Causal Attributions in Children with Attention Deficit Hyperactivity Disorder

by

Yolanda Juanola-Borrat

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Chapter 1. Causal attributions in children with attention deficit hyperactivity disorder: A review. *Clinical Psychology Review*

Chapter 2. Children's beliefs and perceptions of ADHD. *Clinical Child Psychology and Psychiatry*

Chapter 3. Causal attributions, self-esteem and mood in children with ADHD. *Clinical Child Psychology and Psychiatry*

Summary

ADHD is a complex and challenging concept. Its core symptoms are poor ability to sustain attention, impulsivity, and overactivity. Although theories of ADHD are still a subject of debate, some of the leading models have proposed that cognitive factors such as causal attributions may play an important role in the disorder.

A review of studies on causal attributions and ADHD revealed that the methodology employed to assess attributions may result in significant differences. Despite this, findings suggested that both explanations and treatments for ADHD may carry a variety of subtle messages which clinicians should take into account in their practice.

The second chapter explored the perceptions and beliefs of children with ADHD of their condition. Participants tended to attribute their difficulties to ADHD, which they believed was the result of some physical/biological impairment. In line with this belief, the main solution identified was medication. Furthermore, ADHD was reported to have a damaging impact on participant's interpersonal relationships.

The third paper examined the relation between mood, self-esteem and causal attributions of children with ADHD for their difficulties. Findings revealed that internal attributions were associated with higher depressive symptomatology and lower self-concept. Results from both empirical papers strongly suggest that attributions should inform the assessment and treatment of children with ADHD.

Finally, dilemmas and doubts which emerged during my research journey are reflected upon in the last chapter.

CHAPTER 1

Causal attributions in children with attention deficit hyperactivity disorder: A review

ABSTRACT

The purpose of the present manuscript is to provide a brief overview of ADHD, to present some suggestions as to why the link between this disorder and attribution theory might be important, to review studies which measure attributions of children with ADHD and to provide recommendations for future work. One of the concerns most often expressed in the literature is the possibility that drug treatments may lead children to attribute their behaviour to external factors and view their own efforts or abilities as playing a relative minor role. Open-ended comments of these children suggest that, in fact, they do attribute outcomes to pills rather than to skills. However, our review of 17 studies indicates that these attributions are not confirmed when structured formats such as forced-choice items are used. Further research should attempt to clarify the reason for this, although it appears that it might be partly due to flawed assessment procedures. As a result, researchers are challenged to gather information on children's spontaneous attributions in real-life settings.

1. INTRODUCTION

1.1. Definition of ADHD

Hyperactivity is a potentially confusing concept with different terminology and history in Europe and the U.S.A. Traditionally regarded as relatively rare in Europe, hyperactivity disorders are conceptualised as common in North America (Hill & Cameron, 1999). The term is ambiguous even among mental health professionals. To a large extent this may be due to the significant differences between the two classification systems currently used. Traditionally, psychiatrists in the UK have preferred to use the International Classification of Diseases (ICD-10; World Health Organisation, 1992) although there is an increasing tendency to use the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994). As a result, the American diagnostic label, i.e. Attention Deficit/Hyperactivity Disorder (ADHD) is more commonly used than Hyperkinetic Disorder, as described by the ICD-10. Although criteria in both classification systems bear many similarities there are also a small number of significant differences, which result in the APA diagnosis being more inclusive than the WHO version, and therefore, leading to its being associated with much higher prevalence rates (BPS, 2000). The rest of this review will use the term ADHD since this manuscript aims to review published studies, the majority of which focus on participants who fulfil DSM-IV criteria.

The core symptoms of ADHD are poor ability to sustain attention, impulsivity, and overactivity. Children with ADHD typically have difficulty thinking before they act, their limited capacity for self-control is quickly overwhelmed by their immediate need to act. In addition, these children have difficulty remaining on task and

focusing their attention, and tend to be excessively restless, overactive, and easily aroused emotionally. Due to their lack of inhibition, they require immediate, frequent, predictable, and meaningful rewards which makes it very difficult for them to work towards a long-term goal. Furthermore, children with ADHD have difficulties controlling their emotions which often leads them into trouble and may give them the message that emotions are not valued. Finally, they may also be prone to develop an external locus of control, to project blame onto others, and to be unwilling to recognise and accept the role they play in their own behaviour (Goldstein, 1999).

1.2. Assessment

ADHD tends to be measured by behavioural symptoms since there is no current acceptable biological measure of the disorder (Williams, Wright & Partridge, 1999). This makes diagnosis complicated and so assessment should be as thorough as possible. One way to guarantee this is for the assessment to be multimodal and involve professionals from a range of disciplines. Furthermore, it should reflect the multi-faceted nature of ADHD taking into account the biological, social, emotional and psychological features of the phenomenon (BPS, 2000).

1.3. Treatment

Many authors agree on a multimodal approach as the best treatment of ADHD (Garber & Garber; 1998; Fine, 1997; Overmeyer & Taylor, 1999). This includes a combination of medical, behavioural, and environmental techniques. Of these, pharmacology and behaviour therapy seem to be the most used forms of treatment. Although several studies had demonstrated their short-term efficacy, no longer-term

investigations had compared these two treatments and their combinations. In order to fill this gap, and as a response to public concerns regarding stimulant treatment, a Multimodal Treatment Study of Children with ADHD was carried out a few years ago in America (The MTA Cooperative Group, 1999). Their conclusion was that a carefully executed regime of medication management is superior to alternative treatments and nearly as good as combined treatment. However, in the UK, although the British Psychological Society (BPS, 2000) believes that medication is sometimes a necessary intervention for ADHD, it also claims that it is rarely sufficient alone. Consequently, they recommend a multi-modal intervention programme, which should usually include educational, behavioural and other psychological approaches. On the same lines, the National Institute for Clinical Excellence recommends that stimulant medication should be used as part of a comprehensive treatment programme which should involve advice and support to parents and teachers (NICE, 2000).

1.4. Psychological theories of ADHD

Despite the abundant and continuously growing literature about the disorder, theories of ADHD are still a subject of debate. In recent years a large number of theoretical models have been postulated that attempt to assist in an understanding of the key deficits and mechanisms involved in this chronic childhood disorder (see Quay & Hogan, 1999). Some of these models of ADHD have proposed that cognitive–motivational factors play central roles in the disorder (e.g. Barkley, 1997) and describe insufficient effort and associated lack of persistence with tasks as major problems associated with ADHD. Hence, it is hardly surprising that part of the research in recent years has centred on variables which are believed to be related to

cognitive-motivational factors such as task persistence, self-efficacy, pretask expectancies and causal attributions, which are the focus of this review.

2. CAUSAL ATTRIBUTIONS AND ADHD

Attribution theory is based on the assumption that individuals search to understand the causes of events and make causal attributions about both their own behaviours and behavioural outcomes as well as for the behaviours of other individuals (Försterling, 2001). These resulting causal attributions are linked to affect, motivation, cognition, and expectancies for the future (Weiner, 1986). Therefore, attributions are important predictors of future functioning.

Abramson, Seligman, and Teasdale (1978) introduced their widely cited reformulated attributional model of learned helplessness. This theory proposes that individuals who attribute negative life events to internal, stable, and global causes and positive life events to external, unstable, and specific causes, will be more vulnerable to helplessness and depression than those who make the opposite attributions. In contrast to this depressogenic pattern of attributions, those people who attribute success more so than failure to internal factors such as their ability are considered to have a healthy attributional style that has been labelled as self-enhancing or positive illusory (Taylor & Brown, 1988; Weary, Stanley, & Harvey, 1989). Given that children with ADHD experience repeated failure in several domains, it seems important to explore the role of their attributions following success and failure in order to ascertain whether they are at risk for the development of a helpless response style.

Furthermore, since causal attributions tell us what a person thinks about events and their causes, uncovering children's causal attributions of ADHD could be very useful in understanding their behaviour and working towards changing it. Despite this, there is a remarkable lack of research in this area. One reason for this might be found in the argument by Wright, Partridge, & Williams (2000) that the 'content' of ADHD as a diagnostic or therapeutic challenge tend to overlook the relevance of the 'process', and hence of the attributions made, i.e. "the way in which professionals, parents and children perceive and interpret the behaviour, information and evidence available to them, and how this drives and influences diagnosis or management" (p.627). Wright et al. suggest that a role of clinical care should be the management of these attributions to encourage healthy development trajectories for children.

The present manuscript aims to review studies which examine associations between children attributions and ADHD. Only peer-reviewed, English-language published research was included in this review. A computer search using PsychINFO was conducted using relevant keywords (i.e. ADHD, ADD, attention deficit hyperactivity disorder, attention deficit disorder, and attribution/s). The term ADD (American Psychiatric Association, 1980) was included since ADHD was not introduced until 1989 and the search was conducted for the years 1985-2002. All studies which focused on and measured attributions of children with ADHD were included, excluding those which only measured attributional style. The search resulted in 17 articles. Table 1 describes these studies, which are subsequently discussed. It is worth noting that most of the identified studies were very comprehensive but for the purpose of this review only the attributional section was selected. The reader is encouraged to refer to the papers themselves for further information.

TABLE 1. Descriptive information for studies of attributions for behaviour in children with ADHD

Study	Sample	Conditions compared	Attributional event	Attribution	How were attributions assessed?	Main findings
1. Borden & Brown, 1989	N = 30 (25 boys), Ages 5.8-11.11 & Parents	• Cognitive training • Cognitive training and medication • Cognitive training and placebo	• Causes of and solutions to their problem • Word-unscrambling task	• Effort Other people Physical causes Luck-fate • Effort Ability Task difficulty Luck	• Forced-choice questions • Forced-choice questions • Open-ended questions. Responses were coded as effort, ability, difficulty, luck or fate, and combined or other attribution.	• Treatment group did not influence children attributions for problem causes and solutions. • No significant group differences emerged on measures of achievement attributions.
2. Pelham, Murphy, Vannatta, Milich, & Licht, 1992	Study 1: N = 28 boys, Ages7.2-11.8	• Medication • Placebo	• Daily behaviour in a Summer Treatment Programme	• Effort Ability Pill Counsellors • Effort Pill Counsellors	• Likert scale ratings • Forced-choice questions	• Boys tended to attribute their improved performance to effort rather than to medication, particularly when medicated.
	Study 2: N = 38 boys, ages 7.3-13.9	• Medication • Placebo • No pill	• Daily behaviour in a Summer Treatment Programme	• Effort Ability Pill Counsellors • Effort Pill Counsellors Ability	• Likert scale ratings • Forced-choice questions	• The majority of attributions for success were to ability or effort. • Attributions for failure were to the pill or to counsellors. • A subset of ADHD boys tended to make internal attributions for failure and external attributions for success.
3. Ohan & Johnston, 1999	N = 43 (32 male), Ages 13.5-17.7 & Parents	• Medication • No medication	• The Attributions for Parent-Child Interactions Task (APCIT; Johnston, 1996): four hypothetical vignettes of compliance/non compliance with parental directives.	• Locus Control Stability Tablet/No tablet	• Likert scale ratings	• Behaviour was seen as more controllable when on medication. • Medication was not seen as responsible for good behaviour, but rather as helping to gain control over behaviour.

Study	Sample	Conditions compared	Attributional event	Attribution	How were attributions assessed?	Main findings
4. Johnston, Fine, Weiss, Weiss, Weiss & Freeman, 2000	N = 86 (75 boys), Ages 5.8-15.2 & Mothers	• Medication • No medication	• Hypothetical scenarios of compliant and noncompliant child behaviours.	• Locus Control Stability • Task difficulty Effort Ability Tablet/No tablet	• Bipolar scales • Forced-choice questions	• Children rated their behaviour as more controllable in the medicated condition. • When medicated, they attributed compliance to taking a pill and non-compliance to ability, effort and task. This was reverse for the not medicated condition.
5. Johnston & Leung, 2001	N = 74 boys, ages 6-13 & Parents	• No treatment • Medication • Behavioural treatment and medication • Behavioural treatment	• Videotape scenes of boys engaging in different types of behaviour.	• Locus Control Stability Intentionality	• Bipolar scales	• Behavioural treatments produced increased control over ADHD symptoms and non-compliance. • Medication treatments produced greater control and intent attributions for noncompliant behaviour.
6. Pelham, Hoza, Pillow, Gnagy, Kipp et al., 2002	N = 136 boys, ages 7.6-12.7	• Placebo/ told placebo • Placebo/told drug • Drug/ told placebo • Drug/ told drug	• Perceived success or failure in four different domains within both the setting of a Summer Treatment Programme and the boys' regular classrooms.	• Ability Task difficulty Effort Pill Fairness	• Likert scale ratings	• Boys attributed their success to their effort and ability and attributed failure to task difficulty and the pill, regardless of medication and expectancy.
7. Milich, Licht, Murphy, Pelham, 1989	N = 26 boys, Ages 7.1-11.8.	• Medication • Placebo	• Performance on a laboratory continuous performance test.	• Effort Ability Task difficulty Medication	• Forced-choice questions	• Boys chose medication as an explanation for their successes significantly less often than either effort or ability.
8. Whalen, Henker, Hinshaw, Heller, & Huber-Dressler, 1991	N = 15 boys, ages 7-12.75	• Medication • Placebo	• Two novel computer games, the first paced to ensure failure and the second success.	• Effort Ability Task difficulty	• Forced-choice questions	• Following failure, participants receiving placebo attributed their performance to lack of effort more than did medicated boys, regardless of expectancy.

Study	Sample	Conditions compared	Attributional event	Attribution	How were attributions assessed?	Main findings
9. Milich, Carlson, Pelham & Licht, 1991	N = 21 boys, ages 7.10-12.1	• Medication • Placebo	• Solvable and insolvable puzzles	• Effort Ability Task difficulty Medication • As above	• Likert scale ratings • Forced-choice questions	• On medication participants were more likely to make external attributions for failure and internal attributions for success.
10. Carlson, Pelham, Milich, & Hoza, 1993	N = 26 boys, ages 7.08-12.75	• No pill • Placebo • Medication	• Solvable and insolvable puzzles	• Effort Ability Task difficulty Medication • As above	• Likert scale ratings • Forced-choice questions	• All participants tended to attribute success to effort and failure to task difficulty, hence not adopting a helpless response style, regardless of medical status.
11. Milich, 1994	REVIEW ARTICLE	N/A	N/A	N/A	N/A	• Boys with ADHD exhibit characteristics of helpless children. However, contrary to expectation, boys with ADHD making external attributions for failure actually exhibited a more adaptive response style.
12. Pelham, Hoza, Kipp, Gnagy, & Trane, 1997	N = 60 boys, ages 8.08-12.58	• Placebo/ told placebo • Placebo/told drug • Drug/ told placebo • Drug/ told drug	• Solvable and insolvable puzzles	• Effort Ability Task difficulty Medication	• Likert scale ratings	• Children made internal attributions for success and external attributions for failure, regardless of medication or expectancy.
13. Hoza, Pelham, Waschbusch, Kipp, & Owens, 2001	N = 83 boys, ages 7.4 - 12.7	• ADHD boys • Control boys	• Solvable and insolvable puzzles	• Ability Task difficulty Effort Luck	• Likert scale ratings	• All children attributed failure to task difficulty and success to effort and ability. However, ADHD boys endorsed luck as a reason for success more strongly and lack of effort as a reason for failure less strongly than controls.
14. Hoza, Waschbusch, Pelham, Molina & Milich, 2000	N = 120 boys, ages 7.4-12.7	• ADHD boys • Control boys	• Dyadic, laboratory get-acquainted task.	• Ability Task difficulty Effort Luck	• Likert scale ratings	• Children in both groups attributed their success to internal reasons and failures to external ones. However, ADHD boys were more likely than controls to attribute success to external, uncontrollable factors.

Study	Sample	Conditions compared	Attributional event	Attribution	How were attributions assessed?	Main findings
15. Pelham, Waschbusch, Hoza, Gnagy & Pillow, 2001	N = 137 boys, ages 7.6-12.6	• Placebo/ told placebo • Placebo/told drug • Drug/ told placebo • Drug/ told drug	• Dyadic, laboratory get-acquainted task.	• Ability Task difficulty Effort Pill	• Likert scale ratings	• Boys attributed success to effort and ability and failure to task difficulty, and neither medication nor expectancy affected this pattern.
16. Hoza, Pelham, Milich, Pillow, & McBride, 1993	N = 27 boys, ages 8.5-13	• ADHD boys • Control boys	• The Peer Social Attributional Questionnaire (PSAQ: Hoza et al., 1990): vignettes of success and failure in peer social relationships • Children's Attributional Style Questionnaire (CASQ; Kaslow et al., 1978): measure of children's general attributional style.	• Luck Task difficulty Other's mood Own mood Effort Ability Personal qualities • Internal Stable Global	• Likert scale ratings • Forced-choice questions	• ADHD boys were more likely to take responsibility for social successes and less likely to take responsibility for social failures than the control boys.
17. Treuting & Hinshaw, 2001	Study 2: N = 27 boys, ages 9-12	• Medication • No medication	• Four hypothetical vignettes, two with positive outcomes and two with negative outcomes.	• Ability Effort Mood Luck Medication	• Open-ended causal attributions for the outcomes described. Responses were coded along several attributional dimensions.	• Boys tended to attribute positive outcomes to the use of medication and negative ones to the lack of it. Furthermore, medication-related attributions were associated with higher depression and lower self-esteem.

2.1. Causal attributions for behavioural outcomes

Methylphenidate (MPH), a drug better know by its brand name Ritalin, accounts for most of the stimulant treatment for attentional problems in the United States (Safer & Zito, 2000). Its prescription is increasing in the United Kingdom although it is estimated that it is used between 10 and 30 times less frequently than in the United States (Taylor, 1999). In spite of the efficacy of Ritalin in suppressing the symptomatology of ADHD, the use of powerful drugs to control children's behaviour has caused considerable apprehension (Wright, 1997), which has led to several studies attempting to evaluate the possible effect of medication on children with ADHD. However, attention has been paid for the most part to the possible physical or medical side effects of the psychostimulants rather than the potential psychological side effects (Ialongo, Lopez, Horn, Pascoe, & Greenberg, 1994), which only a few studies have attempted to address.

One of the concerns most often expressed is the possibility that drug treatments may lead children to attribute their behaviour to external factors (such as the medication) and view their own efforts or abilities as playing a relative minor role (Milich, Licht, Murphy & Pelham, 1989). Studies 1 to 6 in Table 1 have attempted to explore this link between medication effects and attribution for behaviour. The findings of these studies are discussed below.

Studies 3 and 4 in this section examined the influence of medication versus non medication on ADHD children's attributions for behaviour outcomes. In both studies children were presented with hypothetical scenarios of compliant and noncompliant child behaviours and were asked to make attributions for the cause of

the behaviours described. The two different groups of participants rated the behaviour, both positive and negative, as more controllable when they were on medication. In addition, adolescents in the Ohan & Johnston's (1999) study did not generally see medication as responsible for their good behaviour but reported that medication did help them to gain control over their behaviour. To this point, then, attributions associated with medication in these studies were generally reassuring since it did not appear that the use of stimulant medication contributed to a maladaptive attributional style. However, Johnston, Fine, Weiss, Weiss, Weiss & Freeman (2000) also found that participants' responses on the forced-choice measure were somewhat different than that on the attribution ratings. Specifically, medicated children attributed compliance more to taking a pill and non-compliance more to ability, effort and task. On the contrary, when not medicated, they chose more ability and task attributions for compliance, and more not taking a pill for non-compliance. Therefore, compliance was more likely when the child was medicated and non-compliance when the child was not taking medication.

On the other hand, studies 2 and 6 examined the effects of medication versus placebo on ADHD children's daily behaviour and their explanations for naturally occurring success and failure attributions in a summer day-treatment program. Pelham et al. (1992) found that across drug conditions (i.e. medication, placebo, and no-pill) boys attributed improved behaviour to own efforts or ability rather than to medication, whereas attributions for negative behaviour were to pill or to counsellors. Similar findings were reported by Pelham et al. (2002), not only in a summer treatment programme but also in the boys' regular classrooms. Thus, contrary to the concern that methylphenidate induces dysfunctional attributions (i.e. the pill), results

suggested that medicated boys adopted attributional styles that would generally be considered positive, since they blamed their failures on an external factor, their pill, whereas they took credit for their successes by making internal (effort or ability) attributions. In addition, Pelham et al. (2002) used a balanced-placebo design, a methodology that completely crosses medication condition (medication vs. placebo) with expectancy for medication (expect medication vs. expect placebo) to rule out the possibility that the pharmacological effects of MPH are only evident when participants think they are ingesting such drug. Their results demonstrated that boys showed the same pattern of attributions regardless of medication and expectancy.

Finally, the remaining two studies in this section (studies 1 & 5) examined the effects of medication versus other treatments on the attributions of children with ADHD for their behaviour. Participants in Borden and Brown (1989) were randomly assigned to one of 3 treatment groups, including cognitive training (CT) alone, or combined with either medication or placebo. Children's attributions for either the cause of or the solution to their problems did not show any significant differences as a result of their being in different treatment groups. Nevertheless, it is important to note that the majority of children made more effort than medication attributions. On the other hand, Johnston & Leung (2001) examined the effects of medication, behavioural treatment, combined treatments, and no-treatment condition on the attributions of participants for the behaviour of children with ADHD. Interestingly, boys saw ADHD and noncompliant behaviours as more controllable by the child when treatment involved a behavioural component. Consistent with previous results (Johnston et al., 2000; Ohan & Johnston, 1999), medication treatments produced greater control and intent attributions for noncompliant behaviours.

Taken together, findings do not seem to indicate a detrimental effect of medication on children's attributions. Both behavioural and medication treatment influenced children in a similar way and when attributions for success and failure were measured boys showed a healthy attributional pattern. Furthermore, participants viewed their behaviour as more controllable when they were on medication.

However, a few findings challenge the belief that medication has no harmful effects. First of all, in Johnston et al. (2000), medicated participants attributed compliance to medication and not to an internal cause as it would be expected from other studies (e.g. study 2 & 6). However, comparing the results of these investigations is difficult due to differences in the attributional event or in the way attributions were measured (see Table 1). Nevertheless, the different findings suggest that the methodology employed to measure the attributions may have a significant influence on the results.

In addition, children in Johnston and Leung (2001) appeared to believe that medication treatment provided them with a greater control over negative behaviours, which has been considered maladaptive and often associated with negative outcomes such as depression (Abramson, Seligman, & Teasdale, 1978; Taylor & Brown, 1988). However, it could also be argued that the boys' enhanced perceptions of control indicate that they view treatment as providing a means through which they can gain control and change their behaviour. Future research is needed to examine the links between treatment-induced changes in children's attributions and measures of adaptive functioning.

2.2. Causal attributions for achievement outcomes

Because a major component of successful performance in school involves learning new and challenging material, how ADHD children respond to difficult tasks may influence their ultimate success as learners. Consequently, if and how medication might affect children's performance on a cognitive task has been a popular area of research, which is reflected by the fact that seven of the seventeen studies reviewed are included in this section (study 7 to 13).

Studies 7, 8 and 9 assessed children's causal attributions after they performed a novel task both on medication and on placebo. Results from the first study (Milich, Licht, Murphy, and Pelham, 1989) indicated that participants were more likely to attribute their successes to their ability when they had taken medication. Along these lines, Whalen, Henker, Hinshaw, Heller, and Dressler (1991) found that following failure, participants receiving placebo attributed their performance to lack of effort more than did medicated boys. In accordance with these findings, Milich, Carlson, Pelham, and Licht (1991) found that compared to placebo, boys receiving medication were more likely to make external attributions for failure and internal attributions for success. Therefore, the pattern of responses in all three studies was consistent with an adaptive attributional style; no evidence was found to support the speculation that medication produces predominantly external, medication-related explanations for performance.

An important limitation of these studies was that boys always ingested a pill and therefore it was not possible to assess whether the findings were due to the medication itself or to the expectancy effects of taking a pill. To account for that,

Carlson, Pelham, Milich & Hoza (1993) replicated study 9 with the addition of a non-pill comparison group. They found that participants were more persistent and solved more puzzles when medicated than when receiving placebo. However, medication did not seem to influence the children's attributions; all participants, regardless of medication, tended to attribute success to effort and failure to task difficulty, hence not adopting a helpless response style. In addition, they found no differences between placebo and a "no pill" condition, thereby suggesting that any impact medication has on ADHD children's attributions must be associated with its active components, rather with the placebo effects associated with pill ingestion.

This brief account of findings suggests that children with ADHD sometimes exhibit several characteristics consistent with a helpless response style. However, if these children take medication they may move closer to what is considered a healthy and adaptive style of responding. Indeed, in a review of four studies (study 11), including both Milich et al. (1991) and Carlson et al. (1993), Milich (1994) concludes that children who receive stimulant medication adopt a more healthy attributional orientation, in addition to improved persistence and problem solving, and a decreased level of frustration.

In a more sophisticated study (study 12) using a balanced-placebo design, participants did not endorse the pill for either success or failure. Instead, and consistent with findings from other studies, they tended to attribute failure to task difficulty and success to effort and ability. This was the case regardless of medication or expectancy conditions. Therefore, once again medication did not appear to affect ADHD children's causal attributional patterns for success or failure.

More recently, Hoza, Pelham, Waschbusch, Kipp and Owens (2001; study 13) introduced a new dimension to the study of ADHD children's attributions for task performance. Unlike the studies described above, which only considered the effect of medication for success and failure, Hoza et al. (2001) also included comparisons with control children. They found that all children attributed their success more strongly to their own efforts, followed by their ability and task ease, and less strongly to luck. On the other hand, they all attributed failure to task difficulty, followed by ability, luck and effort. As discussed elsewhere in this review, this attributional pattern resembles the positive illusory bias described by Taylor and Brown (1988) and is consistent with the findings for children with ADHD in earlier studies. Despite the similarities, the study also revealed some differences. ADHD boys were more likely to attribute success, especially when it followed an initial failure, to luck than controls. In addition, they were more likely than controls to deny that their own effort was responsible for their failures. Therefore, on the whole ADHD children did tend to make more external attributions than control boys.

From all this it follows that even though the earlier studies suggested that children with ADHD showed a more adaptive attributional style when medicated, the study by Pelham, Hoza, Kipp, Gnagy, and Trane (1997) using a balanced-placebo design refutes this, since the boys' attributional patterns were the same regardless of medication or expectancy conditions. However, Pelham et al. (1997) argue that MPH does have an indirect effect on attributions. They deduce that since research findings indicate that MPH enhances the performance and behaviour of ADHD boys, this results in more experiences of success and therefore more frequent positive effort

attributions and less internal attributions for failure, which in turn may help boys to be less likely to adopt a helpless style of behaviour and social cognition.

Additionally, a difference seems to exist between the attributions of children with and without ADHD, the latter being more likely to make external attributions for both success and failure experiences.

2.3. Causal attributions for social outcomes

Children with ADHD may have problems succeeding in social situations and making friends; in fact it has been estimated that 50 per cent or more of children with ADHD display social skills problems (Munden & Arcelus, 1999). These difficulties often lead to the rejection of a child by other children which can have a devastating effect on the child's self-esteem and subsequent behaviour.

It has been suggested that children with ADHD may not respond to social situations in the same manner as control children do (Whalen & Henker, 1992). Given that one of the speculated differences may be their attributions to the outcomes of their social behaviour, study 14 (Hoza, Waschbusch, Pelham, Molina and Milich, 2000) examined the attributional responses to social success and failure of children with ADHD. To this end, they compared the attributions of children with ADHD and nonreferred boys for the outcome of two laboratory-manipulated social situations, one involving success with a peer and one involving failure. Participants rated four possible explanations for having succeeded or failed on the task: ability, task difficulty, effort, and luck.

Both ADHD and control children attributed their success most strongly to internal reasons (ability, effort) and failures most strongly to an external reason (task difficulty). However, their attributional patterns differed in that ADHD children endorsed luck for success and task difficulty for failure more strongly than controls.

The other study in this section (study 15) examined whether ADHD children's response to social success and social failure was influenced by medication administration. Pelham, Waschbusch, Hoza, Gnagy and Pillow (2001) used a social task in which success and failure were manipulated to evaluate the effects of medication on several variables, including the attributions of children with ADHD. They found that boys attributed success to internal reasons (effort and ability) and failure to external reasons (task difficulty), and neither actual medication nor medication expectancy affected this pattern.

In summary, both studies report that children with ADHD adopt a healthy attributional style. However, results from the first study (Hoza et al., 2000) suggest that boys with ADHD are more likely than controls to avoid taking responsibility for either success or failure, which the authors label a denial-of-responsibility attributional pattern. These findings are consistent with results from Hoza et al. (2001; see previous section).

2.4. Causal attributions and mental health

Poor peer relations is just one of the secondary characteristics associated with ADHD. Other features include aggression, academic underachievement, and perhaps low self-esteem and depressive symptoms as well (Barkley, 1998). However, little

attention has been paid to the potential importance of depressive symptoms and low self-esteem among children with ADHD and the studies addressing these issues have yielded contrasting results (Treuting & Hinshaw, 2001).

Studies 16 and 17 attempted to explore the linkage between depression, self-esteem and causal attributions. Hoza, Pelham, Milich, Pillow and McBride (1993) found that ADHD boys did not rate themselves significantly worse than controls on global self-worth or most other self-perception subscales. With regards to depression, their findings revealed that although children with ADHD scored significantly higher than control boys on the Children's Depression Inventory (CDI; Kovacs, 1992), this difference was no longer significant when items for internalizing symptomatology such as behavioural problems were eliminated. Therefore, their study indicated that ADHD boys were no more likely to be depressed than controls. Finally, using a hypothetical vignette methodology, children with ADHD tended to make internal attributions for positive social outcomes, but were less likely than controls to accept responsibility for negative social outcomes. The authors suggested that ADHD children might attribute their failures to the fact they have a medical problem for which they are not responsible.

When examining the relationship between global self-worth, attributions, and depressive affect two different patterns emerged. For the controls, and as predicted from the literature, boys who made adaptive attributions for positive outcomes had greater self-worth and less depressive affect, while those who made maladaptive attributions for negative outcomes had lower self-worth and greater depressive affect. Self-worth and depressive affect were negatively related. However, no relationship

was revealed between attributional style and depression for the ADHD boys. As for self-worth, a negative correlation was found between attributions for negative outcomes and self-worth, i.e. ADHD boys with higher self-worth tended to have less depressogenic attributions for negative outcomes. The authors suggest that ADHD boys' attributions might not be causally related to depressed affect in the manner that has been reported in the literature for school children.

The findings from Hoza et al. (1993) contradict the suggestions in the literature that children with ADHD are more likely to present depressive symptomatology. In contrast, Treuting and Hinshaw (2001; study 17) compared ADHD and control boys with both the total CDI scores and the abbreviated version suggested by Hoza et al. (1993) and did find that boys with the disorder reported more symptoms of depression than comparison boys, although in a heterogeneous manner. Specifically, they found that ADHD children who exhibited aggressive behaviour reported more depression symptoms than the rest of boys with ADHD who in turn were more depressed than control boys. Depression and self-esteem were negatively correlated. Thus, their results raised the question as to under what circumstances might ADHD be more strongly associated with the development of depression. They examined whether this variance might be explained by children's attributional patterns, in particular they were interested in attributions regarding medication. To this end, they administered a semistructured causal attribution interview, comprising hypothetical vignettes with combinations of outcome (good/bad) and medication (given/not given). After hearing each story, participants were asked to give open-ended causal attributions for the outcomes described which were subsequently coded (ability, effort, mood, luck, and medication). Children rarely attributed outcome, whether

positive or negative, to ability. Instead, they tended to attribute positive outcomes to the use of medication and negative ones to the lack of it. These results are at odds with several of the studies reviewed here in which medication was not frequently selected as an attribution. In addition, boys in Treuting and Hinshaw (2001) made effort attributions statistically as often as medication attributions and these were the most frequently used of all attributions for positive outcomes when medication was not given.

As for the association between attributions and depression or self-esteem, medication-related attributions were associated with higher depression and lower self-esteem. Effort attributions were, in some cases, associated with less depression and higher self-esteem. However, the direction of these associations is unclear and Treuting and Hinshaw's (2001) correlational design does not allow for accurate conclusions.

Given just two studies, it is not possible to draw conclusions about the relationship between attributions, depression and self-esteem in children with ADHD. However, it is interesting to note that results from Treuting & Hinshaw (2001) differed depending on whether the children displayed aggression, indicating that children with ADHD are not a heterogeneous group and that individual differences need to be taken into account.

Finally, children in this study tended to attribute behaviour outcomes to either the use of medication or the lack of it, which is consistent with the anecdotal experience in clinical practice of the authors of the present review. Particularly noteworthy is that this is the only study which measured the spontaneous causal explanations of

participants. On the other hand, Treuting and Hinshaw used hypothetical vignettes of ADHD boys who were allegedly medicated or not. Thus, they did not measure boys' attributions for their own behaviour, which might have influenced the results.

2.5. Summary of empirical studies on causal attributions and ADHD

Attributional studies with children with ADHD tend to focus on the effects of medication in several domains. Stimulant pharmacology for ADHD is an effective, practical, and readily available tool (Whalen & Henker, 1997). Despite this, many concerns have been raised about the causal explanations and motivational states that may result from children's perceptions of and beliefs about medication (Henker & Whalen, 1980; O'Leary, 1980). Most recent empirical studies, however, have not supported this idea. On the contrary, findings suggest that medication may exert a positive effect on attributional reasoning and self-confidence. The series of studies reviewed here examined ADHD boys' attributions for success and failure in academic tasks, cognitive tasks, social tasks, daily school performance, and daily camp performance. Boys' attributions to medication did not appear to influence their overall attributional style, and the participants did not make strong pill attributions for either success or failure. Thus, many studies across multiple samples and domains have failed to find any evidence that medication produces maladaptive attributional patterns in children with ADHD.

On the other hand, Henker and Whalen (1980) reported than when medicated ADHD children were questioned about their problems on a general level, the children indicated that their problems were physiologically based and that the drug helped them control their behaviour. These children were considerably more likely to list

medication rather than personal factors such as effort and ability as the solution to their problems. This is consistent with the findings by Treuting & Hinshaw (2001), the only study which asked children for their spontaneous attributions. Thus, the open-ended comments of ADHD children often suggest that they attribute outcomes to pills rather than to skills. But the medication attributions that emerge when these children talk spontaneously have not been confirmed when structured formats such as Likert scales ratings are used. Further research should attempt to clarify the reason for this.

Although ADHD has been associated with elevated levels of depressive symptomatology and low self-esteem, research findings are inconsistent. This could be partly due to individual differences within children with ADHD. However, findings from Treuting and Hinshaw (2001) suggest that a complex and perhaps nonlinear association exists between children's attributions and both depression and self-esteem.

3. METHODOLOGICAL LIMITATIONS OF CURRENT STUDIES

3.1. Co-morbidity

Aside from three Canadian studies (No.3, 4, & 5) the remainder are all North American, although they were conducted at different locations. Consequently, the diagnostic procedures were somewhat different. Despite this, children in most studies met the criteria for the diagnosis of ADHD as specified by the DSM-III or the DSM-IV. However, since many children across the samples also met criteria for other disorders, including Conduct Disorder and Oppositional Defiant Disorder, it is

not possible to ascertain to what degree the effects observed are due to ADHD or to the other comorbid problems. One important area for future investigation involves examining the individual differences (e.g. diagnosis, concurrent learning disability) that may put subgroups of ADHD children at risk for the development of dysfunctional attributional styles.

3.2. Gender

Another important difference to be studied is gender. From the 17 articles reviewed, only three included a small proportion of female participants. Therefore, it is not known whether the findings discussed here generalize to girls.

3.3. Age

There is not a great variance in the age range of the participants in the different samples except for one study which focuses on adolescents. However, it is important to bear in mind that although typical of clinical research, the wide age range employed in the studies may have increased error variance relative to the size of experimental effects in the studies.

3.4. Generalization of findings

Given the high degree of experimental control employed in a large number of studies, the generalization of the findings to classrooms, social, or home settings in everyday life is unknown. Along the same lines, some of the studies reviewed used hypothetical situations to gather data on children's attributions. However, the utility of verbal reports from these studies is questionable (Ericsson & Simon, 1984).

Therefore, future research needs to attempt to undertake similar investigations in more naturally occurring situations.

3.5. Methodology

Attribution research in this area has examined attributions only after the individual has received medication. One interesting and valuable avenue of research would be to assess attributions both before and after prescriptions are given. Furthermore, attributions were often measured on a particular task in the context of short-term medication assessment. It is crucial to explore the long-term effects of MPH on children's causal attributions for their own behaviour and performance.

The predominant method used by the studies reviewed to assess attributions involved force-choice questions and Likert-type scales. Ericson and Simon (1984) argue that children may generate thinking processes rather than reflect actual attributions when they are provided with a set of alternatives. To account for this, Palmer and Rholes (1989) recommend the use of open-ended probes instead. Despite this, only one of the studies reviewed used this methodology, thus exploring the unique way in which individuals explain things, without having to rely on potentially artificial questionnaire responses. More research in this direction is definitely warranted.

4. CLINICAL ISSUES

A treatment that advises children to take medication to alter their behaviour may be affected by non beneficial attributional messages. Children may believe that if medication is needed to treat their behavioural problems, attempting to take personal control over their disorder would be pointless. This is reinforced by the notion that a

positive drug response is often interpreted as confirming a biochemical or genetic dysfunction. Given this, what message about medication is likely to be most useful for children with ADHD? Levine (1990) suggests explaining to children that medication will help to improve functioning in ADHD-related domains, but that it is not the only cause of good outcomes. In his view, medication may best be seen as a facilitator of behaviour, allowing a child's underlying potentials to be realized. On the other hand, there is some critical literature (e.g. Breggin, 1998) that challenges the diagnosis of ADHD based on behavioural symptoms and rejects the use of stimulant drug treatment because of its hazardous effects.

Therapeutically, clinicians need to become more sensitive to the attributions children with ADHD make. This could help identify unhelpful causal explanations that would otherwise interfere with treatment. For instance, children with exclusively biological attributions may say that the only solution is medication and that no other intervention is indicated. These children would be very difficult to engage in a behavioural treatment programme. On the other hand, children could be trained to make more adaptive attributions. In fact, work of Reid and Borkowski (1987) suggests that training children with ADHD to see effort as a controllable factor can influence the subsequent outcome of their performance. Specifically, they found that such training not only improved academic strategies and classroom behaviour, but also improved children's attributions of personal control.

Children need support to believe that symptoms of ADHD or a diagnosis of ADHD does not absolve them from responsibility for their behaviour. It may be part of the

explanation but should not be an obstacle to the numerous ways of empowering children to believe in their own abilities and futures.

5. SUMMARY AND CONCLUSIONS

ADHD is a complex and challenging concept. Its core symptoms are poor ability to sustain attention, impulsivity, and overactivity. With regards to assessment and treatment, there is some agreement among professionals in that both should be multimodal.

To date, psychological theories of ADHD are still a subject of debate. Nevertheless, some of the leading models have proposed that cognitive factors such as causal attributions may play an important role in the disorder.

This paper has reviewed 17 studies which explore the causal attributions of children with ADHD for behavioural, achievement and social outcomes as well as the relationship between such attributions and the children's mental health. The review has revealed that the vast majority of attributional studies with children with ADHD tend to focus on the effects of medication in several domains. The main finding is that, despite the concerns in the literature about the harmful effect of medication on children's attributions, most recent empirical studies have failed to find any evidence that medication produces maladaptive attributional patterns in children with ADHD.

In spite of this, open-comments of these children often suggest that they attribute outcomes to pills rather than skills. Therefore, there appears to be some inconsistency in the literature which may be partly due to different assessments

procedures. This and other methodological limitations of the studies are discussed in this manuscript and some suggestions for future research are proposed.

All in all, it follows from this review that both explanations and treatments for ADHD may carry a variety of subtle messages. Learning how they affect the cognitions of children with ADHD and developing techniques to control these cognitions can further maximize therapeutic progress.

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CHAPTER 2

Children's beliefs and perceptions of ADHD

ABSTRACT

The present study aimed to explore the perceptions and understanding of children with ADHD of their condition. To this end, eighteen children were interviewed and the data collected was analysed using an Interpretative Phenomenological Analysis. This revealed that participants tended to attribute their difficulties to ADHD which they believed was the result of some physical/biological impairment. In line with this belief, the main solution identified was medication. Furthermore, ADHD was reported to have a damaging impact on participant's interpersonal relationships.

This investigation reflects upon the complexity of ADHD and its management. Clinicians are invited to become more sensitive to children's beliefs and attributions and to take them into account as a significant area for intervention.

1. INTRODUCTION

Currently, there is high public awareness of the term Attention Deficit/Hyperactivity Disorder or ADHD. However, although it may be perceived by many as a clear and uncomplicated disorder which can be solved largely by medication, this view is not always shared by the professionals dealing with it (Hinton & Wolpert, 1998). In a review of ADHD, Williams, Wright & Partridge (1999) stated that various aetiological associations have been proposed in the literature, the diagnosis is complicated as there is no current acceptable measure of the disorder, and 'the debate about treatment options can be as contentious as those surrounding aetiology and diagnosis' (p.566). For instance, there is some critical literature (e.g. Breggin, 1998) that challenges the diagnosis of ADHD based on behavioural symptoms and warns of the hazards of stimulant drug treatment. Thus, since ADHD is still an issue of debate it is not surprising that in our clinical practice we encounter different explanations of, and attitudes towards, this disorder. This in turn might partly explain why in some centres there is a large proportion of medicated children with a diagnosis of ADHD, whereas in others the number is significantly lower. It would be of particular interest to explore what factors within the service influence how the diagnosis is made and what interventions are offered (Wolpert, Hinton, Gardner, Possamai, & Owen, 1999).

However, how professionals understand and manage ADHD is not the only focus of concern. Similarly, how parents and teachers comprehend and explain the disorder will determine how they deal with children with ADHD. For instance, a study by Johnston and Freeman (1997) indicated that compared with parents of children without behaviour disorders, parents of children with ADHD saw negative behaviours as more internally caused, less controllable by the child, and more stable;

and they had more negative reactions to such behaviours. As for teachers, several studies have revealed that their understanding of the condition, and of classroom management options, is very limited indeed (Arcia, Frank, Sánchez-LaCay, & Fernández, 2000; Jerome, Gordon, & Hustler, 1994; Reid, Vasa, Maag, & Wright, 1994).

Ultimately, how children themselves perceive and interpret their difficulties will influence their behaviour, their attitude to treatment and their self-esteem, amongst other things. Despite this, little is known about what the children themselves think of ADHD. Not long ago, Cooper and Shea (1999) presented what they believed was the first published empirical study of the perceptions and attitudes of children with ADHD towards their condition, its effects and their treatment. The authors are not aware of any other similar studies. This is surprising considering the growing interest among professionals in recent years in giving children a voice regarding factors that influence their lives (see Hennessy, 1999, for a review). Furthermore, in the UK, the British Psychological Society's guidelines for working with children with ADHD (BPS, 2000) clearly state that it is crucial for children to develop an understanding of the nature of ADHD and its management. In addition, professionals should portray ADHD in terms that provide the child with a sense of empowerment in relation to the condition.

It is worth stating at this point, that although research so far has not focused on children's perceptions of ADHD, several studies (e.g. Johnston & Leung, 2001) have attempted to explore the influence of treatment on the attributions these children make, i.e. how they explain their behaviour. The vast majority of these studies (e.g.

Johnston et al., 2000; Pelham et al., 2002; Pelham, Waschbush, Hoza, Pillow, & Gnagy, 2001) have focused on the effects of medication in several domains. The reason for this is that in spite of the effectiveness of stimulant medication in suppressing the symptomatology of ADHD, many concerns have been raised about the causal explanations and motivational states that may result from children's perceptions of and beliefs about medication (Henker & Whalen, 1980; O'Leary, 1980). However, the most recent empirical studies have not shown that medication produces detrimental causal attributions. On the contrary, findings suggest that medication may exert a positive effect on attributional reasoning and self-confidence. It is worth noting that the above studies assessed attributions by means of structured formats such as forced-choice questions.

On the other hand, Henker and Whalen (1980) reported that when medicated ADHD children were questioned about their problems on a general level, the children indicated that their problems were physiologically based and that the drug helped them control their behaviour. These children were considerably more likely to list medication rather than personal factors such as effort and ability as the solution to their problems. This is consistent with the findings of Treuting & Hinshaw (2001), a recent study which asked children for their spontaneous attributions for ADHD-type behaviours. Thus, it appears that the open-ended comments of children with ADHD suggest that they attribute outcomes to pills rather than to skills but these attributions have not been confirmed when structured formats are used.

2. AIMS

The present investigation aimed to explore the perceptions and understanding of children with ADHD of their condition. Specifically, by means of semi-structured interviews, we asked participants for the causes of and possible solutions to their difficulties and the impact that such difficulties have on them. Data collected was analyzed using Interpretative Phenomenological Analysis (IPA; Smith, Jarman & Osborn, 1999; Moustakas, 1994). Due to the exploratory nature of this study the authors did not endeavour to prove or disprove hypotheses. The aim of the investigation was to gain some insight into the inner experiences of children with ADHD, a subject that research about this condition appears to have neglected.

3. METHOD

3.1. Procedure

Participants were recruited through different child health professionals, although mainly child psychiatrists, from four different children and adolescent mental health service (CAMHS) departments. A total of 121 identified potential participants were sent a participation information sheet giving details of the study (see Appendix C). These were children aged between 8 and 16 with a clinical diagnosis of ADHD, who were not suffering from any major mental health disorder or a significant additional developmental problem (e.g. learning disability, autism). An appointment with the first author was arranged for the 19 families who responded. Data collection was completed in a single clinic or home visit. First, parents and children signed informed consent forms (see Appendix D). Subsequently, children were interviewed. Meanwhile, parents completed a questionnaire designed for this study and a measure of parental perceptions of children's disruptive behaviours. They were asked to refer

to their child's unmedicated behaviour when completing the latter measure. The above protocol was initially piloted with a small number of potential participants and their families in order to get the administrative procedures right and reveal any possible errors in measurement or design.

3.2. Participants

Due to the fact that only one girl agreed to participate, it was decided not to include her in the study. Hence, the final sample consisted of 18 boys aged between 8 and 16 (M = 11.50, SD = 2.62) and their parents. All children but one attended school and all were seeing a health professional at the time of the assessment. Thirteen boys were taking Methylphenidate (either Ritalin or Equasym), one of them had taken Ritalin for 5 years but was off the medication at the time of assessment, another one was taking Dextroamphetamine (Dexedrine), two participants were on Concerta and finally, one young boy was refusing to take his medication. From parent reports of their children's disruptive behaviour, the mean Conner's ADHD Index score was 29.76 (SD = 3.67; T > 70), which was consistent with their diagnosis of ADHD.

3.3. Measures

Semi-structured interview

The semi-structured interview schedule (see Appendix E) was constructed according to the steps described by Smith (1995). Following his suggestions, the schedule was designed to be a guide for the interviewer in that the order of the questions was not always the same. Furthermore, the interviewer was free to probe interesting areas that arose during the interview. This methodology was chosen with the aim of attempting to enter the world of the respondent to elicit their understanding of the

causes of and solutions to their difficulties as well as its consequences. Some of the initial questions were merely an attempt to establish rapport with the participant. The duration of the interviews varied from 20 to 30 minutes. They were audiotaped and subsequently transcribed verbatim.

Parents/Main carers' questionnaire

This questionnaire (see Appendix F) was designed to gather relevant information about the participants which was envisaged to facilitate a better understanding of their situation. It included demographic information, as well as questions about the child's behaviour, professional involvement and medication.

Conner's Parent Rating Scale – Revised (S) (CPRS-R; Conners, 1997).

The CPRS-R (see Appendix G) provides a relatively brief measure of parental perceptions of children's disruptive behaviour. It includes 4 scales: Oppositional; Inattention; Hyperactivity; and Conners' ADHD Index. This Index was developed to provide an easy to use empirical assessment for identifying children at risk of ADHD. Scores can be transferred to a Profile Form for a visual display and for comparison to responses obtained in an appropriate normative group. The psychometric properties of the revised scale appear adequate as demonstrated by good internal reliability coefficients, high test-retest reliability, and effective discriminatory power (Conners, Sitarenios, Parker, & Epstein, 1998).

3.4. Analysis

IPA was chosen to analyse the data because it is concerned with understanding what the respondents think or believe about the topic under discussion. However, it also

TABLE 1. Analysis Process

Stage 1	**Reducing the raw information** The first transcript (see Appendix H) was read a number of times. A list was made of every expression made by the respondent. Some of the expressions were summarised or paraphrased keeping as close as possible to the data. Each expression was given a page reference indicating where it could be found in the raw data (see Appendix I).
Stage 2	**Looking for themes** Emergent themes were identified and written next to the expressions. This was an exploratory process, i.e. data-driven as opposed to theory driven (Boyatzis, 1998), since the aim of the study was not to prove a theory but to try to make sense of the respondents' experiences.
Stage 3	**Looking for connections** Connected themes were clustered together. Transcripts were checked to make sure the connections concurred with what the respondent had said.
Stage 4	**A table of themes** Themes were ordered coherently and a title was given to each one of the clusters (see Appendix J).
Stage 5	**Continuing the analysis with the rest of transcripts** The above four steps were carried out with the rest of transcripts. This was a cyclical process in that each new theme that emerged was checked against earlier transcripts.
Stage 6	**A master list of themes for the group** The lists of themes for each interview were read together and a consolidated list of the master themes for the group produced (see Appendix K).
Stage 7	**Writing up** The themes were converted into a narrative account which is presented in the next section of this report. Participants' names were altered for purposes of confidentiality.

recognises that 'qualitative analysis is inevitably a personal process and the analysis itself is the interpretative work which the investigator does at each of the stages' (Smith et al., 1999, pp.220). Suggestions for thematic analysis and code development (Boyatzis, 1998) were also incorporated in the analysis. Details of each stage of the analysis process are summarized in Table 1.

Independent audits (Smith, 1996) for two of the participants were carried out by the second author and by an external researcher with good knowledge of IPA. Their task was to check that there was a logical progression throughout the different steps of the analysis. These independent audits were not intended as an inter-rater reliability score, since it is not the authors' belief that only one definitive account can be produced from the data. It was instead an attempt to validate a particular reading, a 'verification step' of reviewing the data for discrepancies, overstatements or errors (Elliott, Fischer & Rennie, 1999). In addition, the second author continuously checked the stages of the analysis to ensure that the final report was credible in terms of the data collected. Finally, quotes have been provided in the findings section so the reader can act as an auditor as well.

4. FINDINGS

For the purpose of exploratory research, it is recommended to use open questions and to try to encourage the person to speak about the topic with as little prompting from the interviewer as possible. However, interviewing children is a demanding task, in particular when those children believe that they are unable to sit still and concentrate for long periods of time. Participants in this study were not easy to engage and were not especially forthcoming. They tended to answer the questions briefly and were

not particularly enthusiastic about expanding on their responses. As a result, most of the themes which emerged from the data closely followed the interview questions. Then again, participants did not always tackle the subject in the way one would have anticipated and some unexpected themes did emerge. In total, four main themes were identified which in turn were split into ten sub-themes as shown in Table 2.

Table 2. Master list of themes which emerged from analysis

MAIN THEMES	SUB-THEMES
Making sense of the difficulties	Searching for an explanation Lack of understanding Disagreement with diagnosis
Attributions for difficulties' causes and solutions	Causes of difficulties Solutions to difficulties
Medication	Favourable aspects Unfavourable aspects
Impact and development of ADHD	Emotional consequences of ADHD Interpersonal relationships and ADHD - Ability to make friends - Being bullied - Sharing ADHD - Comparison to other children Prognosis

4.1. Making sense of the difficulties

At the beginning of the interview participants were asked to describe themselves and talk about the difficulties for which they had entered treatment. Most of the children could easily describe their difficulties, the vast majority of which related to ADHD symptomatology. For instance, this is what two boys said:

I get distracted so easily. I can't stay at one place at a time, I keep moving. John, 16

I can't stay still for very long and sometimes I act without thinking. Martin, 12

However, it was not so straightforward to explain why they might have such difficulties and they struggled to make sense of them as the themes below illustrate.

Searching for an explanation

Thirteen of the eighteen participants stated that they had a diagnosis of ADHD and it was their belief that their difficulties were a result of this condition. The following quote was valid for many of the boys:

I have the condition Attention Deficit Hyperactivity Disorder and I have difficulties because of it. George, 13

However, although most children mentioned ADHD not all of them could explain what it stood for. For instance, according to John ADHD meant Adolescence Disorder Hyperactivity Deficit. Furthermore, many boys did not know what caused ADHD or why they had such a condition although a few attempted to explain it:

Most common kids can get it, although not all. It's mostly in America, American kids get it. Only a few kids in Britain get it and I am one of them. John, 16

I had this brain scan about a couple of months ago and there is something wrong with my left sinus in my nose. I don't know what that has got to do with it, but maybe it has something to do with it. Paul, 11

I think it's something that's not right with my brain, like missing certain...like everyone else's got this concentration thing and I ain't got it. Leonard, 15

Although participants proposed different explanations for their disorder, these explanations had a common feature in that they all implied some sort of biological damage. Furthermore, this impairment was present since they were born. This was valid for two thirds of the participants, including those who did not mention ADHD:

It's biological. I was born with it, you can't catch it. Andrew, 15

I was born with it. I've always been like this. Kevin, 10

Lack of understanding

Despite their attempts to explain ADHD half the participants also expressed their lack of understanding towards the subject:

I don't understand ADHD; it's too complicated for me. Paul, 11

I saw a programme on TV about ADHD. It said it was a disorder of concentrating. I found it hard to understand. Tom, 13

Disagreement with diagnosis

Only two boys expressed their disagreement with their diagnosis, thus it was not a prominent theme. Nevertheless, it was an extremely important subject for those two participants:

> *Well, I don't think I've got ADHD but my mother and the doctor reckon I do. Leonard, 15*

> *I don't think I have problems with my behaviour, I am very loud and very talkative and very...That's it really. Kevin, 10*

4.2. Attributions for difficulties' causes and solutions

This theme includes the participants' beliefs about the causes of and solutions to their difficulties:

Causes of difficulties

As mentioned in the previous section, the majority of children interviewed stated that they suffered from ADHD and this was the reason for their difficulties. The following quotes illustrate such a belief:

> *If I didn't have ADHD I would be able to occupy myself and I wouldn't have to take the pill. I would be able to concentrate more at school. Tom, 13*

> *ADHD it's a behaviour disability kind of thing. It makes me naughty sometimes. Matt, 10*

I am hyperactive and I get distracted, which ADHD does distract you. And you don't know what you are doing, you lose your temper. John, 16

In addition, fifty per cent of participants identified other possible causes for their behaviours besides ADHD:

I lose my temper because people pick on me. Frank, 9

There is something in my brain or something, telling me: Be naughty, be naughty. I can't control it. Martin, 12

I am not allowed stuff that has a lot of E numbers in it like Coke and things. I am not allowed fizzy stuff. It makes me like wind me up, naughty and things. Matt, 10

I think it's because when I am with a big bunch of kids I am silly. If I am with my cousin I am alright. Chris, 11

Solutions to difficulties

Only one participant stated that nothing helped him with his difficulties. As for the rest, most solutions offered by the boys corresponded to what they believed caused their difficulties. Thus, for example, Matt thought that not having food or drink with E numbers helped him to behave, whereas Chris claimed that he did not get into trouble when he kept the right company. Nevertheless, there were other things that the participants found helpful:

My behaviour is better when I do things I want to do, like playing play station. Chris, 11

I control my temper very easily now. I keep a happy face in my mind. Before, I used to bottle things up and when somebody called me stupid I just lashed out. Now, I don't do it anymore. John, 16

To be told off helps me not to do it again. Timothy, 8

It would help if people stopped picking on me. Frank, 9

The solution most often mentioned was tablets. However, since medication was an outstanding subject in almost all interviews it was decided to discuss it as a separate theme.

4.3. Medication

Sixteen participants stated that medication helped them with their difficulties and from those; eleven could identify other possible solutions as illustrated above. Although most references to medication related to its salutary effects, a few participants also expressed their doubts and concerns about it as reported below:

Favourable aspects of medication

Medication was regarded by almost all participants as the main solution to their problems, sometimes even the only one:

Other than the tablets I don't know what else could help me. Matt 10

I take a pill, that's helped a bit. Nothing else helps. George, 13

Some of the children's comments implied a remarkable, almost magical, effectiveness of the medication, as if medication could transform them:

I am really, really fidgety. I tap, and bang, and stuff. But if I take the tablets I'm quiet, I just sit down. Joshua, 15

Nobody notices my problems when I take medication. Mike, 12

Medication was effective in several domains, the most often mentioned being school:

If I wouldn't take my tablets I'd find everything difficult and I wouldn't be able to get good exams. Paul, 11

If I forget taking my tablets at school, I find it hard to finish tasks; I can not concentrate enough to get it finished in time. I just talk a lot and fiddle with stuff instead of doing my work. Mike, 12

In addition, medication was regarded as helpful for participants to feel more in control:

Tablets help me if I am like shouting at people. Sometimes I play football at break time with some other friends and like, if they don't pass I shout at them and I am not very nice to them. But if I take my medication it keeps me under control from things like that. Paul, 11

Once I didn't take my medication and I punched windows and hurt myself. So now I always take my medication, otherwise I have no control over ADHD. John, 16

I take tablets to stop me from losing my temper. Ed, 12

Finally, medication is reported to be perceived as an aid for the children's behaviour by people around them:

My Dad'd probably say that I am much better when I take my tablets but if I don't I am a pain. Andrew, 15

I don't take medication at the weekends unless mum and dad are desperate and I have school work to do. Mike, 12

Unfavourable aspects of medication

Despite medication being the most popular solution to their difficulties, its non beneficial effects were also mentioned by a four participants:

Tablets don't help me. And I don't like taking them because the taste of them, and stuff like that. I get stomach ache. I take them because my mum makes me. Mark, 9

I stopped taking the tablets. I don't like them. They make you shake and...because I got used to it, and after a while every time I took one it just made me all weird and I didn't use to speak or anything and like if I was trying to sit I couldn't, I just started shaking, I couldn't relax properly, so I thought I am not taking them anymore. Now I feel more happy about myself. Leonard, 15

They (doctor and parents) say I need to take medication. It helps me concentrate at school. I don't think it does...I think I shouldn't be taking it at all. Why do I need it? If I didn't take medication I wouldn't have that awful taste in my mouth. I just don't like the taste of it and I don't really know why I take it. Kevin, 10

4.4. Impact and development of ADHD

Emotional consequences of ADHD

While the younger participants said that their difficulties affected their emotional state, the older ones tended to verbalize that ADHD did not affect the way they felt:

Having these difficulties makes me sad and angry. Sometimes very, very sad indeed. Richard, 8

When I can't get sweets it makes me feel a bit cross that I have ADHD. Christian, 8

I am upset because I have been naughty. Timothy, 8

Having ADHD doesn't make me feel anything. I have to get on with my life. I've got it, that's it. It doesn't affect me. John, 16

I don't mind having ADHD. Somehow I like having it because it makes me faster and I can run better in races. Joshua, 15

Interpersonal relationships and ADHD

Although only four participants explicitly said that their ability to make friends was impaired because of ADHD, most of them reported that in their everyday life their interpersonal relationships were negatively affected by their difficulties:

If I didn't have ADHD I'd have more friends. Richard, 8

ADHD means that I can't spend long periods of time doing an activity; I have to do something else. Also, I kind of find it hard to make friends. George, 13

Connected with the above subject, three children admitted being bullied as a result of their difficulties:

Some people in school bully me because of my ADHD. They call me mental and tablet boy. Matt, 10

I didn't like the lessons, I didn't like the school. I was getting bullied at school so I didn't go to my lessons. School was hell. John, 16

Not surprisingly then, participants didn't like talking about ADHD with other people:

The only person I've told so far is my best friend CJ, he said he didn't mind at all because it was nothing serious. Other children don't know because I don't take the tablets at school. George, 13

I just don't like telling people what is going wrong with me. Ed, 12

My friends don't know I have ADHD. If they don't ask, I don't tell them. Tom, 13

Now I am not really bothered about ADHD, but I was. I weren't really bothered but I thought people'd think I am a nut case or something and they are not going to like me. Leonard, 15

Finally, children's responses implied that they were not the same as other children, somehow they felt different, and what seemed to make the distinction between them and their peers was the fact that they took medication:

I don't want to take any more tablets, I don't want to have a temper and I just want to be normal...I don't feel different, I know I am different, I have to take tablets. Ed, 12

I feel both normal and abnormal. I am not normal because I take the tablets. Chris, 11

Prognosis

Although participants did not feel there was a cure for ADHD and they did not anticipated that it would disappear, there was some expectation of improvement as they grew older:

I will always have ADHD but when I am a bit older and I can control myself more, I'll just come off the tablets. Joshua, 15

Mum says, she doesn't think it is going to go away, but she says, like it'll fade away, but still be there, like act like a normal child, but still be there. Paul, 11

ADHD is not going to go away for a very long time...maybe when I am older. Tom, 13

5. DISCUSSION

The analysis of the interviews revealed that it was the participants' belief that they were born with a form of physical/biological abnormality which they did not really understand and which resulted in a range of difficulties, mainly behavioural, for which they had to visit a doctor on a regular basis. This is consistent with findings by Cooper and Shea (1999), which suggests that a medical explanation for ADHD seems to be the most popular amongst children with such diagnosis. As a matter of fact, there is a growing body of research evidence supporting the presence of a biological influence in the development of ADHD (BPS, 2000). However, it is widely understood that whether an individual develops the disorder or not is the product of an interaction between biological and environmental factors (Johnson, 1997) and that a full understanding of ADHD in a particular child requires consideration of biological, psychological and social factors.

On the other hand, children's perceptions of and attitudes towards ADHD might partly derive from the socialization that they receive from their parents. Indeed, some empirical research indicates that parents have an important relationship with, and perhaps a lasting influence on, their children's health beliefs and behaviours (see McNeal, Roberts, & Barone, 2000). Therefore, as Wright, Partridge and Williams (2000) point out, if parents believe in a purely genetic, biological explanation, they may believe that their child's behaviour does not need managing, or that their child is unable to learn responsibility. This in turn may be communicated to children and consequently influence their beliefs. Thus, over time, it is reasonable to expect that children with ADHD may learn and internalize their parents' attributions for the disorder and also believe that they are not responsible for their behaviour. The

possible consequences of such attributions should alarm health professionals working in this area. Ultimately, it is their duty to fully inform parents about the different factors which influence the behaviour of a child with ADHD. As Cooper and Shea (1999) suggest, children with ADHD and their families would benefit from a more balanced view of ADHD, in which the condition is portrayed in terms of the interaction between psychosocial and biological factors. Parents need support to recognize their role as integral to any successful approaches with their children (Wright et al., 2000) and children need to be empowered to believe in their own abilities.

Furthermore, biological attributions may lead to the belief that only medication interventions are useful. In fact, participants regarded medication as the main aid for their difficulties, stating that, amongst other things, tablets helped them to behave, allowed them to gain control over their difficulties and improved their academic performance. This is consistent with the studies discussed earlier in this report which assessed spontaneous attributions for behaviour of children with ADHD (Henker & Whalen, 1980; Treuting & Hinshaw, 2001). Indeed, stimulant medications have proved to be effective and safe treatments for the symptomatic management of individuals with ADHD. Most children who receive stimulants show improvement in behavioural, academic and social functioning (DuPaul, Barkley, & Connor, 1998). In addition, they are a practical and readily available tool (Whalen & Henker, 1997). However, even though medication is quite effective in the day-to-day management of symptoms of ADHD, other interventions are usually required to maximize the chances of better adjustment. A striking and rather concerning finding while interviewing participants and their families, was that the involvement of some health

professionals ceased when the diagnosis was made, apart from very sporadic visits to the clinician who provided the repeated prescription of stimulant medication. However, tablets do not teach prosocial behaviour or impulse control, even though they may make it easier for such children to learn these skills. As Levine (1990) suggests, clinicians should explain to children that "medication will help improve functioning in ADHD-related domains but that it is not the only cause of good outcomes. ... In sum, medication may best be seen as a facilitator of behaviour, allowing a child's underlying potentials to be realized" (Treuting & Hinshaw, 2001, p. 38).

An additional risk of medication is the possibility for these children to believe that other drugs and substances can have the same 'quick fix' effect as the tablets they take. These could lead to addiction to their medication or abuse of other drugs and alcohol. However, Barkley (1998) notes that Weiss & Hechtman (1993) carried out a review of several studies on this subject and their conclusion was that there was no increased risk for drug abuse associated with psychostimulant treatment. Nevertheless, more research is needed to rule this out conclusively.

It is worth stating at this point that even though participants explained their difficulties largely in biological terms and thought of medication as the main answer to their problems, a few other causes of and solutions to their difficulties were also identified. There was a tendency to attribute their problems to external causes such as their diet or other people's behaviour towards them. As for factors which contributed to an improvement of their difficulties, no trend could be identified.

Clinicians need to explore these additional attributions and reinforce those that empower the children and help them to feel in control.

One of the secondary features of ADHD is that children with the disorder may have problems succeeding in social situations and making friends. In fact, it has been estimated that 50 per cent or more of children with ADHD display social skills problems (Munden & Arcelus, 1999), which many studies have shown can be significantly improved by the administration of stimulant medication (Swanson, McBurnett, Christian, & Wigal, 1995). These difficulties often lead to rejection of the child by other children which can have a devastating effect on the child's self-esteem and subsequent behaviour. This fact is reflected in one of the themes which emerged from the data. ADHD affected participants' interpersonal relationships with their peers at several levels. Firstly, children interviewed felt that as a consequence of their condition it was difficult for them to make friends. This was not helped by the fact that some of these children were bullied at school because of their disorder. However, even though according to the participants' account ADHD was stigmatizing, the fact that they took tablets was even worse. Indeed, not only was medication a reason for which these children were bullied, it was also the deciding factor that made them feel different from other children. Therefore, even though medication was usually welcomed as it helped to improve ADHD symptomatology, it was also what revealed to other children that the participants were different. In addition, some children expressed their concern about the medication, stating its inefficacy, unpleasant taste and other side-effects. An older participant also mentioned that he felt weird when he took tablets as if it affected his sense of self.

This fact has been reported by other adolescents (Cooper & Shea, 1999; Ohan & Johnston, 1999) and warrants further research.

Limitations

This study contributes to our understanding of children's perceptions and inner sense of ADHD. However, the authors do not claim that the information reported here can be generalized to all children with the disorder. Only 18 boys out of 121 potential participants took part. What is presented here is the understanding and experience of the condition of this specific subgroup of children as interpreted by the main researcher.

Furthermore, most children were taking psychostimulant medication. Future research should include children with similar difficulties who are untreated or who are treated using different modalities such as cognitive-behavioural interventions or social skills training. Ideally, it should also include children with symptoms of ADHD who have not been diagnosed in order to gain a better understanding of the effects of having such diagnosis.

As mentioned earlier in this report, interviewing participants was not an easy task. The majority of them were not especially forthcoming and had to be prompted continuously. In addition, their initial interest faded out quickly and was replaced by signs of tiredness. Despite this, all participants agreed to continue until the end of the interview.

There are several plausible explanations for the participants' poor performance during the interviews. Firstly, one of the reasons why these children have a diagnosis of ADHD is because of their difficulty in sustaining attention in tasks. Interviews varied in duration between 20 and 30 minutes. Therefore, some children may have found it difficult to focus on the same activity for this length of time. Secondly, although the researcher spent some time with the children and their families before the interviews, the opportunity to establish a good rapport with the participants was indeed very limited. Finally, ADHD is a complex subject to discuss. It was assumed that the participants could take part in the study and follow the interview but their verbal abilities were not assessed. In addition, the wide age range was reflected in their answers. Younger children replied with "Don't know" more often that the older participants and their responses tended to be less elaborated. Further work needs to take into account all these considerations. Ideally, the chosen methodology should encourage participants to speak about ADHD with as little prompting from the interviewer as possible.

6. CONCLUSION

This study reflects the complexity of ADHD and its management. One of the main clinical implications is that therapeutically, clinicians need to become more sensitive to the attributions children with ADHD make. This can help identify damaging causal explanations and work towards helping the child to make more adaptive ones. Ultimately, the goal of the health professional should be to help children with ADHD and their families to develop an understanding of the nature of ADHD and its management, and empower them in relation to the condition.

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CHAPTER 3

Causal attributions, self-esteem and mood in children with ADHD

ABSTRACT

The aim of the present study was to examine the relation between mood, self-esteem and causal attributions of children with ADHD for their difficulties. Participants completed a battery of tests including measures of depression, self-concept and attributional style. Furthermore, children's spontaneous attributions were extracted from interviews with the participants and subsequently coded following the Leeds Attributional Coding System. Findings revealed that internal attributions were associated with higher depressive symptomatology and lower self-concept. These results suggest that attributions should inform the assessment and treatment of children with ADHD.

1. INTRODUCTION

Children with ADHD are rated as having more symptoms of depression and low self-esteem than their peers without the diagnosis (see Barkley, 1998 for a review). In this study it is hypothesized that this may be directly related to the belief that their difficulties are the result of ADHD. Indeed, it is hypothesized that children who are given a diagnosis of ADHD are likely to attribute their difficulties to internal, stable, and global causes, given the perceived nature of ADHD as a medical condition.

Consequently, consistent with attribution theory, these children might be expected to be more depressed and have lower self-esteem. Attribution theory is based on the assumption that individuals search to understand the causes of events and make causal attributions about both their own behaviours and behavioural outcomes as well as for the behaviours of other individuals. These resulting causal attributions are linked to affect, motivation, cognition, and expectancies for the future (see Weiner, 1986). In their reformulated attributional model of learned helplessness, Abramson, Seligman, and Teasdale (1978) propose that individuals who attribute negative events to internal, stable, and global causes and positive events to external, unstable, and specific causes, will be more vulnerable to low self-esteem and great depression.

Evidence for this association has been found in children (Seligman et al., 1984), and emerging evidence also suggests it to be the case for children with ADHD. Hoza, Pelham, Milich, Pillow, & McBride (1993) found that more internal, stable, and global attributional style was associated with lower self-esteem. Schmidt, Stark, Carlson, & Anthony (1998) examined whether ADHD with and without a comorbid

mood disorder could be differentiated on the basis of their attributional style. It was found that children with ADHD and comorbid depression adopted a more negative attributional style.

However, what is not clear is whether the diagnosis of ADHD itself provides an internal, stable, and global explanation to children of their difficulties which in turn leads to depression and low self-esteem. For instance, Treuting and Hinshaw (2001) showed some support for attribution/internalizing linkages. However, what they found was that medication-related attributions for good outcomes were associated with higher depression and lower self-esteem.

The present study was designed to examine further whether causal attributions of children with ADHD for their difficulties are linked to their mood and self-concept. It was hypothesized that more internal, stable, and global causal attributions would be positively related to poorer self-esteem and higher depression symptomatology.

A new dimension introduced in this investigation was that attributions of children were measured by means of open-ended probes as recommended by Palmer and Rholes (1989). The authors are not aware of similar studies using this methodology.

2. METHOD

2.1. Participants

Children with a clinical diagnosis of ADHD were recruited through child health professionals in child and adolescent mental health service (CAMHS) departments. Children with significant additional developmental difficulties (e.g. learning disability, autism) were not included. The final sample consisted of 18 boys aged between 8 and 16 (M = 11.50, SD = 2.62) and their parents. All children but one attended school and all but two were on medication. From parent reports of their children's disruptive behaviour, the mean Conner's ADHD Index score was 29.76 (SD = 3.67; T > 70), which was consistent with their diagnosis of ADHD.

2.2. Measures

Birleson Depression Scale-Questionnaire (Birleson, 1981). This scale (see Appendix L) was developed as a clinical instrument to be completed by children and adolescents to assess the degree of depressive feelings. It correlates highly with other measures of depression such as the Children's Depression Inventory (CDI; Kovacs, 1992). It yields a total score.

Piers-Harris Self-Concept Scale (Piers, 1984). This self-report questionnaire (see Appendix M) contains 80 items rated on a yes-no basis and is designed to assess how children and adolescents feel about themselves. It is suitable for children aged 8 to 18 years. The Piers-Harris yields a total score as well as scores for six subscales (Behaviour, Intellectual Status, Physical Appearance, Anxiety, Popularity, and

Happiness). This questionnaire has been found to possess adequate levels of reliability and validity (Piers, 1984).

Children's Attributional Style Questionnaire - Revised (CASQ - R; Kaslow & Nolen-Hoeksema, 1991). The CASQ – R (see Appendix N) is a shortened version of the CASQ (Seligman et al., 1984). It includes 24 forced-choice items, half addressing positive outcomes and half addressing negative outcomes. Children choose the response that best explains why they believe the event might have occurred. Three dimensions of attributions (internal-external, stable-unstable, and global-specific) are assessed. The scale yields positive and negative composite scores as well as an overall (positive minus negative) composite score. The lower the 'good' and the higher the 'bad' scores, the lower the overall composite score and the more depressive the attributional style as conceptualised by the revised learned helplessness theory of depression. The CASQ – R has good criterion-related validity, moderate internal consistency reliability, and fair test-retest reliability (Thompson, Kaslow, Weiss, & Nolen-Hoeksema, 1998).

Conner's Parent Rating Scale – Revised (S) (CPRS-R; Conners, 1997). The CPRS-R (see Appendix G) provides a relatively brief measure of parental perceptions of children's disruptive behaviour. It includes 4 scales: Oppositional; Inattention; Hyperactivity; and Conners' ADHD Index. This Index was developed to provide an easy to measure, empirical assessment for identifying children at risk of ADHD. Scores can be transferred to a Profile Form for a visual display and for comparison to responses obtained in an appropriate normative group. The psychometric properties of the revised scale appear adequate as demonstrated by good internal reliability

coefficients, high test-retest reliability, and effective discriminatory power (Conners, Sitarenios, Parker, & Epstein, 1998).

Semi-structured interview

With the purpose of eliciting spontaneously occurring explanations from the children for their difficulties, a semi-structured interview schedule (see Appendix E) was constructed according to the steps described by Smith (1995). This was the main measure for a qualitative study reported elsewhere (see Chapter 2). Interviews were audiotaped and subsequently transcribed verbatim. Causal attributions for children's difficulties were extracted from the transcripts (see Appendix O). Attributions were defined as a statement identifying a factor or factors that contribute to their difficulties, e.g. "I lose my temper because people pick on me". Only causal attributions for negative outcomes were included. Attributions for the improvement of their difficulties were not included in this study, e.g. "Tablets help me to concentrate in class". Attributions were coded by the main researcher (YJ) following the Leeds Attributional Coding System (LACS; Stratton et al., 1986; Munton, Silvester, Stratton, & Hanks, 1999). This system has been found to be reliable and valid in a range of different contexts (e.g. Brewin, MacCarthy, Duda, & Vaughn, 1991; Joseph, Brewin, Yule, & Williams, 1993). Causes identified by the children were rated on a three point scale along the dimension of internality/externality. Other dimensions lacked sufficient variability to permit analysis, as perceived causes tended to be stable, global and uncontrollable. If the cause for the difficulty was believed to originate within the child it was rated as internal (3), for example "There is something in my brain or something, telling me: Be naughty, be naughty. I can't control it". If it originated in a characteristic of other people or objects, or a set of

circumstances, it was rated as external (1), for example "I do silly things when I am with my brother". Explanations that included both internal and external aspects or that were ambiguous with respect to this dimension were rated on a midpoint (2), for example "I used to bottle things up and when somebody called me stupid I just lashed out". To check coding reliability, data was also rated by the second author (SJ). There was 93.8 % agreement between the raters about the coding of each statement (kappa = 0.87).

2.3. Procedure

Identified potential participants were sent a participation information sheet giving details of the study (Appendix C). An appointment with the main researcher was arranged for those who responded. Data collection was completed in a single clinic or home visit. First, parents and children signed informed consent forms (Appendix D). Subsequently, children completed a battery of three tests. Measures were administered in a one-to-one situation to eliminate any problems with reading and/or understanding the questionnaires. Next the boys were interviewed. Meanwhile parents completed a questionnaire and the CPRS-R. They were asked to refer to their sons' unmedicated behaviour when completing the latter measure.

3. RESULTS

The mean scores and standard deviations for all scales are shown in Table 1. The results suggested that the participants' mean scores in the three different questionnaires were within the ranges reported for non-clinical children. However, it is important to note that there were important differences amongst the children in the various samples and thus the normal population means stated here are for guidance

only and do need to be interpreted with extreme caution. For instance, although control children were attending school, their age range varied slightly across samples. In the Yule et al. (1990) study children were 12 to 16 years, whereas in the Thompson et al. (1998) the age range was 9 to 12 and in the Piers (1984) it was 10 to 16. In addition, there were other variables such as race which also differed from the participants in this study. Despite this, the normative data in Table 1 is believed to be useful to help comprehend the means obtained in the ADHD group.

Table 1. Means and standard deviations for the Birleson Depression Scale, the Piers-Harris Self-Concept Scale and the Children's Attributional Style Questionnaire-Revised (CASQ-R)

	Participants		Normal population	
	Mean	SD	Mean	SD
Birleson Depression	8.56	5.62	7.76	4.14
Self-concept/Behaviour	10.44	3.75	11.44	3.22
Self-concept/Intellectual Status	11.33	3.74	11.62	3.57
Self-concept/Physical Appearance	9.28	2.85	8.31	3.05
Self-concept/Anxiety	10.17	3.11	9.54	3.11
Self-concept/Popularity	8.44	3.22	8.27	2.70
Self-concept/Happiness	8.17	2.26	8.05	2.04
Self-concept/Total	56.06	12.49	56.04	11.79
CASQ-R Positive	7.39	2.57	7.62	2.19
CASQ-R Negative	3.06	1.73	2.79	1.90
CASQ-R Overall	4.33	3.71	4.83	3.36

Note. Normal population scores were extracted from Yule et al., (1990), Thompson et al., (1998) and Piers (1984).

For the 18 participants, the number of causal attributions for their difficulties ranged from 2 to 17 (mean = 3.78). A mean rating was computed for the dimension of internality for each child: the internality ratings for each of the participants' attributional statement were summated and divided by the total number of statements rated. Mean ratings ranged from 1.00 to 3.00 (mean = 2.35). Therefore, even though attributions ranged from external (1) to internal (3), there was a tendency for them to be within the midpoint (2) to internal end of the scale.

Correlations were computed between each participant's internality rating and their scores on the different scales (see Table 2). More internal causal attributions for the participants' difficulties were associated with higher scores on the Birleson Depression Inventory and lower scores on two dimensions of the Piers-Harris Self-Concept Scale, namely Intellectual Status and Physical Appearance, as well as the total self-concept score. Furthermore, internal attributions were positively related to the negative composite of the CASQ-R and negatively related to the CASQ-R positive and the overall composites.

From this analysis it follows that the CASQ-R overall score was negatively related to depression and positively related to self-concept, thus indicating that participants with lower depression and higher self-concept tended to have a more adaptive attributional style.

Table 2. Correlations between attributions and depression, self-concept and attributional style measures

	1	2	3	4	5	6	7	8	9	10	11	12
1. Internality												
2. Birleson Depression	.675**											
3. Self-concept/Behaviour	-.288	-.479*										
4. Self-concept/Intellectual Status	-.609**	-.835**	.496*									
5. Self-concept/Physical Appearance	-.610**	-.705**	.363	.645**								
6. Self-concept/Anxiety	-.332	-.627**	.250	.488*	.550**							
7. Self-concept/Popularity	-.341	-.672**	.319	.555**	.656**	.891**						
8. Self-concept/Happiness	-.087	-.367	.285	.085	.478*	.635**	.572**					
9. Self-concept/Total	-.584**	-.892**	.643**	.866**	.770**	.726**	.810**	.433*				
10. CASQ Positive	-.434*	-.280	.447*	.498*	.466*	.097	.280	-.058	.531*			
11. CASQ Negative	.437*	.637**	-.816**	-.669**	-.374	-.241	-.228	-.272	-.693**	-.402*		
12. CASQ Overall	-.527*	-.520*	.730**	.666**	.549**	.195	.351	.161	.723**	.898**	-.737**	

* Correlation is significant at the .05 level (1-tailed).

** Correlation is significant at the .01 level (1-tailed).

4. DISCUSSION

The findings of this study seem to confirm the hypothesis that children's causal attributions for their difficulties are linked to their self-concept and mood. Attributions were overwhelmingly stable and global. However, there was variability on the external-internal dimension. As hypothesized, more internal causal attributions by the participants for their difficulties were associated with higher scores on the Birleson Depression Inventory and a lower total score on the Piers-Harris Self-Concept Scale.

In addition, internal attributions, as well as depressive symptomatology, were positively related to the negative composite of the CASQ-R and negatively related to the CASQ-R positive and overall composites, which strongly validates the coding system employed in this study. Furthermore, this finding is consistent with the reformulated attributional model of learned helplessness (Abramson, Seligman, & Teasdale, 1978) and several studies mentioned earlier in this report (Schmidt, Stark, Carlson, & Anthony, 1998; Seligman et al., 1984), in that children with ADHD and higher depressive symptomatology endorsed a more negative attributional style.

These results have several implications for the assessment and management of children with ADHD. Since participants' causal attributions for their difficulties appeared to be a good predictor of their mood and self-concept, it is reasonable to think that attributions could be used as a powerful tool to inform clinical practice. However, a dilemma arises from the findings discussed here. On the one hand, children's internal attributions for their difficulties do not seem to be adaptive since they are more likely to feel worse about themselves, but on the other hand, it would

be unrealistic to encourage these children to make external attributions for their difficulties. There is however another dimension which seems to play an important role and that is controllability. In the present study, participants' attributions were overwhelmingly uncontrollable. This is in accordance with Diener and Dweck (1978), who claim that helpless children make attributions to stable and uncontrollable factors for negative events. Consequently, they do not believe these negative events can be prevented or avoided through their own efforts as they are the result of forces outside their control (Treuting & Hinshaw, 2001). Given this belief, it is not surprising that they are at increased risk for feelings of depression.

It would appear, then, that interventions directed at children with ADHD should take into account their attributions and possibly encourage them to make more adaptive ones. For instance, the work of Reid and Borkowski (1987) suggests that training children with ADHD to see effort as a controllable factor can influence the subsequent outcome of their performance. Specifically, they found that such training not only improved academic strategies and classroom behaviour, but also improved children's attributions of personal control.

The exploratory nature of this study and the use of a small sample necessitates that the significant findings obtained be replicated. In addition, the majority of children who participated in our study were taking psychostimulant medication. It is conceivable that medication may have influenced children's responses (see Whalen & Henker, 1997) and future work should examine the role of medication status. Ideally, future research should include attributions of children with similar

difficulties who are untreated or who are treated using different modalities such as cognitive-behavioural interventions or social skills training.

Despite these limitations, results from this study have promising implications. Attributions have proved to be a very powerful tool which should be used for assessment and intervention. They seem to be able to predict mood and self-concept in children with ADHD and should unquestionably inform clinical practice.

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CHAPTER 4

Reflections upon the research journey

INTRODUCTION

I do believe that clinical psychologists ought to utilise the scientific method to achieve objectivity and precision in their professional work. This entails the application of scientific principles in clinical practice. (...) Working with clinical cases demands many practical skills. These are acquired not so much from scientific principles and procedures, but as a result of practical experience. Clinical psychologists can only be scientists to a degree; they must also learn to be creative and sensitive practitioners.

Those were my exact words on my application for the clinical psychologist course that I am now about to finish. At the moment, almost five years later, having completed my research project and a few months away from being qualified, I wonder how valid this statement still is for me. Although I firmly believe that research and practice should somehow complement each other, my experience as both a clinician and a researcher has made me realise that in some situations one role seems to win over the other, clinical psychologists tend towards the scientific or the practitioner end of the continuum, being very difficult to find a good balance between both ends.

During the course of this study, I have faced several challenging situations which have posed a dilemma, have reflected poor practice, or have made me question the relationship between clinical practice and research. I have tried to convey the most relevant ones in the illustrative scenarios which are presented below. The purpose of this paper is to examine and discuss them.

ILLUSTRATIVE SCENARIOS

Scenario 1

Everything in my project, including the research question, suggested that a qualitative methodology was the most appropriate way to collect and analyse data. However I had my reservations about conducting a piece of qualitative research for the first time.

When more than a decade ago I studied my degree in Psychology, there was a big emphasis on experimental design and statistical analysis. Lecturers were searching for respectability in the academic world and qualitative methodologies would not have facilitated this process. This became also my belief, and even though throughout the years I began to appreciate other methodologies, I still considered quantitative research to be the real one.

However, one of the things I have learnt during the course of this doctorate is that there are many different forms of research for many different purposes and that they are all equally respectful. As a result, although still a bit apprehensive towards qualitative methodology, I embarked myself on the discovery of this new way to carry out research. I chose Interpretative Phenomenological Analysis (IPA; Smith, Jarman, and Osborn, 1999) because it was an accessible, systematic, practical and clearly presented procedure, set out with a minimum theoretical baggage.

To my surprise, I really enjoyed it. IPA allowed me to feel close to the participants and to the data; and it made the whole process more relevant to my clinical practice.

The downside was that the analysis was extremely time consuming. Furthermore, I must admit that on a few occasions I had my doubts about the whole procedure since I still thought that qualitative methods were somewhat different to what had been my understanding of research for a very long time. However, I am pleased I have experienced this methodology first hand, and I would definitely use it again if it was the most indicated methodology to answer my research question.

Like me, many other psychologists may still be uneasy towards qualitative methods. I think that some journals are already showing that there is a place for qualitative research in clinical psychology and hopefully this will become more apparent in the next few years. I fully agree with Smith, Harré, and Van Langenhove (1995) in that the change on methodological issues is going to help the link between scientist and clinicians. For many years, discontent has been expressed with narrowness in the discipline of psychology, with its emphasis on laboratory studies, experimental design and statistical analysis. This type of research implies a considerable technical expertise which, according to Hayes, Barlow, and Nelson-Gray (1999) is one of the reasons why clinicians have not done research. Therefore, if psychology is open to new methods which are more appropriate to the questions clinicians want to ask and to the settings they want to ask them, it will be easier and more appealing for clinicians to get involved in research.

Scenario 2

After reading chapter 2, one of my colleagues said that I could have written part of the discussion section before having interviewed the participants. She though it

strongly reflected my opinion about ADHD and wondered whether I should make that clear in the paper.

Because of my historic background discussed in the previous scenario this statement shocked me and in a way discouraged me. I was in complete agreement with my colleague and her account made me more aware of the fact that my beloved piece of research was not objective and could not be generalized. However, although a few years ago I would have thought that in consequence this was a useless and non informative study, I now believe that this type of investigations have their role in helping knowledge to develop. In addition, it would be absurd to believe that research can be completely neutral and objective. One's theoretical position affects one's research practice and consequently psychologists adopting different theoretical orientations are likely to conduct research and analyse results in different ways, whether they use quantitative or qualitative methods.

In my view, the present study has emphasized the importance of children's perceptions and beliefs of ADHD. It is true that we only know the effect that such perceptions have on the 18 children who participated, but it would be reasonable to believe that other children with similar difficulties do also make attributions which affect them in different ways. According to the literature, this is an area that has been hugely neglected. Therefore, even if this was the only conclusion from my study, which I don't think it is, I would already feel that something has been achieved.

Scenario 3

When I started analysing the transcripts of the interviews I realised that they could have been conducted far more skilfully for the purpose of this study.

I placed a lot of attention on constructing the interview: I followed Smith's (1995) suggestions for constructing the semi-structured interview schedule and I piloted it with a few children. However, I never questioned my ability to conduct the interview. I made the mistake to assume that I already had the necessary skills since I am used to conducting interviews in my clinical practice.

However, I have now realised that even though qualitative interviews have similarities to psychological assessment, they have differences as well. Certainly, some therapeutic skills, such as empathy and clinical intuition, are also valuable when interviewing research participants. Similarly, both clinicians and qualitative interviewers must have an attitude of genuine interest in learning from others, in hearing their story, and must be able to listen to them with tolerance and acceptance. Despite this, there is a clear distinction between clinical assessment interviews and research interviews, since the former tend to be aimed at assembling the information into a coherent clinical formulation whereas this is not the aim of the qualitative interview.

I have learnt from this project that conducting a semi-structured interview for a qualitative study entails certain skills which require practice (Robson, 2002). If I carried out a similar study in the future I would definitely place more attention to the way I interviewed participants.

Scenario 4

After interviewing a participant, his parents bombarded me with questions for about two hours. They had read about ADHD and wondered whether their 15 years old boy had also oppositional defiant disorder. They were desperate for explanations and advice which they did not get from the doctor they saw twice a year to repeat their son's prescription.

The above situation was by no means a unique experience. Parents wanted to talk about their situation, asked me for clinical advice, explained to me incidents with other clinical psychologists, some of which I knew or I had worked with, they even invited me to read clinical reports. Some situations were quite difficult to handle; parents appeared distressed, helpless in front of their child, and fed up with the health system. I often wondered whether that was the reason why they accepted to participate. Did they see it as a chance to get help? If this was the case, was it my role to do so?

I have since consulted a few text books about research in clinical psychology. As expected, all of them discussed the scientist-practitioner model and emphasized how important it is for clinicians to both consume and produce research. Despite this, and to my disappointment, I have failed to find advice for clinical problems encountered while carrying out research.

Although at times it was difficult being a researcher and a clinician at the same time, I do believe that it was an extremely valuable experience. Seeing the other side of our work, in particular what parents think of us and how they view the health system,

was a bit of an eye opener which I would like to believe will inform my future practice.

Scenario 5

After inviting 121 children and their parents to take part in the project only 19 families agreed to participate.

Recruiting participants was probably the most stressful and time consuming stage of this project. Using my best persuasion skills I had to 'sell' my proposal to four different teams of professionals, let alone the R&D Directors and Ethics Committees. When I finally managed to send the invitation letters to potential participants, only 16% opted in. At that time I felt desperation, I really thought all efforts were in vain. I wished I had collected data using questionnaires and a non-clinical sample as I initially intended. However, now that this project is reaching its final state I am pleased with my experience and I believe that my contact with the participants has immensely enriched both my clinical and research practice.

On the other hand, I wonder whether participants have also benefited from the experience in any way. I told families that it was hoped that the information resulting from the study would help to provide an improved service to children and young people with similar difficulties. To this end I intend to disseminate the results in the trusts which participated, in peer-review journals and of course, to the families who made this project possible. However, although I would like the children who I interviewed to benefit directly from an improved service, I am aware that nothing may change for them and I find this disappointing.

CONCLUSION

The Division of Clinical Psychology clearly states that "appropriate research and scholarship are crucial to the advancement of knowledge and clinical practice. Psychologists should make every effort to undertake such work, and to communicate their theoretical knowledge and empirical findings" (DCP, 1995, p.51). On the other hand, in their widely known book 'What is a clinical psychologist?', Marzillier and Hall (1992) defend that a "clinical psychologist is first and foremost and 'applied scientist' or a 'scientist-practitioner' who seeks to use scientific knowledge to a beneficial end" (p.9). Thus, it seems to be widely accepted that researchers should be practitioners and vice versa. However, I do not think that clinical psychology has reached this state yet. There are clinical psychologists who do not conduct research and do not consciously use research findings in their clinical work. Similarly, there are clinical psychologists who are drawn into the academic world and discontinue their clinical practice. Naturally, there are those who enjoy the two activities and manage to engage in both.

Recently, six different models of how practitioners might produce or consume research have been recognized (see Barker, Pistrang and Elliott, 2002). At the moment, I do not identify myself with any of them. I do think that clinical practice and research can complement and inform each other but I am not so certain that one needs to actively be involved in both activities to be a good clinical psychologist. As Marzillier (1998) points out, what it is essential is the capacity to think critically and psychologically about one's own and other people's work.

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Appendix A

Ethical Approval

COVENTRY UNIVERSITY - SCHOOL OF HEALTH & SOCIAL SCIENCES

STUDENT SUBMISSION TO SCHOOL RESEARCH ETHICS COMMITTEE

1. Student's name: YOLANDA JUANOLA-BORRAT 2. Course: Doctorate in Clinical Psychology

3. Title of project: Personality, Causal Attributions, Self-Concept and Mood in Children with Attention Deficit Hyperactivity Disorder

4. Summary of the project in jargon-free language and in not more than 120 words:

Sample: 50 children and their parents. Children must fulfill criteria for ADHD, Age 8-17.

Research site: Orchard House - South Warwickshire Combined Care NHS Trust

Design (e.g. experimental): Between-subjects, non-randomised design.

Methods of data collection: Information from both children and their parents, will be collected by means of well-known standardised questionnaires. In addition, children will be interviewed.

Families will be invited to attend the Orchard House in order to complete relevant questionnaires and for the child to be interviewed. Alternatively, families may be visited at home.

Access arrangements (if applicable): Via Vicky Knibbs, Clinical Supervisor.

5. Will the project involve patients(clients) and/or patient(client) data? Yes [X]; No [ ]

6. Will any invasive procedures be employed in the research? Yes [ ]; No [X]

7. Is there a risk of physical discomfort to those taking part? Yes [ ]; No [X]

8. Is there a risk of psychological distress to those taking part? Yes [ ]; No [X]

9. Will specific individuals or institutions (other than the University) be identifiable through data published or otherwise made available? Yes [ ]; No [X]

10. Is it intended to seek informed consent from each participant (or from his or her parent or guardian)? Yes [X]; No [ ]

Student's signature: ..... Supervisor's signature: ..... Date: 13/02/01

FOR COMMITTEE USE:

Immediate approval [✓] Referral to full School Committee [ ]

Referral to local Hospital Ethics Committee [ ] Decision pending receipt of further information (specify below) [ ]

Committee Member's signature: Date: 12/03/01

Warwickshire NHS
Health Authority

Westgate House
Market Street
Warwick CV34 4DE

Tel: 01926 493491
Fax: 01926 495074

PAH

11th April 2001

WARWICKSHIRE RESEARCH ETHICS COMMITTEE

The following LREC trial protocol has been examined from an ethical viewpoint and the decision of the Committee is as follows

			Documentation Reviewed *as itemised in ICH guidelines*	
1	*	Approved		
			Protocol	☑
			Patient Information Form/	☑
			Consent Form	☑
2		Approved subject to amendments listed below	**Indemnity (signed)**	☑
			CTX	☐
			Protocol Amendments	☐
3		Rejected for reasons listed below		
4		Approved by Chairman's Action		

Ethical Committee Minute Number 516/01 Dated 28th March 2001

Protocol Title and Reference Number
RE 476 Causal attributions in children with attention deficit hyperactivity disorder (ADHD)
(Yolanda Juanola Barratt)

Signed ..... Committee Chairman

Dated 9\7\01

This approval is subject to the following standard conditions

1. the study must begin within one year;
2. the researcher must seek the Committee's approval in advance of any proposed deviations from the original protocol,
3. any unusual or unexpected results which raise questions about the safety of the study must be reported to the Committee
4. progress reports must be submitted to the Committee annually, and
5. a summary of the study's findings must be submitted to the Committee upon its completion.

X400 Address: s=office, g=gen, o=nhs warwickshire ha, p=nhs w mids hn, a=nhs, c=gb Internet: gen.office@warwick-ha.wmids.nhs.uk

Appendix B

Instructions to authors

CLINICAL PSYCHOLOGY REVIEW

INSTRUCTIONS TO AUTHORS

AIMS AND SCOPE: *Clinical Psychology Review* publishes substantive reviews of topics germane to clinical psychology. Its purpose is to help clinical psychologists keep up-to-date on relevant issues outside of their immediate areas of expertise by publishing scholarly but readable reviews. Papers cover diverse issues, including: psychopathology, psychotherapy, behavior therapy, behavioral medicine, community mental health, assessment, and child development.

Reviews on other topics, such as psychophysiology, learning therapy, and social psychology, often appear if they have a clear relationship to research or practice in clinical psychology. Integrative literature reviews and summary reports of innovative ongoing clinical research programs are also sometimes published. Reports on individual research studies are not appropriate.

SUBMISSION REQUIREMENTS: All manuscripts should be submitted to Alan S. Bellack, The University of Maryland at Baltimore, Department of Psychiatry, 737 W. Lombard St., Suite 551, Baltimore, MD 21201, USA. Submit three (3) high-quality copies of the entire manuscript; the original is not required. Allow ample margins and type double-space throughout. Papers should not exceed 50 pages (including references). One of the paper's authors should enclose a letter to the Editor, requesting review and possible publication; the letter must also state that the manuscript has not been previously published and has not been submitted elsewhere. One author's address (as well as any upcoming address change), telephone and FAX numbers, and **E-mail address** (if available) should be included; this individual will receive all correspondence from the Editor and Publisher.

Papers accepted for *Clinical Psychology Review* may not be published elsewhere in any language without written permission from the author(s) and publishers. Upon acceptance for publication, the author(s) must complete a Transfer of Copyright Agreement form.

COMPUTER DISKS: Authors are encouraged to submit a 3.5" HD/DD computer disk to the editorial office. Please observe the following criteria: (1) Send only hard copy when first submitting your paper. (2) When your paper has been refereed, revised if necessary, and accepted, send a disk containing the final version with the final hard copy. If the disk cannot be converted, the hard copy will be used. (3) Specify what software was used, including which release, e.g., WordPerfect 6.0a. (4) Specify what computer was used (IBM compatible PC, Apple Macintosh, etc.). (5) The article file should include all textual material (text, references, tables, figure captions, etc.) and separate illustration files, if available. (6) The file should follow the general instructions on style/arrangement and, in particular, the reference style of this journal as given in the Instructions to Contributors. (7) The file should be single-spaced and should use the wrap-around end-of-line feature, i.e., returns at the end of paragraphs only. Place two returns after every element such as title, headings, paragraphs, figure and table call-outs. (8) Keep a back-up disk for reference and safety.

TITLE PAGE: The title page should list (1) the article; (2) the authors' names and affiliations at the time the work was conducted; (3) a concise running title; and (4) an unnumbered footnote giving an address for reprint requests and acknowledgments.

ABSTRACT: An abstract should be submitted that does not exceed 200 words in length. This should be typed on a separate page following the title page.

KEYWORDS: Authors should include up to six keywords with their article. Keywords should be selected from the APA list of index descriptors, unless otherwise agreed with the Editor.

STYLE AND REFERENCES: Manuscripts should be carefully prepared using the *Publication Manual of the American Psychological Association*, 4th ed., 1994, for style. The reference section must be double spaced, and all works cited must be listed. Avoid abbreviations of journal titles and incomplete information.

Reference Style for Journals:
Raymond, M. J. (1964). The treatment of addiction by aversion conditioning with apomorphine. *Behavior Research and Therapy, 3*, 287–290.

For Books:
Barlow, D. H., Hayes, S. C., & Nelson, R. O. (1984). *The scientist practitioner: Research and accountability in clinical and educational settings.* Elmsford, NY: Pergamon.

TABLES AND FIGURES: Do not send glossy prints, photographs or original artwork until acceptance. Copies of all tables and figures should be included with each copy of the manuscript. Upon acceptance of a manuscript for publication, original, camera-ready photographs and artwork must be submitted, unmounted and on glossy paper. Photocopies, blue ink or pencil are not acceptable. Use black india ink and type figure legends on a separate sheet. Write the article title and figure number lightly in pencil on the back of each.

PAGE PROOFS AND OFFPRINTS: Page proofs of the article will be sent to the corresponding author. These should be carefully proofread. Except for typographical errors, corrections should be minimal, and rewriting the text is not permitted. Corrected page proofs must be returned within 48 hours of receipt. Along with the page proofs, the corresponding author will receive a form for ordering offprints and full copies of the issue in which the article appears. Twenty-five (25) free offprints are provided; orders for additional offprints must be received before printing in order to qualify for lower publication rates. All coauthor offprint requirements should be included on the offprint order form.

COPYRIGHT: Publications are copyrighted for the protection of the authors and the publisher. A Transfer of Copyright Agreement will be sent to the author whose manuscript is accepted. The form must be completed and returned to the publisher before the article can be published.

CLINICAL CHILD PSYCHOLOGY AND PSYCHIATRY

Notes for Authors

AIMS AND SCOPE

Clinical Child Psychology and Psychiatry brings together clinically oriented work of the highest distinction from an international and multidisciplinary perspective, offering comprehensive coverage of clinical and treatment issues across the range of treatment modalities. The journal is interested in advancing theory, practice and clinical research in the realm of child and adolescent psychology and psychiatry and related disciplines. The journal directs its attention to matters of clinical practice, including related topics such as the ethics of treatment and the integration of research into practice.

Multidisciplinary in approach, the journal includes work by, and is of interest to, child psychologists, psychiatrists and psychotherapists, nurses, social workers and all other professionals in the fields of child and adolescent psychology and psychiatry.

INSTRUCTION TO AUTHORS

The Editor apologizes for the apparent pedantry of these instructions, but adherence to them will ensure rapid and efficient processing of your contributions, and will enhance the article itself.

Peer review process. The Editor will screen manuscripts for their overall fit with the aims and scope of the journal. Those that fit will be further reviewed by two or more independent reviewers. Papers will be evaluated by the Editorial Board and refereed in terms of merit, readability and interest. Unsolicited manuscripts will not be returned to the author.

Submission of MSS. Four copies of each manuscript, **typed in double spacing throughout**, and on one side only of white A4 or US standard size paper, and a copy on disk (preferably PC compatible) should be sent to the Editor at the address given below. All pages should be numbered. Email submissions are encouraged.

Format of MSS. Each manuscript should contain the following, in the correct order.

(a) Title page to include the title of the paper, full name of each author, current professional position and work context, and indicators of which author will be responsible for correspondence. A word count should also be included.

(b) Abstract: should not exceed 200 words (150 for preference); up to **5 key words to be listed alphabetically on the same page.** This page should carry the title of the paper but not the author name(s).

(c) Main text: not usually to exceed 7500 words and to be clearly organized, with a clear hierarchy of headings and subheadings (3 weights maximum).

(d) References: Citation of references follows APA (American Psychological Association) style. References cited in the text should read thus: Brown (1955, pp. 63-64); (Brown, 1995, pp. 63-64; Green & Brown, 1992, p. 102, Table 3). The letters a, b, c, etc., should distinguish citations of different works by the same author in the same year (Black, 1989a, 1989b).

All references cited in the text should appear in an alphabetical list, after the Notes section.

(e) Figures, tables, etc.: should be numbered consecutively, carry descriptive captions and be clearly cited in the text. Keep them separate from the text itself, but indicate an approximate

location on the relevant text page. Line diagrams should be presented as camera-ready copy on glossy paper (b/w, unless to be reproduced - by arrangement - in colour) and, if possible, on disk as EPS files (all fonts embedded) or TIFF files, 800 dpi - b/w only. For scanning, photographs should preferably be submitted as clear, glossy, unmounted b/w prints with a good range of contrast or on disk as TIFF files, 300 dpi.

(f) Author biographies: On a separate sheet provide a one-paragraph biobibliographical note for each author - up to 100 words for a single author, but none to exceed 65 words in a multi-authored paper.

Style. Use a clear and readable style, avoiding jargon. If technical terms must be included, define them when first used. Use plurals rather than he/she, (s)he, his or hers: 'If a child is unhappy, he or she. . . ' is much better expressed as 'When children are unhappy, they. . .'.

Spelling. British or American spellings may be used ('z' versions of British spellings preferred to 's' versions, as given in the Oxford English Dictionary).

Punctuation. Use single quotation marks, with double inside single. Present dates in the form 9 May 1996. Do not use points in abbreviations, contractions or acronyms (e.g. DC, USA, DR, UNESCO).

Covering letter. Attach to every submission a letter confirming that all authors have agreed to the submission and that the article is not currently being considered for publication by any other journal. The name, address, telephone and fax number and email address of the corresponding author should always be clearly indicated.

Disks. On acceptance of your MS for publication you will be asked to supply a disk (preferably PC compatible) of the final version.

Copyright. Before publication authors are requested to assign copyright to Sage Publications, subject to retaining their right to reuse the material in other publications written or edited by themselves and due to be published preferably at least one year after initial publication in the Journal.

Mailing. Address MSS to the Editor: **Bernadette Wren, Consultant Clinical Psychologist, Child and Family Department, Tavistock Clinic, 120 Belsize Lane, London NW3 5BA, UK. Email: BWren@tavi-port.org**

North America: **Prof. John Leventhal, Yale University, Section of Paediatrics, School of Medicine, 333 Cedar Street, PO Box 208064, New Haven, Connecticut. Tel: 001 203 688 2468 Fax: 001 203 785 3932. Email: John.Leventhal@Yale.Edu**

Australasia: **Dr Kenneth Nunn, Department of Psychological Medicine, The Children's Hospital at Westmead, Locked Bag 4001, Westmead, NSW 2145, Australia. Tel: 00 61 2 9845 2005 Fax: 00 61 2 9845 2009. Email: Kennethn@chw.edu.au**

Books for review should be sent to: **Anna Brazier, The Children's Centre, University Hospital of Wales, Heath Park, Cardiff, CF14 4XW, UK.**

Appendix C

Example of invitation letter and information sheets

South Warwickshire Combined Care NHS
NHS Trust

Department for Children, Young People and their Families
Tiddington Fields
Main Street
Tiddington
Stratford-upon-Avon
CV37 7AY

Tel:01789 414643
Fax: 01789 263752

Date

Dear (Parents/carers of children who have a diagnosis of ADHD)

I am writing to you to request your help with a research project. I enclose an information sheet that provides more information about the project and what it would involve. I would very much appreciate it if after reading the "Information Sheet" you could complete the tear-off slip overleaf stating whether you would like to take part in the study and return it in the stamped addressed envelope provided.

The study is being conducted by Yolanda Juanola-Borrat who is a Psychologist in her final year of clinical training and she is looking at how children and young people understand and explain the difficulties they may be having with their behaviour. She is interested in knowing how these explanations may affect the way they see themselves and the way they feel. It is hoped that this information will help to provide an improved service to children and young people with similar difficulties.

The study is a requirement of the Doctorate in Clinical Psychology course run jointly by the Universities of Coventry and Warwick. It has been approved by Warwickshire Research Ethics Committee and it is well supervised both academically and clinically.

The supervisors are:

Dr Eve Knight,
Clinical Psychologist, Academic Tutor, Coventry University
Ms Jacky Knibbs,
Consultant Clinical Psychologist, South Warwickshire Combined Care NHS Trust
Dr Stephen Joseph,
Chartered Health Psychologist, Senior Lecturer, Warwick University

Thank you very much for your time.

Yours sincerely

Dr P.
Chartered Clinical Psychologist

✂----------

Please return this response slip to Dr P. in the enclosed stamped addressed envelope.

We would* / we would not* be interested in taking part in the study regarding children's explanations for their behavioural difficulties.

If we are happy to take part in this study we understand that our child's details (name and address) will be passed into Yolanda Juanola-Borrat, who will contact us concerning the study.

* delete as applicable.

Signed (Carer/Guardian): .....

Date: .....

Print Name: .....

Child's name: .....

Address: .....

Telephone No: .....

INFORMATION SHEET FOR PARENTS OR MAIN CARER

Personality, Causal Attributions, Self-Concept and Mood in Children with Attention Deficit Hyperactivity Disorder

This project is looking at how children and young people understand and explain their behavioural difficulties. Some children seem to blame themselves for their difficulties whereas others do not seem to take any responsibility for them. We are interested in understanding why this might be the case. In addition, this study will also attempt to explore the process whereby children's explanations of their behaviour may affect the way they feel and what they think about themselves.

Taking part in this project will involve completing two questionnaires about your child and his/her behaviour. This will take you no longer than 30 minutes. We also would like your child to complete some easy questionnaires about his/her mood, self-concept (i.e. the way one feels about oneself) and explanations of bad and good events. In addition, we would like to interview your child for about 10-15 minutes about how he/she understands the difficulties he/she is having. This interview would be tape-recorded so we can go over it afterwards. In all we anticipate spending about one hour with your child.

Any information that you provide will be confidential to the research project. Details of questionnaires, information from interviews, etc. will be given an anonymous identification number, kept in a place that is confidential, and will be inaccessible to anybody not involved in the project. Tapes recorded will be destroyed as soon as they have been transcribed. The information you and your child provide will not be passed on to the professionals involved in your child's care unless you agree to it. I will be happy to answer any questions you may have about confidentiality.

I would be grateful if you would consider taking part in this research project. However, it is important for you to understand that your participation is not a requirement for your child's current or future care. And even in the case you do agree to answer the questionnaires and the interviews, you have the right to request at any time that your information be withdrawn from the project, in the knowledge that this will not affect or jeopardise your child's care in any way.

If you have any more questions or would like to discuss the study in more detail before deciding whether to take part or not, please contact me on the address below.

Yolanda Juanola-Borrat, Trainee Clinical Psychologist,
Doctoral programme in Clinical Psychology, School of Health & Social Sciences,
Coventry University, Priory Road, Coventry, CV1 5FB; Telephone: 024 7688 8328

5 January 2002

INFORMATION SHEET FOR CHILD/YOUNG PERSON

Personality, Causal Attributions, Self-Concept and Mood in Children with Attention Deficit Hyperactivity Disorder

Sometimes, children and young people may get into trouble because of the things they do. We are doing a study to find out why children and young people think they sometimes get into trouble and what would help them to do something about this. We also would like to know how these children and young people feel about themselves. We think that if we understand children and young people better it would be easier for us to find ways of helping.

If you would be prepared to take part in this study, we would ask you a few questions about your life and how you feel. We would also ask your parents some questions about how they see things.

Whatever you tell us will be kept in a safe place where other people will not be able to read it. Your parents will be told that whatever you say will be confidential. This means that nobody else, including your parents, will see the answers you give.

You do not have to take part in this study but we would really appreciate it if you felt you could help us. The care you receive will not be affected in any way by your decision. If you decide to take part I will ask you to sign a consent form. However, if later on you change your mind and would like to stop taking part, you can do so at any time.

You can contact me at the following address and number if you want to ask me more questions about this study before deciding to take part.

Yolanda Juanola-Borrat, Trainee Clinical Psychologist
Doctoral programme in Clinical Psychology, School of Health & Social Sciences,
Coventry University, Priory Road, Coventry, CV1 5FB; Telephone: 024 7688 8328

5 January 2002

Appendix D

Consent form

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

School of Health and Social Sciences
Coventry University
Priory Street Coventry CV1 5FB
Telephone 024 7688 8328
Fax 024 7688 8328 or 8784

THE UNIVERSITY OF WARWICK

COVENTRY UNIVERSITY

CONSENT FORM

Our ref

Title of project: Personality, Causal Attributions, Self-Concept and Mood in Children with Attention Deficit Hyperactivity Disorder

Your ref

Name of Researcher: Yolanda Juanola-Borrat, Trainee Clinical Psychologist

Date

Doctoral Programme in Clinical Psychology, School of Health & Social Sciences, Coventry University, Priory Road, Coventry, CV1 5FB

Telephone: 024 7688 8328

Please initial box

	Participant	Parent
1. I confirm that I have read and understand the information sheet dated 5 January 2002 for the above study and have had the opportunity to ask questions.	☐	☐
2. I understand that my participation is voluntary and I am free to withdraw at any time, without giving any reason, without my medical care or legal rights being affected.	☐	☐
3. I understand that sections of any of my medical notes may be looked at by the researcher where it is relevant to my taking part in the research. I give permission for her to have access to my notes.	☐	☐
4. I agree to take part in the above study.	☐	☐

Name of participant	Date	Signature
Name of parent/main carer	Date	Signature
Researcher	Date	Signature
Name of person taking consent (if different from researcher)	Date	Signature

1 for participant, 1 for researcher, 1 to be kept with medical notes

5 January 2002

Appendix E

Semi-structured interview

CHILD/YOUNG PERSON'S SEMI-STRUCTURED INTERVIEW

I would like to talk with you about your difficulties and how you feel about them. This is not a test; therefore there are no right or wrong answers. I am interested in your views and how you feel, so just try to be as honest as you can.

- **Why do you come to see Dr .....?**

- **How would you describe yourself?**
  - What are you good at? What are your favourite things?

- **Lots of boys/girls/young people who come to see Dr ..... have some difficulties with their behaviour? What are yours? (Ask for difficulties at home and at school)**

- **What do you think causes these difficulties?**

- **What do you think may help you with your difficulties?**

- **How does having these difficulties make you feel?**

- **If you didn't have them what would be different? (home, school, etc)**
  - If you Mum/Dad were here, what would they say about your difficulties?
  - If your brothers/sisters were here, what would they say about your difficulties?
  - If you teacher was here, what would they say about your difficulties?
  - If you friends were here, what would they say about your difficulties?

- **Would you like to add anything else?**

Appendix F

Parents/Main carers' questionnaire

PARENTS/MAIN CARERS' QUESTIONNAIRE

The questions below concern your family and your child's behaviour. It would be very helpful if you could complete them all. Thank you for your time.

Child/Young person's name ..... **D.O.B.** .....

SEX Boy ☐ Girl ☐ **Grade in school** ..... **Not attending school** ☐

Father's type of work ..... **Mother's type of work** .....

This form filled out by: Mother ☐ Father ☐ Other ☐ .....

- How would you describe your child behavioural difficulties?

_____

_____

_____

_____

- Why do you think he/she has these difficulties?

_____

_____

_____

_____

- What do you think may help him?

_____

_____

_____

_____

- Have you seen any professional because of your child's behaviour?

_____

_____

_____

_____

(Please continue overleaf)

- Have you been offered any help to manage your child's behaviour?

_____

_____

_____

_____

- Does your child take medication?

  If yes, could you specify the name and the dose?

_____

_____

_____

_____

- Comments:

_____

_____

_____

_____

_____

_____

_____

_____

Appendix G

Conners' Parent Rating Scale – Revised (S)

Conners' Parent Rating Scale - Revised (S)

by C. Keith Conners, Ph.D.

Child's Name: _____ **Gender: M F**

Birthdate: ____/____/____ (Month Day Year) **Age:** _____ **School Grade:** _____

Parent's Name: _____ **Today's Date:** ____/____/____ (Month Day Year)

Instructions: Below are a number of common problems that children have. Please rate each item according to your child's behavior 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. Angry and resentful	0	1	2	3
3. Difficulty doing or completing homework	0	1	2	3
4. Is always "on the go" or acts as if driven by a motor	0	1	2	3
5. Short attention span	0	1	2	3
6. Argues with adults	0	1	2	3
7. Fidgets with hands or feet or squirms in seat	0	1	2	3
8. Fails to complete assignments	0	1	2	3
9. Hard to control in malls or while grocery shopping	0	1	2	3
10. Messy or disorganized at home or school	0	1	2	3
11. Loses temper	0	1	2	3
12. Needs close supervision to get through assignments	0	1	2	3
13. Only attends if it is something he/she is very interested in	0	1	2	3
14. Runs about or climbs excessively in situations where it is inappropriate	0	1	2	3
15. Distractibility or attention span a problem	0	1	2	3
16. Irritable	0	1	2	3
17. Avoids, expresses reluctance about, or has difficulties engaging in tasks that require sustained mental effort (such as schoolwork or homework)	0	1	2	3
18. Restless in the "squirmy" sense	0	1	2	3
19. Gets distracted when given instructions to do something	0	1	2	3
20. Actively defies or refuses to comply with adults' requests	0	1	2	3
21. Has trouble concentrating in class	0	1	2	3
22. Has difficulty waiting in lines or awaiting turn in games or group situations	0	1	2	3
23. Leaves seat in classroom or in other situations in which remaining seated is expected	0	1	2	3
24. Deliberately does things that annoy other people	0	1	2	3
25. Does not follow through on instructions and fails to finish schoolwork, chores or duties in the workplace (not due to oppositional behavior or failure to understand instructions)	0	1	2	3
26. Has difficulty playing or engaging in leisure activities quietly	0	1	2	3
27. Easily frustrated in efforts	0	1	2	3

Profile for Females: Conners' Parent Rating Scale - Revised (S)

Child's Name:_____ **Gender: M F** (Circle One)

Birthdate:_____/_____/_____ (Month Day Year) **Age:**_____ **School Grade:**_____

Parent's Name:_____ **Today's Date:**_____/_____/_____ (Month Day Year)

T	A. Oppositional 1	2	3	4	5	B. Cognitive Problems/ Inattention 1	2	3	4	5	C. Hyperactivity 1	2	3	4	5	D. Conners' ADHD Index 1	2	3	4	5
90	.	.	17	16	17	.	.	16	.	.	.	15	.	.	.	.	.	.	.	.
89	.	16	.	.	.	12	15	.	16	.	.	.	9	.	.	27	33	30	.	.
88	.	.	.	.	.	.	.	15	.	16	.	.	.	.	.	.	32	.	28	29
87	14	.	16	15	16	.	.	.	15	.	12	14	.	.	.	26	.	29	27	28
86	.	15	.	.	.	.	14	.	.	.	.	.	.	.	6	.	31	28	.	.
85	.	.	.	.	.	11	.	14	.	15	.	.	.	6	.	25	30	.	26	27
84	13	.	15	14	15	.	.	.	14	.	.	.	.	.	.	.	.	27	.	.
83	.	14	.	.	.	.	13	.	.	14	11	13	8	.	.	24	29	26	25	26
82	.	.	.	.	.	.	.	13	.	.	.	.	.	.	.	.	28	.	24	25
81	.	.	14	13	14	10	.	.	13	.	.	.	.	.	.	23	.	25	.	.
80	12	13	.	.	.	.	12	.	.	13	.	12	.	.	.	22	27	24	23	24
79	.	.	.	.	.	.	.	12	.	.	10	.	7	5	5	.	26	.	.	23
78	.	.	13	12	13	.	.	.	12	.	.	11	.	.	.	21	.	23	22	.
77	11	12	.	.	.	9	11	.	.	12	.	.	.	.	.	.	25	.	.	22
76	.	.	12	.	12	.	.	11	.	.	9	.	.	.	.	20	24	22	21	.
75	.	.	.	11	.	.	.	.	11	.	.	.	.	.	.	.	23	21	20	21
74	.	11	.	.	.	8	10	.	.	11	.	10	.	.	.	19	.	.	.	20
73	10	.	11	.	11	.	.	10	.	.	.	.	8	.	.	.	22	20	19	.
72	.	.	.	.	.	.	.	.	10	.	.	.	.	4	4	18	21	19	.	19
71	.	10	.	10	.	.	9	.	.	10	8	9	.	.	.	.	.	.	18	.
70	9	.	10	.	10	7	.	9	9	.	.	.	.	.	.	17	20	18	17	18
69	.	.	.	.	.	.	.	.	.	9	.	8	5	.	.	.	19	.	.	17
68	.	9	.	9	.	.	8	.	.	.	7	.	.	.	.	16	.	17	16	.
67	.	.	9	.	9	.	.	8	8	.	.	.	.	.	.	15	18	16	.	16
66	8	.	.	.	.	6	.	.	.	8	.	7	.	3	3	.	17	.	15	.
65	.	.	.	8	.	.	7	.	.	.	.	.	.	.	.	14	.	15	14	15
64	.	8	8	.	8	.	.	7	7	.	6	.	4	.	.	.	16	14	.	14
63	7	.	.	.	.	5	.	.	.	7	.	6	.	.	.	13	15	.	13	.
62	.	.	.	7	.	.	6	.	.	.	.	.	.	.	.	.	.	13	.	13
61	.	7	7	.	7	.	.	6	6	.	.	.	.	.	.	12	14	.	12	12
60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	13	12	11	.
59	6	.	.	6	.	4	5	5	.	6	5	5	3	.	.	11	.	11	.	11
58	.	6	6	.	6	.	.	.	5	5	.	.	.	2	2	.	12	.	10	.
57	.	.	.	.	.	.	.	.	.	.	4	.	.	.	.	10	11	10	.	10
56	5	.	.	5	.	.	4	4	4	.	.	4	.	.	.	.	.	9	9	9
55	.	5	5	.	5	3	.	.	.	4	.	.	2	.	.	9	10	.	8	.
54	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	8	9	8	.	8
53	.	.	.	4	.	.	3	3	3	.	3	3	.	.	.	.	8	.	7	.
52	4	4	4	.	4	.	.	.	.	3	.	.	.	1	1	7	.	7	.	7
51	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.	7	6	6	6
50	.	.	3	3	.	.	2	2	2	.	.	2	1	.	.	6	6	.	5	.
49	3	3	.	.	3	.	.	.	.	2	2	.	.	.	.	.	.	5	.	5
48	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	5	5	4	4	4
47	.	.	2	2	.	.	1	1	1	1	.	1	.	.	.	.	4	.	.	.
46	.	2	.	.	2	.	.	.	.	.	.	.	.	0	.	4	.	3	3	3
45	2	.	.	.	.	.	.	.	.	.	1	.	0	.	0	3	2	2	.	2
44	.	.	1	.	.	0	0	0	0	0	.	0	.	.	.	.	.	1	1	1
43	.	1	.	1	1	.	.	.	.	.	.	.	.	.	.	2	1	.	.	.
42	1	.	.	.	.	.	.	.	.	.	0	.	.	.	.	1	0	0	0	0
41	.	.	0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
40	.	0	.	0	0	.	.	.	.	.	.	.	.	.	.	0	.	.	.	.
39	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
38	0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Note:
For age-groups:

Column 1: ages 3 to 5

Column 2: ages 6 to 8

Column 3: ages 9 to 11

Column 4: ages 12 to 14

Column 5: ages 15 to 17

Please see back of scoring sheet for Scale Descriptions

Please see reverse for CPRS-R Male Profile

Appendix H

Example of interview transcript

Participant 1 Interview (16 yrs old)

I: I would like to talk with you about the difficulties you have and how you feel about them. It's not a test, it's not an exam, and there are no right or wrong answers. I am interested in your views and how you feel, so just try to be as honest as you can. Do you have any question before we begin?
T: Not really.
I: OK. Let's begin then. How would you describe yourself to someone who does not know anything about you?
T: Oh, God, I don't know. Handsome, tall, dark hair, dark eyes, all of that. Very smartly dressed. Very cheerful.
I: What would you say about your difficulties?
T: I can't read. I can but I can't, if you know what I mean. I get distracted so easily. I can't stay at one place at a time, I keep moving. I need help with my maths.
I: Are these the reasons why you are seeing J?
T: No, she is someone I can talk to...because I used to get very angry and things. I used to lose my temper so easily.
I: So, you used to lose your temper easily...
T: Yes, people know how to get on my nerves so easily. Especially those people in the village, they go on and on.
I: So, basically you are saying that you have problems with reading, and with maths, and also you are very distractible, and you lose your temper easily.
T: I used to, not so much anymore.
I: So how is it now?
T: I control my temper very easily now. I keep a happy face in my mind. Before, I used to bottle things up and when somebody called me stupid I just lashed out. Now, I don't do it anymore.
I: I see. Do you know why you have these difficulties?
T: No.
I: Do you know what causes them?
T: Not truly. I don't know why it happens; I don't know what makes me do it. I probably wake up in a bad mood, I have a bad day. I often get the mickey taken out of me but in fact that's easy to handle because this also happened at school. Now, my boss gets on my nerves and says I can have an attack, which ain't true, because I've read up about ADHD.
I: What is ADHD?
T: Adolescence disorder hyperactive deficit.
I: Do you think you have ADHD?
T: I am absolutely hyperactive.
I: Why do you think you are hyperactive?
T: No idea. I've always been hyperactive since I was 3. I can't sit down unless it's something I am interested in like my play station or TV. I could spend hours playing my playstation; I could spend a whole weekend.
I: I see.
T: Yes. I am hyperactive and I get distracted which ADHD does distract you. And you don't know what you are doing, you lose your temper.
I: Then, being easily distracted, losing your temper...
T: It's from ADHD. As I've said I've read up about it.
I: What else have you read about ADHD?

T: Most common kids can get it, although not all. It's mostly in America, American kids get it. Only a few kids in Britain get it and I am one of them.
I: Ok, so you've got ADHD and you believe that it affects your other difficulties?
T: I think so, I can't be sure.
I: And how does having ADHD make you feel?
T: It doesn't make me feel anything. I have to get on with my life. I've got it, that's it. It doesn't affect me.
I: Tell me more about how you feel.
T: That's it really. It's just that if I don't take the tablets I do get hyper and then it's when ADHD starts kicking in, I can not control what I am doing. I can not control what I am doing if I don't take my tablets. I get like mad. People have to get out of my way, basically.
I: Because you have no control...
T: I have no control when I am hyperactive.
I: How often do you take your tablets?
T: Every day. 2 in the morning and 1 in the afternoon.
I: And if you didn't take them...
T: If I didn't take them I'd be completely different. I'd be all over the place.
I: So, if this the only thing that helps?
T: The Ritalin?
I: Yes.
T: And J in someway. I get somebody to talk to. I can talk in private and tell her things, which are confidential. She can not tell anyone. If she does she breaks confidential and I don't trust her again.
I: So, this helps as well.
T: This helps. I tell her my problems and she gives me some advice, what to do.
I: If things could be different, what would you wish for?
T: Not to have ADHD, not to be hyperactive and not to lose my temper so easily.
I: I see...
T: I've always been hyperactive but I didn't know I had ADHD until I was 12, so for the last 4 years of my life.
I: And has it changed things in any way?
T: Things are more difficult because I can not get a job.
I: Why not?
T: Because of my ADHD. I can not use machinery. Where I am working now I don't use machinery.
I: Why can you not use machinery?
T: Because my boss says that I can have an attack, which I don't, I can not be left alone.
I: So, what is an attack?
T: I don't know. You don't get an attack from ADHD, just hyperactivity. That's it. He doesn't know. I've tried to tell him but he would not listen to me.
I: So he still thinks that you may have an attack.
T: Yes, but I won't.
I: So you don't get attacks. Is there anything you can get from ADHD?
T: I can get hyper if I don't take my tablets and also I start lashing out at people, which really annoys me, but it doesn't happen very often.
I: And if you don't take your tablets?
T: Once I did not take my medication and I punched windows and hurt myself. So now I always take my medication, otherwise I have no control over ADHD.

I: Does it always work?
T: Yes, always.
I: And, what happens then?
T: Then, nothing happens; I don't lash out or anything.
I: Do you know what causes ADHD?
T: No, I don't know what ADHD is and how you get it...unless you are born with it. Ah, I've changed my wishes. I wish I could be born again not having ADHD.
I: Why?
T: Because you can not get a job if you have ADHD and then you can not get married, have a house and all that.
I: Can you not get any job at all?
T: Not a good one, no.
I: Does it ever go away?
T: No, if you get it, it's for the rest of your life. I never knew I had ADHD till 4 years ago and my life has been hell after that. But much better since I left school.
I: How was school?
T: Don't ask. I was like a nightmare at school.
I: So you were saying that things are better now.
T: No, still a nightmare. I wish I was back at school.
I: Why?
T: Because I didn't go to all my lessons, I didn't stay at school. I got bad GCSEs, I wish I hadn't.
I: Hmm...
T: It's because ADHD stopped me from going to my lessons.
I: Do you think so?
T: Yes, I think so badly.
I: How did having ADHD stop you from going to your lessons?
T: It doesn't, but I like saying it does. It's just me, I didn't like the lessons, I didn't like the school. I was getting bullied at school so I didn't go to my lessons. School was hell.
I: Would you like to tell me more?
T: Not really.
I: Is there anything you would like to add?
T: No, that's it.

Appendix I

Example of first stage of thematic analysis

Extracted expressions (Participant 1)	Page ref.
I am handsome, smartly dressed, very cheerful.	1.8
I can't read properly.	1.11
I get distracted easily.	1.11
I can't stay at one place at a time, I keep moving.	1.11
I need help with my maths.	1.12
I used to get very angry.	1.14
I used to lose my temper easily.	1.14
People get on my nerves and I lose my temper.	1.17
I keep a happy face in my mind to control my temper.	1.23
I used to bottle things up and when somebody called me stupid I just lashed out.	1.23
I don't know why I have these difficulties.	1.29
Sometimes I don't control my temper because I wake up in a bad mood.	1.29
I often get the Mickey taken out of me.	1.30
My boss gets on my nerves since he incorrectly says I can have an attack.	1.31
I've read up about ADHD.	1.32
ADHD stands for Adolescence disorder hyperactive deficit.	1.34
I am absolutely hyperactive.	1.36
I've always been hyperactive since I was 3.	1.38
I can sit down if I do something I am interested in	1.38
ADHD does distract you.	1.42
I lose my temper because of ADHD.	1.42
Only a few kids in Britain get it and I am one of them.	1.47
Having ADHD doesn't affect the way I feel.	2.4
If I don't take the tablets I get hyper.	2.7
I have no control when I am hyperactive.	2.8
If I didn't take the tablets I'd be completely different. I'd be all over the place.	2.15
Talking to therapist helps.	2.19
I wished I wasn't hyperactive.	2.25
I can not get a job because of ADHD.	2.30
I can not use machinery at work because of ADHD.	2.32
Tried to explain ADHD to my boss but he would not listen.	2.38
If I do not take the tablets, I get hyper and lash out at people.	2.42
Once I did not take my medication and I punched windows and hurt myself.	2.45
Now I always take my medication, otherwise I have no control over ADHD.	2.45
Medication always works.	2.48
You are born with ADHD.	3.2
You can not have a normal life if you have ADHD.	3.5
ADHD does not go away.	3.10
My life has been hell since I know I have ADHD.	3.10
My life has been better since I left school.	3.11
I was like a nightmare at school.	3.13
I would like to go back to school and improve my marks.	3.17
ADHD stopped me from going to my lessons.	3.20
I got bullied at school.	3.25

Appendix J

Example of fourth stage of thematic analysis

Extracted expressions (Participant 1)	Page ref.
Positive Self-concept	
I am handsome, smartly dressed, very cheerful.	1.8
Difficulties	
I can't read properly.	1.11
I need help with my maths.	1.12
I was like a nightmare at school.	3.13
My life has been better since I left school.	3.11
I get distracted easily.	1.11
I can't stay at one place at a time, I keep moving.	1.11
I used to get very angry and things.	1.14
I used to lose my temper easily.	1.14
I am absolutely hyperactive.	1.36
I have no control when I am hyperactive.	2.8
Lack of understanding	
I don't know why I have these difficulties.	1.29
Trying to find an explanation	
I've read up about ADHD.	1.32
ADHD stands for Adolescence disorder hyperactive deficit.	1.34
I've always been hyperactive since I was 3.	1.38
Only a few kids in Britain get it and I am one of them.	1.47
You are born with ADHD.	3.2
Reason for difficulties	
Medical	
ADHD does distract you.	1.42
I lose my temper because of ADHD.	1.42
ADHD stopped me from going to my lessons.	3.20
Other	
People get on my nerves and I lose my temper.	1.17
I used to bottle things up and when somebody called me stupid I just lashed out.	1.23
Sometimes I don't control my temper because I wake up in a bad mood.	1.29
Consequences of ADHD	
Having ADHD doesn't affect the way I feel.	2.4
I can not get a job because of ADHD.	2.30
I can not use machinery at work because of ADHD.	2.32
You can not have a normal life if you have ADHD.	3.5
My life has been hell since I know I have ADHD.	3.10
Factors which contribute to an improvement of the difficulties	
Internal	
I keep a happy face in my mind to control my temper.	1.23
I can sit down if I do something I am interested in.	1.38
External	
Talking to therapist helps.	2.19
Medication	
If I don't take the tablets I get hyper.	2.7
If I didn't take the tablets I'd be completely different. I'd be all over the place.	2.15

If I don't take the tablets, I get hyper and lash out at people.	2.42
Once I did not take my medication and I punched windows and hurt myself.	2.45
Now I always take my medication, otherwise I have no control over ADHD	2.45
Medication always works.	2.48
Prognosis	
ADHD does not go away.	3.10
Being bullied	
I often get the mickey taken out me.	1.30
I got bullied at school.	3.25
Wish to change	
I wished I wasn't hyperactive.	2.25
I would like to go back to school and improve my marks.	3.17
Other's perceptions of ADHD	
My boss gets on my nerves since he incorrectly says I can have an attack.	1.31
Tried to explain ADHD to my boss but he would not listen.	2.38
Controllability	
I keep a happy face in my mind to control my temper.	1.23
Sometimes I don't control my temper because I wake up in a bad mood.	1.29
Now I always take my medication, otherwise I have no control over ADHD.	2.45
I have no control when I am hyperactive.	2.8

Appendix K

Master list of themes (first page)

THEMES	*John*	*Matt*	*George*	*Paul*	*Chris*	*Tom*	*Mark*
Making sense of the difficulties							
Searching for an explanation	1.32, 1.34, 1.38, 1.47, 3.2	2.4		2.40, 3.12, 1.36 4.14	2.17	3.25, 1.37, 1.41	
Lack of understanding	1.29		1.41, 2.7	1.38, 2.36	1.11, 2.19	2.8	
Disagreement with diagnosis							
Attributions for difficulties causes and solutions							
Causes of difficulties	1.42, 3.20, 1.17 1.23, 1.29	1.23, 1.27, 1.29, 1.33, 2.6	1.20, 1.27	1.30, 1.42, 1.44 3.27, 4.17	1.10, 1.16, 1.26 1.37, 2.11	1.21, 1.43, 2.6 2.42, 2.42, 2.45	4.8
Solutions to difficulties	1.23, 1.38, 2.19	2.16			3.11, 2.5	2.15,	
Medication							
Favourable aspects	2.7, 2.15, 2.42 2.45, 2.48	1.23, 1.38, .40, 1.41, 1.43, 1.45 2.23, 3.5, 3.9 3.16, 3.34, 3.36 3.45	1.45, 2.1, 2.15	1.40, 2.1, 2.8 2.15, 2.22, 2.29 3.22, 3.34	1.19, 1.21, 1.25 1.35, 1.42	1.29, 1.35, 2.13 2.21, 2.27, 2.31	3.12, 3.43, 3.47 3.51, 4.2, 4.6
Unfavourable aspects							3.20, 3.24, 3.32 3.35, 3.41
Impact and development of ADHD							
Emotional consequences of ADHD	2.4, 2.30, 2.32 3.5, 3.10	2.27	1.22, 1.25, 1.33 2.21		3.9		4.14, 4.16
Interpersonal relationships and ADHD							
- *Ability to make friends*			1.25				4.16
- *Being bullied*	1.30, 3.25	3.24, 3.26					
- *Sharing ADHD*		3.22	2.9, 2.11, 2.26 2.32	3.49, 4.4, 4.8	2.41	3.3, 3.13, 3.19	
- *Comparison to other children*		2.9, 2.11	1.29	3.4	2.30, 2.32, 3.1	1.19	
Prognosis	3.10	2.29		2.48, 3.1		3.28	

Appendix L

Birleson Depression Scale

Birleson Depression Scale – Questionnaire

NFER-NELSON
INFORMING YOUR DECISIONS

Name: Age: Sex (please circle): M / F Date of birth: / /

Directions: The statements below refer to how you have felt *over the past week*. There are no right answers but it is important to say how you have felt. Please answer as honestly as you can. Put a tick in the appropriate box. Thank you.

	Most	Sometimes	Never
1. I look forward to things as much as I used to			
2. I sleep very well			
3. I feel like crying			
4. I like to go out to play			
5. I feel like running away			
6. I get tummy aches			
7. I have lots of energy			
8. I enjoy my food			
9. I can stick up for myself			
10. I think life isn't worth living			
11. I am good at things I do			
12. I enjoy the things I do as much as I used to			
13. I like talking with my family			
14. I have horrible dreams			
15. I feel very lonely			
16. I am easily cheered up			
17. I feel so sad I can hardly stand it			
18. I feel very bored			

Appendix M

The Piers-Harris Children's Self-Concept Scale

THE PIERS-HARRIS CHILDREN'S SELF-CONCEPT SCALE

PROFILE FORM

Ellen V. Piers, Ph.D., and Dale B. Harris, Ph.D

Client's Name: _____

Percentile	T	Inconsistency Index	Response Bias Index	I Behavior	II Intellectual and School Status	III Physical Appearance and Attributes	IV Anxiety	V Popularity	VI Happiness and Satisfaction	Total Score	T	Percentile
	80	≥9	≥57							≥80	80	
		8	56							78–79		
										77		
			55									
	75										75	
		7								76		
			54									
99												99
		6	53									
98	70		52		17					75	70	98
			51			13	14	12		74		
		5								73		
			50							72		
			48–49	16						71		
93	65		47							70	65	93
		4	46			12						
			45		16		13		10	69		
			44							68		
								11		67		
		3				11				66		
84	60		43								60	84
			42	15	15		12			65		
			41							64		
		2	40							63		
						10			9	61–62		
69	55		39		14		11	10		60	55	69
			38	14						59		
		1	37			9				57–58		
					13		10		8	56		
			36					9		54–55		
50	50			13	12					53	50	50
			35			8	9			52		
		0	34							50–51		
				12	11		8	8	7	49		
			33			7				47–48		
31	45			11	10					45–46	45	31
			32				7	7		44		
				10	9	6				42–43		
			31						6	40–41		
				9	8		6	6		39		
16	40					5				37–38	40	16
			30	8				5		35–36		
					7		5			33–34		
			29		6	4				31–32		
				7				4	5	30		
7	35		28	6						28–29	35	7
					5	3	4	3		26–27		
				5						24–25		
			27					2	4	23		
			25–26	4			3			21–22		
2	30		23–24		4				3	20	30	2
						2		1		19		
1									2			1
				3	3					18		
						1	2					
	25									0–17	25	
					2		1		1			
				2		0		0				
							0					
	20		<23	<2	≤1				0		20	

	Inconsistency Index	Response Bias Index	I Behavior	II Intellectual and School Status	III Physical Appearance and Attributes	IV Anxiety	V Popularity	VI Happiness and Satisfaction	Total Score
Raw Scores	_____	_____	_____	_____	_____	_____	_____	_____	_____
T-Scores	_____	_____	_____	_____	_____	_____	_____	_____	_____

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Scoring Instructions

Validity Scores

To determine the Response Bias Index, count the number of circles that have been made in the "yes" columns. Enter this number in the raw score space for the Response Bias Index at the bottom of the Profile Form. For the Inconsistency Index, refer to the scoring pages inside the AutoScore™ form and review all of the conditions listed in the Inconsistency Index columns, making a check mark beside each condition that is applicable. Count the number of check marks that you have made, and enter that number in the raw score space for the Inconsistency Index at the bottom of the Profile Form.

Total Score and Cluster Scores

To obtain the raw total score, count the number of items for which "1" is circled on the inside scoring pages. Enter this number in the raw score space for the total score at the bottom of the Profile Form. To determine the raw scores for Cluster I through Cluster VI, first locate each item for which a "1" has been circled, and make a check mark in any boxes in the same row as that item. Then count the number of check marks you have made in the columns that correspond to each cluster. Enter the number of check marks as the raw score for each cluster in the spaces provided at the bottom of the Profile Form.

Plotting the Profile

On the Profile Form, circle the value in each column that corresponds to the raw score you have entered at the bottom. Then connect the circled scores to plot the profile. The *T*-score and percentile rank for each raw score can be found along the left and right margins of the Profile Form in the same row where the circled raw score appears. Copy the *T*-scores for the Validity indexes, the cluster scores, and the total score to the *T*-score spaces provided below the raw score spaces on the Profile Form. *T*-scores are standard scores with a mean of 50 and a standard deviation of 10. Thus a *T*-score below 40 on any scale falls at least one standard deviation below the mean, and a score above 60*T* falls at least one standard deviation above the mean. Validity scores (the Response Bias and Inconsistency Indexes) above 70*T* suggest that an unusual pattern of answers has been given to the *Piers-Harris* items.

My classmates make fun of me ..... yes no
I am a happy person ..... yes no
It is hard for me to make friends ..... yes no
I am often sad ..... yes no
I am smart ..... yes no
I am shy ..... yes no
I get nervous when the teacher calls on me ..... yes no
My looks bother me ..... yes no
When I grow up, I will be an important person ..... yes no
I get worried when we have tests in school ..... yes no
I am unpopular ..... yes no
I am well behaved in school ..... yes no
It is usually my fault when something goes wrong ..... yes no
I cause trouble to my family ..... yes no
I am strong ..... yes no
I have good ideas ..... yes no
I am an important member of my family ..... yes no
I usually want my own way ..... yes no
I am good at making things with my hands ..... yes no
I give up easily ..... yes no
I am good in my school work ..... yes no
I do many bad things ..... yes no
I can draw well ..... yes no
I am good in music ..... yes no
I behave badly at home ..... yes no
I am slow in finishing my school work ..... yes no
I am an important member of my class ..... yes no
I am nervous ..... yes no
I have pretty eyes ..... yes no
I can give a good report in front of the class ..... yes no
In school I am a dreamer ..... yes no
I pick on my brother(s) and sister(s) ..... yes no
My friends like my ideas ..... yes no
I often get into trouble ..... yes no
I am obedient at home ..... yes no
I am lucky ..... yes no
I worry a lot ..... yes no
My parents expect too much of me ..... yes no
I like being the way I am ..... yes no
I feel left out of things ..... yes no

THE WAY I FEEL ABOUT MYSELF

THE PIERS-HARRIS CHILDREN'S SELF-CONCEPT SCALE

Ellen V. Piers, Ph.D. and Dale B. Harris, Ph.D.

Client's Name: _____

Today's Date: _____

Age: _____

Sex: *(circle one)* Girl Boy

Grade: _____

School: _____

Teacher's Name (optional): _____

Directions

Here is a set of statements that tell how some people feel about themselves. Read each statement and decide whether or not it describes the way you feel about yourself. If it is *true or mostly true* for you, circle the word "yes" next to the statement. If it is *false or mostly false* for you, circle the word "no." Answer every question, even if some are hard to decide. Do not circle both "yes" and "no" for the same statement. If you want to change your answer, cross it out with an X, and circle your new answer.

Remember that there are no right or wrong answers. Only you can tell us how you feel about yourself, so we hope you will mark the way you really feel inside.

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41. I have nice hair ..... yes no
42. I often volunteer in school ..... yes no
43. I wish I were different ..... yes no
44. I sleep well at night ..... yes no
45. I hate school ..... yes no
46. I am among the last to be chosen for games ..... yes no
47. I am sick a lot ..... yes no
48. I am often mean to other people ..... yes no
49. My classmates in school think I have good ideas ..... yes no
50. I am unhappy ..... yes no
51. I have many friends ..... yes no
52. I am cheerful ..... yes no
53. I am dumb about most things ..... yes no
54. I am good-looking ..... yes no
55. I have lots of pep ..... yes no
56. I get into a lot of fights ..... yes no
57. I am popular with boys ..... yes no
58. People pick on me ..... yes no
59. My family is disappointed in me ..... yes no
60. I have a pleasant face ..... yes no
61. When I try to make something, everything seems to go wrong ..... yes no
62. I am picked on at home ..... yes no
63. I am a leader in games and sports ..... yes no
64. I am clumsy ..... yes no
65. In games and sports, I watch instead of play ..... yes no
66. I forget what I learn ..... yes no
67. I am easy to get along with ..... yes no
68. I lose my temper easily ..... yes no
69. I am popular with girls ..... yes no
70. I am a good reader ..... yes no
71. I would rather work alone than with a group ..... yes no
72. I like my brother (sister) ..... yes no
73. I have a good figure ..... yes no
74. I am often afraid ..... yes no
75. I am always dropping or breaking things ..... yes no
76. I can be trusted ..... yes no
77. I am different from other people ..... yes no
78. I think bad thoughts ..... yes no
79. I cry easily ..... yes no
80. I am a good person ..... yes no

Appendix N

Children's Attributional Style Questionnaire

CHILDREN'S ATTRIBUTIONAL STYLE QUESTIONNAIRE-REVISED

INSTRUCTIONS

Here are some situations. I want you to try really hard to imagine that these situations just happened to you. After each situation is presented, two possible reasons for why the situation might have happened are given. I want you to choose the most likely reason to explain why the situation happened to you.

Sometimes both of the reasons may sound true, and sometimes both may sound false, and, you may never have been in some of these situations. But even so, I want you to pick the reason that seems to explain why the situation happened to you.

There are no right answers and no wrong answers, so always pick the reason that seems the most likely to you.

Circle either "A" or "B" for each question. I can read along with you, if that helps.

Do you have any questions before we begin?

Children's Attributional Styles Questionnaire-Revised

1. You get an "A" on a test.

   A. I am clever.
   B. I am good in the subject that the test was in.

2. Some kids that you know say that they do not like you.

   A. Once in a while people are mean to me.
   B. Once in a while I am mean to other people.

3. A good friend tells you that he or she hates you.

   A. My friend was in a bad mood that day.
   B. I wasn't nice to my friend that day.

4. A person steals money from you.

   A. That person is not honest.
   B. Many people are not honest.

5. Your parents tell you something that you make is very good.

   A. I am good at making some things.
   B. My parents like some things I make.

6. You break a glass.

   A. I am not careful enough.
   B. Sometimes I am not careful enough.

7. You do a project with a group of kids and it turns out badly.

   A. I don't work well with people in that particular group.
   B. I never work well with groups.

8. You make a new friend.

   A. I am a nice person.
   B. The people that I meet are nice.

9. You have been getting along well with your family.

A. I am usually easy to get along with when I am with my family.
B. Once in awhile I am easy to get along with when I am with my family.

10. You get a bad mark in school.

A. I am not a good student
B. Teachers give hard tests.

11. You walk into a door and you get a nose bleed.

A. I wasn't looking where I was going.
B. I have been careless lately.

12. You have a messy room.

A. I did not clean my room that day.
B. I usually do not clean my room.

13. Your mother makes you your favorite dinner.

A. There are a few things that my mother will do to please me.
B. My mother usually likes to please me.

14. A team that you are on loses a game.

A. The team members don't help each other when they play together.
B. That day the team members didn't help each other.

15. You do not get your jobs done at home.

A. I was lazy that day.
B. Many days I am lazy.

16. You go to an amusement park and you have a good time.

A. I usually enjoy myself at amusement parks.
B. I usually enjoy myself in many activities.

17. You go to a friend's party and you have fun.

A. Your friend usually gives good parties.
B. Your friend gave a good party that day.

18. You have a supply teacher and she likes you.

A. I was well behaved during class that day
B. I am almost always well behaved during class.

19. You make your friends happy.

A. I am usually a fun person to be with.
B. Sometimes I am a fun person to be with.

20. You put a hard puzzle together.

A. I am good at putting puzzles together.
B. I am good at doing many things.

21. You try out for a sports team and do not make it.

A. I am not good at sports.
B. The other kids who tried out were very good at sports.

22. You fail a test.

A. All tests are hard.
B. Only some tests are hard.

23. You score a rounder.

A. I swung the bat just right.
B. The bowler threw an easy ball.

24. You do the best in your class on a test.

A. The other kids in my class did not work hard on their tests.
B. I worked hard on the test.

Appendix O

Example of attributions extracted from a transcript

Participant 1 Interview (16 yrs old)

I: I would like to talk with you about the difficulties you have and how you feel about them. It's not a test, it's not an exam, and there are no right or wrong answers. I am interested in your views and how you feel, so just try to be as honest as you can. Do you have any question before we begin?
T: Not really.
I: OK. Let's begin then. How would you describe yourself to someone who does not know anything about you?
T: Oh, God, I don't know. Handsome, tall, dark hair, dark eyes, all of that. Very smartly dressed. Very cheerful.
I: What would you say about your difficulties?
T: I can't read. I can but I can't, if you know what I mean. I get distracted so easily. I can't stay at one place at a time, I keep moving. I need help with my maths.
I: Are these the reasons why you are seeing J?
T: No, she is someone I can talk to...because I used to get very angry and things. I used to lose my temper so easily.
I: So, you used to lose your temper easily...
T: Yes, people know how to get on my nerves so easily. Especially those people in the village, they go on and on.
I: So, basically you are saying that you have problems with reading, and with maths, and also you are very distractible, and you lose your temper easily.
T: I used to, not so much anymore.
I: So how is it now?
T: I control my temper very easily now. I keep a happy face in my mind. Before, I used to bottle things up and when somebody called me stupid I just lashed out. Now, I don't do it anymore.
I: I see. Do you know why you have these difficulties?
T: No.
I: Do you know what causes them?
T: Not truly. I don't know why it happens; I don't know what makes me do it. I probably wake up in a bad mood. I have a bad day. I often get the mickey taken out of me but in fact that's easy to handle because this also happened at school. Now, my boss gets on my nerves and says I can have an attack, which ain't true, because I've read up about ADHD.
I: What is ADHD?
T: Adolescence disorder hyperactive deficit.
I: Do you think you have ADHD?
T: I am absolutely hyperactive.
I: Why do you think you are hyperactive?
T: No idea. I've always been hyperactive since I was 3. I can't sit down unless it's something I am interested in like my play station or TV. I could spend hours playing my playstation; I could spend a whole weekend.
I: I see.
T: Yes. I am hyperactive and I get distracted which ADHD does distract you. And you don't know what you are doing, you lose your temper.
I: Then, being easily distracted, losing your temper...
T: It's from ADHD. As I've said I've read up about it.
I: What else have you read about ADHD?

T: Most common kids can get it, although not all. It's mostly in America, American kids get it. Only a few kids in Britain get it and I am one of them.
I: Ok, so you've got ADHD and you believe that it affects your other difficulties?
T: I think so, I can't be sure.
I: And how does having ADHD make you feel?
T: It doesn't make me feel anything. I have to get on with my life. I've got it, that's it. It doesn't affect me.
I: Tell me more about how you feel.
T: That's it really. It's just that if I don't take the tablets I do get hyper and then it's when ADHD starts kicking in. I can not control what I am doing. I can not control what I am doing if I don't take my tablets. I get like mad. People have to get out of my way, basically.
I: Because you have no control...
T: I have no control when I am hyperactive.
I: How often do you take your tablets?
T: Every day. 2 in the morning and 1 in the afternoon.
I: And if you didn't take them...
T: If I didn't take them I'd be completely different. I'd be all over the place.
I: So, if this the only thing that helps?
T: The Ritalin?
I: Yes.
T: And J in someway. I get somebody to talk to. I can talk in private and tell her things, which are confidential. She can not tell anyone. If she does she breaks confidential and I don't trust her again.
I: So, this helps as well.
T: This helps. I tell her my problems and she gives me some advice, what to do.
I: If things could be different, what would you wish for?
T: Not to have ADHD, not to be hyperactive and not to lose my temper so easily.
I: I see...
T: I've always been hyperactive but I didn't know I had ADHD until I was 12, so for the last 4 years of my life.
I: And has it changed things in any way?
T: Things are more difficult because I can not get a job.
I: Why not?
T: Because of my ADHD. I can not use machinery. Where I am working now I don't use machinery.
I: Why can you not use machinery?
T: Because my boss says that I can have an attack, which I don't, I can not be left alone.
I: So, what is an attack?
T: I don't know. You don't get an attack from ADHD, just hyperactivity. That's it. He doesn't know. I've tried to tell him but he would not listen to me.
I: So he still thinks that you may have an attack.
T: Yes, but I won't.
I: So you don't get attacks. Is there anything you can get from ADHD?
T: I can get hyper if I don't take my tablets and also I start lashing out at people, which really annoys me, but it doesn't happen very often.
I: And if you don't take your tablets?
T: Once I did not take my medication and I punched windows and hurt myself. So now I always take my medication, otherwise I have no control over ADHD.

I: Does it always work?
T: Yes, always.
I: And, what happens then?
T: Then, nothing happens; I don't lash out or anything.
I: Do you know what causes ADHD?
T: No, I don't know what ADHD is and how you get it...unless you are born with it. Ah, I've changed my wishes. I wish I could be born again not having ADHD.
I: Why?
T: Because you can not get a job if you have ADHD and then you can not get married, have a house and all that
I: Can you not get any job at all?
T: Not a good one, no.
I: Does it ever go away?
T: No, if you get it, it's for the rest of your life. I never knew I had ADHD till 4 years ago and my life has been hell after that. But much better since I left school.
I: How was school?
T: Don't ask. I was like a nightmare at school.
I: So you were saying that things are better now.
T: No, still a nightmare. I wish I was back at school.
I: Why?
T: Because I didn't go to all my lessons, I didn't stay at school. I got bad GCSEs, I wish I hadn't.
I: Hmm...
T: It's because ADHD stopped me from going to my lessons.
I: Do you think so?
T: Yes, I think so badly.
I: How did having ADHD stop you from going to your lessons?
T: It doesn't, but I like saying it does. It's just me, I didn't like the lessons, I didn't like the school. I was getting bullied at school so I didn't go to my lessons. School was hell.
I: Would you like to tell me more?
T: Not really.
I: Is there anything you would like to add?
T: No, that's it.