS CPsychol (Clin Foren)

THE UNIVERSITY OF WARWICK

Coventry University

Clinical Psychology Research Project

Dear Parents/Guardians

Your son's school has agreed to take part in a research project that is looking at how teenage boys with behaviour difficulties empathise with other people. Students at [redacted] school have been asked to take part as the group without behaviour difficulties. Please find enclosed an information sheet which gives details on the research project and a consent form.

If you are happy for your son to take part in the research project, I would be grateful if you could sign the consent form and return it to Mr [redacted] at [redacted] School.

Thank you for taking the time to read the information.

Yours sincerely

Amy Woolston
Trainee Clinical Psychologist
Universities of Coventry & Warwick

Enc.

Dean of Faculty of Health and Life Sciences
Dr Linda Merriman Mphil PhD DpodM CertEd Coventry University Priory Street Coventry CV1 5FB Tel 024 7679 5805

Chair of Department of Psychology
Professor Koen Lamberts BA BSc MSc PhD University of Warwick Coventry CV4 7AL Tel 024 7652 3096

An investigation into empathy in boys with behaviour difficulties

My name is Amy Woolston, I am a trainee Clinical Psychologist. As part of my training I have to complete a piece of research. Your child is invited to take part in this research study. This leaflet explains why the research is being done and what would be involved if you give permission for your child to take part. Please feel free to ask me if there is anything that is not clear or if you would like more information.

What is the purpose of the study
We are interested in young people with behaviour problems and how they empathise with other people. We will be comparing boys with behaviour difficulties to boys without behaviour difficulties.

Why has my child been chosen?
Two groups of boys are needed for the purpose of this study – those with behaviour difficulties and those without behaviour difficulties. Students at your son's school have been asked to take part as it is a school for boys with emotional and behavioural difficulties.

Does my child have to take part?
It is up to you and your child to decide whether they take part – taking part is entirely voluntary. If you do decide to allow your child to take part, we ask you to sign and return the consent form enclosed. If you do allow your child to take part you are free to withdraw them from the study at any time without giving a reason.

What would my child have to do if he decides to take part?
A quiet room will be found within your child's school where the session can take place. In order to keep all information confidential only your child and the researcher will be present in the room. The researcher will ask your child about which people in their life they have a good relationship with. They will be asked to complete 3 questionnaires about empathy and to complete an assessment which gives a measure of IQ (this is so that we know empathy is not being affected by someone's intelligence).

Are there any risks or disadvantages to taking part?
We do not expect that there are any risks or disadvantages to taking part. The procedure is not likely to cause your son any distress, but we will give them the name of a member of staff within the school who will be able to manage any difficulties should they arise. Unfortunately, we are not able to offer your child personal counselling.

What are the benefits to taking part?
We are not able to offer any incentive to take part in the research. By allowing your child to participate, we may be able to better understand how boys with behaviour difficulties are different from boys without behaviour difficulties in terms of empathy. This can help towards developing better ways of working with boys with behaviour difficulties and treating these problems.

The results of the study will be made available to you if you wish to see them.

Confidentiality
All information which is collected about your child during the course of the research will be kept strictly confidential and kept under the supervision of the researcher. No individually identifiable material will be published.

What will happen to the results of the research?
The results of the research will be written up as a thesis which will be completed in May

2007. It is likely that the thesis will be published in a journal and participants will be informed of how they can get a copy of the research if they wish.

What if something goes wrong?
If you wish to complain, or have any concerns about any aspect of the way you have been approached or treated during the course of this study the university complaints procedure is available to you.

Who has reviewed this study?
This study has been reviewed and approved by the Coventry University ethics committee.

Who is organising and funding the study?
This study is sponsored by the Clinical Psychology Training Programme based at Coventry and Warwick Universities. If you have any queries about the study, please contact;

Amy Woolston
Trainee Clinical Psychologist
Clinical Psychology Doctorate
School of Health & Social Sciences
Coventry University
Priory Street, Coventry
Tel: 02476 888328

Thank you for taking the time to read this information

Universities of Coventry & Warwick

Clinical Psychology research project

Empathy and behaviour difficulties

Information for parents of participants

Appendix 9

An investigation into empathy in boys with behaviour difficulties

My name is Amy Woolston, I am a trainee Clinical Psychologist. As part of my training I have to complete a piece of research. Your child is invited to take part in this research study. This leaflet explains why the research is being done and what would be involved if you give permission for your child to take part. Please feel free to ask me if there is anything that is not clear or if you would like more information.

What is the purpose of the study
We are interested in young people with behaviour problems and how they empathise with other people. We will be comparing boys with behaviour difficulties to boys without behaviour difficulties.

Why has my child been chosen?
Two groups of boys are needed for the purpose of this study – those with behaviour difficulties and those without behaviour difficulties. Your son has been asked to take part as a student without behaviour difficulties.

Does my child have to take part?
It is up to you and your child to decide whether they take part – taking part is entirely voluntary. If you do decide to allow your child to take part, we ask you to sign and return the consent form enclosed. If you do allow your child to take part you are free to withdraw them from the study at any time without giving a reason.

What would my child have to do if he decides to take part?
A quiet room will be found within your child's school where the session can take place. In order to keep all information confidential only your child and the researcher will be present in the room. The researcher will ask your child about which people in their life they have a good relationship with. They will be asked to complete 3 questionnaires about empathy and to complete an assessment which gives a measure of IQ (this is so that we know empathy is not being affected by someone's intelligence).

Are there any risks or disadvantages to taking part?
We do not expect that there are any risks or disadvantages to taking part. The procedure is not likely to cause your son any distress, but we will give them the name of a member of staff within the school who will be able to manage any difficulties should they arise. Unfortunately, we are not able to offer your child personal counselling.

What are the benefits to taking part?
We are not able to offer any incentive to take part in the research. By allowing your child to participate, we may be able to better understand how boys with behaviour difficulties are different from boys without behaviour difficulties in terms of empathy. This can help towards developing better ways of working with boys with behaviour difficulties and treating these problems.

The results of the study will be made available to you if you wish to see them.

Confidentiality
All information which is collected about your child during the course of the research will be kept strictly confidential and kept under the supervision of the researcher. No individually identifiable material will be published.

What will happen to the results of the research?
The results of the research will be written up as a thesis which will be completed in May

2007. It is likely that the thesis will be published in a journal and participants will be informed of how they can get a copy of the research if they wish.

What if something goes wrong?
If you wish to complain, or have any concerns about any aspect of the way you have been approached or treated during the course of this study the university complaints procedure is available to you.

Who has reviewed this study?
This study has been reviewed and approved by the Coventry University ethics committee.

Who is organising and funding the study?
This study is sponsored by the Clinical Psychology Training Programme based at Coventry and Warwick Universities. If you have any queries about the study, please contact;

Amy Woolston
Trainee Clinical Psychologist
Clinical Psychology Doctorate
School of Health & Social Sciences
Coventry University
Priory Street, Coventry
Tel: 02476 888328

Thank you for taking the time to read this information

Universities of Coventry & Warwick

Clinical Psychology research project

Empathy and behaviour difficulties

Information for parents of participants

Appendix 10

An investigation into empathy in boys with behaviour difficulties

- **Who am I?**

My name is Amy Woolston, I am a trainee Clinical Psychologist. As part of my training I have to complete a piece of research. I'd like to invite you to take part.

- **What is the purpose of this research?**

I am interested in young people with behaviour problems and how they empathise with other people.

- **Why have I been chosen?**

I need to interview two groups of teenage boys – those with behaviour difficulties and those without behaviour difficulties. Students at your school have been asked to take part as it is a school for boys with behavioural difficulties.

- **What is empathy?**

Empathy is how we understand what another person might be feeling. Some people are able to do this quite easily, other people find it harder.

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

It is up to you and your parents or guardian to decide whether you would like to take part - taking part is entirely voluntary. If you do decide to take part I will ask you to sign a consent form when you meet with me. However, you can change your mind at any time without giving a reason.

- **What will happen to me if I decide to take part?**

You would spend about 45 minutes with the researcher in a quiet room at your school. So that information is kept confidential, only you and the researcher would be present. You will be asked a bit about people in your life you have a good relationship with; you will complete some questionnaires about empathy, and a short assessment that gives a measure of IQ (this is so we know that empathy is not being affected by intelligence).

Are there any risks or disadvantages to taking part?

Some of the questions will ask you about people whom you get on with well or have a good relationship with. We don't think the research will cause you any distress, but we will give you the name of a person in your school who you can talk to if you do become distressed. Unfortunately we are not able to offer you individual counselling.

- **Are there any benefits to taking part?**

We are not able to offer you a reward for taking part – but you will get to miss a lesson! If you do take part we may be able to learn more about how boys with behaviour difficulties empathise with other people, this might help to develop better ways of treating these problems.

- **Will my taking part be kept confidential?**

All information that is collected about you will be kept strictly confidential. I will not use your name when I write about the research so no-one will know what you have said.

- **What happens to the results of the research?**

I will be writing a report about the information that people give me which will be completed in May 2007. The research may get published in a psychology journal for libraries and universities – I will tell you how you can get a copy of it if you would like to.

- **What if something goes wrong?**

If you wish to complain about any part of the research you can tell someone at your parents or someone at your school. Also, the university complaints procedure is open to you.

- **Who is organising and funding the research?**

This research is being carried out as part of a Clinical Psychology doctorate. It is organised and funded by the University of Coventry.

- **Who has said this research is OK to carry out?**

The research project has been reviewed and approved by the Coventry University ethics committee.

- **What do I do next if I want to take part?**

If you want to take part, your parents need to sign a consent form and send it back to the school. You can tell David Jackson that you would like to take part. I will arrange a time to meet with you when I come to your school in the autumn.

For further information contact;

Amy Woolston
Trainee Clinical Psychologist
School of Health & Social Sciences
Coventry University
Priory Street
Coventry

Tel: 02476 888328

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Universities of Coventry & Warwick

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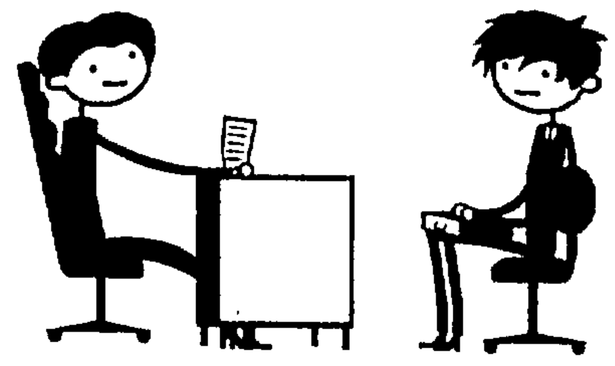

Information for participants

Appendix 11

An investigation into empathy in boys with behaviour difficulties

- **Who am I?**

My name is Amy Woolston, I am a trainee Clinical Psychologist. As part of my training I have to complete a piece of research. I'd like to invite you to take part.

- **What is the purpose of this research?**

I am interested in young people with behaviour problems and how they empathise with other people.

- **Why have I been chosen?**

I need to interview two groups of teenage boys – those with behaviour difficulties and those without behaviour difficulties. Students at your school have been asked to take part as boys without behaviour difficulties

- **What is empathy?**

Empathy is how we understand what another person might be feeling. Some people are able to do this quite easily, other people find it harder.

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

It is up to you and your parents or guardian to decide whether you would like to take part - taking part is entirely voluntary. If you do decide to take part I will ask you to sign a consent form when you meet with me. However, you can change your mind at any time without giving a reason.

- **What will happen to me if I decide to take part?**

You would spend about 45 minutes with the researcher in a quiet room at your school. So that information is kept confidential, only you and the researcher would be present. You will be asked a bit about people in your life you have a good relationship with; you will complete some questionnaires about empathy, and a short assessment that gives a measure of IQ (this is so we know that empathy is not being affected by intelligence).

Are there any risks or disadvantages to taking part?

Some of the questions will ask you about people whom you get on with well or have a good relationship with. We don't think the research will cause you any distress, but we will give you the name of a person in your school who you can talk to if you do become distressed. Unfortunately we are not able to offer you individual counselling.

- **Are there any benefits to taking part?**

We are not able to offer you a reward for taking part – but you will get to miss a lesson! If you do take part we may be able to learn more about how boys with behaviour difficulties empathise with other people, this might help to develop better ways of treating these problems.

- **Will my taking part be kept confidential?**

All information that is collected about you will be kept strictly confidential. I will not use your name when I write about the research so no-one will know what you have said.

- **What happens to the results of the research?**

I will be writing a report about the information that people give me which will be completed in May 2007. The research may get published in a psychology journal for libraries and universities – I will tell you how you can get a copy of it if you would like to.

- **What if something goes wrong?**

If you wish to complain about any part of the research you can tell someone at

your parents or someone at your school. Also, the university complaints procedure is open to you.

- **Who is organising and funding the research?**

This research is being carried out as part of a Clinical Psychology doctorate. It is organised and funded by the University of Coventry.

- **Who has said this research is OK to carry out?**

The research project has been reviewed and approved by the Coventry University ethics committee.

- **What do I do next if I want to take part?**

If you want to take part, your parents need to sign a consent form and send it back to the school. You can tell Mr Satterthwaite that you would like to take part. I will arrange a time to meet with you when I come to your school in the autumn.

For further information contact;

Amy Woolston
Trainee Clinical Psychologist
School of Health & Social Sciences
Coventry University
Priory Street
Coventry

Tel: 02476 888328

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Universities of Coventry & Warwick

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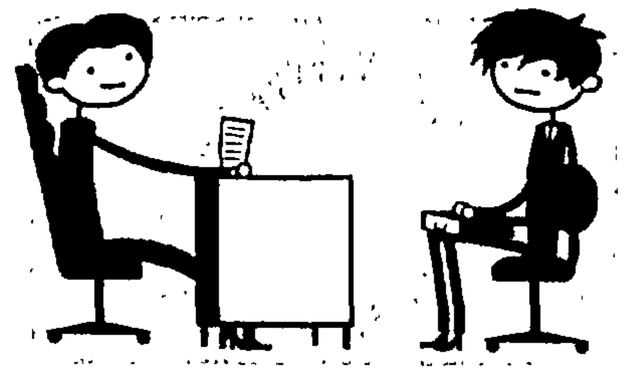

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Telephone 024 7688 8328
Fax 024 7688 8702

Programme Director
Doctorate Course in Clinical Psychology
Professor Delia Cushway
BA (Hons) MSc PhD AFBPS CPsychol (Clin Foren)

Appendix 13

THE UNIVERSITY OF WARWICK

Coventry University

Consent Form

Name of researcher	Amy Woolston
Name of research project	Investigation into empathy in children with behaviour difficulties
Aim of research	To look at what factors influence young people, with behaviour problems, ability to empathise with others.

Details of the research process

- No names will be used in this study.
- All information from the interviews will be kept confidential by the researcher and will remain anonymous.
- After completion of the study all information will be destroyed.
- If you want to withdraw or vary your consent at any time, the information will not be used and will be destroyed as soon as possible.

Please tick box

1. I confirm that I have read and understood the information sheet for the above study. ☐
2. I understand that participation is voluntary and I am free to withdraw my child at any time without giving a reason. ☐
3. I agree for my child to take part in the study. ☐

Name of participant's parent	Signature	Date
Name of researcher	Signature	Date

Code no. ☐

Parent version

Dean of Faculty of Health and Life Sciences
Dr Linda Merriman Mphil PhD DpodM CertEd Coventry University Priory Street Coventry CV1 5FB Tel 024 7679 5805

Chair of Department of Psychology
Professor Koen Lamberts BA BSc MSc PhD University of Warwick Coventry CV4 7AL Tel 024 7652 3096

Coventry University
Priory Street, Coventry CV1 5FB
Telephone 024 7688 8328
Fax 024 7688 8702

Programme Director
Doctorate Course in Clinical Psychology
Professor Delia Cushway
BA (Hons) MSc PhD AFBPS CPsychol (Clin Foren)

Appendix 14

THE UNIVERSITY OF WARWICK

Coventry University

Consent Form

Name of researcher	Amy Woolston
Name of research project	Investigation into empathy in children with behaviour difficulties
Aim of research	To look at what factors influence the ability of young people, with behaviour problems, to empathise with others.

Details of research process

- No names will be used in this study
- All information will be kept confidential by the researcher
- All information will be destroyed once the study is complete
- You can change your mind about taking part in the study at any time. If you change your mind, all information will be destroyed and will not be used in the study

Please tick box

1. I have read and understood the information sheet for this study ☐
2. I know that I do not have to take part in the research and that I can leave at any time. ☐
3. I agree to take part in the study ☐

Name of participant	Signature	Date

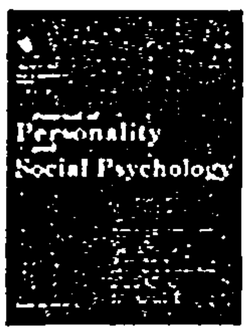
Name of researcher	Signature	Date

Code no. ☐

Participant version

Dean of Faculty of Health and Life Sciences
Dr Linda Merriman Mphil PhD DpodM CertEd Coventry University Priory Street Coventry CV1 5FB Tel 024.7679 5805

Chair of Department of Psychology
Professor Koen Lamberts BA BSc MSc PhD University of Warwick Coventry CV4 7AL Tel 024 7652 3096



Journal of Personality and Social Psychology

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D'Souza, D. (1991). *Illiberal education: The politics of race and sex on campus*. New York: Free Press.

Hinkle, S., & Brown, R. (1990). Intergroup comparisons and social identity. Some links and lacunae. In D. Abrams & M. A. Hogg (Eds.), *Social identity theory: Constructive and critical advances* (pp. 48–70). London: Harvester-Wheatsheaf.

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In addition to the relevant guidelines in the APA *Publication Manual,* pay particular attention to the use of appropriate language when referring to people with disabilities. Do not use phrases such as *the disabled,* which place emphasis on the disability. Rather, write *a person with a disability.* Do not refer to a person as a condition. For example, say *a person with epilepsy,* not *an epileptic.* Do not use terms that carry negative or emotionally loaded connotations; replace them with objective descriptors. For example, do not say a person is *afflicted with cancer* or is a *victim of cancer.* Instead write *a person with cancer.* Finally, avoid pejorative metaphors, such as a *double-blind study.* Instead write *the treatment conditions were hidden from both the researcher and participants.* The term *subject* should not be used when referring to a sample of research participants or to an individual participant. Usually a more specific term should be used (e.g., *students*) or, if a more general term is desired, *participants* should be used.

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