A PORTFOLIO OF STUDY, PRACTICE
AND RESEARCH

REFERRER SATISFACTION WITH A
CHILD & ADOLESCENT PSYCHOLOGY
SERVICE AND ANALYSIS OF WHY SOME
PROFESSIONALS DO NOT REFER

Submitted for the Doctor of Psychology
(PsychD) in Clinical Psychology

Conversion Programme

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1995
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SECTION ONE:

PROFESSIONAL AUDIT
1. Overall aims and objectives:

1.1 To attain greater professional competence in order to enhance the contribution of clinical psychology to health care.

1.2 To produce a portfolio of study, practice and research that will demonstrate increased competence in each of these three areas.

1.3 To enhance and promote the image of clinical psychology as a profession within the Health Service
2. Academic:

2.1 Aims: To enhance academic competence in three specialist areas of clinical psychology in order to develop the services offered by the department or profession.

To contribute to the expansion of specialist areas in which the department can offer expertise to service users and other professionals.

To enhance or increase my own knowledge in academic areas in which it is lacking.

2.2 Objectives: To complete three academic reviews, one for each of the three specialist areas.

To attend continuing professional development training workshops presented by the Clinical Psychology Continuing Professional Development Committee or by the University of Surrey as part of the PsychD conversion course and/or third year of training course.

Registration with the University of Surrey library and with the Worthing Priority Care NHS Trust Postgraduate library.
2.3 Rationale: Within my current clinical work I have cases which present me with considerable challenges both theoretically, in terms of my lack of up to date knowledge of the literature concerning these areas, and behaviourally, in terms of the most appropriate management strategies for these difficulties.

The first of the areas in which I need to update my knowledge is that of Conduct Disorders. This is of particular importance as Conduct Disorders are found to be the most common reason for referral to child and adolescent clinical psychology departments, and the one in which I work is no exception. An up to date knowledge of this area will be valuable to the specialty.

The second area for academic investigation is in the area of Gilles de la Tourette's Syndrome. The department receives referrals for treatment of children and adolescents diagnosed with this syndrome, but it is one that is not covered in the clinical psychology training course. Therefore, it is important for me to familiarise myself with current issues in this area.
The third area for academic review is panic in children and adolescents. This is a relatively new and controversial field of investigation within this population and it is important for the department to be kept up to date with the latest developments in this area.

2.4 Plan: A review and critical evaluation of Parent Training Programmes and Child Skills Training Programmes as models of treatment of conduct disordered children and adolescents.

Academic Review 2: The case of Gilles de la Tourettes Syndrome and Obsessive Compulsive Disorder: A critical review


3. Clinical:

3.1 Aims: To increase personal professional competence.
3.2 Objectives: To present a dossier on clinical activity carried out throughout the year that will make evident increased personal clinical competence, satisfying the BPS requirements for the third year of training.

3.3 Rationale: Following new regulations outlined by the BPS which stated that all trainees must undergo a period of three years of training to be eligible for status as a Chartered Clinical Psychologist, the cohort of trainees to which I belonged had to undertake a third year of training following the successful completion of the two year MSc course in clinical psychology.

On completion of the third year of training an account of all clinical activity undertaken throughout the year had to be submitted to the BPS Committee for the Scrutiny of Individual Clinical Qualifications (CSICQ) for examination of proof of acceptable completion of the third year of training, indicating an improvement in clinical skill and knowledge.

3.4 Plan: To include a copy of the material submitted to the BPS CSICQ for examination of successful completion of the third year of training.
To include a copy of the BPS letter of eligibility to register for status as a Chartered Clinical Psychologist.

4. Research:

4.1 Aims:
To increase research competence so as to develop the services offered by the department.

To increase personal research competence to include the development of questionnaires and the use of appropriate statistical analysis for survey data.

4.2 Objectives:
To develop a research dossier, part of which will be the original MSc dissertation, which will make evident increased personal research competence.

To complete an evaluation of satisfaction levels, on a number of dimensions, of all referrers to the Child and Adolescent Speciality of the Worthing Priority Care NHS Trust Psychology Service and to develop a profile of those professionals who currently do not refer to the Child and Adolescent Speciality.
To send a postal survey to all actual and potential referrers to the Child and Adolescent Speciality for the above evaluation.

To use appropriate statistical analysis to evaluate the data collected for the above study.

4.3 Rational

There is an increasing move within the Health Service towards involving consumers in the evaluation of service provision.

This was initially stimulated by government reports such as the “Working For Patients” White Paper (Department of Health 1989) which highlighted the need to seek consumer views and to use this information to monitor performance. It is traditional for “consumer” to be taken to mean the recipients of a service.

However, in the current study the “consumers” are defined as the professionals who may refer to the service. Referrers’ views regarding the service they receive are vital. If they are not provided with the service they require they may eventually opt to buy in
services from other trusts, resulting in a loss of revenue to the Worthing Priority Care Trust.

The Child and Adolescent Speciality of the Worthing Priority Care NHS Trust Clinical Psychology Service has recently expanded from one full-time member to 2.7 wte. With this increase in staffing levels the speciality is now able to develop as a comprehensive, fully evaluated service, where in the past staff shortages dictated that it was only possible for the one member of the service to carry a case load without having time to systematically evaluate the service that was being provided.

The current study is the first move in the development of full service evaluation.

4.4 Plan: All professionals working in the Worthing Priority Care NHS Trust and West Sussex Education Authority with children and adolescents under the age of eighteen years will be sent a postal questionnaire to determine either their levels of satisfaction with the service they received or the reasons why they currently do not refer to the Psychology Service. A stamped
addressed envelop will be provided to encourage a high response rate and all responses will be anonymous, asking only for the profession of the respondent.

There will be only one send-out of the questionnaire as in the process of ensuring anonymity respondents may produce more accurate information, but it will not be possible to ascertain who has responded or not. A second send-out could also be perceived as intrusive and is prohibitive in its cost. There will be a final date by which all questionnaires must be received in order to facilitate the progress of data analysis.

The collected data will be analysed in terms of levels of satisfaction with the main areas of the service and comparisons will be made of levels of satisfaction between different professional groups.

A profile will be compiled of those professionals who could but currently do not refer to the Child and Adolescent Psychology Service.
5. Portfolio Outline:

Section One: **Academic Component:**

Academic Review 1: A review and critical evaluation of Parent Training Programmes and Child Skills Training Programmes as models of treatment of Conduct Disordered children and adolescents

Academic Review 2: The case of Gilles de la Tourette's Syndrome and Obsessive Compulsive Disorder: A critical review


Workshop and lecture attendance.

Section Two: **Clinical Component:**

To submit an account of all clinical activity undertaken throughout the year from October 1994 - October
1995 and one in-depth case study in accordance with British Psychological Society regulations for third year of training.

Acceptance of clinical competence letter acknowledging eligibility for Chartered Status from the British Psychological Society.

Section Three: Research:

Original MSc dissertation titled "The Perceptions and Interpretations of Chronic Illness in Asthmatic Children and Their Parents".

A new research report on the evaluation of referrer satisfaction with the Child and Adolescent Speciality of Worthing Priority Care NHS Trust Clinical Psychology Service.

Participant Signature: [Signature]

Head of Clinical Department Signature: [Signature]

Course Director Signature: [Signature]
SECTION TWO:

ACADEMIC AUDIT
A REVIEW AND CRITICAL EVALUATION OF PARENT TRAINING PROGRAMMES AND CHILD SKILLS TRAINING PROGRAMMES AS MODELS OF TREATMENT OF CONDUCT DISORDERED CHILDREN AND ADOLESCENTS
In the last two decades, many instruments have been constructed to describe and classify the behaviour of children and adolescents, e.g.: The Child Behaviour Checklist (Achenbach 1973), the Eyberg Child Behaviour Inventory (Eyberg 1980), and the Child and Adolescent Problem Profile (Moghughi 1991). As a result, many dimensions of child behaviour have been identified. Despite this range of measuring instruments and number of dimensions identified, two major dimensions repeatedly emerge from most analyses: those of emotional and conduct disorders. The latter accounts for between 4 - 10% of childhood behaviour disorders in the U.K. (Rutter et al 1975), making up one-third to one-half of all child and adolescent clinic referrals (Herbert 1987).

Empirical investigations, e.g., Achenback & Edelbrock (1983) who collected data on 2300 American children referred to forty-two mental health settings, consistently identify behavioural problems of an under-controlled or externalising type (referred to as conduct disorders) and an over-controlled or internalising type (referred to as emotional disturbance). Of these two, the externalising behaviours appear to be more stable over time. Fisher et al (1984) in a longitudinal study, found that pre-school children with severe internalising symptoms were no more likely than other children to show such severe shy, withdrawn behaviours at a seven year follow-up. Conversely, severe externalising behaviours are much more likely to persist into adolescence and beyond. Rutter et al (1970) in the Isle of Wight Study found that three-quarters of those diagnosed early as having a conduct disorder still manifested the disorder at adolescence.
Before proceeding, it is important to develop a clear definition of the disorder to be discussed. Peterson (1961) demonstrated that conduct disorder is a cluster of problems characterised by non-compliance, restlessness, irresponsibility, boisterousness, aggression and is often associated with hyperactivity. The common theme running through this somewhat heterogeneous collection of behaviours is antisocial disruptiveness and the disapproval they earn because of the flouting of societies' rules. Webster-Stratton (1991) also specifies that in conduct disordered children there is significant impairment in everyday functioning at home or school due to the persistent pattern of anti-social behaviour, or that the child’s behaviours are considered unmanageable by parents or teachers. This then is the specific constellation of problems to which this Paper is referring in the following evaluation of treatments.

Of the variety of syndromes described in the child literature, conduct disorders are of particular significance because of their prevalence and potentially long-term ramifications. The need to find ways to maximally help children with conduct disorders and their families is particularly urgent in view of findings by Coie (1990) that these children are at increased risk of being rejected by their peers and/or abused by their parents (Reid, Taplin and Loeber 1981). Kazdin (1985) has demonstrated that they are also at risk of developing problems such as school dropout, substance misuse, adult crime, disharmony in their own marital relations and poor physical health. In the absence of treatment, the long-term outlook for conduct disordered children is poor.
Conduct disorders are multi-faceted in terms of the specific behaviours that are manifested, the ages of the children who engage in the behaviours and the settings (home, school or community) in which the behaviours occur. It is not surprising, therefore, that a plethora of therapies have been developed (Kazdin 1985) in an attempt to deal with the diverse manifestations of this disorder. The present Paper will explore two of these in detail which have been subjected to the most rigorous empirical outcome evaluations.

One of the major strategies that has been followed in an attempt to treat conduct disorders has been based on the 'parent training' model (O'Dell 1974). Research demonstrating that parents of children with conduct disorders lack certain fundamental parenting skills underpins this approach to treatment. Parents of conduct disordered children have been reported to exhibit fewer positive behaviours, to be more violent in their use of discipline, to be more permissive, to be less likely to monitor their child's behaviour and to be more likely to reinforce inappropriate behaviours and to ignore or even punish prosocial behaviours (Webster-Stratton 1985).

Given this data, Patterson (1986) developed the 'coercion hypothesis', based on a social learning interaction model, which emphasises the primacy of familial socialisation processes in the development and maintenance of conduct disorders. This postulates that the coercive, or controlling, behaviour on the part of one family member (parent or child) is reinforced when it results in the
removal of an aversive event being applied to another family member. As this coercive 'training' within the family continues over long periods, the rate and intensity of parent and child aggressive behaviours are increased as family members are reinforced by engaging in aggressive behaviours (hence the increased likelihood of abuse in families of conduct disordered children mentioned previously). Furthermore, the child observes his or her parents engaging in coercive responses, which provides the opportunity for modeling of aggression to occur (Patterson 1982). This 'negative reinforcement trap' has been shown by Patterson (1980) to be one of the most powerful process contributing to child conduct disorders and preliminary investigations have been supportive of the model as it applies to conduct-disordered boys both within the home (Patterson & Bank 1986) and at school (Walker et al 1987).

Conversely Wahler (1976) showed how a coercive cycle may be created by a 'positive reinforcement trap'. That is, parental attention positively reinforces the child's misbehaviour. It seems likely that both theories play a role in the maintenance of conduct disorders given that parents of these children both reinforce anti-social behaviour as well as engage in increasingly aggressive behaviour towards their children over time (Webster-Stratton 1985). Following these theories, which posit the primacy of parent's behaviours in the development and maintenance of conduct disorders in children, intervention approaches have been aimed at 'treating' the child's parents.
Parent Training Programmes (PTPs) focus on teaching parents how to change the interpersonal antecedents and consequences that elicit and maintain the child’s negative behaviours. Patterson et al (1975) and Patterson (1982) developed a PTP originally aimed at pre-adolescents aged three to twelve years to be carried out with individual families. Alterations were later made for treating adolescents, and are discussed later. Prior to starting treatment, the parents are given a book about the treatment to read, the rationale being that it will provide a conceptual framework to the treatment approach. Added to this, preliminary research by Patterson (1975) indicated that for some families simply reading the book and increasing understanding led to a significant reduction in observed child behaviours. Following this initial stage, five ‘family management practices’ form the basis of the programme. First, parents are taught to pinpoint and record the problem behaviours at home (e.g. recording compliance vs. non-compliance). Second, they are taught reinforcement principles for pro-social behaviours and thirdly the principles and application of discipline procedures for anti-social behaviours. Fourly, they learn to provide close supervision of the child. Finally they are taught problem-solving and negotiation strategies in order to become increasingly responsible for carrying on the programme without the therapist’s involvement.

A major advance in the treatment of Conduct Disorders came when Patterson and his colleagues modified the PTP for use with adolescents, in order to take account of the different life stage of adolescence as compared to middle childhood (Marlowe, Reid, Patterson, Weinrott and Bank 1988). The
alterations include the parents' need to identify behaviours which put the adolescent at risk of further delinquency, e.g.: school non-attendance, curfew violations and substance misuse. In lieu of time-out procedures advocated for younger children, the adolescent is punished by restriction of free time, increase in household chores and reparation of damaged or stolen property. There is also greater involvement of the adolescent themselves in treatment sessions aimed at increasing their awareness of the functions and consequences of their behaviour and to increase their responsibility to adhere to behavioural contracts entered into with their parent. This is a clear example of the developmental framework as it must be applied to all work in the child and adolescent field.

A second PTP was developed by Hanf and Kling (1973) and modified by Forehand and McMahon (1981). The emphasis of this programme is on teaching parents to play with their child in a non-directive way and to identify how to reward children's pro-social behaviours via praise and attention. Time-out procedures are taught for non-compliance. This programme also involves individual families, making use of ear-bug devices which enables the therapist to communicate with one of the parents while they are observed interacting with their child in the playroom. The emphasis on play indicates the use of this particular PTP with children aged between three and eight years, again making use of a developmental framework.
The final PTP to be discussed here is that developed by Webster-Stratton (1981 and 1984) and includes elements of the two programmes already outlined. What is unique about this programme is that it involves treating parents in groups and is based on Bandura's (1977) modeling theory. The programme utilises video taped modeling methods which demonstrate parenting skills. After each of 250 one- to two-minute vignettes, the therapist leads a group discussion of the relevant interactions and encourages parents' ideas and problem-solving as well as role play and behavioural rehearsal. The children are not involved in the therapy sessions but parents are given homework tasks in order to practice the skills with their children at home.

Each of the aforementioned PTPs have been extensively evaluated. The short-term efficacy of treatment outcome has been verified by reports of significant changes in parent's and children's behaviour, as well as parental perceptions of child adjustment (e.g.; McMahon & Forehand 1984 and Spitzer, Webster-Stratton & Hollinsworth 1991). However, the generalisation of these effects is less consistent, as shown in the following section. Forehand and Atkeson (1977) discuss four major types of generalisation which, given the multifaceted nature of conduct disorders, should not be disregarded in a discussion of outcomes of PTPs.

'Setting generalisation' refers to the transfer of treatment effects to settings in which treatment did not occur, while 'temporal generalisation' refers to the maintenance of treatment effects following termination. Patterson &
Fleischmann (1977) and Webster-Stratton (1984) demonstrate generalisation of improvement from clinic to home over one to four years post-treatment with all three programmes. However, generalisation from clinic to school did not occur in a study by Breiner and Forehand (1981) as a result of the Forehand and McMahon programme. The Webster-Stratton programme on the other hand reported significant improvement in teacher reports of child adjustment immediately following treatment, but these improvements were not maintained at a one year follow-up.

The lack of setting and temporal generalisation shown between clinic and school is an important point, especially given the amount of time a child spends in school throughout their childhood and adolescence. A possible reason for this failure of generalisation may be due to the teacher's lack of involvement in the programmes. The teacher's behaviour towards the child is likely to remain constant, despite possible early alterations in the child's behaviour due to the parental behaviour changes. With time, the anti-social behaviours are likely to re-emerge within the school if the teacher has not also altered their behaviour in line with the parents. This clearly points to the need for joint working between psychologists, teachers and parents to ensure that everyone who has regular contact with the child learns to treat them in a consistent manner.

'Sibling generalisation' concerns the transfer of the newly acquired parenting skills to untreated siblings in the family and the siblings responding in the
desired manner. Sibling generalisation was demonstrated in response to the Hanf and Kling PTP. Mothers employed the skills they learned in the parent training programme to untreated children in the home. These children, in turn, responded by being more compliant to maternal direction (Humphreys et al 1978). Sibling generalisation has not been investigated with the other PTPs. This may be an area for future research.

Finally, 'behavioural generalisation' refers to whether the targeted changes in specific conduct disordered behaviours are accompanied by improvements in other non-targeted behaviours. Behavioural generalisation has been demonstrated by all three programmes (Fleischmann 1981, Forehand & Long 1986 and Webster-Stratton 1990). This indicates the importance of appropriate parental responses to child behaviour. Once a pattern is established in which the child's pro-social behaviours are rewarded and attention for anti-social behaviours is withdrawn, the child learns that other pro-social behaviours also reap the benefits of increased reinforcement. This is an example of behaviour modification at its best.

PTPs generally produce significant changes in parent and child behaviours. If the investigation into efficacy stopped there one could conclude that this method of treatment is sufficient for all conduct disordered children and adolescents. However, this would be a misplaced view. There is evidence that some families do not respond to treatment; these children continue to show 'clinically significant' behaviours after treatment. Long-term follow-up studies
of PTPs suggest that 30-40% of treated parents and 25% of teachers report that children still have behaviour problems in the clinical range (Forehand, Furey & McMahon 1984 and Webster-Stratton 1990). Research shows that parent and family characteristics such as marital distress, spouse abuse, maternal depression, poor problem-solving skills and high life stress are associated with fewer treatment gains. (Forehand et al 1984, Forgatch 1989 and Webster-Stratton 1990).

As well as the equivocal findings regarding the long-term effectiveness of PTPs, there is an additional problem: that of engaging parents in the programmes. Parents commonly view the child as 'the problem' as they are the one displaying the overt behaviours. Much time may need to be spent in the early stages of therapy in addressing the issue of blame in the family such that all family members are able to accept some responsibility for the maintenance of dysfunctional behaviour patterns. In achieving this, it is more likely that parents will engage in treatment programmes. Therefore, although PTPs have much to recommend them, they are not without problems. The focus will now shift to look at another treatment approach with quite a different emphasis.

Conduct disordered children differ from their 'normal' peers on a variety of behavioural, cognitive and affective dimensions (McMahon & Wells 1989). Another body of research into the treatment of conduct disorders has been developed which focuses on child skills training. The premise underlying this
approach to treatment is that one or more of the differences found in conduct disordered children represents a fundamental deficit which, if remedied, will lead to improvements in the child’s functioning in several domains. Research has indicated that conduct disordered children are less competent socially and more likely to be rejected by peers than are other children (Coie 1990). Rubin & Krasnor (1983) suggest that conduct disordered children are more likely to have difficulty solving social problems, while Dodge (1985) indicates that they are more likely to misattribute hostile intentions to others. Ellis (1982) found that they are less empathic than their non-aggressive peers. Asher and Renshaw (1981) term this lack of critical cognitive and social behavioural skills the ‘deficit hypothesis’. This has informed treatment approaches which are directed towards the child and aimed at ameliorating these deficits.

Two basic types of Child Skills Training Programmes (CSTP) have been developed. The first approach deals with training the child in specific social behaviours based on their particular area of skills deficit. Social skills training (e.g.: Spence & Marzillier 1981) represents this model of treatment. Other CSTPs have focused on play and conversational skills (Gresham & Nagel 1980 and Ladd & Asher 1985) or academic and social interaction training (Coie & Krehbiel 1984). La Greca & Santogrossi (1980) focused on a wider range of social skills including smiling, joining, greeting, co-operating and complimenting. These all represent a relatively straight-forward behavioural approach.
The second type of CSTP relies on cognitive-behavioural methods and focuses on training children in the cognitive process (i.e. problem-solving and self-statements) or the affective domain (i.e. empathy training and perspective taking). The methods used usually include verbal instruction and discussion, opportunities to practice with peers, role play, and reinforcement by the therapist. The majority of these programmes address anger and aggression control in conduct disordered children and adolescents (e.g.: Lochman et al 1987) given that anger arousal is a possible cognitive mediator of aggressive behaviour, which is common in conduct disordered children.

The Anger Coping Programme developed by Lochman and his colleagues (Lochman, Lampron, Gemmer & Harris 1987), aimed at nine to twelve year olds, views the aggressive behavioural response of these children as arising from the child's faulty cognitive processes rather than as a result of the stimulus event directly. The focus of their intervention, therefore, is primarily on altering the cognitions that are evoked by frustrations, conflict or perceived threat to the child. Self-talk and self-control are advocated and much is made of goal setting and behavioural contracts. In the pure Anger Coping Programmes, the work is carried out with groups of five children over eighteen sessions.

Kazdin et al (1985) developed a Problem Solving Skills Training (PSST) programme specifically for pre-adolescents. It differs from Anger Coping Programmes in that it is administered on an individual basis and focuses on
behavioural skills, as opposed to cognitive processes, by teaching interpersonal tasks, as in social skills training, as well as training in specific academic areas.

Reviews of outcome measures of Child Skills Training Programmes are only mildly encouraging (Asher and Coie 1990). Studies evaluating the behaviourally oriented Social Skills training approaches (e.g.: Goldstein and Pentz 1984) demonstrate short-term improvements in specific social skills in analogue situations e.g. role plays with the experimenter. However, very few studies have addressed the question of generalisability. The exception to this is a study by Spence & Marzillier (1981) of adolescent male delinquents. Results indicate specific improvements in many individual social skills, similar to the Goldstein (1984) study above. Furthermore, these improvements were maintained at a three month follow-up. However, in answer to the question of generalisability, results were disappointing. There was no evidence of generalised differential changes in social skills according to observer ratings of friendliness, social anxiety, or employability. Nor were these evident in Social Worker's ratings of improvements in family, school, work on social relationships.

However, there is a general problem with these outcome studies which lies in the fact that few of them have employed direct observational methods of aggression or non-compliance so it is not known whether the improvements in social skills also indicate reductions in conduct problems. There has been a general failure to demonstrate that social skills training, even that which leads
to improvements in skills within the experimental setting, will create similar positive changes in the child's general behaviour.

Evaluations of Problem Solving Skills Training (PSST) have involved controlled studies. Kazdin et al (1987) demonstrated that children who underwent PSST were more likely to move to within or near the normal range on parent and teacher ratings on behaviour problem and social adjustment scales at post-treatment assessment and at a one year's follow-up than children who underwent relationship therapy or those in a placebo group. However, no observations of actual behaviours either in the laboratory, home or school were carried out. It is not clear if actual behaviour changes occurred or if they showed any form of generalisation (Webster-Stratton 1991).

In terms of evaluation of cognitive-behavioural programmes aimed directly at children and adolescents with conduct disorders, results appear somewhat more promising. Lochman et al (1984) evaluated their Anger Coping Programme in a well controlled study. Results indicate that their cognitive-behavioural intervention was more effective in reducing disruptive, off-task behaviour in the classroom than either goal-setting alone or no treatment. Goal-setting plus a cognitive element was more successful in reducing aggressive behaviour than if the cognitive element was presented in isolation. Unfortunately, the long-term effectiveness of this programme is unknown. Lochman and Curry are in the process of carrying out longitudinal evaluations.
This rather brief review of the literature indicates that evaluation of Child Skills Training Programmes have presented rather disappointing results. There are a number of possible reasons for this. Firstly, the majority of studies have involved older children or adolescents in whom the conduct disorder has been established for at least five to six years (Dodge 1983). It is likely, therefore, that by the time of study the behaviours, as well as peer group rejection, are well established. This points to the need for early interventions before the negative behaviours and reputations develop into permanent patterns, a position strongly supported by Dodge et al (Dodge, Pettit, McClaskey & Brown 1986).

Secondly, the content of most CSTPs, particularly those which aim to address the above criticism by focusing on younger, aggressive, peer-rejected children, does not directly address aggression and non-compliance, with the exception of Lochman’s Anger Coping Programme. Direct behavioural prohibitions, or specific consequences for negative behaviours such as Time-Out, are very rarely included in programmes (Coie & Krehbiel 1984). Social skills interventions might benefit from having more direct behaviour modification elements of this kind included in them.

A third reason for the limited effectiveness may be the lack of specific attention to the most appropriate methods of transmitting information to young children. Singer and Singer (1983), in their research into the effects of television on children, showed that young children may benefit most directly
from concrete, performance-based approaches such as video tape modeling, as opposed to the primarily verbal approaches employed in CSTPs. As indicated in the section on Parent Training programmes involving adolescents, greater attention needs to be paid to developmental differences which are fundamental in all areas of child and adolescent work. Webster-Stratton is currently investigating the effectiveness of one such developmentally-based programme.

The fourth and final reason for limited effectiveness of CTPs may lie in the exclusive focus that these programmes place on the child as the locus of change. In so doing, the role of parents, families and schools is neglected. We have already seen the detrimental effect of neglecting teachers in the learning process of PTPs; the results failed to generalise the schools. By falling into the same trap with CTPs the effect is likely to be the same; that of very limited generalisation.

The two treatment methods discussed in this Paper have two very different focuses. The first is family focused and aimed at treating parents, the second is child focused and aimed at treating the child. These differences illustrate their different aetiological models of the development and maintenance of conduct disorders. The first implies a parent management skill deficit, the second a child cognitive or social skill deficit. Both treatment approaches have been shown to have limited success in terms of generalisation and long-term amelioration of the behaviours associated with conduct disorders.
These models need not be mutually exclusive, however. McMahon and Wells (1989) state that it seems unrealistic to assume that altering a single skill deficit in a child is likely to lead to wide ranging changes in the behaviour of the child with problems as pervasive as those seen in conduct disordered populations. Similarly, it is unrealistic to assume that focusing exclusively on parent’s behaviour will have long-term generalised effects on the negative behaviours of a child who functions within so many different environments. These postulations are, indeed, supported by the outcome literature reviewed herewith. Regardless of whether one believes the origins of the child’s problems to be in the child or social environment, it is undeniable that these factors are inextricably interconnected (Webster-Stratton 1991). Either method alone, therefore, is likely to have limited utility.

In conclusion, socially skilled children usually have a socially fluent family. Conversely, the child with a conduct disorder often has parents with poor verbal skills, lives in a hostile family environment with a lack of family harmony, often extending to antisocial peer group behaviour (Schonfeld et al 1988). Effective treatment, therefore, requires changes in lifestyle and redressing the skills deficits of both the child and the family. As a result of studying the approaches to treatment for this review, it appears that an integrated approach treating the child and the family is the only way one can hope to gain long lasting, far-reaching results.
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THE CASE OF
GILLES DE LA TOURETTE'S SYNDROME AND
OBSESSIVE COMPULSIVE DISORDER:
A CRITICAL REVIEW
In the literature on Gilles de la Tourette's Syndrome (GTS) there are two elements which appear with almost unaltering regularity. The issue of Psychopharmacology and the relation between GTS and Obsessive Compulsive Disorder (OCD). The former is predominantly a medical issue and is outside the scope of the current author's knowledge. The frequency with which the latter appears guided the author towards an interest in investigating such a proposition. The question to be posed is this: Does the evidence in the literature support the commonly assumed link between GTS and OCD? To begin, the two disorders are briefly defined.

Gilles de la Tourette's Syndrome (GTS) is a neuropsychiatric disorder of childhood onset, age ranging from 2-15 years with a mean of 7 years. The essential features of the disorder are the existence of multiple motor tics and at least one vocal tic (DSM-III-R, 1987). The tics occur many times a day, usually in bouts, nearly every day throughout a period of more than one year. The anatomical location, number, frequency, complexity and severity of the tics changes over time. Symptoms do not occur exclusively during psychoactive substance intoxication or known central nervous system disease, such as Huntington's chorea and post-viral encephalitis.

Obsessive Compulsive Disorder (OCD) is defined by DSM-III-R (1987) as consisting of obsessions which are persistent ideas, thoughts, impulses or images that are experienced, at least initially, as intrusive and senseless. The obsessions
are recognised as a product of the person's own mind and attempts are made to ignore or suppress them or to neutralise them with some other thought. Compulsions are repetitive, purposeful and intentional behaviours that are performed in response to obsessions, according to certain rules or in a stereotyped manner. The behaviour is designed to neutralise the obsessive thoughts or images. However, either the activity is not connected in a realistic way with that which it is designed to neutralise or prevent, or it is clearly excessive. For diagnosis to be made, the obsessions and/or compulsions must interfere significantly with functioning or cause marked distress. The differences between GTS and OCD will be commented on in greater detail later in this review.

Investigations into OCD and movement disorders such as GTS suggest that these disorders may be related (Swedo & Leonard 1994). Many authors have reported GTS patients with obsessional symptoms, traits or illness, varying from single case studies to significant percentages or patient populations. Among others, Comings & Comings (1985) reported a rate of 32%, Abuzzahab & Anderson (1973) reported 33%, Asam (1982) reported 38%, Nee et al (1980) reported 68% and Yaryura-Tobias et al (1981) reported rates as high as 80%.

Evidence for the link between the two disorders has been quoted differently by various authors. Yaryura-Tobias and Neziroglu (1983) clearly regard GTS as an obsessive-compulsive disorder and specifically suggest that it may be a
hyposerotonergic condition. Cummings & Frankel (1985) cite symptomology as evidence for a link. They draw attention to the similarities between GTS and OCD, including age of onset, chronicity, waxing and waning of symptoms, ego-alien behaviour and experiences, occurrence within family cohorts and the worsening with depression and anxiety.

Robertson (1989) suggests that the argument for a clear association between the disorders comes also from the findings of Kurlan et al (1986) and Comings & Comings (1987) who found that many relatives of GTS patients describe obsessive-compulsive thoughts and actions in the absence of motor or vocal tics, which, they report, suggests that GTS and OCD may be aetiologically related. Robertson states therefore that it appears that obsessional disorder is an integral part of GTS.

This and other evidence reporting an association between OCD and GTS will be evaluated, using the published reports in the literature which support such a link as the data for the evaluation. The primary focus will be upon GTS with a critical exploration of its links with OCD being the aim.

In order to put the question into context, the history of aetiological concepts of GTS will be briefly reviewed. The first of these concepts appeared in the 15th century in the work of Kramer and Sprenger (1489) in which a priest with GTS was described as suffering from demonic possession. Isolated descriptions of the
disorder continued to appear throughout history, but without any proposed aetiology until Gilles de la Tourette concluded, in 1885, that the illness was hereditary. This theory remained prominent for only a short period, until it was surpassed by concepts of psychological aetiology.

Psychological theories, which inferred aetiology from symptomology, became more elaborate with the development of psychoanalysis. The predominant concept from 1945 until 1976 was that GTS was an obsessive-compulsive (OC) neurosis or psychosis (Shapiro et al 1988). Shapiro et al (1978) evaluated a clinical sample of 392 GTS patients in the period between 1965-1976 and found that the majority had previously been given this diagnosis. However, on the basis of clinical experience, they believed otherwise. To test this, they set up a predictive, controlled study with the hypothesis that OC neurosis or psychosis and other hypothesised psychopathology characterised patients with GTS as compared to a neurotic outpatient sample. A comprehensive evaluation of 144 consecutive referrals of GTS patients was carried out. The hypothesis was not confirmed. The conclusion drawn from this extensive study of American patients, with a diagnosis of GTS, was that aetiological factors lie in a neurophysiological disorder of the central nervous system.

Although there was a resurgence of interest in the relationship between psychopathology and GTS in the early 1980's, both controlled and uncontrolled studies concluded that psychopathology was no more frequent in patients with
GTS or their families than in the general population. The theory of a central nervous system disorder therefore has remained the predominant theory of the aetiology of GTS to the present time.

With this change in theories of aetiology came an alteration in beliefs about the link between OCD and GTS. Tics are no longer thought of as compulsions, and GTS is no longer considered a purely compulsive disorder. However, recent studies suggest that OCD is associated with GTS or is an alternative expression of the aetiology that underlies GTS (e.g. Pauls et al 1986). Although this change signifies a significant shift in the conceptualisation of GTS, it belies an unwillingness to let go of a conceptual link between the two disorders. This critique will move on to question the validity of such an association.

This paper began with definitions of GTS and OCD. Looking more closely at this definitions will begin to bring into question the proposed link between the two disorders. Whereas Cummings & Frankel (1985) cite the similarities between GTS and OCD symptomology as evidence for a link between the disorders, Shapiro & Shapiro (1992) cite the differences as evidence against such a link. The evidence cited by the former authors, although true to some extent, could also pertain to a great many psychological disorders, but one would not propose that this is enough to link them. The evidence cited by the latter authors is much more specific to the disorders in question, thus providing more robust evidence.
In clarifying the differences between the two disorders, Shapiro & Shapiro (1992) draw attention to the fact that the cardinal symptoms of GTS are simple and complex motor and vocal tics, which are defined as involuntary, partially suppressible symptoms in all reports published in the last 30 years (Shapiro et al 1988). Compulsions, on the other hand, are defined as intentional and voluntary.

The diagnosis of GTS is dichotomous, it is either present or absent, it is not related in any way to severity of symptomatology or interference with everyday functioning. For the diagnosis of OCD, however, symptoms must cause marked distress, be time consuming or interfere significantly with functioning. Tics are related to a specific body region, are usually purposeless, are an end in themselves and are unrelated to specific cognitions. Conversely, compulsions, such as washing and checking and obsessions about dirt and contamination are common in OCD, but infrequent in GTS, and are commonly linked with a specific cognition, often regarding keeping the self or loved ones safe from harm. And finally, vocal symptoms such as coprolalia and echo phenomena are cardinal symptoms in GTS but are not present in OCD.

In terms of treatment there are demonstrated differences between GTS and OCD, both in favoured methods of treatment and results of outcome studies. The information regarding psychopharmacology is beyond the scope of the current author’s knowledge, so the details will not be explored. However, it is clear from the literature that in following a pharmacological approach to
treatment, GTS responds to neuroleptics, primarily haloperidol or pimozide (Shapiro et al 1989), whereas Fluoxetine, a bicyclic serotonin reuptake blocker, is the treatment of choice for OCD (Jenike et al 1989).

With regard to non-medical approaches to treatment, much research has been carried out to explore the effectiveness of behaviour therapy for GTS (e.g.: Peterson & Azrin 1992). Results have been unpromising, demonstrating some immediate effect, but long-term follow-up studies have failed to report benefits. Additional, well controlled, studies are required to explore the effectiveness of behavioural techniques for GTS. For OCD on the other hand, behaviour therapy is established as a major therapeutic tool. Although behavioural treatment has not been systematically studied in children or adolescents with OCD, what data there is suggests that the techniques employed with adults will also be effective and appropriate with younger sufferers of the disorder (Berg et al 1989).

The foregoing highlights the many diagnostic and treatment differences that exist between GTS and OCD which may appear to be enough to exclude any association between the disorders. Despite this assumption, a survey of the literature shows that there is still consistent reporting of just such an association. However, the literature referred to uncritically cites the same references repeatedly. Quoted are those which report high percentages of OCD in GTS patients, e.g. Walkup et al (1988). Complex motor and vocal tics and echo phenomena are frequently cited as compulsions, which accounts for the dramatic
inflation of the percentages of OCD reported in patients with GTS. Studies which fail to be reported are those which cite clinical and controlled studies with low percentages of OCD, e.g. Shapiro et al (1988).

One of the issues creating confusion may be the fact that opinions differ about the classification of some of the symptoms of GTS and their differentiation from impulsions, symmetry behaviour i.e. the need to do things symmetrically which may be a form of self-echokinesis, stereotypies and habits. At the very least questions must be raised about the reliability and validity of classifying them as OCD. For any progress to be made towards an increased understanding of both GTS and OCD, as well as their possible interrelationship, there must follow the development of more exact definitions of specific characteristics of the disorder, such as those listed above, followed by thorough reliability and validity studies.

A review of the published literature which demonstrates a link between the two disorders shows that studies can be divided into two types, those with a control group and those without. Shapiro & Shapiro (1992) carried out an evaluation of these two groups of studies. To evaluate the overall relationship of adequate methodology to the percent of OCD reported in studies they rated five criteria consensually. The criteria they identified were as follows.

Firstly, the type of GTS sample was rated on a scale of 1-5, representing a range of methods from inadequate, i.e. questionnaires completed by Tourette's
Syndrome Association volunteers, without information about numbers of questionnaires sent or comparative information about those who did not respond; to adequate, i.e. evaluation of an epidemiological sample. Secondly, the presence or absence of a control sample was rated on a scale of 1 - 4 indicating no comparison with a control group, minimal comparison with an unmatched sample, partially adequate comparison of a random matched group, such as neurotic outpatients, or adequate comparison with a matched sample with an equivalent illness to control for the secondary effects of the illness.

Thirdly, tics cited as OCD symptoms were rated on a scale of 1 - 3, indicating the range between symptoms fulfilling the criteria for tics being cited as compulsions, no clear information given about how tics or compulsions were classified, or that tics were not included in the description of OCD. Fourth, they rated the presence of blind evaluation on a scale of 1 - 3 to indicate if this did not occur at all, occurred inadequately or adequately. Finally, issues of reliability and validity were explored and rated on a scale of 1 - 3 to indicate total absence, minimal reliability but no evidence of validity, or the presence of reliability and validity studies for the hypothesised dependent variable.

Of the clinical reports without a control group, high percentages of OCD were reported in ten studies (e.g. Nee et al 1982, Price et al 1985 and Yaryura-Tobias et al 1982) and low percentages in four studies (e.g. Han-bai et al 1983 and Min 1983). Although this method of looking at clinical reports without control
groups is inconclusive, it does raise serious questions about the high percentages of OCD symptoms reported in patients with GTS, specifically about the reliability of the data which is quoted as providing evidence for the link between the disorders.

Shapiro & Shapiro (1991) reviewed seven studies which did utilise control groups. However, even these studies have serious methodological limitations. For example, a study by Frankel et al (1986) indicated that a significantly greater number of GTS patients showed obsessive symptoms that the control group. However, the hypothesis of the study was only implied rather than being specifically stated and the diagnosis for the OCD was based on the total score of a modified version of the Leyton Obsessional Inventory which itself does not have evidence of reliability or validity for the diagnosis of OCD. Shapiro & Shapiro state that they would classify many items on the scale used by Frankel et al differently, ten items would be classified by them as probable tics and eleven as compulsive personality items. This enforces the earlier point regarding the need for clear definitions of symptoms of both disorders, followed by reliability and validity studies. Only in doing so is it possible to avoid confusion such as that indicated by Shapiro & Shapiro’s evaluation of Frankel et al’s study.

Further methodological flaws in those studies which employed a control group include the lack of specific dependent variables or statistical analysis established prior to the study being carried out and the performance of numerous
retrospective statistical tests and analyses uncorrected for multiple testing, e.g. Pitman et al 1987. Added to this, the sample consisted of a small number of nonconsecutive volunteers. Grad et al (1987) identified four dependant variables, all with some evidence of reliability, but not valid for the diagnosis of OCD. A study by Robertson & Gourdie (1990) failed to give sufficient information regarding the 35% of the original sample whose data was not used in the final analysis and no reason for this alteration in the number of participants was given.

The authors of all these studies conclude that their data supports the hypothesised link between GTS and OCD. However, the methodological inadequacies inherent within the studies could artificially elevate the percentage of OC symptoms found within GTS patients, and therefore brings into question the strength of their evidence for a link between the two disorders.

Support for more methodologically rigorous studies comes with the finding that when tics are defined as OCD the percentage of OCD reported in GTS patients increases (Shapiro & Shapiro 1992). They also report that the percent of OC symptoms reported was inversely correlated with the adequacy of the GTS sample and the adequacy of the control group. Their analyses suggests that the variable percentages of OCD among GTS samples is strongly related to the way in which tics and compulsions are defined. If the definition is restricted, the percentages of patients reported to have OCD are low. Conversely, if the definitions is extensive, the percentages of OCD are high. This adds to the argument for the need for rigorous definitions, the careful differentiation of OCD
and GTS symptoms and improved methodology in studies designed to examine the link between the two disorders.

A vital element in designing any psychological study is the question of reliability and validity. However, demonstrating reliability and validity of the diagnosis of OCD from scales, standardised interviews such as the Diagnostic Interview for Children and Adolescents (DICA) and diagnostic criteria, such as those found in DSM-III-R, is a major problem (Shapiro & Shapiro 1992).

The problem of reliability is highlighted in a study by Flament et al (1988) in a large epidemiological study using the Leyton Obsessional Inventory - Revised for Children (LOI-CV). One hundred and sixteen adolescents had high scores on the 20 item survey form of the LOI-CV or interference scores. However, subsequent interviews using the DICA and other interview schedules and scales confirmed the diagnosis for only 26% of the sample. The positive predictive value was only 15-18% and there were many false positives. Thus the LOI-CV is useful when used specifically as a screening instrument for selecting a heterogeneous group among which patients with true OCD can then be identified by subsequent clinical interviews. This point must be born in mind by investigators using it as a method for diagnosis, as the above study clearly raises questions about the reliability of using it as the sole diagnostic tool.
Similar problems arise with the Child Behaviour Checklist (CBCL). A possible explanation for elevated OC scores on the CBCL in studies of samples that include both GTS without Attention Deficit Hyperactivity Disorder (ADHD) and GTS with ADHD groups, is that the OC scale, rather than a pure measure of OC, is largely a measure of general psychopathology. For example, the ratio of specific OC items to general psychopathology items is 3:13 for 6-11 year old boys and 1:9 for 6-11 year old girls. This includes the term ‘nervous movements and twitching’ which is always indicated by GTS patients. Moreover, although the reliability of the scale is adequate, its validity as a measure of OCD has not been demonstrated. These findings illustrate that studies using the OC scale of the CBCL, as well as for other scales that include many non-specific psychopathology items, should analyse the GTS groups without ADHD and GTS groups with ADHD separately. However, this is rarely the case.

In conclusion, the literature on GTS and OCD provides considerable indications that these two disorders are associated. However, because the studies are methodologically flawed, the premises on which the association is postulated must be questioned. Well designed studies must be carried out in order to confirm or disconfirm the association. In order to redress the balance of poorly designed studies, future investigations of the link between the two disorders must incorporate accepted methodological principles. These would include blind evaluation of patients and control groups in order to avoid observer bias, the use of appropriate control groups to control for social desirability in responses,
stringent criteria for defining tics and compulsions, a prior specification of hypothesis, independent and dependent variables, adequate sample size, the use of test instruments with demonstrated reliability and validity to control for errors in measurement, and finally, the avoidance of postdictive and unadjusted statistical tests which contribute to type 1 errors (Pauls et al 1990). Although such studies are not easy to conduct, the adoption of such an approach would help to avoid the recurrent problem in neurology, psychiatry and psychology of inferring aetiology from symptomatology and the premature drawing of conclusions about similar aetiology for syndromes of unknown cause.

Although obsessive-compulsive like symptoms in GTS and OCD appear to have some degree of overlap, significant questions still exist about whether they represent different disorders. An exploration of the current evidence has proven to be inconclusive, failing to provide sufficient evidence to fully support the association.
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A REVIEW OF THE EVIDENCE FOR THE EXISTENCE OF PANIC ATTACKS AND PANIC DISORDER IN CHILDREN AND ADOLESCENTS AND THE IMPLICATIONS FOR TREATMENT
The existence of panic attacks and Panic Disorder is well established in the adult population (Anderson, Noyes & Crowe 1984 and Cox, Endler & Swinson 1991). However, much controversy still exists regarding the prevalence of such phenomena in children and adolescents. Before embarking on an exploration of the research into this controversial field, it is necessary to clarify exactly what it is that we are looking at. The first step therefore is to define panic attacks and Panic Disorder.

The American Psychiatric Association, in its Diagnostic and Statistical Manual of Mental Disorders - Fourth Edition (DSM-IV) defines panic attacks as "discrete periods of intense fear or discomfort" (APA 1994, DSM-IV p.395) with the following symptoms characteristic of panic: Shortness of breath or smothering sensations; dizziness, unsteady feelings or faintness; feeling of choking; palpitations or accelerated heart rate; trembling or shaking; sweating; nausea or abdominal distress; feelings of depersonalisation or derealisation; numbness or tingling sensations; chills or hot flushes; chest pain or discomfort; fear of dying; and fear of going crazy or doing something uncontrolled during the attack. Attacks involving four or more of these symptoms are defined as "full-blown" panic attacks, while those characterised by less than four symptoms are referred to as "limited symptom attacks". In order for the diagnosis of Panic Disorder to be made an individual must experience one or more spontaneous panic attacks which occur unexpectedly and are not triggered by specific stimuli. The attacks must occur with a frequency of at least four attacks within a four week period, or one or more attacks followed by at least one month of
persistent fear of experiencing another attack. At least one attack must be a full-blown panic attack. Finally, the presence of an organic disturbance must be ruled out. Although minor differences exist, Panic Disorder is defined in much the same way by the World Health Organisation in its International Classification of Diseases (ICD-10; WHO 1991). Given the general agreement between the two major classification systems, it is the definition of Panic Disorder as laid out above which will inform the present review.

Within the field of child and adolescent psychology there is much disagreement regarding the existence of such a disorder in this population. Some clinicians and researchers have expressed reservations about the occurrence of panic attacks in children (e.g. Kearney & Silverman 1992 and Klein, Mannuzza, Chapman & Fryer 1992) with Klein et al asserting that they are “confident that prepubertal spontaneous panic attacks are rare” (p.144). However, others have argued that such a disorder not only exists in children, but is seen with some regularity (e.g. Black & Robbins 1990 and Abelson & Alessi 1992). Drawing on the results of many studies, Black & Robbins (1990) state that “on the basis of this accumulating evidence there is little reason to doubt the occurrence of prepubertal Panic Disorder” (p. 835). Resolution of the controversy surrounding the occurrence of panic attacks in children and adolescents can be found with the exploration of the data regarding the frequency of panic attacks in this population as well as the literature regarding the types of panic symptoms experienced at various developmental levels. Therefore this review will now
move on to look at the available data presented in retrospective reports, clinical studies and normative research.

Due to the paucity of retrospective reports utilising children or adolescents as informants, the data in this section must draw on the reports of adult sufferers of panic attacks. The limited utility of these reports is acknowledged at the outset and questions regarding the reliability and validity of the data, as well as some further methodological flaws inherent in these studies, will be discussed in further detail later in this review. Despite these flaws, the data can not be overlooked as they provide an initial framework for understanding the epidemiological aspects of panic, as well as the age of onset of such attacks (Ollendick, Mattis & King 1994).

The National Institute of Mental Health Epidemiological Catchment Area Programme surveyed a large community sample of adults using the Diagnostic Interview Schedule developed by Robins, Croughan, Williams & Spitzer (1981). Results from this study demonstrate that for adults experiencing panic attacks or Panic Disorder the peak age of onset was between the ages of 15 and 19 years, with 18% of the adults indicating onset before the age of 10 years (Von Korff, Eaton & Keyl 1985). Similar results were found in a clinical population by Thyer et al (1985). From examining the files of patients with various anxiety disorders they reported that the mean age of onset for Panic Disorders was in the mid-20’s, but that 39% reported the onset of symptoms before ten years of age (Thyer, Parrish, Curtis, Nesse & Cameron 1985).
However, neither Von Korff et al (1985) or Thyer et al (1985) reported the types of panic symptoms experienced prior to adulthood or the extent to which early attacks were unexpected vs. situationally cued. Therefore the diagnosis of panic attacks vs. Panic Disorder and full-blown vs. limited symptom panic attacks can not reliably be inferred from either of these studies. However, it is clear from these studies that some form of panic is experienced in childhood.

A study by Fryer et al (1985) made use of the Schedule for Affective Disorders and Schizophrenia - Lifetime Anxiety version to examine retrospective reports of the onset of Panic Disorder in adults (Fryer, Endicott, Mannuzza & Klein 1985). These authors reported much lower estimates of Panic Disorder occurring in childhood, possibly as a function of the more stringent methods they employed to define the presence of the disorder. They interviewed 343 consecutive admissions to an anxiety disorders clinic as well as 560 first-degree relatives of anxiety disordered clients. Only nine (1%) of the 903 participants were judged to have experienced spontaneous panic attacks before the age of 13 years. Although the data from this study is more concise in terms of the definition of Panic Disorder it employed, the authors did not explore the distinction between physiological and cognitive symptoms in its analysis of the retrospective reports. Therefore the amount of information that can be inferred about the precise nature of panic experienced by children and adolescents is still limited.
It can be seen from two of the three studies quoted above that age of onset of panic attacks in both community and clinical samples has been reported to occur during prepubescence for a significant number of adults. However, as already noted, there are methodological issues which must be raised in studies which rely upon retrospective reports of age of onset, particularly questions of reliability and validity, which may limit the ability to generalise information from the data obtained.

In an attempt to elicit sounder data, researchers have turned to direct assessment of panic in children and adolescents. Early clinical studies examined related disorders involving children and adolescents rather than directly exploring the presence of panic in this population. These studies can be traced back to the mid 1950’s to a study by Gillespie (1954) on Hyperventilation Syndrome. A later study by Enzer & Walker (1967), also investigating Hyperventilation Syndrome, identified 44 cases of the syndrome in childhood following a review of hospital records. The symptoms described by the patients included difficulty breathing (too fast or shallow breathing), dizziness, tingling sensations and headaches. All children described “spells” or “attacks” and psychiatric evaluation revealed anxiety to be the primary affect. A number of specific fears were also noted, primarily the fear of dying, fear of death of friends and worry about poor school performance. Interestingly, as Nelles & Barlow (1988) point out, the description of Childhood Hyperventilation Syndrome in these studies is very similar to what is described in the modern literature as Panic and includes both the physiological and cognitive symptoms.
of the disorder. The age range of the patients who experienced the symptoms in this study was 5 to 16 years. An unfortunate drawback of these early studies however, is that by including a wide age range of participants it is rendered impossible to conclude whether the physiological and cognitive symptoms were differentially reported by the younger children and older adolescents.

Alessi, Robbins & Dilsalver (1987) carried out one of the first direct examinations of panic in adolescents. The authors assessed 61 hospitalised adolescents in order to determine the presence of Panic Disorder. Participants were diagnosed using, among other diagnostic tools, the Schedule for Affective Disorders & Schizophrenia (SADS, Spitzer & Endicott 1978). From the SADS data 10 cases (15%) of Panic Disorder were diagnosed with 15 additional cases (24%) of possible Panic Disorder identified. The mean age of patients diagnosed with definite Panic Disorder was 15.8 years and that of possible Panic Disorder was 15.1 years. Both types of Panic Disorder (Definite and Possible) were more common among females (6:4 and 12:3 respectively) and the age of onset ranged from 12 to 15 years. Definite Panic Disorder was indicated if panic attacks occurred which involved feelings of intense anxiety with discrete onset of at least two panic symptoms. Possible Panic Disorder was indicated when attacks involved only one symptom or when it was uncertain that the panic attack represented intense anxiety with discrete onset. The diagnostic criteria were clearly broader than the DSM-IV (APA 1994) requirements in which at least four symptoms must be present in one attack. They also did not require that the attacks were spontaneous or occur with a prescribed frequency.
It is unclear to what extent Panic Disorder would have been diagnosed in the Alessi et al (1987) sample if the more stringent DSM-IV criteria had been applied. It is only possible to speculate, but it seems likely that at least the possible Panic Disorder group would be greatly diminished with the employment of stricter defining criteria. However, even given this drawback, there does appear to have been a number of people in this sample who described feelings of panic in adolescence. Of further interest is the finding that most patients with a diagnosis of definite Panic Disorder had a history of psychiatric disturbance, the most common of which was Separation Anxiety Disorder. The authors suggest that separation anxiety may therefore be a precursor to Panic Disorder.

A recent study by Bradley & Hood (1993) adds further support to the evidence of panic disorder in adolescents and the possibility of separation anxiety playing an important role in the disorder. Participants were 28 consecutive psychiatrically referred adolescents aged 11 to 18 years. The mean age of onset of panic attacks was 12 years with a range of 4 to 16 years. A history of separation anxiety was evident in 48% of the sample.

A later study by Alessi & Magen (1988) explored Panic Disorders in younger children. From a sample of 135 consecutive referrals to a child psychiatric clinic, 4 girls and 3 boys (5.5%) were diagnosed as meeting the DSM-III (APA 1980) criteria for Panic Disorder. All children with panic disorder were
prepubertal, ranging in age from 7 to 12 years at the time of diagnosis with a mean age of onset of panic attacks of 8 years. In this study, as in that mentioned above (Alessi, Robins & Dilsalver 1987), six of the seven children with Panic Disorder were also diagnosed as suffering from Separation Anxiety Disorder. Ollendick et al (1994) argue that this lends further support to the growing notion of Separation Anxiety Disorder as a precursor to, or perhaps an early form of Panic Disorder in some children (Ollendick, Mattis & King 1994).

Drawing from a wider age range, Moreau, Weissman & Warner (1989) investigated the presence of Panic Disorder in 220 individuals aged 6 to 23 years who were identified as being at high or low risk for depression based on parental diagnosis of major depressive disorder. In this carefully designed study, high risk participants were matched by age and sex to low risk participants. Diagnosis by a Child Clinical Psychologist and a Child Psychiatrist based on DSM-III criteria identified six people with Panic Disorder ranging in age from 5 to 18 years, with prepubertal onset noted in four cases. Physiological as well as cognitive symptoms were experienced by four of the six who were given the diagnosis. All cases of Panic Disorder occurred in children who fell into the high risk category due to their parents depressive illness. The authors noted that the onset of Panic Disorder was either concurrent with separation anxiety disorder or major depression or it occurred several months after the onset of separation anxiety disorder.
A systematic clinical study of Panic Disorder in children and adolescents was carried out by Last & Strauss (1989). Of 177 consecutive referrals to an outpatient clinic for anxiety disordered children and adolescents, approximately 10% met the DSM-III-R criteria for Panic Disorder. The participants in this study were aged between 5 and 18 years. The mean age of onset of the disorder was found to be 16 years, with preadolescent panic attacks evident in only one child. The authors indicate that both physiological and cognitive panic symptoms were present in the majority of this mostly adolescent sample. In contrast to the studies mentioned above however, the most frequent past disturbance in this group of adolescents was a depressive disorder, with only two of the participants having a history of Separation Anxiety Disorder. It seems then that although separation anxiety appears to be a common precursor to Panic Disorder it is only the case for some children.

The available literature on Panic Disorder in children and adolescents also includes several case reports which help to clarify the issues in question. Van Winter & Stickler (1984) described “panic attack syndrome” in seven paediatric cases aged between 9 and 17 years. This was characterised by “many peripheral manifestations of sudden, massive autonomic discharge, with fear of dying, of ‘going crazy’, or of ‘doing something uncontrolled during an attack’ ” (Van Winter & Stickler 1984 p.661). A report by Biederman (1987) identified two 11 year old children, one male and one female, and one eight year old boy who all reported “discrete, spontaneous episodes of intense fear associated with anxiety symptoms of enough severity and rapidity of onset to permit the
diagnosis of Panic Disorder” (Biederman 1987 p.40). Ballenger et al (1989) described three cases of children between the ages of 8 and 13, who all met the criteria for DSM-III diagnosis of Panic Disorder with agoraphobia. All three experienced cognitive symptoms, the youngest child (an 8 year old female) reportedly felt “out of control” during attacks, the 11 year old (also female) experienced intense fear that she was going to die, and the 13 year old male had a fear of losing control during the attacks (Ballenger, Carek, Steele & Cornish-McTighe 1989). Finally, Black & Robbins (1990) identified five adolescents, aged 14 - 17 years, with Panic Disorder for whom the age of onset ranged from 4 to 15 years.

The accumulation of evidence from these clinical studies indicates the existence of Panic Disorder in childhood and adolescence. The data supports the postulation that the panic experienced by this age group includes both physiological and cognitive elements, similar to the panic symptoms experienced by the adult population. It has also become evident that Panic Disorder in children is often comorbid with separation anxiety disorder, although it appears that this latter disorder is not an essential prerequisite to the development of Panic Disorder.

The review will move on now to look at the normative data regarding Panic Disorder in children and adolescents. Several survey studies have been undertaken with the aim of ascertaining the prevalence and nature of panic attacks in unselected samples of children and adolescents. Warner and
Zgourides (1988) carried out the first of these studies in the United States. They administered a Panic Attack Survey to 388 high school students aged 12-19 years. A remarkable 60% of the students reported having had at least one panic attack, 32% as having at least one panic attack which satisfied the DSM-III criteria, and 4.7% met the criteria for the diagnosis of Panic Disorder. The overall conclusion of this study, however, was that panic attacks did not present a severe or recurrent problem for the majority of students in this sample.

Macaulay & Kleinknecht (1989) studied panic attacks in 660 students aged 13 to 18 years. Using DSM-III-R criteria, analysis revealed that 63% of the respondents reported having experienced at least one panic attack within the past year. 5.4% reported an average of 3.8 panic attacks within the preceding four week period, a rate slightly under the DSM-III-R criteria of four attacks in a four week period necessary for the diagnosis of Panic Disorder. The mean age of onset for panic attacks in this group was 12 years.

Hayward, Killen & Taylor (1989) also examined prevalence of panic attacks in a group of students aged between 14 and 16 years. Of the 95 adolescents interviewed in this study 11.6% experienced at least one full-blown panic attack. However, this was a lifetime prevalence and it is not clear from the reported results how many of these respondents had attacks with the frequency required for a diagnosis of Panic Disorder.
Ollendick, Mattis & King (1994) report on an as yet unpublished study carried by King et al in Australia, which adds important information to this area of investigation. The study consisted of a sample of 649 unselected adolescents between the ages of 12 and 17 years (King, Mattis, Yang & Ollendick, submitted for publication). All participants were administered the Panic Attack Questionnaire, the Revised Children's Manifest Anxiety Scale (RCMAS, Reynolds & Richmond 1985), the Children's Depression Inventory (CDI, Kovacs & Beck 1977) and the Fear Survey Schedule for Children - Revised (FSSC-R, Ollendick 1983). Results indicate that 35.9% of the participants reported having had a panic attack at some point in their lives. Of these 233 adolescents, 171 reported full-blown attacks and 62 reported limited symptom attacks. Those individuals who reported having full-blown attacks also reported higher levels of anxiety, fear and depression than those having limited symptom attacks or those having no attacks. In addition, results revealed that panic severity and frequency were directly related to anxiety, fear and depression. The authors indicate that these findings are of theoretical significance. As Rapee, Ancis & Barlow (1988) point out, a tendency to be generally anxious and to respond with apprehension to physical sensations may predispose individuals to the experience of panic. The authors label this the 'Anxiety Sensitivity Model' of panic. It appears that the results of the King et al study (submitted) supports this model. This ties in with the findings reported earlier in the review of the general tendency of children with Panic Disorder to have previously or comorbidly suffered from separation anxiety. These young
people may have a general predisposition or sensitivity to anxiety related disorders.

In addition to these survey studies, at least one epidemiological study has been carried out in the United States to examine prevalence of DSM-III-R disorders, including Panic Disorder (Whitaker et al 1990). The study utilised screening tests and clinical interviews with a nonreferred sample of 13 to 18 year olds. Results indicate lifetime prevalence estimates for panic disorder of 0.6%, obsessive-compulsive disorder 1.9%, generalised anxiety disorder 3.7%, major depression 4.0% and dysthymic disorder 4.9%. Although the prevalence of 0.6% for panic disorder is lower than the other reported disorders, this figure does not indicate a major discrepancy from adult lifetime prevalence rates of approximately 1.5% (Black & Robbins 1990).

The data outlined thus far must be tempered by the knowledge of the methodological flaws which characterise the study of panic in the child and adolescent population. In a critical review of the published data, Kearney & Silverman (1992) outline a number of these flaws. In particular they cite small sample sizes which restricts the external validity of the research, assessment methods which are often of questionable reliability and which vary from study to study which restricts the usefulness of cross-study comparisons, limited settings and sources of data, failure to assess panic severity creating a lack of clarity between the prevalence of panic attacks and Panic Disorder, and a lack of normative data. They state that these factors make it difficult to determine
whether all subjects with panic attacks or Panic Disorder were indeed genuine cases.

In addition to these concerns, studies of panic attacks and/or Panic Disorder have relied on different time periods for their estimates of prevalence. Some have used lifetime estimates while others have used twelve month or point prevalence rates. These discrepancies make comparisons across studies difficult. Different studies have also used different information gathering methods. Some have employed self-report methodologies and have found high prevalence rates, while others have made use of structured clinical interviews with the results showing more conservative estimates of prevalence. The standardisation of assessment methods across studies would facilitate the collection of data from which information could be generalised.

Ollendick et al (1994) suggest further ways in which the research into panic in children and adolescents could be improved (Ollendick, Mattis & King 1994). They recommend that the reliability of panic attack questionnaires needs to be addressed. While such research has been undertaken utilising adult samples (Margraf & Ehlers 1988) research is needed on the psychometric properties for child and adolescent populations. The need for longitudinal studies of panic in this population is also highlighted but as yet none have been carried out. The data from longitudinal research would be useful in addressing the developmental differences and the longitudinal course of Panic Disorder.
Although these methodological flaws limit the ability to draw definite conclusions about the prevalence of panic attacks and Panic Disorder in children and adolescents, it is possible to make suggestions about optimal treatment approaches based on the data that is available. One such direction for treatment is based on the finding that young people who experience panic describe both physiological and cognitive symptoms during the attacks. It would appear therefore that people in this age group are capable of experiencing the catastrophic misinterpretations necessary to evidence a true panic attack. On the basis of this conclusion it would appear that a valuable treatment strategy would be an adaptation of the adult-based model of focused cognitive therapy (Beck, Sokol, Clark, Berchick & Wright 1992). This incorporates strategies intended to provide corrective information resulting in the reattribution of negatively perceived physiological symptoms to less threatening sources. Future research must explore the effectiveness of such treatment approaches with young people.

Barlow & Cerny (1988) suggest that exposure to interoceptive sensations, via hyperventilation or CO₂ inhalation, and the reinterpretation of internal somatic cues are critical factors in the treatment of panic. These researchers report substantial reductions in panic frequency in adult patients treated with interoceptive exposure combined with cognitive methods. The effectiveness of this type of treatment with children should also be investigated as it may prove to be a promising direction for future treatment strategies.
In conclusion, based on the review of the available literature, it is possible to conclude that panic attacks are common among adolescents, while panic attacks and Panic Disorder do occur but are less frequent in children. Adolescents and children who report panic attacks describe the experiences of cognitive symptoms, although with less frequency than physiological ones. In order to fully satisfy the critics of such statements further research must investigate the way in which panic is actually manifested in a young population (Abelson & Alessi 1992). Rather than being satisfied with assessing the frequency with which panic occurs in this population, research must explore more fully the question of what panic actually looks like in children and the pathways which lead to such a disorder.
REFERENCES


King, N J, Mattis, S, Yang, B & Ollendick, T H (submitted) *Non-clinical panic attacks in adolescents: prevalence, symptomatology and associated features.*


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<table>
<thead>
<tr>
<th>LECTURER</th>
<th>TITLE OF EVENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bill Yule, Institute of Psychiatry</td>
<td>Post Traumatic Stress Disorder One day workshop</td>
</tr>
<tr>
<td>Ron Blackburn, Ashworth Hospital</td>
<td>Psychopathy One day lecture</td>
</tr>
<tr>
<td>Padmal deSilva, Institute of Psychiatry</td>
<td>Obsessive-Compulsive Disorder Half day lecture</td>
</tr>
<tr>
<td>Tony Lavendar, Salomon’s Centre</td>
<td>Quality in mental health services Half day lecture</td>
</tr>
<tr>
<td>John Teasdale, MRC, Cambridge</td>
<td>Cognitive model of depression Half day lecture</td>
</tr>
<tr>
<td>Glynis Breakwell, University of Surrey</td>
<td>Theoretical understanding of identity Half day lecture</td>
</tr>
<tr>
<td>Ruth Williams, Institute of Psychiatry</td>
<td>Designing professional career paths Half day workshop</td>
</tr>
<tr>
<td>Roger Squier, Salomon’s Centre</td>
<td>Introduction to short-term dynamic psychotherapy One day workshop</td>
</tr>
<tr>
<td>Alec Duncan-Grant, Worthing Clinical Psychology Department</td>
<td>Psychotherapy interviewing skills Monthly workshop</td>
</tr>
</tbody>
</table>
SECTION THREE:

CLINICAL AUDIT
SUMMARY OF MSc / CLINICAL TRAINING

MSc Course / Clinical Training:

- MSc in Clinical Psychology, University of Surrey
- South Thames Regional Health Authority (West)

Dates of MSc:

- October 1992 - September 1994

Summary of Course Components:

The course was full-time, of which at least half was spent in clinical settings in the South Thames Regional Health Authority (West). The course aimed to provide a comprehensive curriculum, integrating research, academic and clinical theory and practice.

Academic:

Lectures, seminars and workshops held at the University of Surrey which supported a broad range of areas relating to clinical psychology, e.g. interviewing skills, formulation, therapeutic models and skills, psychometric testing, and professional and ethical issues. The academic component covered a broad range of mental health disciplines including child and adolescent, adult, people with learning disabilities and older adults.
Clinical:

Placements of four months duration were undertaken in the following areas:

- Three core placements in Child and Adolescence, General Adult and People with Learning Disabilities.
- One specialist placement in Paediatric Psychology
- One specialist placement in Older Adults
- One research placement

Research:

- Research methods and statistics course formed part of the academic curriculum.
- One small scale research project was undertaken as part of the core learning disability placement.
- Submission of a 15,000 word thesis.

Evaluation:

Academic:

- One 3,000 word essay for each of the following areas: Child & Adolescent, Adult, Learning Disabilities, Neuropsychology and Older Adults.
- Written examination in each of the three core clinical areas and neuropsychology.
Clinical:

- Logbook of all clinical activity undertaken on each placement.
- Formal assessment of clinical skills on each placement by placement supervisor and university clinical tutor in accordance with British Psychological Society guidelines.

Research:

- Written examination of research methods and statistics.
- One small scale research project from one core placement.
- Dissertation of 15,000 words followed by *viva voce* examination.
MATERIAL SUBMITTED TO THE BRITISH
PSYCHOLOGICAL SOCIETY FOR
ELIGIBILITY FOR CHARTERED STATUS
PRE-REGISTRATION CLINICAL PSYCHOLOGIST's CONTRACT:

SPECIALTY PLACEMENT IN CHILD AND ADOLESCENT CLINICAL PSYCHOLOGY:

DATE: From 10th October 1994 to September 1995

To provide clinical experience in treating and assessing a wide range of children throughout the 1-16 year age range referred to the Clinical Psychology Dept.

Models and areas of skills encompassed:

1. Psychological assessment using a range of tests such as the Wechsler Intelligence Scale for Children, Revised, educational tests, etc. Report writing will include scoring and test interpretation, using interview information and reports from other professionals in combination to give a full clinical picture and as well a reply to the referral request.

2. Developing expertise in using major models of therapy, such as behaviour and family therapy and in developing skills in interviewing and the psychotherapeutic process. A systemic model will be used for the Pre-Registration Clinical Psychologist's case-load, using breaks to consult during the session. Being a part of a team-behind-the-screen observing the supervisor and others will be on-going throughout the placement.

3. Individual work with a child in terms of structured, short term sessions may be offered, depending on referral pattern.

4. Consulting with other professionals, attending case conferences and school meetings and working with the multi-professional child care system around each individual child will be an important aspect of the work. Understanding of the wider system will be based on systemic models.

5. Report writing in terms of responding to and informing the referrer, communications with parents and dealing with other professionals in terms of professional role and ethics, confidentiality etc.

6. A half day with another specialty, eg adult mental health.

7. Teaching of other staff and students, in terms of case presentations, formal teaching, or workshops where appropriate and as service demand arises.

8. Supervision will be given for all cases in Child and Adolescent Specialty on a regular basis of weekly sessions and as necessary in-between.

9. Entitlement for leave is one half day per week study leave and 5 weeks' annual leave.

10. Reviews will take place in April and at the end of the placement year in September; dates to be set up by the Pre-Registration Clinical Psychologist.

Supervisor [Signature] Pre-Reg Clin Psych [Signature]

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THE BRITISH PSYCHOLOGICAL SOCIETY
MEMBERSHIP AND QUALIFICATIONS BOARD
COMMITTEE FOR THE SCRUTINY OF
INDIVIDUAL CLINICAL QUALIFICATIONS

PLACEMENT LOG BOOK

TRAINEE: Lissa Lichterman
SUPERVISOR: Miriam Creighton
PLACEMENT ADDRESS: Psychology Service
16 Liverpool Gardens
Worthing
West Sussex

TYPE OF PLACEMENT: Child and Adolescent
DATES OF PLACEMENT: October 10 1994 - October 1 1995
1. **SETTINGS IN WHICH TRAINEE HAS WORKED**

Clinical work carried out in Psychology Department which also acts as the base for Adult Mental Health and Sexual Health Specialties.

2. **SUMMARY OF CLIENTS SEEN**

<table>
<thead>
<tr>
<th>NUMBER OF OUT-PATIENTS</th>
<th>AGE RANGE</th>
<th>MALE : FEMALE RATIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIRECT INVOLVEMENT WITH INDIVIDUALS/ COUPLES FOR ASSESSMENT ONLY</td>
<td>2</td>
<td>7-11</td>
</tr>
<tr>
<td>DIRECT INVOLVEMENT WITH INDIVIDUALS/ COUPLES FOR INTERVENTION</td>
<td>1</td>
<td>28</td>
</tr>
<tr>
<td>WORK WITH FAMILIES</td>
<td>26</td>
<td>3-17</td>
</tr>
<tr>
<td>WORK WITH DIRECT CARE STAFF</td>
<td>10</td>
<td>----</td>
</tr>
</tbody>
</table>
### 3. OBSERVATION OF SUPERVISOR’S CASES

<table>
<thead>
<tr>
<th>SEX</th>
<th>AGE</th>
<th>REFERRED FOR</th>
<th>INITIAL ASSESSMENT</th>
<th>NATURE OF INTERVENTION</th>
<th>TOTAL HOURS OBSERVATION</th>
<th>EVALUATION/OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/M</td>
<td>9</td>
<td>PARENTS</td>
<td>Not observed</td>
<td>Family therapy</td>
<td>5</td>
<td>Family were beginning to accept responsibility of protecting child from further abuse. Supervisor continued to see family alone.</td>
</tr>
<tr>
<td>F/M</td>
<td>16</td>
<td>MOTHER</td>
<td>Not observed</td>
<td>Behaviour therapy</td>
<td>2</td>
<td>Only observed final session in which O-C behaviours greatly much reduced. Family discharged.</td>
</tr>
<tr>
<td>M</td>
<td>9</td>
<td>PARENTS</td>
<td>Not observed</td>
<td>Family therapy and bereavement work</td>
<td>1.5</td>
<td>Observed one session in which family expressed their grief at having a developmentally delayed child. Supervisor continued to see family alone.</td>
</tr>
<tr>
<td>F</td>
<td>9</td>
<td>11 - sister</td>
<td>family therapy assessment for treatment</td>
<td>Family therapy to address issues of unresolved grief and behaviour therapy to alter reinforcement</td>
<td>4.5</td>
<td>Issues were beginning to be addressed. High levels of unresolved grief to be worked through. Supervisor continued to see family.</td>
</tr>
</tbody>
</table>
### 3. OBSERVATION OF SUPERVISOR’S CASES

<table>
<thead>
<tr>
<th>SEX</th>
<th>AGE</th>
<th>REFERRED FOR</th>
<th>INITIAL ASSESSMENT</th>
<th>NATURE OF INTERVENTION</th>
<th>TOTAL HOURS OBSERVATION</th>
<th>EVALUATION/OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>10</td>
<td>Gilles de la Tourette’s syndrome and disruptive behaviour</td>
<td>Family therapy assessment and behavioural analysis</td>
<td>Family therapy and behaviour therapy</td>
<td>5</td>
<td>Family were beginning to differentiate between GTS behaviours and unrelated disruptive behaviours. Behaviour therapy continued to alter reinforcement pattern.</td>
</tr>
<tr>
<td>F/M</td>
<td>PARENTS</td>
<td>Disruptive behaviour</td>
<td>Family therapy</td>
<td>None offered</td>
<td>1.5</td>
<td>Behaviour currently fine, however father awaiting prison sentence. Family to return if child’s behaviour deteriorates when father away.</td>
</tr>
<tr>
<td>M</td>
<td>14</td>
<td>Anger management</td>
<td>Family therapy assessment and behavioural analysis</td>
<td>family therapy (not observed)</td>
<td>1.5</td>
<td>Initial assessment observed only. Supervisor went on to see family alone.</td>
</tr>
</tbody>
</table>
4. JOINT & INDEPENDENT WORK

Please indicate in the first column whether the work was Independent (I) or Joint (J).

### 4.1 INDIVIDUALS AND COUPLES

<table>
<thead>
<tr>
<th>I/J</th>
<th>SEX</th>
<th>AGE</th>
<th>REFERRED FOR</th>
<th>INITIAL ASSESSMENT METHODS</th>
<th>BRIEF DESCRIPTION OF INTERVENTION</th>
<th>TOTAL HOURS</th>
<th>EVALUATION/OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>F</td>
<td>7</td>
<td>Enuresis</td>
<td>Family therapy assessment then performed an intellectual assessment - WISC-III-UK, Neale Analysis of Reading Ability and Supplementary Diagnostic Tests.</td>
<td>Intellectual assessment carried out. No further intervention.</td>
<td>5</td>
<td>Considerable variability across subtest scores indicated marked specific learning difficulties. The enuresis fitted with a pattern of a stress related disorder. Meetings at school took place to develop the best strategy to help her. Case discharged.</td>
</tr>
<tr>
<td>I</td>
<td>F</td>
<td>28</td>
<td>Mother of referred child (see section 4.2)</td>
<td>Family therapy and behavioural assessment</td>
<td>Behavioural work with family was having no effect on child's aggressive behaviour. Indication of underlying issues resulted in mother being seen alone. Systemic model used to explore mother's past relationships. Patterns of physical and emotional abuse were highlighted.</td>
<td>6</td>
<td>Mother became much clearer in her understanding of her role in past and current relationships. She began to identify the need to make her own needs met. At this time her relationship with the childrens' father ended. She DNA'd 1 session and canceled 2. File closed. It appeared that she needed time to consolidate the work done.</td>
</tr>
</tbody>
</table>
### 4. JOINT & INDEPENDENT WORK

Please indicate in the first column whether the work was Independent (I) or Joint (J).

### 4.1 INDIVIDUALS AND COUPLES

<table>
<thead>
<tr>
<th>I/J</th>
<th>SEX</th>
<th>AGE</th>
<th>REFERRED FOR</th>
<th>INITIAL ASSESSMENT METHODS</th>
<th>BRIEF DESCRIPTION OF INTERVENTION</th>
<th>TOTAL HOURS</th>
<th>EVALUATION/OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>M</td>
<td>11</td>
<td>Disruptive behaviour at school</td>
<td>Initially carried out family therapy assessment. Then performed Intellectual assessment - WISC-III-UK, Neale Analysis of Reading Ability, Schonell Spelling Test and Auditory Discrimination Test.</td>
<td>Intellectual assessment carried out. No further treatment required by family.</td>
<td>4</td>
<td>Marked specific learning difficulties became apparent. Results fed back to Education Department. Statementing Procedure implemented. File closed.</td>
</tr>
</tbody>
</table>
### 4.2 FAMILIES

<table>
<thead>
<tr>
<th>I/J</th>
<th>SEX</th>
<th>AGE</th>
<th>REFERRED FOR</th>
<th>INITIAL ASSESSMENT METHODS</th>
<th>BRIEF DESCRIPTION OF INTERVENTION</th>
<th>TOTAL HOURS</th>
<th>EVALUATION/OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>M</td>
<td>11</td>
<td>PARENTS</td>
<td>Disruptive behaviour, especially at school</td>
<td>Family therapy assessment. Also carried out intellectual assessment - WISC-III-UK, Neale Analysis of Reading Ability, Schonell Spelling and Auditory Discrimination test.</td>
<td>7</td>
<td>Parents primary aim was to have their son statemented for educational needs. Although many behavioural problems were evident at home, the family wanted to focus on his schooling at present. Therefore file closed.</td>
</tr>
<tr>
<td></td>
<td>F/M</td>
<td></td>
<td></td>
<td></td>
<td>Cognitive assessment completed and report feedback to parents, school and Educational Psychology Service.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>F</td>
<td>10</td>
<td>BROTHER</td>
<td>Disruptive behaviour at home</td>
<td>Family therapy assessment</td>
<td>5</td>
<td>Parental sub-system reinstated and boundaries placed on children's behaviour. Great improvement. File closed.</td>
</tr>
<tr>
<td>M</td>
<td></td>
<td></td>
<td>PARENTS</td>
<td></td>
<td>Family therapy methods used to initiate setting of appropriate boundaries by the parents.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F/M</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>F</td>
<td>10</td>
<td>BROTHER</td>
<td>Victim of bullying at school</td>
<td>Family therapy assessment</td>
<td>5</td>
<td>Family members all felt empowered to counteract bullying should it arise again. Father able to increase his role as protector for his children. File closed.</td>
</tr>
<tr>
<td>M</td>
<td></td>
<td></td>
<td>PARENTS</td>
<td></td>
<td>Family therapy to facilitate working through of feelings of anger and problem solving for future protection of self and children.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F/M</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 4.2 Families

<table>
<thead>
<tr>
<th>I/J</th>
<th>SEX</th>
<th>AGE</th>
<th>Referred For</th>
<th>Initial Assessment Methods</th>
<th>Brief Description of Intervention</th>
<th>Total Hours</th>
<th>Evaluation/Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>F</td>
<td>9</td>
<td>PTSD and grief work following RTA</td>
<td>Family therapy assessment for treatment</td>
<td>Family and individual work carried out aimed at reality testing and dispelling survivor guilt. Roles within family were very rigid and family made some attempt at altering this.</td>
<td>8</td>
<td>Survivor guilt diminished. Roles within family still strongly defined - family not willing to explore these issues at present time. Discharged with proviso that they can return later for further input.</td>
</tr>
<tr>
<td>II</td>
<td>F</td>
<td>14</td>
<td>Generalised anxiety</td>
<td>Family therapy assessment for treatment</td>
<td>Family therapy assessment raised issues of the family life-stage with daughter moving towards increased independence. Separation-anxiety apparent.</td>
<td>1.5</td>
<td>Family did not attend any subsequent sessions. File closed.</td>
</tr>
<tr>
<td>I</td>
<td>F/M</td>
<td>3</td>
<td>Behaviour problems</td>
<td>Family therapy assessment for treatment</td>
<td>Intervention involved reassurance that mother and step-father are dealing with parents separation in appropriate manner.</td>
<td>3</td>
<td>By time of appointment behaviour had improved. Seemed to be due to parental separation. Brief counseling undertaken then file closed.</td>
</tr>
</tbody>
</table>
## 4.2 FAMILIES

<table>
<thead>
<tr>
<th>I/J</th>
<th>SEX</th>
<th>AGE</th>
<th>REferred For</th>
<th>INITIAL ASSESSMENT METHODS</th>
<th>BRIEF DESCRIPTION OF INTERVENTION</th>
<th>TOTAL HOURS</th>
<th>EVALUATION/OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>F</td>
<td>12</td>
<td>Panic attacks and social phobia</td>
<td>Family therapy assessment for treatment</td>
<td>Family therapy to assist in working through issues of family loss. Also cognitive-behavioural work for amelioration of avoidance and panics.</td>
<td>7.5</td>
<td>Panic attacks stopped and no longer avoiding social situations. Family gained insight into effects of loss and more open to each others emotions. File closed.</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>8- BROS.</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>F/M</td>
<td>PARENTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>M</td>
<td>8</td>
<td>Conduct disorder</td>
<td>Family therapy assessment for treatment</td>
<td>No intervention accepted.</td>
<td>1.5</td>
<td>Mother under high levels of stress. used her contact with me in an attempt to avoid contact with social services. Refused further treatment. Referred on to Social Services.</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>11-SIBS.</td>
<td>5</td>
<td></td>
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<td></td>
<td>F</td>
<td>MOTHER</td>
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<tr>
<td>I</td>
<td>M</td>
<td>9</td>
<td>Psychosomatic asthma</td>
<td>Family therapy assessment for treatment</td>
<td>Systemic family therapy assessment of issues of loss following parental separation. Formulated that asthma caused by stress at loss of father and high expressed emotion in family.</td>
<td>3</td>
<td>Began to explore issues. Very high levels of distress felt by whole family. DNA’d 3 sessions. No further contact so file closed.</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>24-SIBS.</td>
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<td>21</td>
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</table>
### 4.2 Families

<table>
<thead>
<tr>
<th>I/J</th>
<th>SEX</th>
<th>AGE</th>
<th>Referred For</th>
<th>Initial Assessment Methods</th>
<th>Brief Description of Intervention</th>
<th>Total Hours</th>
<th>Evaluation/Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>F</td>
<td>14</td>
<td>Relationship with mother breaking down</td>
<td>Family therapy assessment for treatment</td>
<td>Family therapy to facilitate communication and negotiation between mother and daughter.</td>
<td>4.5</td>
<td>Communication much improved. Both making needs heard and learned to compromise. File closed.</td>
</tr>
<tr>
<td>I</td>
<td>F</td>
<td>17</td>
<td>Somatic symptoms of anxiety and social phobia</td>
<td>Family therapy assessment for treatment</td>
<td>Cognitive-behavioural: relaxation taught and worked through hierarchy of feared situations.</td>
<td>8</td>
<td>Somatic symptoms reduced and avoidance ceased. File closed.</td>
</tr>
<tr>
<td>I</td>
<td>M</td>
<td>10</td>
<td>Aggressive behaviour. predominantly at home</td>
<td>Family therapy assessment and behavioural analysis</td>
<td>Family therapy - cot death of brother 3 years previously led to high levels of unresolved grief for whole family. Therapy involved facilitating family to work through these feelings.</td>
<td>10</td>
<td>Anger reduced as grief of whole family diminished. Family unit working together and supporting each other more effectively. File closed.</td>
</tr>
<tr>
<td>I</td>
<td>M</td>
<td>12</td>
<td>Emotional behaviour and tantrums at home and school</td>
<td>Family therapy assessment and behavioural analysis</td>
<td>Family therapy to enable parents to identify the behaviours as unacceptable and place limits and higher expectations on their sons.</td>
<td>4</td>
<td>Parents acknowledged tantrums as unacceptable. Worked well towards altering pattern of reinforcement. File closed.</td>
</tr>
<tr>
<td>I/J</td>
<td>SEX</td>
<td>AGE</td>
<td>REFERRED FOR</td>
<td>INITIAL ASSESSMENT METHODS</td>
<td>BRIEF DESCRIPTION OF INTERVENTION</td>
<td>TOTAL HOURS</td>
<td>EVALUATION/OUTCOME</td>
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<tr>
<td>1</td>
<td>M</td>
<td>2</td>
<td>Aggressive behaviour</td>
<td>Family therapy and behavioural assessment</td>
<td>Initially worked with mother and referred child behaviourally to alter reinforcement for aggressive behaviours.</td>
<td>5</td>
<td>Mother learned behavioural principles quickly, but no changes were taking place in hers or her sons behaviour. There appeared to be underlying issues for the other so she was offered individual sessions (see Section 4.1)</td>
</tr>
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<td></td>
<td>F</td>
<td>6- SISTER</td>
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<tr>
<td>1</td>
<td>M</td>
<td>6</td>
<td>Encopresis</td>
<td>Family therapy and behavioural assessment</td>
<td>Family therapy and behavioural assessment begun, but no intervention carried out.</td>
<td>1.5</td>
<td>Mother, father and step-father believe there to be underlying physical causes. Presently unwilling to work psychologically. Referred back to paediatrician.</td>
</tr>
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<td>F</td>
<td>2- SISTER</td>
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<tr>
<td></td>
<td>M</td>
<td>STEP-FATHER</td>
<td></td>
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<tr>
<td>1</td>
<td>M</td>
<td>10</td>
<td>Fear of going upstairs at home alone</td>
<td>Family therapy and behavioural analysis</td>
<td>Behaviour therapy to alter reinforcement. Reality testing to dispel fears. Family therapy aimed at reinforcing his role as eldest child</td>
<td>7</td>
<td>Behaviour diminished and self-esteem improved. File closed.</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>8-BROS.</td>
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<td>M</td>
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### 4.2 FAMILIES

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<tr>
<th>I/J</th>
<th>SEX</th>
<th>AGE</th>
<th>REFERRED FOR</th>
<th>INITIAL ASSESSMENT METHODS</th>
<th>BRIEF DESCRIPTION OF INTERVENTION</th>
<th>TOTAL HOURS</th>
<th>EVALUATION/OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>F</td>
<td>11</td>
<td>Opportunity to discuss and work through her feelings following parental separation</td>
<td>Family therapy assessment begun</td>
<td>Assessment only.</td>
<td>1.5</td>
<td>There appeared to be many unresolved issues, mainly around grief at loss of father. However, family canceled then DNA'd following 2 sessions. No further contact so file closed.</td>
</tr>
<tr>
<td>I</td>
<td>F</td>
<td>18 - SISTER</td>
<td>MOTHER</td>
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<tr>
<td>I</td>
<td>F</td>
<td>16 - SISTER</td>
<td>PARENTS</td>
<td>Aggressive outbursts</td>
<td>Family therapy and behavioural assessment</td>
<td>13</td>
<td>Aggressive outbursts decreased as family worked through fear and grief. File closed.</td>
</tr>
<tr>
<td>I</td>
<td>F/M</td>
<td>12</td>
<td></td>
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<tr>
<td>I</td>
<td>M</td>
<td>11</td>
<td>Obsessional behaviour</td>
<td>Family therapy and behavioural analysis</td>
<td>Family therapy to facilitate parents understanding of child’s behaviour in terms of his need to keep mother safe - she has M.E. Father encouraged to adopt a much more active role.</td>
<td>7</td>
<td>Increased understanding of causes and functions of behaviour. Behaviour reduced as father became more involved with family. Children increased their understanding of M.E. File closed.</td>
</tr>
<tr>
<td>I</td>
<td>F</td>
<td>16 - SISTER</td>
<td>14 - BROTHER.</td>
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<td>I</td>
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### 4.2 FAMILIES

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<th>EVALUATION/OUTCOME</th>
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</thead>
<tbody>
<tr>
<td>I</td>
<td>M</td>
<td>7</td>
<td>Disruptive behaviour at home and school</td>
<td>Family therapy and behavioural assessment</td>
<td>Family therapy to reduce parental arguments and increase consistent discipline and negotiation. Issues involving the families feelings re: having a handicapped child (the 3 yr. old sibling of the referred child) were addressed. Consultation with school also carried out.</td>
<td>12</td>
<td>Parents worked hard to alter their behaviour and to explore the effects of a handicapped child on the whole family. referred child’s behaviour greatly improved as pressure to perform was removed and consistent discipline was enforced. File closed.</td>
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<tr>
<td>M</td>
<td>3-BRO.</td>
<td>PARENTS</td>
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<td>F/M</td>
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<tr>
<td>I</td>
<td>F</td>
<td>14</td>
<td>Negative attitude, running away from school, problems with peer relationships</td>
<td>Family therapy assessment for treatment</td>
<td>Family therapy to re-align siblings and empower mother to enforce appropriate boundaries on her teenage daughter’s behaviour.</td>
<td>11</td>
<td>Aims achieved and family requested discharge as they felt they could cope without further professional input. School still very concerned. File still open, but would have preferred to continue treatment.</td>
</tr>
<tr>
<td>F</td>
<td>15-SISTER</td>
<td>MOTHER</td>
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### 4.2 FAMILIES

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<th>INITIAL ASSESSMENT METHODS</th>
<th>BRIEF DESCRIPTION OF INTERVENTION</th>
<th>TOTAL HOURS</th>
<th>EVALUATION/OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>F</td>
<td>4</td>
<td>Defiant behaviour at home</td>
<td>Family therapy assessment and behavioural analysis</td>
<td>Initial assessment and formulation only carried out. There appeared to be a lack of agreement between the parents regarding the severity of the problem and whether or not professional input was necessary. It seemed to be this lack of parental negotiation, which was present in the management of the children also, which may have created unsettled and defiant behaviour in referred child.</td>
<td>2.5</td>
<td>Family canceled third session and did not make further contact. This highlights the importance of at least some degree of parental agreement before being able to work on resolving the difficulties. File closed as no further contact was made.</td>
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<th></th>
<th>F</th>
<th>2-SISTER</th>
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<tbody>
<tr>
<td>F/M</td>
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<td>PARENTS</td>
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### 4.2 FAMILIES

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<th>I/J</th>
<th>SEX</th>
<th>AGE</th>
<th>REFERRED FOR</th>
<th>INITIAL ASSESSMENT METHODS</th>
<th>BRIEF DESCRIPTION OF INTERVENTION</th>
<th>TOTAL HOURS</th>
<th>EVALUATION/OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>M</td>
<td>13</td>
<td>Difficult and Aggressive behaviour</td>
<td>Family therapy and behavioural assessment</td>
<td>Behaviour therapy to alter pattern of reinforcement that he received from his parents as a result of his defiant or aggressive behaviour. Father encouraged to become more actively involved in enjoyable activities with his son in order to promote a positive malt role model and to develop a stronger bond between father and son.</td>
<td>6</td>
<td>Behaviour began to improve. However, after session 5 there was a setback, with an increase in defiant behaviour. The parents felt that this indicated failure and that their son was not capable of change. They declined the offer of further sessions. File closed, very reluctantly. Letter to referrer suggested encouraging the family to return in future.</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>10</td>
<td>BRO</td>
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<tr>
<td></td>
<td>F/M</td>
<td></td>
<td>PARENTS</td>
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<tr>
<td>I</td>
<td>F</td>
<td>8</td>
<td>Destructive and defiant behaviour</td>
<td>Family therapy and behavioural assessment</td>
<td>Family therapy to re-align parents in their subsystem and reduce the amount of control that identified client had. Reduce parental arguments within hearing of children and facilitate consistent discipline.</td>
<td>7</td>
<td>Parental negotiation skills improving. Fewer arguments in front of children and more consistent discipline implemented. Child’s behaviour improving. Parents identified deep-rooted difficulties in their relationship and decided to seek marital counseling elsewhere. Closed.</td>
</tr>
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<td>F</td>
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<td>4-SISTER</td>
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<td>PARENTS</td>
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### 4.2 FAMILIES

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<tr>
<th>I/J</th>
<th>SEX</th>
<th>AGE</th>
<th>REferred For</th>
<th>INITIAL ASSESSMENT METHODS</th>
<th>BRIEF DESCRIPTION OF INTERVENTION</th>
<th>TOTAL HOURS</th>
<th>EVALUATION/OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>M</td>
<td>11</td>
<td>Defiant behaviour and relationship difficulties with step-mother</td>
<td>Family therapy and behavioural assessment</td>
<td>Behaviour therapy to alter pattern of reinforcement for defiant behaviour. Family therapy to resolve issues of anger and grief at loss of birth mother.</td>
<td>7</td>
<td>Relationship between client and step-mother improving. Still many unresolved issues of grief. Family passed on to supervisor as placement ending. Family in agreement.</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>14- BRO. PARENTS</td>
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<tr>
<td>I</td>
<td>M</td>
<td>9</td>
<td>Temper-tantrums</td>
<td>Family therapy and behavioural assessment</td>
<td>Behaviour therapy to alter pattern of reinforcement and implementation of consistent boundaries.</td>
<td>6</td>
<td>Temper reduced significantly. Consistent messages given by parents and child learned more adaptive ways to make needs known.</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>6- SISTER MOTHER</td>
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<td>F/M</td>
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### 4.3 GROUPS

<table>
<thead>
<tr>
<th>I/J</th>
<th>THERAPIST</th>
<th>YOUR ROLE</th>
<th>MEMBERSHIP (ages and sex)</th>
<th>NATURE OF GROUP WORK</th>
<th>NUMBER OF SESSIONS AND TOTAL HOURS</th>
<th>EVALUATION/OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>J</td>
<td>Trainee and Supervisor</td>
<td>Joint-facilitator</td>
<td>Health Visitors, all female, who worked in the District. Group has been running for two years with psychologist as facilitator.</td>
<td>Support group and teaching forum.</td>
<td>7 sessions 10.5 hours.</td>
<td>Some sessions used for structured teaching of psychological principles. Some used for open discussion of general topical issues of cases. Much lively debate and discussion of ideas.</td>
</tr>
</tbody>
</table>
### 4.4 INDIRECT WORK WITH CLIENTS (through staff)

<table>
<thead>
<tr>
<th>I/J</th>
<th>PROFESSION AND NUMBERS OF STAFF</th>
<th>IDENTIFIED CLIENT (age and sex)</th>
<th>NATURE OF ASSESSMENT</th>
<th>BRIEF DESCRIPTION OF INTERVENTION</th>
<th>FORMULATION</th>
<th>TOTAL CONTACT TIME (hrs)</th>
<th>OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>J</td>
<td>One school teacher</td>
<td>7 year old male referred due to behaviour problems at school</td>
<td>family therapy assessment carried out previously. Teacher requested meeting to discuss behaviour in school.</td>
<td>Suggested behavioural interventions to encourage on-task behaviour in the classroom.</td>
<td>receiving high level of reinforcement for disruptive behaviour</td>
<td>2</td>
<td>Supervisor followed up family.</td>
</tr>
<tr>
<td>I</td>
<td>One school teacher</td>
<td>12 year old male referred due to behaviour problems</td>
<td>family therapy assessment carried out previously. Behavioural analysis at school.</td>
<td>Discussion with teacher re: ways to enforce suitable boundaries within school setting.</td>
<td>Lack of clear and enforced boundaries. Behaviour escalating in attempt to have these enforced.</td>
<td>2</td>
<td>Therapy continued with family and progress made in terms of some behavioural improvement.</td>
</tr>
<tr>
<td>I</td>
<td>Two school teachers - class teacher and head teacher</td>
<td>6 year old male referred due to behaviour problems</td>
<td>Meeting with teachers to assess behaviours in school.</td>
<td>Family therapy carried out in conjunction with behavioural programme at school.</td>
<td>High level of reinforcement for of-task behaviour.</td>
<td>1.5</td>
<td>Therapy continued with family. Some reduction in problem behaviours.</td>
</tr>
</tbody>
</table>
## 5. TEACHING

<table>
<thead>
<tr>
<th>PROFESSION &amp; NUMBERS</th>
<th>HOURS INVOLVED</th>
<th>OBJECTIVES</th>
<th>BRIEF DESCRIPTION OF CONTENT</th>
<th>BRIEF DESCRIPTION OF TEACHING METHOD AND FORMAT</th>
<th>EVALUATION/OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 CPN 1 Social Worker 3 Psychologists</td>
<td>3</td>
<td>To impart information on a particular aspect of Family Therapy</td>
<td>Definition of 'reframes', reasons for use, examples &amp; explanation of specific factors e.g. timing - when to use/not use reframes.</td>
<td>Oral presentation accompanied by handouts. Questions answered throughout, followed by discussion.</td>
<td>Participants reported that content and presentation were appropriate and informative.</td>
</tr>
<tr>
<td>7 Health Visitors</td>
<td>3</td>
<td>To teach basic, general information on the psychological aspects of eating disorders</td>
<td>Definition of Anorexia and Bulimia Nervosa, behaviours associated and the psychological underpinnings of these disorders. Treatment offered by specialist clinics also outlined.</td>
<td>Oral presentation accompanied by handout. General discussion followed.</td>
<td>Participants reported that content was informative and highlighted the need for health visitors to refer on to other professionals if they suspect eating disorders in clients in the community.</td>
</tr>
</tbody>
</table>
6. RESEARCH ACTIVITY

Outline any projects which you initiated or with which you were involved and indicate the extent of your involvement. (For example, objectives, measures, design, results, collaboration with others, time etc.)

The research undertaken on this placement was designed to fulfill the Research component of the PsychD Clinical Psychology Conversion Course at the University of Surrey. The objective was to carry out an evaluation of referrer satisfaction with the Child & Adolescent Specialty of Worthing Priority Care NHS Trust Clinical Psychology Service. All work was carried out independently by the trainee, with supervision from Surrey University Psychology Department.

A questionnaire was designed and sent to all actual and potential referrers to this service. The aims was to evaluate levels of satisfaction on a number of given variables including waiting time before first appointment and communication, and to develop a profile of those professionals who currently do not refer to this service.

The questionnaire was sent to 239 professionals, with a response rate of 63%. Results have not yet been fully evaluated, but will include descriptive and quantitative statistics to ascertain differences between professional groups in terms of their levels of satisfaction with different aspects of the service. A list of specific suggestions regarding potential ways in which the service might be improved will be collated.

This has been a particularly useful learning experience with regard to questionnaire design and the evaluation of discrete elements of a service.
7. SERVICE DEVELOPMENT

This includes work with staff support groups, involvement in service planning, developing I.P.P systems etc. Outline each piece of work, indicating the extent of your role and evaluation/outcome.

Although not a new service, the Child & Adolescent specialty has consisted of only the specialty head for a number of years. Expansions were made when two new staff members joined the specialty in October 1994, myself one of them. Consequently, the service development in which I was involved was at quite a basic but fundamental level. It consisted of meetings with multi-professional agencies with the aim of establishing effective professional links (see Section 8). I was involved in discussions with the specialty head regarding the planning and implementation of these meetings. In December 1994 the Psychology Service was relocated to a new department base. As a result, I was also involved in a number of meetings within the specialty in order to plan and set up the new specialty base. e.g. setting up the split-screen observation and family therapy rooms and the purchase of books and equipment for the specialty.
8. MEETINGS, VISITS, OBSERVATIONS

This includes meetings with other professionals, Psychology Department meetings, special supervision groups and visits to other units. Outline each experience and the extent of your involvement.

1. Consultant Paediatrician, Southlands Hospital - to discuss role of Psychology in paediatric settings and possibility of setting up joint work and a unified referral system between the two services. Jointly drew-up document with supervisor following meeting re: Clinical Psychology in Paediatric Setting.

2. Behaviour Support Teacher, County Education Department - spent day shadowing her to gain an understanding of her work and ways in which the two services may work together in the future.

3. Head Teacher, Language Unit - half-day visit to observe unit for children with specific language disorders and Autism.

4. Head of Pastoral Care and Head of Special Support Unit, Angmering High School - meeting to discuss ways of developing multi-agency working.

5. Southlands Hospital Paediatric Wards - shown around wards and introduced to ward staff with the aim of beginning to liaise with members of paediatric team with a view to future joint working.
8. MEETINGS, VISITS, OBSERVATIONS (continued)

6. Southlands Hospital - meeting with SHO's and Consultant Paediatrician to discuss the role of clinical psychology in paediatric setting. Jointly presented with supervisor.

7. Child Development Team - met with all members of the Paediatric Occupational Therapy service. The aim was to discuss the role of clinical psychology, the specific way our service works and the possibility of developing future joint working. Meeting attended by all three members of Child & Adolescent psychology specialty.

8. Child Protection Team, Social Services Department - met with team to discuss the work they do. Joint meeting with supervisor.

9. Child Guidance Team - met with consultant psychiatrist and social work team to find out about the way they work and inform them of my role with in the specialty.

10. Child Development Team - observe multi-disciplinary clinic to learn about the type of work done within the CDT.

11. Pupil Referral Unit - met with head teacher of unit to learn about the work undertaken at the unit. Joint visit with supervisor. Discussed ways of possible future joint working.
8. MEETINGS, VISITS, OBSERVATIONS (continued)

12. Members of clinical psychology service- met with members of Sexual Health, Substance Misuse, Elderly, Learning Disability and Adult Mental Health specialties to learn about the work they carry out, the ethos of the different specialties and the similarities and differences in the way they work within the wider system of the clinical psychology service.

13. Psychology Department meetings - attended monthly meetings of the psychology service, consisting of business section and seminars.
9. TRAINING EVENTS

Please indicate what training events you attended whilst on placement. The formal teaching programme should not be included in this section.

<table>
<thead>
<tr>
<th>DATE</th>
<th>TITLE</th>
<th>VENUE</th>
<th>BRIEF DESCRIPTION OF TOPIC</th>
<th>OUTCOME (VALUE OF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fortnightly</td>
<td>Family Therapy Group</td>
<td>Psychology Department</td>
<td>Theory and practice of family therapy, includes formal teaching, discussions, case presentation, guided reading and role play.</td>
<td>Extremely useful for learning more about the theory of the model of working.</td>
</tr>
<tr>
<td>2.12.94</td>
<td>Bulimia Nervosa - Behavioral and Reproductive Dysfunction. By Prof. H. Lacey</td>
<td>Worthing Hospital Post-graduate Medical Centre</td>
<td>Diagnostics and psychopathology of BN. Also details Prof Lacey's recent research on reproductive function in BN, and St. George's Hospital treatment plan.</td>
<td>Very useful in updating knowledge of eating disorders, especially interesting to hear about such recent research.</td>
</tr>
<tr>
<td>6.12.94</td>
<td>The Children Act Update</td>
<td>Royal Surrey Hospital Medical Centre</td>
<td>Update on recent legislation and practical implications of the act. Mostly based on group work with some formal teaching.</td>
<td>Helpful for keeping up to date with current policy changes. Interesting to discuss issues with other psychologists.</td>
</tr>
<tr>
<td>23.2.95</td>
<td>Enuresis study day</td>
<td>Southlands Hospital</td>
<td>Study day for multi-agency professionals on the diagnosis and treatment of enuresis.</td>
<td>Useful for gaining up to date information, although much of it was aimed at General Practitioners and was medically based.</td>
</tr>
</tbody>
</table>
9. TRAINING EVENTS

<table>
<thead>
<tr>
<th>DATE</th>
<th>TITLE</th>
<th>VENUE</th>
<th>BRIEF DESCRIPTION OF TOPIC</th>
<th>OUTCOME (VALUE OF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.4.94 and</td>
<td>Psychotherapy interviewing skills workshop</td>
<td>Clinical psychology</td>
<td>Workshop format, using role play, self-assessment and peer review to learn micro- and macro-skills involved in psychotherapy interviewing.</td>
<td>Very useful in broadening skill base.</td>
</tr>
<tr>
<td>monthly thereafter</td>
<td></td>
<td>department.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.4.95</td>
<td>Child Protection: A framework for practice</td>
<td>St. Peter’s Hospital</td>
<td>Teaching day on child sexual abuse.</td>
<td>There was too much information attempted to be fitted in to one day of teaching, which made it difficult to learn some of the more complex issues. However, many useful issues were raised and helpful guidance on reading material was given.</td>
</tr>
</tbody>
</table>
REPORT OF CLINICAL ACTIVITY

**Name:** Sarah B.

**D.O.B.:** May 1982

**Age At Referral:** 12.6 years

**Referred By:** Dr. V., General Practitioner, due to “problems relating to panic attacks...(which) have been going on for some time but have been increasing in frequency and severity...such that they stop her from leaving home and leaving her parents”.

**Initial Assessment:** An initial assessment as carried out over two sessions involving the whole family. The following information was obtained:

Sarah is the middle of three children. Her brother, Wayne, is 14 and Christopher is aged 8. The parents describe the two boys as “keeping their feelings to themselves”, whereas Sarah has “always been the more emotional one”. This was evident in the assessment sessions, in which Sarah was often tearful and flushed whereas the boys listened impassively. Mr and Mrs B. both described their own feelings of panic which they have both had for many years and which the children know about. Mr B. feels very anxious in crowded shops and Mrs B. is extremely anxious when driving on dual carriageways. However, the parents do not avoid these situations and their symptoms have never been severe enough to prompt them to seek professional input.
Sarah presented with feelings of panic which physiologically manifested as sweaty palms, butterflies in the stomach and an increase in body temperature. These feelings arose in a number of social situations in which there was a potential for becoming involved socially with her peers. For example, the symptoms appeared when the telephone rang at home as she was worried that it might be a friend calling to invite her out, and at school when friends talked about going out for fear that they might ask her to join them.

Sarah was currently avoiding any situation in which there might be an invitation for prolonged social contact with her peers. She refused to answer the telephone and rushed away from school to avoid invitations. However, she was still attending school regularly.

From the initial assessment, a number of relevant details about the family’s history were noted as follows:

In August 1991 Sarah’s maternal great-grandmother died. In the same month, the father of a friend of hers was murdered. In the autumn of that year, Sarah and her father were involved in a car accident in which she no major injuries but her father seriously injured his back. In this same year the family began to suffer serious financial difficulties. Mr B. lost his business and had to put the family home on the market. In March 1992 Sarah’s paternal grandfather died. In early 1993 her paternal grandmother became very ill and was diagnosed as
having skin cancer. In October 1994 the family home was finally sold and they moved into a three-room flat. In the same month both of the family's pet dogs died.

This indicated a pattern of multiple loss suffered by the family between August 1991 and October 1994. The significance of this pattern becomes clear in the light of findings by Clark (1989) that stressful life events are common around the time of onset of panic disorders, and Finlay-Jones & Brown (1981) who indicate that the events often involve some element of loss.

**Initial Formulation:**

1) Systemic Family Formulation: The family have undergone a series of stressful life-events and suffered multiple loss over the past three years. It was formulated therefore that Sarah’s panics were a response to real, rather than perceived, stress. Within the family, Sarah is placed in the role of the emotional, worrying child. Her two brothers are expected to internalise their feelings. Therefore it was formulated that she expressed her emotions in this way due to the role she has within the family. Added to this, it was formulated that Sarah’s symptoms served the function of diverting her parents’ attention from their financial worries. This links with the findings of Graham (1991) that children living in homes where the parents are pressurised by adversity are more likely to experience insecurity and therefore be predisposed to anxiety.
2) Behavioural Formulation: Sarah’s response to family stress was somatised as the physical feelings of panic. There appears to be a predisposition within the family towards feelings of panic. It was formulated that Social Learning Theory (Bandura & Walters 1963) resulted in the expression of stress in this particular manner. Initially the panics involved situations in which she was required to leave the family, e.g. socialise with peers. As time progressed, the physiological symptoms generalised to include situations in which she might be invited into such situations, e.g. answering the telephone. It was formulated that her avoidance made it difficult to learn that the feared object or situation was not dangerous in the way, or to the extent that she thought. Added to this, the escape was associated with relief from the unpleasant symptoms of anxiety, was thus reinforced and consequently more likely to recur.

**Action Plan:** In order to ameliorate the physical symptoms of the panic attacks, behavioural work was planned. This would include an explanation of the ‘Vicious Circle Model’ (Butler 1989) of phobic anxiety (see section entitled ‘Implementation of Action Plan’ for discussion of model) an the development and implementation of a hierarchy of feared situations. Monitoring of anxiety levels was to be built into the behavioural work.

A Structural Family Therapy model would be implemented to run concurrently with the behavioural work in order to enable the family to alter the patterns of behaviour which were defined by the individuals’ roles within the family system, and to address the issue of family grief.
Implementation of Action Plan: to put this into context, this section will start with a rationale for treatment.

Behavioural treatment for phobias developed out of the findings of experimental psychology and the work of Wolpe (1958 & 1961) on systematic desensitisation. The underlying hypothesis is that 'abnormal' behaviour is learned. It follows that what is learned can be unlearned and more adaptive reactions learned instead. This can be achieved by approaching rather than avoiding the feared object or situation. In reversing the tendency to avoid phobic situations, by use of 'graded exposure', the person has the opportunity to learn that the situation does not hold the dangers they had expected. Treatment, therefore, requires that the phobic person repeatedly makes contact with the feared situation. Exposure breaks the Vicious Circles that maintain symptoms and therefore enables new, more adaptive, learning.

Exposure is defined as facing something that has previously been avoided because it provokes anxiety. Emmelkamp (1982) has shown that, for optimal effectiveness exposure should be graduated, repeated and prolonged. The first step in an exposure programme must be for the patient to identify all of the things that are avoided and order them according to difficulty in a 'graded hierarchy'. The first task selected for practice should be easy enough for the person to be sure they can attempt it, but sufficiently hard to produce some anxiety. Tasks that do not provoke anxiety are not helpful (Borkovec & Sides...
1979), possibly because they do not provide an appropriate context for new learning. Tasks should be repeated regularly and frequently until they provoke little or no anxiety, and then the next task on the list is attempted. A further vital element for successful exposure is that each practice session should be prolonged until anxiety starts to subside to enable new learning to occur. Mathews et al (1981) suggest that patients should practice for one hour every day, whereas Butler (1989) is not so prescriptive, stating more generally that the more patients practice the more quickly they improve.

Family Therapy was planned to run concurrently with the behavioural work described above. The goal of structural family therapy is to create a structure that is appropriate to the normative developmental stage of the family. In this case, a family of two adolescents, one middle childhood offspring and a mother and father, who have undergone a series of stressful life events and losses. Minuchin states that:

"Patients move for three reasons. First, they are challenged in their perception of reality. Second, they are given alternative possibilities that make sense to them, and third, once they have tried out the alternative transactional patterns, new relationships appear that are self-reinforcing."

Minuchin, 1974.

In order to achieve this change, the therapist initially joins with the family, then challenges 'how things are done' (Minuchin & Fishman 1981) and then
restructures the family by offering alternative, more functional ways of perceiving and behaving. The effectiveness of this method of working with families has been validated by the research of Minuchin, Roseman & Baker (1978).

Given the rationale of the behavioural approaches to treatment of phobic responses, and the brief explanation of structural family therapy, the work with Sarah and her family proceeded as follows:

The first stage of treatment was to explain to the family about the cyclical nature of triggers, symptoms and reactions (avoidance in particular). When this was done the family were given a schematic representation to take home to remind them of the treatment rationale. The graded hierarchy was developed in the second half of this session (See Appendix 1) and Sarah agreed to attempt the first task before the next session. She was given monitoring sheets to record anxiety levels and her satisfaction on completion of the task (See Appendix 3).

The next session, number four, was dedicated to evaluating Sarah's progress with the exposure programme. This session, as with the previous one, focused exclusively on the behavioural work, giving the therapist an opportunity to join with the family before progressing with the family therapy work.
In session number five, the family issues became the focus of the work. The hypothesis that Sarah’s behaviour was functional in diverting the parents’ worries from themselves was explored. Sarah had been acutely aware of the stress her parents had been under and admitted to a high degree of worry about them. The emphasis shifted from Sarah alone to include her brothers. Their feelings about the past were explored and the parents began to acknowledge that the situation had affected all three children, not just Sarah.

Sarah continued to progress through her hierarchy.

Session number six continued to focus on the family. The difficulties and strengths of the family as a system were explored. The children had the opportunity to hear the parents’ positive appraisal of the marital relationship despite the difficulties of the past three years.

Sarah’s behavioural progress was also monitored. She continued to work through the exposure programme.

In session number seven a review of progress in terms of Sarah’s panics and the family functioning formed the focus. It was agreed that this was to be the final session and the file was closed.

Outcome: Throughout the five sessions of the treatment phase, Sarah progressed through six of the seven tasks on the graded hierarchy. The
monitoring sheets, which she diligently completed, indicated that in the early stages of exposure a decrease in anxiety levels was evident although the difference between pre- and post-task anxiety was small. At this stage, she found the anxiety itself worrying. However, as she worked through the hierarchy, she learned that her anticipatory anxiety was consistently worse than her anxiety when in the feared situation. When tackling the later tasks, Sarah’s anxiety was higher than previously, as would be expected as she was confronting more feared situations, but this did not prevent her from attempting them. As she progressed through the hierarchy, the differential between pre- and post-task anxiety was increasingly marked.

Sarah’s self-esteem increased significantly as she gained a sense of mastery over previously avoided situations. By the end of therapy, she was regularly talking on the telephone with her friends, going out after school and spending time with her peers at weekends. She still experienced some residual physiological symptoms of anxiety but no longer avoided situations. She had learned that the symptoms, though uncomfortable, did her no harm and that they reduced once she was involved in the situation.

In terms of family functioning, the shape of the family altered throughout the course of our work. Sarah moved out of the role of ‘family worrier’ and was able to realign with her siblings as the concern they all felt for their parents was acknowledged and normalised. Mr and Mrs B. became more aware of the impact of their behaviour on the children. They subsequently took active steps
to protect the children from unnecessary ‘adult’ worries. The whole family was facilitated in expressing their feelings of loss. In openly sharing these feelings they were able to begin to move on towards seeing a more positive and realistic future.

**Formulation Of The Problem**: In the course of most clinical work there is an ongoing process of assessment, formulation, treatment, re-assessment and re-formulation (Kirk 1989). In the present case, however, the family were extremely forthcoming in the initial assessment phase which made it possible to make a thorough initial formulation. The ongoing monitoring sheets of the behavioural elements of the work made it possible to assess progress throughout the treatment phase. The reported success of treatment was taken as an indication of the accuracy of the initial formulations. Therefore no further formulation was undertaken.

In Summary, the behavioural formulation was that Sarah’s response to real stress manifested as specific physiological symptoms, due at least in part to Social Learning Theory. The symptoms were reinforced by avoidance and thus generalised to a variety of situations. By confronting, rather than avoiding, feared situations Sarah was able to learn to control her feelings of panic and that the feared situation was not dangerous in the way, or to the extent, that she thought.
The systemic formulation hypothesised that Sarah responded to stress in an explicit behavioural manner due to the family system, which placed her in the role of expressing the family's emotions. It was formulated that each family member had been effected by the multiple losses but that these emotions were not acknowledged. Sarah's role took on a function of diverting attention from the problems she perceived in her parents' marital relationship. By challenging the Family's belief that Sarah was the only emotional member of the system and facilitating all members to acknowledge their worries and grief in a safe and contained setting, new patterns of interaction were established. This enabled Sarah to move out of the role of "worrier" and back into the more functional sibling sub-system.

**Lessons From Carrying Out This Clinical Work:** In looking back over this piece of work as a whole, the importance of addressing the family factors as well as the behavioural elements becomes clear. Given the importance of the family structure, it seems likely that ignoring the dysfunctional elements of it would have had widespread ramifications. If the focus had been solely on Sarah, the pattern of viewing her as the emotional one with problems would have been reinforced for the family. However, by exploring the family shape and the effects of each individual's behaviour on the others, the family was able to alter these patterns, loosen the previously rigid roles and begin to adopt more adaptive behaviour patterns.
A weakness in this piece of work is that the family may have been discharged too quickly. Although there had been some major shifts in the behaviour and beliefs of the family system, these were still in their infancy. In the final session, the family felt strongly that positive changes had been made. However, they may have benefited from a period of consolidation followed by a series of follow-up appointments to ensure that the changes were maintained. This applies to Sarah's individual behaviour as well as the wider family system.

Following on from this, the therapist learned of the power of a family system when they are speaking in a united voice. The family felt they had benefited enough from therapy and it was extremely difficult to explore the alternatives when the family were united in asking to be discharged. Equally, a similar lesson has been learned from other families, all the therapist can do in this situation is to put across the alternatives, it is up to the family how they decide to proceed. Although the therapist may be joined with the family they always remain meta to the system.
REFERENCES


APPENDIX 1

HIERARCHY OF FEARED SITUATIONS
SARAH B - HIERARCHY

1. Answer telephone at home anytime it rings. If it is a friend inviting you out, Mum or Dad will make a reason for you not to go.

2. Answer telephone at home anytime it rings. If it is a friend inviting you out, you will say you are not able to go.

3. Have a friend over. If they invite you to go to their house, Mum or Dad will make a reason for you not to go.

4. Have a friend over. If they invite you to go to their house, you can make a reason not to go.

5. Go into town with a friend. Meet up with Mum or Dad, who will be in town, after half an hour on your own with your friend.

6. Go into town with a friend or to a friend's house. Arrange for Mum or Dad to pick you up at a specific time. Mum and Dad will not have been in town.

7. Stay the night at a friend's house. Mum or Dad will pick you up the next day at an arranged time.
APPENDIX 2

LETTERS TO REFERRER
21st December 1994

Dr V.
Locum General Practitioner
S. Health Centre

Dear Dr V.

Re: Sarah B. (d.o.b. 10.5.82)

Thank you for referring Sarah to the Clinical Psychology Service for help with her panic attacks. I have seen her and her family on two occasions.

The family report that they have undergone a series of stressful events over the past three years, including bereavements, moving house and financial difficulties. Sarah's panic attacks appear to be her way of dealing with this accumulation of stress. At present she is avoiding almost all situations she finds difficult, which commonly only serves to increase the anxiety symptoms.

I plan to work behaviourally to help ameliorate the panic attack symptoms and psychotherapeutically in order to enable Sarah to come to terms with the multiple losses she and her family have endured recently. The B's seem to be a caring family and I am confident of their ability to work in these ways.

Thank you for making this most appropriate referral. I will keep you informed of future developments. If there is anything you would like to discuss, please do not hesitate to contact me.

Yours sincerely,

Lissa Lichterman
Pre-Registration Clinical Psychologist
Child & Adolescent Specialty
24th April 1995

Dr V.
Locum General Practitioner
S. Health Centre

Dear Dr V.

Re: Sarah B. (d.o.b. 10.5.82)

I have seen Sarah and her family for five further sessions for help with her panic attacks, since my letter to you dated 21st December 1994.

Sarah has been very motivated to tackle her fears and as a result has progressed extremely well. We developed a hierarchy of fears which she has worked through, overcoming previously worrying situations. She now has a greater understanding of how to deal with her feelings of panic if they do arise and is regularly socialising with her peers again.

As a result of Sarah’s great improvement I have agreed with the family to close my file. Thank you for making this referral and if there is anything you would like to discuss, please do not hesitate to contact me.

Yours sincerely

Lissa Lichterman
Pre-Registration Clinical Psychologist
Child & Adolescent Specialty
APPENDIX 3
MONITORING SHEETS
<table>
<thead>
<tr>
<th>Date</th>
<th>Task</th>
<th>How long you answered the phone</th>
<th>Anxiety at Beginning</th>
<th>Anxiety at End</th>
<th>Satisfaction On Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 Jan'93</td>
<td>Answer Telephone</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>O.K.</td>
</tr>
<tr>
<td>8 Jan'93</td>
<td></td>
<td></td>
<td>0</td>
<td>3</td>
<td>O.K.</td>
</tr>
<tr>
<td>1 Jan'93</td>
<td></td>
<td></td>
<td>1</td>
<td>3</td>
<td>O.K.</td>
</tr>
<tr>
<td>1 Jan'93</td>
<td></td>
<td></td>
<td>1</td>
<td>3</td>
<td>o.k</td>
</tr>
<tr>
<td>3 Jan'93</td>
<td></td>
<td></td>
<td>2</td>
<td>4</td>
<td>released rt w is nobody I knew released</td>
</tr>
<tr>
<td>3 Jan'93</td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td>good</td>
</tr>
<tr>
<td>4 Jan'93</td>
<td></td>
<td></td>
<td>4</td>
<td>2</td>
<td>o.k</td>
</tr>
<tr>
<td>Day and Date</td>
<td>Task</td>
<td>How long in the Situation</td>
<td>Anxiety at Beginning</td>
<td>Anxiety at End</td>
<td>Satisfaction On Completion</td>
</tr>
<tr>
<td>-------------</td>
<td>----------</td>
<td>---------------------------</td>
<td>----------------------</td>
<td>----------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>9th Jan '95</td>
<td>Number 2</td>
<td>2-3 mins</td>
<td>4</td>
<td>0</td>
<td>good</td>
</tr>
</tbody>
</table>
## Daily Task Sheet

<table>
<thead>
<tr>
<th>Day &amp; Date</th>
<th>Task</th>
<th>How long in the situation</th>
<th>Anxiety at Beginning</th>
<th>Anxiety at End</th>
<th>Satisfaction on Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.2.95 Thursday</td>
<td>having a friend around</td>
<td>2½-3 hours</td>
<td>6</td>
<td>0</td>
<td>very pleased I had done the task, and I had a good time.</td>
</tr>
<tr>
<td>14.2.95 Tuesday</td>
<td>going to a friend's house</td>
<td>about 3 hours</td>
<td>5</td>
<td></td>
<td>I was feeling about 6 because I was asked if I wanted my friend to back.</td>
</tr>
<tr>
<td>14.2.95 Tuesday</td>
<td>I went to my friends house and when mum came to pick me up my friend spent the afternoon with us.</td>
<td>3 hours spent at friends house 3 hours at home</td>
<td>6</td>
<td>0</td>
<td>I was feeling very pleased with myself. I had spent a hole day with my friend and not all the time was with mum. The afternoon was better.</td>
</tr>
</tbody>
</table>

### Anxiety Scale:

<table>
<thead>
<tr>
<th>Anxiety</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>None</td>
</tr>
<tr>
<td>1</td>
<td>Slight</td>
</tr>
<tr>
<td>2</td>
<td>Some</td>
</tr>
<tr>
<td>3</td>
<td>Great</td>
</tr>
<tr>
<td>4</td>
<td>Extreme</td>
</tr>
<tr>
<td>Day &amp; Date</td>
<td>Task</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Saturday 5th March 1995</td>
<td>I went to a friend's disco</td>
</tr>
<tr>
<td>Wednesday 22nd March 1995</td>
<td>I went to a friend's house after school</td>
</tr>
<tr>
<td>Saturday 25th March 1995</td>
<td>went to town with a friend</td>
</tr>
</tbody>
</table>
8th April Saturday went to town about 1½ hours

11th April Tuesday to a friends house mum came too

brilliant I didn't feel weird.

Wednesday going to a friend

12th April
Dear Miss Lichterman

The Committee for the Scrutiny of Individual Clinical Qualifications has recently considered the Evaluation of Clinical Competence form submitted in relation to your third year of training in clinical psychology.

The Committee agreed that, following the successful completion of a two-year clinical psychology training course, you had satisfactorily completed a further period of 12 months' supervised practice. You are, therefore, now eligible to register as a Chartered Clinical Psychologist.

Should you wish to register as a Chartered Psychologist it will be necessary for you to apply formally to the Society for registration, and the appropriate application forms are available from this office on request. You must not describe yourself as a Chartered Psychologist until you have received notification that such an application is successful. If you also wish to use the adjectival title "clinical" then you must join the Division of Clinical Psychology. The enclosed booklet "Information on the Register of Chartered Psychologists" may be of interest to you.

May I take this opportunity to congratulate you on the successful completion of your period of supervised practice.

Yours sincerely

HELEN CLARK (Miss)
Administrative Officer

enc
SECTION FOUR:
RESEARCH AUDIT
Grateful thanks are extended to Dr Robert Edelmann and Ms Mary John for their excellent supervision, to the staff of St George's Hospital Asthma Clinic and especially to the children and parents who so willingly took part in this study.
5. RESULTS

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1. ABSTRACT

This study explored the perceptions and interpretations of chronic illness of asthmatic children and their parents. Ten children and their mothers took part in the study. The main aim was to gain an understanding of the way children themselves interpret and perceive of their chronic illness. It was guided by the hypotheses that there would be age differences in relation to interpretations, with older children having more illness specific, less global, concepts than younger children and that all perceptions would relate to their health beliefs and locus of control.

Two interview schedules were designed, one administered to children and one to parents prior to their regular outpatient appointments at St George's Hospital Asthma Clinic.

Results showed that there is a link between the two theoretical models guiding this study and the participant's perceptions of illness. The small number of subjects made it difficult to interpret the results in terms of age differences, but where these are apparent they are discussed, confirming the hypothesis. All of the perceptions and interpretations of chronic illness that emerge, including links between parent's and children's perceptions, are discussed in full detail. Possible explanations for the results are discussed.
2. INTRODUCTION

2.1 Rationale for the study

The following literature review will look at many aspects of chronic childhood illness, moving through studies of general epidemiological issues to those studies looking at asthma in particular. Having determined the high prevalence of childhood asthma, the contradictory literature that attempts to define the aetiology of childhood asthma will be reviewed, with the conclusion that there is no one widely agreed upon causal factor for this disease. The high prevalence of asthma has led to a change in the emphasis of the work that clinicians carry out with this client group. Thus the next stage of the review will look at Asthma Self Management Programmes and their efficacy. At this point the main emphasis of the research comes to light; that it is not enough to simply look at those factors effecting compliance to medical regimen, without also investigating children's beliefs and perceptions of their chronic illness. The Health Belief and Locus of Control Models are the two theoretical underpinnings of the current study and thus are reviewed at this point. Finally, there will be a look specifically at the literature regarding children's attempts to manage their illness. This literature review leads to an understanding of the aims and objectives of the current study.
2.2 Chronic Illness in Childhood

Recent advances in medical care have led to many changes in the pattern of childhood diseases. Many children who would have died in the past now survive to adulthood, taking with them the potential burden of a chronic illness. Such medical advances have substantially increased the chances of survival in children suffering with cystic fibrosis, spina bifida, congenital heart disease and juvenile arthritis, among others. Dynesen and Flensborg (1978) in a study of cystic fibrosis noted an increase from a 5% chance of survival to age 21 in the years 1945-1959 to a 70% estimated chance of survival for the years 1965-1969. Elwood and Elwood (1980) state that 45% of treated cases of spina bifida now survive as compared to a 21% rate in 1968. For congenital heart disease there has been an increase in survival between two- and seven-fold noted for certain defects (Roberts and Cretin 1980). In the case of juvenile diabetes, in 1978 85% of sufferers survived to age 20 with a higher survival rate of 95% in 1983 (Perrin 1983).

By definition a chronic illness is one that lasts for a substantial period of time or that has sequelae that are debilitating for a long period of time. Most childhood illnesses are self-limiting, with even the more serious illnesses requiring only a month or so for full recovery. In contrast, chronic childhood illnesses persist for
between a few to very many years and have a variable course within that time. Perrin (1985) offered a definition of chronic illness as a condition that interferes with daily functioning for more than three months in a year, causes hospitalization of more than one month in a year, or (at time of diagnosis) is likely to do either of these.

Epidemiological studies consistently show that between 10-15% of the child population, i.e. those under the age of 18 years, have a chronic illness. Among these chronically ill children about 10% (or 1-2% of the total child population) have disabilities severe enough to interfere with tasks appropriate to their age (Pless and Roghmann 1971). With these survivors of once fatal illnesses in whom health status is now maintained comes the possibility of increased psychological disturbance. This is demonstrated by a prevalence study carried out in Canada in which it was reported that children with chronic illnesses have approximately twice the rate of significant psychological problems compared to children without illness (Cadman et al 1987).

The distribution among chronic illnesses in childhood is different from that of chronic illness in adulthood. Adult illnesses consist mainly of a large number of fairly common illnesses and only a few rare diseases, whereas
chronic illness in childhood is characterised by a few disorders that are common and many that are quite rare. Of the main chronic childhood diseases only asthma has a prevalence rate of greater than one in a thousand in the child population (Gortmaker 1985) accounting for half of all childhood chronic diseases (Eiser 1990).

2.3 Childhood Asthma: Aetiology
Rees (1984) defines asthma as a disease characterised by wide variations over short periods of time in resistance to airflow in intrapulmonary airways. The unusual degree of bronchial reactivity is in response to a wide variety of stimuli. The basic cause of asthma is unknown, with a number of proposed theories having been discarded in the past century (Leffert 1978). The oldest theory of aetiology is of asthma as a psychosomatic disorder. However, in looking at the psychological aspects of childhood asthma Mattsson (1975) suggests that there is no particular personality type or behaviour pattern in children with asthma, and that stress alone does not produce the characteristic alterations in pulmonary activity. Leffert (1985) explains the personal and intrafamilial stress observed in many children with asthma as being common to the group of children with chronic illnesses rather than specific to the group of asthmatic children.
A second theory of asthma as proposed by Silverman (1985) is that it is an allergic disease. This theory states that a basic defect in asthma is the predisposition to become sensitised to ingested or inhaled allergens, resulting in an immunologic reaction which triggers the release of chemical mediators of inflammation that act on lung tissue to produce asthmatic symptoms. However, there is an opposing view put forward by Leffert (1985) stating that although allergens may be an important stimulus for the symptoms of asthma, they are not in fact the basic aetiological agents. This is backed up by the fact that many children with asthma do not have any allergic sensitivities, while many children with allergies do not suffer from asthma. Therefore it seems likely that allergy agents are responsible for inducing bronchial hyperresponsivity only in those children predisposed to such a disorder.

A more widely held view of aetiology is that asthma results from an imbalance in autonomic nervous system functions. Kaliner (1976) postulates that cholinergic hyperresponsiveness leads to excessive bronchoconstriction. The exaggerated cholinergic responses to stimuli do not effect the normal lung. However, similar to the allergy hypothesis, although autonomic dysfunction can be demonstrated in asthma, it is
not clear if it has a causal relationship or if it is the result of altered pulmonary functioning found in asthma.

The conclusion from the available literature is that there is no widely agreed upon aetiology of asthma at this time. Leffert (1985) concludes that it is possible that there are a number of diseases, all of which have different causes, which have in common the physiology of hyperreactive bronchi which results in obstructive lung disease.

2.4 Asthma Self Management

Given the increased incidence of chronic illness generally, and the high prevalence of asthma in particular, clinicians have had to alter their aims and methods of treatment. They are no longer called upon to act primarily in response to acute illnesses, but rather to take a longer term view taking into account that chronic illnesses can not be cured, only managed. Increasingly clinicians perceptions of optimal management of chronic illness involves patients themselves taking increased responsibility for the maintenance of their own physical health. This is the case for children as well as adults and asthma is no exception. Berris and Taylor (1990) state that "children with diseases such as asthma should take responsibility for their own medication as soon as possible".
This philosophy, while having the potential benefits of providing the person with the skills to assume responsibility for controlling their disease, thus enabling them to become the central component in their own health care system, has not been without problems (Creer et al 1984). Medication compliance, i.e. the extent to which a person's behaviour coincides with medical advice, in general patient populations who require long-term treatment regimens, is extremely poor. Mean compliance rates of only 54% are reported by Sackett and Snow (1979). Among children with asthma, a number of reports suggest that compliance is also generally poor. Christiaanse, Lavigne and Lerner (1989) estimated that compliance in paediatric asthmatics ranges from 12-66%. Cluss and Epstein (1985), in a review of the asthma compliance literature, found compliance with medication ranged from 6-67%, and Sublett et al found subtherapeutic levels of medication in 49 out of 50 childhood asthma cases admitted to hospital emergency rooms in 1979.

As a result of these poor compliance rates, Asthma Self Management Programmes (ASPMs) have become a growth industry in the past decade. ASPMs are generally concerned with increasing patients' knowledge, but have largely ignored emotional and behavioural adjustment. Thus, as Klingelhofer and Gershwin (1988) point out in their review article, there have been varying degrees of
success rates as a result of these programmes. Developers of ASPMs generally report success in transmission of information about asthma in the programme participants. For example, a programme evaluated by Cropp and Hindi-Alexander (1981), in which they compared pre- and post-programme knowledge in 133 mild to severe asthmatics and their parents, showed that factual knowledge was significantly improved for both parents and children. However, the programmes are markedly less effective in controlling frequency and severity of wheezing episodes or in increasing adherence to medical regimen.

Dissonance, the failure of knowledge to alter potentially destructive behaviour, illustrates that the gap between knowledge and behaviour is apparent in much of what people do. Therefore, successful interventions require more than an increase in knowledge, they also require a detailed understanding of what the target population is currently doing that is effective or ineffective in managing their symptoms. Previous asthma research has identified the management practices of adults (Wilson et al 1987), school aged children (McNabb et al 1986) and parents of children under the age of seven years (Wilson et al 1993).

2.5 Children's Beliefs and Perceptions of Chronic Illness
It is not enough, however, to look only at the behaviours surrounding compliance. Any successful intervention also
requires an understanding of the beliefs, perceptions and interpretations about chronic illness held by the population who have such disorders. This understanding is necessary if communication between health care professionals and children, concerning issues involving treatment and prevention of chronic conditions, is to be improved. Potter and Roberts (1984) suggest that such improved communication may result in more effective paediatric interventions.

In a review of the literature on children's concepts of physical illness, Burbach and Peterson (1986) outline a number of findings which support their hypothesis that children's illness concepts develop in a systematic and predictable way. Primarily they conclude that there is a clear relationship between chronological age and children's beliefs and perceptions of chronic illness by children who have these conditions.

There are many findings relating to children's concepts of general chronic illness. Perrin and Gerrity (1981) found that older children conceptualize illness in terms of specific symptoms and diseases, whereas younger children tend to have more global and non-specific illness concepts. Similarly, Bibace and Walsh (1980) found that older children associate illness with infection and germs,
while younger children are unable to differentiate symptoms from causes.

In terms of interpretations of one's own health, more cognitively mature children appear to rely on internal cues to determine when they are healthy or ill (Neuhauser et al. 1978) while less cognitively mature children seem to rely on external cues as an evaluation of their health status (Wood 1983). Bibace and Walsh (1980) investigated children's perceptions of control, concluding that with increasing age children's beliefs in their own control over their illness and subsequent recovery or abatement of symptoms also increased.

In looking at children's interpretations of the broader effects of chronic illness, Perrin and Gerrity (1981) found that older and more cognitively mature children were able to appreciate the psychological, affective and social aspects of chronic illness. Younger and less cognitively mature children, in contrast, did not have any concept of these issues as relating to illness.

Finally, a number of authors have found that older, more cognitively mature and less anxious children seem able to reject the idea that illness and misbehaviour are inextricably linked. Younger, less cognitively mature and highly anxious children do perceive illness in a

The above information from the Burbach and Peterson review (1986) demonstrates the large body of research which has investigated children's concepts of chronic illness as a general category. However the vast majority of past research into all aspects of asthma, as an example of a specific chronic illness, has focussed on either actual behaviours (see section 2.4 'Asthma Self Management'), the effects that asthma has on family functioning, e.g. Hobbs et al (1985), and parental behaviours and attitudes towards asthma, e.g. Wilson et al (1993).

There has been little research directed at eliciting the views of children themselves who suffer from asthma. Eiser and Havermans (1993) have argued for the need for children's perceptions of asthma to be investigated and understood. They emphasise that children must be able to express their needs to the powerful adult in their environment, be they parents, teachers or medical staff. Christie et al (1993), along these same lines, suggests a need for a review of management procedures and an acceptance of the view that clinicians should listen to children and not only to their parents, however adequate
their insights are of the meaning of the illness for their child.

It is the need for the acceptance of these ideas and the distinct lack of this type of data which has led to the development of the current study. The experiences and beliefs of children may not be adequately expressed by an adult, even a parent; child-centred approaches are indicated.

2.6 Health Beliefs and Locus of Control as Predictors of Behaviour

In looking at children's expectations, beliefs and interpretations about asthma, the Health Belief Model (HBM) and Locus of Control (LOC) Model can be used as the basis for trying to gain an understanding and prediction of health behaviours. Kasl and Cobb (1966) make a distinction between types of 'Health Behaviour'. Firstly, Health Behaviour is defined as an activity undertaken by a person believing him or herself to be healthy for the purpose of preventing disease or detecting it in an asymptomatic stage. Secondly, they define Sick Role Behaviour as an activity undertaken by those considering themselves as ill with the aim of getting well. It includes a range of dependent behaviours in the form of receiving treatment. Rosenstock (1974) developed the HBM to explain preventative health behaviours against a
particular disease in healthy individuals. Becker and Maiman (1975) modified the model to incorporate sick role behaviour and compliance with medical regimens.

The HBM postulates that individuals will comply with medical regimens if they view themselves as vulnerable (susceptibility), view the disease as severe (severity), believe the regimen will be effective in prevention (benefits) and see few barriers to carrying out the prescribed regimens (costs). Internal and external cues that the individual associates with carrying out health related behaviours are necessary to begin any action. Becker et al (1977) provide an example of the HBM in action in a study which attempted to predict whether mothers of obese children would keep their clinic appointments. The results suggested that there was a relationship between the mothers health beliefs and a reduction in obesity over a twelve month period. From these results they state that the HBM is a useful tool in predicting the degree to which individuals are likely to play an active role in their own health care.

In recent years there have been studies aimed at using such a model to predict adherence to medical regimen by those suffering from a chronic illness (Janz and Becker 1984 for a review). There have been studies informed by the HBM in looking at diabetes, for example Bond et al
(1992) found that compliance was positively associated with cues to action and with the perceived benefits-costs of the regimens as predicted by the HBM. However, similar studies with asthma are lacking.

Rotter (1954) proposed that behaviour is a function of an individual's belief that a behaviour will lead to a reinforcement (expectancy) and how much that reinforcement is liked (reinforcement value). The most important factor in determining generalised expectations is Locus of Control. This model relates to the degree to which a person believes they or others control their fate.

An increasing number of studies have measured LOC beliefs and attempted to relate these to health related behaviours, for example Strickland (1978). Results from some studies show that a person with an internal LOC is most likely to engage in health behaviour. DeVillis et al (1980) in a study of epilepsy and LOC found that people with higher internal LOC were less likely to immediately adhere to medical advice and more likely to seek out information regarding their illness. They postulate that individuals with internal LOC may be more motivated to take action concerning their health, but sometimes are likely to choose not to adhere to medical advice. Yet again there is a lack of research aimed specifically at children with chronic asthma in relation to LOC.
2.7 Children's Attempts To Manage Their Illness

As well as investigating a child's health beliefs and LOC, is the necessity to determine what children do that is effective or ineffective with respect to the management of their asthma. An appropriate method to facilitate this knowledge is the Critical Incident Technique (CIT) (Flannagan 1954). This method consists of a set of procedures for gathering and analysing detailed reports of specific instances of human actions, or failures to act, that have made a significant difference to the outcome of some task, hence identifying the critical factors in success or failure. This method is predominantly used in studies of accidents or near accidents and job performance analysis, e.g. Fritz and Jones (1951). Two studies have used it specifically in relation to asthma; Wilson et al (1993) in looking at management behaviours of parents of young children with asthma, and McNabb et al (1986) with children aged 9-13 years to identify behaviours critical in preventing or ameliorating acute asthma episodes. The present study will use a modified version of the CIT with younger children, incorporating their health beliefs and locus of control as outlined above.

2.8 Script Theory

The choice of age range of participants for the current study, while corresponding to traditional Piagetian stages of a move from pre- to formal-operational thought (Piaget
1929), has been informed by the Script Theory of cognitive development and development of concepts of health and illness issues. In contrast to traditional Piagetian approaches, Nelson (1986) argues that "the key to understanding a child's mind...is to be found by examining what children know". The script theory explains differences in children's levels of understanding by acknowledging that children have very much less experience than adults in all areas of functioning. This can account for observed differences in the organisation of information by children. While acknowledging that children with different experiences will formulate and understand knowledge in different ways, script theory is not tied down to the theory of movement through strict developmental stages. Although it is expected that there will be age related differences in the children taking part in this study, those differences will not be looked at in terms of the transition through qualitatively different stages.

2.9 Parent's Perception of Asthma

Finally, Perrin et al (1989) have demonstrated that objective measures of severity and parents' perceptions of severity appear to relate to adjustment differently. They found no significant variation in children's psychological adjustment based on objective measures of health status, but that having moderate asthma as perceived by the
parents improved psychological adjustment. Therefore, while aiming primarily to explore the views of children themselves with asthma, the current study will ask similar questions of participants parent's.

2.10 Objectives and Hypotheses

The objectives of the present study are -

(1) To gain insight into what children with asthma understand about their chronic illness

(2) To understand how children with asthma rate the severity of their illness

(3) To gain insight into what children believe causes their illness.

(4) To gain insight into how children believe they can prevent acute asthma episodes.

(5) To compare children's perceptions and interpretations about their asthma with that of their parents.
The hypotheses of the present study are -

(1) That there will be age differences in relation to children's beliefs, perceptions and interpretations about their chronic illness. That younger children will have more concrete beliefs and perceptions and make more global interpretations of their illness than will the older children in this sample.

(2) That parameters relating to Health Beliefs and the Locus of Control Model will predict children's beliefs, perceptions and interpretations about their asthma. It is hypothesised that subjects will comply with medical regimen if they view themselves as vulnerable, view the disease as severe, believe the medical regimen will be effective in prevention, see few barriers to carrying out the prescribed medical regimen and have an internal locus of control.
3. METHOD

3.1 Measures

Two interview schedules were designed by the author; one for children and one for parents. The aim was to access information regarding participant's health beliefs, locus of control and behaviours critical in ameliorating or preventing an acute asthma episode. Most questions were open ended in order to give participants the opportunity to talk about their beliefs and perceptions, an aspect which is felt to have been missing from past studies of asthma. Different schedules were devised for parent's and children in order to access information in an age appropriate format. To insure that children understood the questions asked of them, the children's interview schedule was piloted on three children of different ages. The data from these interviews was used as part of the data set, as it appeared that the wording was appropriate and accessible to children as young as six years.

The full interview schedules are presented in Appendix A. The rational for inclusion of each question is as follows:

**Children's Interview Schedule**

This consisted of 17 questions with the following aims:

i) establish that the child knows they have asthma

ii) establish how the child first learned they have
Asthma

iii) determine susceptibility in terms of Health Belief Model

iv) determine way in which the child understands asthma

v) understand how the child feels about having asthma and why they feel this way

vi) determine the child's perception of severity of their own asthma and asthma generally

vii) access quality of life information; perceptions of life with asthma, the burden of the disease, the burden of expectations of self care

viii) determine vulnerability in terms of Health Belief Model

ix) interpret the child's perception of frequency and severity as cues to action

x) establish if and how a child knows they are going to have an asthma attack

xi) determine the child's locus of control with implications for compliance

xii) determine which behaviours are critical in preventing or ameliorating an acute asthma episode

Parent's Interview Schedule

This consisted of 12 questions with the following aims:

i) establish parent's perceptions of the severity of their child's asthma and of asthma in general
ii) determine parent's beliefs about susceptibility in terms of the Health Belief Model

iii) determine vulnerability in terms of Health Belief Model

iv) access quality of life information; perceptions of their child's life with asthma, the burden of the disease for them and their child, the burden of self care for their child

v) establish if and how their child knows they are going to have an asthma attack

vi) determine the parent's beliefs about their child's locus of control

vii) determine the parent's locus of control

viii) determine the parent's beliefs about which behaviours are critical in preventing or ameliorating an acute asthma episode

3.2 Sample

10 children, five male and five female, with an age range of 6 - 11 years (specifically: one six year old, two seven year olds, one eight year old, two nine year olds, two ten year olds, and two eleven year olds) and their parents (all female) attending St. George's Hospital Asthma Clinic as out-patients were used as participants. All children attending the clinic have been diagnosed as suffering from chronic asthma by their GP and attend the
clinic for regular monitoring of symptoms and medication compliance. Selection for participation in the study relied upon consecutive referrals rather than on objective measures of severity of asthma. The parents selected were those who accompanied their child to the clinic and whose child took part in the study.

3.3 Procedure

St. George's Hospital Ethical Committee approval was sought and obtained (see Appendix B). Following this approval, all participants were asked at the beginning of their regular clinic appointment if they were willing to take part in the study. They were given ample time to read the information sheet and to sign the consent form (see both in Appendix C) if they wished to take part. When consent was attained the child and parent were seen together in a private room within the asthma clinic.

First the child and then their parent was asked the series of questions on the standardised interview schedule. All responses were manually recorded by the experimenter. The interview took approximately half an hour to complete and participants were given the opportunity to ask questions at any stage during the interview.
4. RATIONALE FOR METHODS OF DATA COLLECTION AND ANALYSIS

4.1 Why Use a Structured Interview?

The aim of this study was to provide a detailed account of the beliefs, perceptions and interpretations of children themselves who suffer from asthma and to compare these views with those of their parents. As a result, a structured interview was used to provide data for analysis. This decision was based on the fact that an interview, as distinct from a standard questionnaire, enables a more thorough description and analysis of the culture and behaviour of humans from the point of view of those being studied (Bryman 1988). The present study shares with other more qualitative works the dual commitment to the development of general theoretical analysis, while ensuring that this analysis remains closely linked to the specific accounts of the participants in the study.

The positivistic tradition of applying the method of the natural sciences to the study of human behaviour did not fit comfortably with the aims of this study in attempting to investigate chronically ill children's experiences of their illness. Existing research has failed to explore these issues and thus the present aim was not to test a priori theories via the traditional hypothetico-deductive method. The present aim rather was to identify subjective experiences and to allow concepts to emerge from the data 

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gathering working hypotheses rather than immutable empirical facts or universal causal laws (Walker 1985).

In psychological research the natural science approach is the dominant paradigm (Henwood and Pidgeon 1992) and as a result qualitative methods are often dismissed as 'unscientific'. It is the objective scientific perspective on behaviour that is held up as reality, rather than any subjective interpretation, even though as 'scientist-practitioners' clinical psychologists are all too well acquainted with making judgements of a qualitative nature (Good and Watts 1989). However, while traditional quantitative methods can produce an accumulation of information, they also run the risk of failing to provide effective insights into human experience. It is in this failure to acknowledge the human ability to choose how to act and how to attribute meaning to those actions and experiences that orthodox scientific methods could be argued to contribute to our impoverished view of the world. Thus, as Reason (1988) argues, the fundamental importance of personal experience needs to be honoured as "the touchstone of valid psychological inquiry".

Taking these arguments into account, the results of the present study will in part be reported by directly citing the participants responses. Use will also be made of
Multidimensional Scalogram Analysis (discussed below), and by presenting tables with percentages of all responses. In choosing which quotations to include care was taken to cite each participant with equal frequency in order to ensure as far as possible that all respondents' experiences are represented.

4.2 Data Analysis by Multidimensional Scalogram Analysis

Gutman's Multidimensional Scalogram Analysis (Lingoes 1973; Zvulun 1978) was used to examine the interrelationships between children's and their parent's responses on five variables as follows: 1) beliefs about why the child has asthma, 2) what causes the child's asthma, 3) the frequency of asthma episodes as compared with other children with asthma, 4) ease of controlling an acute asthma episode once it starts, and 5) perceptions about the severity of their asthma. These five were chosen as subjects of the analysis as they represented those variables on which there appeared to be the least agreement between parent-child diads.

Multidimensional Scalogram Analysis is a non-metric multivariate analysis. The complete data set is initially entered into a computer programme which produces a two dimensional diagram (a scalogram) on which the subjects are represented as points (Figure 1). By use of an interactive mathematical process the programme is designed
to achieve a spatial distribution of the points which obtains the best discrimination between the subjects, taking into account all the variables in the data set. The distances between the points on the diagram reflect empirical relationships (Coxon 1982). The more similar are two subjects, the closer together the points representing them will be (Brown 1985).

In order to examine the contribution of a given variable to the overall distribution of subjects on the scalogram, numerical values are applied to each point. The diagram is then interpreted by drawing lines of partition to isolate all items with the same value for the given variable into separate zones (Figure 2). The programme itself does not impose any constraints on the shape of the partition lines which are drawn by eye.

The programme provides plots for each variable. By using iterations it maximizes the fitness of the representations until a satisfactory coefficient of contiguity is obtained. The coefficient of contiguity acts as a measure of how well the spatial solution fits the overall data set. It ranges between 1 and 0, with 1 indicating a perfect fit. For the present study the criterion for the coefficient of contiguity was set at 0.90 which is considered satisfactory for the two-dimensional representations (Zvulun 1978).
The plots are used to establish if identifiable regions exist for each variable and whether the regions correspond closely among the variables which may indicate the underlying dimensions of difference or similarity between the subjects or a relationship between variables (Low et al 1994).

Space diagrams for a variable enable the identification of structure in the response on each variable in terms of the extent to which category scores are found to occupy particular regions on the space diagram (Low et al 1994). Thus if all category 1 scores are found to occupy the left side of the diagram on any one specific variable's space diagram, and all category 2 scores are found on the right side, then the variable can be partitioned by a line between the two sets of points. This partition defines the contribution of that variable in relation to the structure of overall space diagram. In this way, variables which occupy similar regions across scalograms are related in that they discriminate between cases in a similar way.

Comparisons of this sort enable the identification of relationships between variables. If two variables have the same shape of regional structuring and identical category scores, then they can be said to be highly positively related. On the other hand, if the regional
structuring is the same but the category scores are reversed, then this is evidence of a high negative relation between those two variables.

4.3 'Percentage of Response' Tables

Responses to all questions will be presented in the form of tables indicating the percentage of respondents who gave each particular answer. Provisional coding categories were developed by the experimenter following the pilot administrations of the interview schedule. These were then adjusted as necessary as the final data set was gathered. Responses were then categorised according to the codings and an independent blind rater also coded the responses. There was complete agreement between the experimenter and the independent rater with regard to categorisation of answers. These codings were used as the variables for the Multidimensional Scalogram Analysis.
5. RESULTS

5.1 Percentage of Response Tables and Illustrative Quotes

Unless otherwise stated, answers are those given by children as they were asked more questions than the parents. Where parents and children were asked the same question, the answers will be presented simultaneously.

The full interview schedules are presented in Appendix A.

1. Why have you come to the hospital?

Definitely accurate 60%
Possibly accurate 40%

"Because of my asthma" - definitely accurate
"Because I get bad coughs" - possibly accurate

2. Who first told you that you have asthma?

Don't know 60%
G.P 30%
Assumption of permanence 10%

"I've always had asthma" - assumption of permanence
3. Why do you think you have asthma? (For further analysis see MSA Plot 2)

<table>
<thead>
<tr>
<th></th>
<th>Child</th>
<th>Parent</th>
</tr>
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<tbody>
<tr>
<td>Don't know</td>
<td>70%</td>
<td>0%</td>
</tr>
<tr>
<td>Family history</td>
<td>0%</td>
<td>50%</td>
</tr>
<tr>
<td>Allergy related</td>
<td>10%</td>
<td>30%</td>
</tr>
<tr>
<td>Self blame</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>Personal history of child</td>
<td>0%</td>
<td>10%</td>
</tr>
<tr>
<td>Born with it</td>
<td>10%</td>
<td>10%</td>
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</tbody>
</table>

"Some people are just born with asthma, and I'm one of them" - Born with it

"Because I kept wanting to go swimming when I was little and that gave me asthma" - Self blame

"It's hereditary. His gran and uncle both have asthma" - Family history

4. What happens to someone who has asthma?

Accurate symptom description 80%

Medication required 20%

"They can't breathe properly and cough a lot" - Accurate symptom description

"Start coughing, get pains in the chest and can't breathe" - Accurate symptom description
"Have to take inhaler to stop lungs getting too small" - Medication required

5. a) Is there anything good about having asthma?
No 80%
Yes 10%
Don't know 10%

"There is nothing good about asthma at all"
"No. You get out of breath and it's not nice"
"Yes, I get a lot more attention at school"

b) Is there anything bad about having asthma?
Yes: Unpleasant symptoms 30%
Need for medication 20%
Restricts activities 10%
Possible death 10%
No 30%

"Yes, I get pains in my chest"
"Yes, I have to take horrible medicine"
"Yes, I'm small and so I can't get on fun-fair rides. People don't realize my real age"
"You can die from it"
6. What things do you like to do? (children gave more than one answer to this question)
Active activities 67%
Passive activities 33%

"Football, badminton, and helping my mum clean the house."
"Hockey, ice-hockey and snooker"
"Reading and writing stories and singing"
"Playing and watching football and playing on my computer"

7. Does your asthma/your child's asthma mean that you/they can't do some of these things?

<table>
<thead>
<tr>
<th>Child</th>
<th>Parent</th>
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<tbody>
<tr>
<td>Yes</td>
<td>60%</td>
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<tr>
<td>No</td>
<td>40%</td>
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</table>

"Yes, I cough when I try to sing"
"If I run too fast I get out of breath and my chest hurts"
"No. My son just has to get on with his life and not let it stop him doing the things children do"
"Yes. It makes her tired more quickly so she can't run around"
8. Do you/your child ever want to do them so much that you/they do them anyway?

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<tr>
<th></th>
<th>Child</th>
<th>Parent</th>
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<tbody>
<tr>
<td>Yes</td>
<td>60%</td>
<td>70%</td>
</tr>
<tr>
<td>No</td>
<td>40%</td>
<td>30%</td>
</tr>
</tbody>
</table>

9. What happens to your/your child's asthma if you/they do these things?

<table>
<thead>
<tr>
<th></th>
<th>Child</th>
<th>Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptoms arise</td>
<td>60%</td>
<td>50%</td>
</tr>
<tr>
<td>Symptoms worsen</td>
<td>20%</td>
<td>30%</td>
</tr>
<tr>
<td>Don't know</td>
<td>20%</td>
<td>20%</td>
</tr>
</tbody>
</table>

"It makes me get out of breath"
"I start to cough"
"My asthma gets worse"
"It makes her asthma worse rather than better"

10. Are there any other things which bring on an asthma attack? (For further analysis see MSA Plot 3)

<table>
<thead>
<tr>
<th></th>
<th>Child</th>
<th>Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes: accurate</td>
<td>30%</td>
<td>90%</td>
</tr>
<tr>
<td>No</td>
<td>30%</td>
<td>0%</td>
</tr>
<tr>
<td>Don't know</td>
<td>40%</td>
<td>10%</td>
</tr>
</tbody>
</table>
"Going from a warm building to cold weather outside"
"People smoking"
"Having a cold"
"He's more likely to have an attack if he's stressed"

11. Do you/your child have more/fewer asthma attacks than other children with asthma? (For further analysis see MSA Plot 4)

<table>
<thead>
<tr>
<th></th>
<th>Child</th>
<th>Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fewer</td>
<td>40%</td>
<td>80%</td>
</tr>
<tr>
<td>More</td>
<td>30%</td>
<td>10%</td>
</tr>
<tr>
<td>Same</td>
<td>20%</td>
<td>0%</td>
</tr>
<tr>
<td>Don't know</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>

12. Can you tell when you are about to have an asthma attack?

No                           70%
Yes: accurate symptom perception 30%

"Not really, I just start to cough"
"Yes, I start by getting sweaty"
13. Are there things you/your child can do to make sure an asthma attack does not get worse once it starts?

<table>
<thead>
<tr>
<th>Child</th>
<th>Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>70%</td>
</tr>
<tr>
<td>No</td>
<td>30%</td>
</tr>
<tr>
<td>Don't know</td>
<td>0%</td>
</tr>
</tbody>
</table>

"I can take my inhaler"
"I stop running around and sit still for a while"
"She knows how to take her inhaler"

14. Are there things anyone else can do to make sure an asthma attack doesn't get worse once it starts?

<table>
<thead>
<tr>
<th>Child</th>
<th>Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>30%</td>
</tr>
<tr>
<td>No</td>
<td>60%</td>
</tr>
<tr>
<td>Don't know</td>
<td>10%</td>
</tr>
</tbody>
</table>

"My mum can take me to hospital and they give me special medicine"
"No. It's down to me really"
"Yes, if she's upset I can comfort her"
"No. He is the one who needs to stop running around"
15. Is it easy or hard for you/your child to stop an attack from getting worse once it starts? (For further analysis see MSA Plot 5)

<table>
<thead>
<tr>
<th></th>
<th>Child</th>
<th>Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy</td>
<td>10%</td>
<td>60%</td>
</tr>
<tr>
<td>Hard</td>
<td>70%</td>
<td>20%</td>
</tr>
<tr>
<td>Don't know</td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td>Depends on situation</td>
<td>0%</td>
<td>10%</td>
</tr>
</tbody>
</table>

16. Is it easy or hard for you (parent only) to stop an asthma attack from getting worse once it starts?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy</td>
<td>60%</td>
</tr>
<tr>
<td>Hard</td>
<td>30%</td>
</tr>
<tr>
<td>Don't know</td>
<td>10%</td>
</tr>
</tbody>
</table>

"I'm, used to it. It's second nature now"

"It's easy because it only comes on when she has a cold. I know when it's going to happen"

"It's hard because she won't calm down. I find it frightening"

"It's hard since he's so determined to do active things. I don't have a lot of control over it"
17. **Critical Incident Technique Question:** For further explanation and analysis see pages 55-57

Tell me about the last time you/your child had an asthma attack.

<table>
<thead>
<tr>
<th>Doing:</th>
<th>Child</th>
<th>Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>active activity</td>
<td>40%</td>
<td>50%</td>
</tr>
<tr>
<td>passive activity</td>
<td>30%</td>
<td>50%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Where:</th>
<th>Child</th>
<th>Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>home</td>
<td>40%</td>
<td>70%</td>
</tr>
<tr>
<td>away from home</td>
<td>30%</td>
<td>30%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What did:</th>
<th>Child</th>
<th>Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>remember</td>
<td>70%</td>
<td>100%</td>
</tr>
<tr>
<td>not remember</td>
<td>30%</td>
<td>0%</td>
</tr>
<tr>
<td>self-help</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>help from others</td>
<td>20%</td>
<td>50%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ameliorate feelings:</th>
<th>Child</th>
<th>Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>60%</td>
<td>90%</td>
</tr>
<tr>
<td>no</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Do you usually do this:</th>
<th>Child</th>
<th>Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>70%</td>
<td>100%</td>
</tr>
<tr>
<td>no</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Know what else could have done:</th>
<th>Child</th>
<th>Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>70%</td>
<td>100%</td>
</tr>
<tr>
<td>no</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Failure to remember last attack</th>
<th>Child</th>
<th>Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30%</td>
<td>0%</td>
</tr>
</tbody>
</table>
18. Severity Ratings:

a) Your own/your child's asthma - subjects were presented with five faces ranging from very happy to very sad. They were asked to indicate which face shows how serious their own/their child's asthma is. (For further analysis see MSA Plot 6)

<table>
<thead>
<tr>
<th></th>
<th>Child</th>
<th>Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Very happy/very mild</td>
<td>0%</td>
</tr>
<tr>
<td>2.</td>
<td>Moderately happy/moderately mild</td>
<td>30%</td>
</tr>
<tr>
<td>3.</td>
<td>Neutral</td>
<td>30%</td>
</tr>
<tr>
<td>4.</td>
<td>Moderately sad/moderately severe</td>
<td>20%</td>
</tr>
<tr>
<td>5.</td>
<td>Very sad/very severe</td>
<td>20%</td>
</tr>
</tbody>
</table>
b) Asthma in relation to other illnesses — subjects presented with seven cards with one illness written on each card and were asked to arrange the cards in order of illness severity.

The illnesses represented two known fatal, two potentially fatal and two non-fatal illnesses and asthma.

Each illness was assigned a rating number dependent upon its correct rank order. Means were calculated to indicate accuracy of assigned ordering. 1.0 = perfect ordering by all subjects, 0.0 = no correct ordering of that particular illness.

Mean Rank Ordering:

<table>
<thead>
<tr>
<th>Illness</th>
<th>Child</th>
<th>Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold</td>
<td>0.7</td>
<td>0.8</td>
</tr>
<tr>
<td>Chicken Pox</td>
<td>0.6</td>
<td>0.7</td>
</tr>
<tr>
<td>Asthma</td>
<td>0.3</td>
<td>0.6</td>
</tr>
<tr>
<td>Diabetes</td>
<td>0.2</td>
<td>0.6</td>
</tr>
<tr>
<td>Cancer</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>0.0</td>
<td>0.3</td>
</tr>
<tr>
<td>AIDS</td>
<td>0.1</td>
<td>0.3</td>
</tr>
</tbody>
</table>

This suggests that children have little awareness of how severe asthma is.
The following table shows the mean score attributed to each illness. Mean scores higher than 1.0 indicate that subjects perceive the illness as more severe than it actually is. Mean scores lower than 1.0 indicate that subjects perceive the illness as less severe than it actually is.

<table>
<thead>
<tr>
<th></th>
<th>Child</th>
<th>Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold</td>
<td>2.10</td>
<td>1.20</td>
</tr>
<tr>
<td>Chicken Pox</td>
<td>1.35</td>
<td>0.95</td>
</tr>
<tr>
<td>Asthma</td>
<td>1.36</td>
<td>1.06</td>
</tr>
<tr>
<td>Diabetes</td>
<td>0.90</td>
<td>0.95</td>
</tr>
<tr>
<td>Cancer</td>
<td>1.08</td>
<td>1.26</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>0.95</td>
<td>0.93</td>
</tr>
<tr>
<td>AIDS</td>
<td>0.71</td>
<td>0.85</td>
</tr>
</tbody>
</table>

This suggests that parents are realistic in their ratings, whereas children think asthma is more severe than it is.
5.2 Multidimensional Scalogram Analysis

The association between beliefs about why the child has asthma and knowledge of what precipitates an attack (figures 2 and 3)

The plots suggest that there is a link between those subjects who believe their/their child's asthma to be due to the personal history of the child or the family, being allergy related, or those who did not know the cause (figure 2) and a knowledge of what precipitates an asthma attack (figure 3). Those children who believed that they were born with asthma (figure 2) did not know what precipitated an asthma attack (figure 3).

The association between beliefs about why the child has asthma and perceived amount of asthma attacks (figures 2 and 4)

The plots suggest that those subjects who do not know why they/their child have asthma, and those who believe that asthma is due to their own family history, and that it is allergy related or that they/their child has asthma because they were born with it (figure 2) were more likely to say either that they have fewer attacks than other children with asthma or that they did not know about the frequency of their attacks as compared to other children (figure 4). Those children who blamed themselves or who's parent's put it down to the early behaviour of their child
(figure 2) felt that they had more frequent attacks than other children with asthma (figure 4).

The association between beliefs about why the child has asthma and perceived ease of stopping symptoms once they start (figures 2 and 5)

The majority of subjects who said they did not know why they/their child has asthma (figure 2) were more likely to say that it is hard to stop an attack from getting worse once it starts (figure 5). Those who found it easy to stop an attack from getting worse (figure 5) were more likely to view asthma as being allergy related, due to family history, were children who blamed themselves or who's parents put the asthma down to their child's early behaviour (figure 2).

The association between beliefs about why the child has asthma and ratings of severity of their illness (figures 2 and 6)

The plots suggest that those subjects who feel that their/their child's asthma is moderately mild (figure 6) (i.e. those who indicated face number 2 out of 5 on the Linkert type scale) were the majority of those who did not know the cause of their asthma (figure 2). Those who believed their/their child's asthma to be allergy related or due to their family history (figure 2) were more likely to feel that the asthma was neutral in severity (figure
6). There is an association between the remaining subjects who did not know the cause of their asthma or believed it to be due to family history (figure 2) and the rating of moderately severe (figure 6). Finally, the plots suggest an association between the belief of asthma due to family history (figure 2) and the belief that their/their child's asthma is severe (figure 6) (the highest rating on the Linkert scale).

The association between knowledge of precipitating factors of an asthma attack and the perceived amount of asthma attacks (figures 3 and 4)
The plots suggest that more subjects who had an accurate awareness of the causes of their/their child's asthma (figure 3) felt that they had fewer attacks than other children with asthma (figure 4). However, there was a group of subjects who did not identify a cause (figure 3) who also believed that they had more asthma attacks than other children (figure 4).

The association between knowledge of precipitating factors of an asthma attack and the perceived ease of stopping symptoms once they start (figures 3 and 5)
The majority of subjects who find it easy to stop an asthma attack from getting worse (figure 5) were aware of the precipitating factors of their illness (figure 3).
The association between knowledge of precipitating factors of an asthma attack and ratings of severity of their illness (figures 3 and 6)
There is no clear relationship between these two variables.

The association between amount of asthma attacks and perceived ease of stopping symptoms once they start (figures 4 and 5)
Those who felt that they/their child had fewer asthma attacks than other children with asthma (figure 4) were split between feeling that symptoms were easy to stop or hard to stop (figure 5). There was also a split between those who felt that they had more asthma attacks than other children (figure 4) and the ease or difficulty of stopping symptoms once they start (figure 5). Two of the subjects who found it hard to stop the symptoms were those who did not know about their/their child's asthma in relation to other children.

The association between perceived amount of asthma attacks and ratings of severity of their illness (figures 4 and 6)
The plots suggest that there is an association between those subject who felt their/their child's asthma to be moderately mild (figure 6) with the belief that they have fewer attacks (figure 4), although this is not a mutually exclusive association. The two subjects who identified
the asthma as being severe also felt they had more attacks than other children with asthma. Most subject who felt that their/their child's asthma fell in the neutral category, i.e. neither severe nor mild, (figure 6) also believed that they have either fewer or the same number of asthma attacks as other children (figure 4).

The association between perceived ease of stopping symptoms once they start and ratings of severity of their illness (figures 5 and 6)

The plots suggest that subjects who feel it is easy to control symptoms (figure 5) also believe that their asthma is moderately mild or, conversely, moderately severe (figure 6).
MSA Plot 1: Plot of the respondents

Each point represents a child (odd numbers) or parent (even numbers). The closer together any two individuals are the more similar are their profiles on the data matrix. All subsequent plots are then overlain on Plot 1 to study the relationship between the variables with the initial distribution of the subjects.
MSA Plot 2: Reasons for child having asthma

1 = Don't know
2 = Family history
3 = Allergy related
4 = Self blame
5 = Born with it
6 = Personal history of child
MSA Plot 3: Knowledge of precipitating factors

1 = Yes
2 = No
3 = Don't know
MSA Plot 4: Frequency of asthma attacks as compared to other children with asthma

1 = More
2 = Fewer
3 = Same
4 = Don't know
MSA Plot 5: Ease of stopping asthma symptoms

1 = Easy
2 = Hard
3 = Depends on situation
MSA Plot 6: Severity of own/child's asthma

1 = Moderately mild
2 = Neutral
3 = Moderately severe
4 = Severe
6. DISCUSSION

The following discussion will begin with a review of the results and make the necessary links between this and the previous literature review. Suggestions will be made about directions for further research as appropriate throughout this section. There will follow a critical analysis of the methodology of the present study with suggestions about how it could have been carried out differently and the benefits this may have had. There will then be a discussion of the difficulties that were encountered in collecting the data, both in terms of this study's methodology and as a result of the wider system. Finally, the discussion will end with a section of conclusions demonstrating how the present study serves to increase the current knowledge base of paediatric asthma.

The results of this study clearly show that children as young as 6 years of age are more than capable of talking about their chronic illness in an intelligent and intelligible manner. All child subjects were easily engaged in the interview and it is the feeling of the investigator that they welcomed the opportunity to express their beliefs and interpretations about their own unique experiences of being chronically ill. There was no one child who answered 'don't know' to all or even the majority of questions. In fact it was often difficult to keep their answers specific to the questions being asked.
of them. This finding in itself, although not explicitly the aim of the current study, demonstrates that it is indeed important for health care professionals to take the time to ask children about their experiences of illness and not to simply rely on the reports of the adults who supposedly know the child best, a view strongly supported by Christie et al (1993). Not only did the children appear to enjoy being asked questions about their illness experiences, but they gave a number of very interesting answers to the questions put to them.

Before going on to look at these answers in detail, there is an unfortunate fact that cannot be ignored with regard to the data set of the current study. Due to factors that will be discussed in greater detail later, it was only possible to obtain ten children and their parents to participate in this study. Therefore, it is not possible to interpret the results in terms of age differences of the type outlined by Burbach and Peterson (1986) or the effects that this may have had on the children's responses. Therefore this aspect will not be looked at in the following discussion. However, as definite patterns of age differences seem to be apparent, they will be reported as a matter of interest, rather than because they can be interpreted with regard to any measures of significance. The results that are interpretable in more detail are to be looked at now.

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6.1 Children's Awareness of their Asthma

The fact that all children were able to say, with at least some degree of accuracy, why they had to attend the hospital clinic indicates that there is a high level of awareness of what is happening to them and the possible consequences of it. There was not a single child who even initially indicated that they did not know why they were at the hospital. The knowledge of having this particular illness did not appear to be dependent upon the child knowing how they were told about it or who it was that first told them. This may be interpreted in two ways. Firstly, it could be the case that who tells the child about their illness is not of the utmost importance, as they do not appear to be able to recall the actual experience of being told. This seems contrary to the literature on imparting of general medical information to patients, which has found that the experience of being told about the presence of an illness is highly dependent upon who imparts the information, how it is imparted and the amount of information that is given at the time of the initial discussion (Korsch and Negret 1988). The second and more likely interpretation of this finding is that, given that the majority of paediatric asthma sufferers are diagnosed within the first three years of life (Gortmaker 1985), most children are simply too young at age of diagnosis to remember later about who told them about the presence of this illness.
There are two distinct ways in which the children in the present study perceive of asthma. The majority of the group described it in terms of the symptoms that it causes, whereas a small minority appear to understand it, or at least define it, in terms of the consequences of having asthma, i.e. in terms of the medication they are required to take. This is an important finding to note in that it may have consequences for the manner in which health care and related professionals communicate with asthmatic children about their illness. The importance of effective communication is highlighted by Potter and Roberts (1984) who suggest that such improved communication may result in more effective paediatric interventions. Communication to children may be most helpful if the accent is placed on that aspect of the illness which the child him or herself feels is most important. If this is adhered to, the information being imparted is more likely to make sense to them as it will be locking in to the child's own belief structure about their illness (Bibace and Walsh 1980).

As one might intuitively expect, the vast majority of children in this study did not believe that there was anything good about having asthma but were able to generate a large number of negative consequences of the illness. The one child who did feel that there was a positive side to the illness was looking at this question
in a general way, and the effect of getting more attention at school outweighed for her any unpleasant symptoms or side effects that the illness imposed upon her. In line with the manner in which children interpret asthma, the largest number of children felt that it was the symptoms of the illness that were the most unpleasant.

With regard to quality of life for children with asthma, it appears that most children in this sample enjoy participating in age appropriate active pastimes. On the one hand it seems that the children are aware that their asthma stops, or at least should stop, them from engaging in these activities with which there is general agreement between all parent-child diads. However, both children and parents report that despite this knowledge the majority of asthmatic children go ahead and engage in these activities regardless. As a result, the child tends to suffer the symptoms more, either bringing on an attack or causing symptoms to worsen if an attack is already under way. The subjects who did not know what would happen if they did the activities regardless of their asthma were the ones who said they did not generally engage in the activities which they knew might precipitate an attack. It seems that the children in this sample do not let their asthma effect their quality of life in a major way. This is in contrast to the findings discussed by Pearson (1990) who states that asthmatic children
suffer significant deficits in their quality of life. The children questioned in the present study use the knowledge they have about the effects of engaging in activities to decide whether or not to go ahead with them. In general the opportunity to carry out age appropriate activities with their peer group seems to override the negative effects of the symptoms of asthma.

Interestingly, the majority of children reported that they are not able to tell when they are about to have an asthma attack. Most children find that the symptoms are in effect before they are able to realize an attack is imminent. This clearly has implications for the management of the illness as medical regimen or coping strategies will only be used by the child once they are actually having an acute asthma episode. It would be preferable if the child was able to correctly identify the precursors of the onset of an attack and then be able to act accordingly to avoid further symptom onset. This has implications for the education of children with asthma as it is possible that education aimed at enabling the child to discriminate the earliest symptom onset would reduce the frequency of actual acute episodes. There is clearly here an area for further research, involving the development of education programmes with careful evaluation of their efficacy needing to be built in.
The Locus of Control Model postulates that a person's behaviour relates to the degree to which they believe themselves or others control their fate (Strickland 1978). No objective measure of Locus of Control was carried out in the present investigation, however two questions were designed specifically to access these beliefs in both parents and children. The information obtained shows that the children appear to have a largely internal Locus of Control and that their parents also have similar attributions. The majority of children and parents believed that there are things the child can do to make sure an asthma attack does not get worse once it starts, while at the same time rejecting the idea that others can be more in control of this aspect of the illness than can the child them self. Given that the burden of care rests largely in the hands of the child, this belief in internal control is clearly both an accurate and adaptive model for the children and parents to adopt.

It is important to note however that there are some children who do not believe that they themselves can have any control over stopping their symptoms and who believe that others can help to reduce or stop their symptoms for them. These children may be more likely to have poorly controlled asthma and may be less likely to adhere to medical regimen. It would be interesting to follow up this group of children and look more closely at their
level of control to ascertain if it is those children with external locus of control who are indeed less likely to be complaint due to their lack of belief in their own efficacy at stopping their symptoms. Or if, as DeVillis et al (1980) found in their study of epilepsy and Locus of Control, it is the children with internal locus of control who have a desire to seek out information regarding their illness and who choose, as a result, to not adhere to medical advice. Further thorough investigations of this aspect of asthma self care and self perception is important.

6.2 Parent's Perceptions of Their Children's Asthma
In looking at parents feelings about the ease or difficulty that they have with helping stop an asthma attack, most stated that they felt it is easy, with half as many finding it difficult. Most of those who find it easy are parents of children who find it hard to stop an attack from getting worse. This is an interesting finding which may be interpreted in one of two ways. It could be that the dynamics of the parent-child interaction are such that either by the parent finding it easy and thus taking control, the child is left feeling somewhat deskilled and thus finds it hard to take control of their own illness. Conversely, the cycle may begin the other way, with the parent reacting to the child's feeling of difficulty by taking control. Practice of dealing with acute asthma
episodes may result in the parents becoming accustomed to dealing with the symptoms and thus finding the illness easy to deal with.

In contrast, all parents who found it hard to stop an attack from getting worse had children who also found it hard. It may simply be personality variables which determine feelings about ease or difficulty of symptom control or it may be related to objective measures of asthma severity, with subjects reacting to the actual ease or difficulty of anyone reducing the child's symptoms. Unfortunately such objective severity ratings were not obtainable for the current study (reasons to be discussed in later section). This hypothesis is therefore unable to be tested within this investigation. The point to be taken from this is that yet again it may not be enough to only ask parents about the ease of symptom control as the child who actually suffers from the illness and is ultimately responsible for control may not be in agreement with the parent.

6.3 Managing Asthma
In attempting to determine what children and parents actually do that is effective or ineffective with respect to the management of their asthma the Critical Incident Technique (Flannagan 1954) was initially planned to be used. However, time constraints placed on the current
study meant that a modified version was used which resulted in much less rich accounts of the specific instances of behaviour which made a difference to the outcome of a task, in this case stopping or ameliorating an acute asthma episode. However, it did become clear that, apart from the three children who were unable to remember their last asthma attack, there was generally a high degree of agreement between parents and children with regard to the incident they discussed and the details of that incident.

Children were engaged in an almost equal number of active and passive activities either at home or away from home. As would be expected from the previous finding regarding children's predominantly internal locus of control, most children remembered the event in terms of their own actions which helped to ameliorate the asthma symptoms. Parents on the other hand were just as likely to report that there was help received from others, usually the parent themselves. All children and parents reported that the actions they took in this instance were typical of the actions they normally take and that they have a knowledge of what can be done to assist with ameliorating symptoms. These findings are interesting in that it appears that there is a high level of knowledge with regard to actions that need to be taken in response to symptoms. This is an encouraging finding. However it is
possible that the sample in question are not representative of the general asthmatic population and their parents. Those who took part in the study were attending their outpatient appointments which may reflect a high degree of commitment to discovering the necessary behaviours for ameliorating symptoms and high motivation to carry out these behaviours when necessary.

6.4 Illness Severity
With regard to subject's perceptions of the severity of their or their child's illness, most subjects rated it as either moderately mild or neutral. The remaining children were equally split between feeling that their asthma is moderately severe or very severe. This differed from parents in that no parent believed their child's asthma to be very severe, and the highest number of parents rated their child's asthma as moderately mild, with an equal split between ratings of neutral and moderately severe. This is interesting given Perrin et al's (1989) finding that having moderate asthma as perceived by parents improved psychological adjustment in their children. However, there was a tendency for children to rate their asthma as more severe than was the case for their parents. This was also the case when subjects were asked to rate asthma in relation to other illnesses. Children tended to place asthma in a higher order of severity than did their parents.
Children overall rated the more common, non-fatal illnesses as more severe than their true ranking. This may reflect the lack of knowledge that children have about fatal and potentially fatal illnesses. It is likely that they knew what a cold and chicken pox were, but did not have the same level of understanding of AIDS, heart disease and cancer, therefore rating these as less severe than they are. The parents were more accurate in their overall ratings, interchanging cold and chicken pox, asthma and diabetes, and cancer, heart disease and AIDS, all of which are more accurate ratings. It is likely then that at the age of 6 to 9 years children do not have enough phenomenological knowledge of illnesses they themselves have never had to be able to accurately rate their severity. The older children made more accurate discriminations, as would be expected given the Burbach and Peterson (1986) review, which found positive correlations between children's age and accurate illness knowledge.

6.5 Patterns of Parent-Child Responses

The five variables chosen for Multidimensional Scalogram Analysis were those in which there was least agreement between parent-child diads. It can be concluded that there was reasonable correspondence between these diads.
in response to the five other questions which were posed to parents and children. However, this statement must be accepted with caution. The emphasis is on the fact that correspondence was reasonable. As has been stated throughout, the author would warn against assuming that reasonable parent-child agreement is reason enough to assume that parents are able to accurately predict or report the beliefs or experiences of their children. Children must be given the opportunity to speak for themselves, a belief strongly advocated by Eiser and Havermans (1993).

One of the main advantages of Multidimensional Scalogram Analysis (Linngoes 1973, Zvulun 1978) as a statistical procedure is that it describes individual subjects or subgroups of individuals (Kidd and Mattysse 1978). This has been useful in the present study as it has enabled an investigation of the way in which beliefs and interpretations about particular issues relate to beliefs and interpretations of other issues, thus allowing any pattern in types of responses to be illustrated. These are discussed below.

There is an association that emerges between those subjects who believe there to be an external, non personally influenced reason for their asthma and the
belief that they have fewer asthma episodes than other children with asthma. Conversely, those subjects who believe they or their child is in some way responsible for the illness are likely to believe they have more frequent attacks. Subjects who do not know why they have asthma are likely to find it hard to stop symptoms. There are implications in this for the communication of accurate information about the causes of asthma. This is made difficult by the fact that there is at present no widely agreed upon aetiology of the illness (Leffert 1985). It is important though that children and parents are not lead to believe that they are in any way at fault for the illness or to be left unaware of any causative agents as both of these factors are likely to increase the perceptions of frequency of asthma episodes and difficulty in ameliorating symptoms.

The links between not knowing the cause of the illness and ratings of the illness as moderately mild is interesting given the previous findings, as these subjects also find it hard to stop attacks. Therefore the intuitive belief that severity and difficulty of stopping symptoms are positively correlated does not apply with this sample.

Knowledge about why a child has asthma does not appear to be linked to the level of awareness a subject has about
factors that are likely to precipitate an acute asthma episode. However it does seem that subjects who identify their asthma as inevitable, i.e. they were born with it and therefore have no control over it, are more likely to be unaware of precipitating factors. The feeling of inevitability may reduce the child's attention to early symptoms as they may view the whole situation as being out of their control. This links with the finding that subjects who are aware of precipitating factors find it easier to stop symptoms from getting worse once they start.

In relation to parent-child diads, the discrepancy between children's and parent's views about ease of stopping symptoms is marked. The majority of children find it hard to stop symptoms whereas the majority of parents find it easy. Given that it is the children themselves who are expected to ultimately take responsibility for the control of their illness, it seems that even by the age of 11 years it is parents who have been more able to internalize the control procedures to such a degree that they perceive of control as relatively easy. It may be that because it is the children who are actually suffering the symptoms of the illness they are more acutely aware of the length of time that the symptoms last. They may be left with residual unpleasant feelings for longer than
the parents realize, and thus feel that control is more difficult. Given that it is the unpleasant symptoms that children identified as most negative about having asthma, this seems likely.

The vast majority of parents were able to accurately identify precipitating factors. Children on the other hand were split equally between being able and not being able to do this. This relates to the previous finding in that being aware of why you/your child is having an attack is linked to perceived ease of stopping symptoms.

6.6 Theoretical Implications
In terms of the Health Belief Model (Rosensock 1974, Becker and Maiman 1975), all subjects in this study perceived of themselves or their children as being susceptible to asthma in that they were all able to correctly identify that they were the victims of this chronic illness with the unpleasant symptoms and need for medication that goes along with it. Not all subjects viewed the illness as severe however. Those who do view it as severe or moderately severe are also those who believe that medical regimen will be effective in prevention. They are also the subjects who see few barriers to carrying out the prescribed regimens. This is demonstrated by the finding that having asthma does not
need to stop them from carrying out their preferred activities. These links, shown both by the Multidimensional Scalogram Analysis and by looking at answers to other relevant questions, demonstrate that in this sample of asthmatic children and their parents there is a link between health beliefs and compliance to medical regimens. This is similar to the finding of Bond et al (1992) in their study of health beliefs and diabetes.

6.7 Methodological Issues
At this point it is appropriate to move on to a discussion of a critical analysis of the methodology of the current study. The overall objective of this study was to gain an increased understanding of the way children themselves who suffer from a chronic illness perceive and interpret that illness and its effects. This objective was largely achieved in that a number of interesting findings came to light. However, despite having originally piloted the interview schedule which served to ascertain that the questions asked were accessible to children as young as six years of age, with the final analysis of responses it appears that the questions may not have been succinct enough to elicit the information hoped for. In attempting to allow children the opportunity to freely discuss their beliefs, interpretations and experiences of asthma, while at the same time trying to tie their responses down to two
distinct theoretical models, neither of these aims were met as fully as the author would have hoped. Given an opportunity to redesign the study, it would be beneficial to make a more firm decision at the outset as to whether one was going to use completely qualitative methods, such as discourse analysis, and allow the children to talk completely freely, or if one wished to use more standardised interview materials which would be guaranteed to illicit information that would relate more systematically to the theoretical models being applied.

If the chosen approach was that which would aim to obtain more information pertaining to the theoretical models, it would have been helpful to use Health Belief and Locus of Control questionnaires in order to facilitate a more thorough comparison between children's attributions of these types with their beliefs and interpretations about their asthma. Studies of this sort have previously been carried out in relation to other childhood chronic illnesses (see Janz and Becker 1984 review). As the present study stands, links have been suggested but the author is aware that without more standardised information any interpretations of this sort are verging towards the subjective.
Another aim of this study was to ascertain if there were age differences in relation to children's beliefs, interpretations and perceptions of asthma. It was hypothesised that younger children would have more concrete, symptom specific conceptualizations and that the older children would have more strongly held belief in their own ability to control their illness and subsequent recovery, as indicated in Burbach and Peterson's (1986) review of children's general illness concepts. While this was largely the conclusion that can be drawn from the available data, the small number of children actually questioned in the present study makes it difficult to do any more than indicate that this is the pattern that appeared to be emerging. It is not possible to say more with any certainty. A larger sample would have enabled more definite conclusions to have been drawn about age related differences. It also would have been beneficial to incorporate a larger age range in order to demonstrate the way in which age related differences occur across a wider section of the paediatric population.

This difficulty of result interpretation highlights one of the problems that was encountered with regard to data collection. Although each fortnightly asthma clinic had a many children registered, a proportion of these did not attend their appointments and of those that did attend
only a small percentage fell within the age requirement for the present study. Therefore, although it was expected that there would be little trouble with recruiting a relatively large number of subjects to participate in the study, in reality the restrictions the methodology placed on those who could take part, together with the number of non-attenders who were potentially able to participate, the final number of subjects was much smaller than the author had originally hoped for.

Prior to beginning data collection the plan was to compare objective ratings of severity, as obtained from the patients medical records, with the subjective ratings that they and their parents gave to the illness. The aim was to test Perrin et al's (1989) finding that objective measures of illness severity and parent's perceptions of severity appear to relate to psychological adjustment differently. In reality it transpired that although the author had access to the medical records, there was very rarely a record of severity rating within the notes. Therefore it was only possible to compare the subject's severity ratings at an intra-group level rather than also at an intra-personal level.
6.8 Conclusions

In conclusion, the current research serves to greatly increase the knowledge that is available with regard to the specific way in which children with asthma and their parents perceive of their illness. The many detailed findings are discussed. Specifically it has been shown that asthmatic children are likely to have an internal locus of control which may serve to increase their compliance to medical regimen as they are more likely to view themselves as responsible for the control of their own illness. It can also be seen that the Health Belief Model is indeed related to compliance behaviours. Children who view themselves as susceptible, view the disease as severe or moderately severe, believe that medical regimen will be effective in preventing or ameliorating symptoms and see few barriers to carrying out the prescribed regimen are more likely to comply with treatment advice.

The present research shows that children as young as six years of age are able to adequately express their beliefs and expectations about their illness experiences. They are shown to have strong belief systems. It is important for there to be further investigation into the most effective way for health care professionals to communicate
with asthmatic children in order that these belief systems may be targeted. In this way information can be transmitted in a manner the child is likely to understand.

Finally, the present research has served to show that parent's, while having unquestionably valid insights into their child's illness, must not be relied upon as the sole information source when clinicians require data about a child's asthma. Unless we wish to perpetuate the cycle of disempowering children with regard to their own illness behaviour, we must continue where this study ends - children have an interesting and insightful voice, and we must ensure that we give them the opportunity for that voice to be heard. Who else but the victim of the illness can have such insights?
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APPENDIX A

Full Interview Schedule
"I have some questions that I would like to ask you about why you come to the hospital clinic. There are no right or wrong answers, I just want to know what you think. I will keep your answers private and won't tell anyone that you gave these answers. I am going to switch on this tape recorder so that I can make sure I remember exactly what you said. If you have anything you want to ask me, you can at any time. Do you understand?"

If "Yes" continue with questions.

If "No" explain again in simpler wording what I am going to do and what is expected of them.
Interview Schedule - Parents

1. Severity Ratings - see separate sheet
2. Why do you think your son/daughter has asthma?
3. Do they have more or less attacks than other children with asthma?
4. Does your son's/daughter's asthma stop them from doing thing they would like to do? What things?
5. Do they ever do things even though they know they shouldn't? What things?
6. What happens to their asthma if they do these things?
7. What other things bring about an asthma attack in your son/daughter?
8. Is there anything your son/daughter can do to stop an attack from getting worse once it starts? What are these things?
9. Is there anything that anyone else can do to stop an attack or prevent it from getting worse for your son/daughter? Who and what can they do?
10. Does your son/daughter find it easy or hard to stop an attack from getting worse? When?
11. Do you find it easy or hard to help their attack from getting worse? Why and when?
12. I would like you to try to remember the last time your child began to have an asthma attack. Where were they when this happened? What were they doing? Did your son/daughter do anything about it? What did they do? Did you do anything about it? What? Did the attack get better or worse? If it got worse, what do you think could have been done to stop it getting worse? What is normally done when they start to feel an attack coming on?
Interview Schedule - Children

1. Can you tell me why you have come to the hospital?

2. Can you remember who first told you that you have asthma? Who was it?

3. Why do you think you have asthma?

4. Can you tell me what happens to someone who has asthma?

5. a) Is there anything that is good about having asthma? What is good about it?

   b) Is there anything that is bad about having asthma? What is bad about it?

6. Severity ratings - see separate sheet.

7. What things do you like to do?

8. Does your asthma mean that you can't do some of these things? Which ones?

9. Do you ever want to do them so much that you just do them anyway, even though you know you shouldn't? Which ones do you do?

10. What happens to your asthma if you do these things?

11. Are there any other things that make you have an asthma attack? What are they?

12. a) Do you think you have more asthma attacks than other children with asthma?

   b) Do you think you have less asthma attacks than other children with asthma?

13. Can you tell when you are about to have an asthma attack? How? What happens to you?

14. Are there things you can do to make sure the attack doesn't get worse? Can you tell me what these things are?

15. Are there things anyone else can do to make sure your attack doesn't get worse? What things and who can do them for you?
16. Is it easy or hard for you to stop an asthma attack from getting bad? Why? If sometimes easy, sometimes hard ask when.

17. I wonder if you can try to remember the last time you felt as though you were going to have an attack. Can you picture that time in your head? Where were you when you felt like this? What were you doing? Can you remember what you did about it?

Prompt if necessary: Did you get mum/dad/teacher?
Did you take your medicine?
Did you do nothing, i.e. Keep on running around

Did you stop what you were doing, i.e. stop running around?

Did the feelings go away or did you have an asthma attack? If you had an asthma attack, do you know what you could have done to stop it happening? What do you normally do?
Severity Rating - in relation to other illnesses

Here is a list of things that can make children sick. Some of them can make you sicker than others. I wonder if you could put them in order, so the one that might make you feel most sick is at the top (No. 1), and the one that might make you feel least sick is at the bottom (No. 7).

: A COLD

: CANCER

: AIDS

: DIABETES

: HEART DISEASE

: ASTHMA

: CHICKEN POX

These will be presented on index cards and handed to the children to arrange in their chosen order. For younger children, they will be read out.
APPENDIX B

St George's Hospital Ethical Committee Approval
25 March 1994

Dear Ms Lichterman,

The perceptions and interpretations of chronic illness of asthmatic children and their parents - 94.15.11

Further to our letter to you of 25 February, I can now give ethical approval for you to proceed with this study. I have signed the information sheet.

Yours sincerely

Patrick Vallance
Vice-Chair
Local Research Ethics Committee

Please Note: All research should be conducted in accordance with the guidelines of the Ethical Committee and the Committee should be informed:

(a) when the project is complete.

(b) what stage the project is at one year from today's date.

(c) if any alterations are made to the treatment or protocol which might have affected ethical approval being granted.

(d) all investigators whose projects have been approved by this Committee are required to report at once any adverse experience affecting subjects in the study.
APPENDIX C

Information Sheet and Consent Form
Information Sheet for Parents

I am a psychologist at the University of Surrey and I am carrying out research looking at the beliefs which children with asthma have about their illness. I will be talking to children and their parents who attend the asthma clinic at St. George's Hospital and will be asking some questions to find out how they feel about asthma, what they believe brings on an episode and what they think they can do to prevent an attack. The questions will take about half an hour.

All answers will be confidential and no names will be used at any time.

I hope the information I gain will bring about a greater understanding of the effects that asthma has on children, and will clarify the issue of why children may not take their medicine. I hope this information will lessen the problems that asthmatic children might suffer.

I would very much appreciate it if you would allow your child to take part in the study and would be willing to answer some questions yourself. However, if you would rather you or your child was not asked these questions this will in no way effect the care your child will receive at St. George's.

Attached is a consent form that indicates you have read the above information and agree to be a part of this study. If this is the case, please sign the attached form and return it to me at the asthma clinic.

Lissa Lichterman
Psychologist in Clinical Training

The local Research Ethics Committee has approved the above statement.

Signed by chair of the committee

Date
Consent Form

This is to indicate that I have read the information regarding the research into asthmatic children's beliefs and expectations about their asthma and agree to my child and myself taking part in the study.

I have been given the opportunity to ask questions about the research and understand that Lissa Lichterman will be available to answer any further questions that I may have.

I am aware that I can decline to take part in the study and have received assurance that doing so will not affect my child's treatment in any way.

Signed:_____________________________________
Date:_________________________
REFERRER SATISFACTION WITH A
CHILD & ADOLESCENT PSYCHOLOGY
SERVICE AND ANALYSIS OF WHY SOME
PROFESSIONALS DO NOT REFER
1. ABSTRACT

The objective of this study was to obtain the views of all actual and potential referrers to the Worthing Priority Care NHS Trust Psychology Service - Child & Adolescent Specialty, concerning their satisfaction with the service they receive or their reasons for not referring. A questionnaire based on the findings of previous research was developed to obtain this information. There was one send-out to the 239 potential referrers to the service. A response rate of 63% was obtained.

The study was guided by the hypotheses that the overall level of satisfaction would be lower than previous studies as a function of a history of severe under-funding within the service, that levels of satisfaction would be dependent upon professional group membership and that a clear pattern would emerge regarding the reasons why those professionals who could refer chose not to do so.

Significant results are found in the analysis of factors effecting the decision to refer and satisfaction with waiting time between referral and first appointment. Possible explanations for the results are discussed with reference to previous studies. Implications for future developments of the specialty are outlined and areas for further research are highlighted.
2. INTRODUCTION

The following literature review will move systematically from a broad overview of the National Health Service (NHS) through to one specific aspect of the current market place, that of consumer behaviour. Beginning with a brief history of health provision in the United Kingdom from the early 19th century to the present day for adults and children suffering with mental health problems, the many changes that have occurred over the past decade will become apparent. The scene will be set in which there is currently a need for systematic evaluation of the services being provided within the Health Service. Having clarified this need, the review will move on to discuss the many different types of audit and evaluation that are commonly in use in the NHS to explain the particular method that is to be used in the current study. There will then be a review of previous referrer satisfaction surveys in an attempt to draw together past research methodology and findings as they impinge on and influence the current study. Finally, this review will focus specifically on consumer behaviour to explain the aims and objectives of the current study in more detail.

2.1 Historical Overview of the National Health Service

Prior to 1800, most people with severe mental health problems remained with their families or were confined to work houses. Those deemed to have committed crimes ended up as part of the legal system. With the industrial revolution came societal pressures for reform which led to the County Asylum Act of 1808. This required every county to provide an asylum for those known
then as 'lunatics'. These increased in size throughout the 19th century, until admissions were restricted as a result of the Lunacy Act of 1890.

This emphasis on confinement and containment was mirrored in the lack of availability of child services at this point in the history of mental health care provision in the United Kingdom; Child Psychiatric services had not been considered at all. Following West's (1848) influence at Great Ormond Street, a few physicians specialising in children's diseases had an interest in the 'nervous child', the title of Hector Cameron's classic work on the subject (1918).

Children with severe psychiatric disorders were seen by doctors from local lunatic asylums while school medical officers were appointed to assess children with less severe difficulties. A young person suffering from a phobia or behaviour disorder would at this time be regarded as either physically ill, wayward, wicked or stupid. Original sin and witchcraft were common explanations of behaviour problems. Residential care for children, similar to that provided for adults, took the form of asylums, work houses, reformatories or industrial schools. Basic management of undesirable behaviour was the aim.
The early part of the 20th century saw a change in attitude towards the mentally ill population. Certified confinement was increasingly challenged as the only solution to the problem of mental illness. The Maudsley Hospital in London began to demonstrate the effectiveness of voluntary treatment in or out of hospital. The 1930 Mental Treatment Act gave local authorities the power to set up services in the community, which led to a rapid increase in the availability of out-patient clinics. Within eight years, 35% of all hospital admissions were on a voluntary basis.

The creation of the National Health Service in 1946 extended the powers of local authorities, but people with mental health problems were given no priority of care. The NHS only spent 16% of its total budget on people with mental illness or learning disabilities and yet they occupied 42% of hospital beds. There were no major improvements in mental health care until the 1950's, when the development of phenothiazine drugs reduced the need for restraint, which coincided with increasingly liberal attitudes.

Despite the fact that services had been seeking alternatives to hospitalization, care in the community did not emerge as a formal concept until the Royal Commission examined mental health services between 1954 - 1957. This led to the Mental Health Act of 1959 which advanced the use of voluntary treatment and gave local authorities the responsibility to provide day and residential services in the community.
In 1960 Enoch Powell gave the first indication that large hospitals and institutions were to be phased out. However, throughout the 1960's and early 1970's little progress was made in this respect. While the number of people in institutions was reduced, little thought was given to what a community service for mentally ill people should provide. This led to the publication of a government white paper in 1975 entitled “Better Services for the Mentally Ill”. The aim was to identify targets for the transition from the then current hospital-dominated model of care towards a more community-oriented one. This report was unique in that it set out a model for the planned development of services, rather than leaving issues of organisation to be dealt with in an ad-hoc fashion, as had predominated in the past.

By the 1980's a number of events increased the momentum for changes within the NHS. The 1980 Nodder Report on the organisation and management of mental health hospitals drew attention to the need for multi-disciplinary assessment, treatment, and rehabilitation of people suffering from mental illness. This coincided with the advent of the concept of normalisation within services in the United Kingdom, which offered a value-based framework within which service development was considered.

In 1983 the Department of Health issued a circular following a document for discussion entitled ‘Care in the Community’. This extended the use of joint finance began in the 1970's, in order to encourage greater collaboration between
Statutory agencies. It also recognised the need for greater development of alternatives to long-stay hospitals. Government reports published in 1985 and 1986 noted that the move to community care was, at best, patchy. The reasons were many, but resulted primarily from an identified lack of agreement within professions about what was needed, rivalry between professionals, lack of commitment for joint planning from health and local authorities, and a lack of investments in alternatives to long-stay hospitals.

The lack of consensus about what form community based services should take has been central to the slow progress of alternatives to hospitals for people with mental health problems. However, people involved in the field of mental health services are finally beginning to speak out about the lack of progress and success in the development of adequate services. The beginnings of this change go back to the 1970's, but did not gather momentum until recently, with the recognition of the importance of individualising services.

The movement has not progressed in the strong separatist way that it has in the United States, but more through partnerships and negotiation with professionals and managers of services. There is now hope that the greater involvement of service users and purchasers in decisions affecting clients will make service developments more relevant and appropriate.

The current emphasis is on providing services that offer consumer choices that are more relevant and responsive to the needs of individuals. In so doing the
Government is seeking to adopt principles that have guided the commercial marketplace for many years in order to change the way health services are planned, delivered and paid for. Effective community services of the future will depend on clearly stated and shared values and shared commitment among users, providers and purchasers to provide such relevant and responsive services to all people with mental health and behavioural problems, children and adults alike.

2.2 Effects of Policy Changes on Current NHS Provision

The changes that have occurred in the provision of health care for people with mental health problems in the past two centuries have been astounding in their magnitude. However, there has never been a period of such rapid change as the NHS is undergoing at present. Current changes to the funding and management structures of the NHS are leading to close scrutiny of service provision. This is due in part to the adoption of marketplace principles outlined above. Added to this, the purchasers of mental health care are now charged with the responsibility of assessing the needs of the local population and allocating resources on behalf of the public to achieve the best possible service for the lowest cost (Parry 1992).

Professionals are becoming increasingly concerned with service quality and effectiveness, as demonstrated by their interest in research and evaluation methods aimed at improving standards of mental health care (Milne 1987 and Parry & Watts 1989).
The current research focus is on the specific provision of psychotherapy services within the present NHS structure. With this aim arise some particular issues relevant to psychotherapy research. Purchasers of psychotherapy services may expect to be able to make strategic investment decisions on the basis of general psychotherapy research. However as Parry (1992) illustrates, there are some fundamental problems in doing so. Research into psychotherapy focuses specifically on therapies, not on services. This is illustrated by the fact that terms relating to service delivery issues, such as 'cost-effectiveness' or 'service evaluation' do not appear in the index of a standard psychotherapy research text, e.g. Garfield & Bergin (1986). Beutler & Crago (1991) published an international compilation of psychotherapy research in which they report on 40 research programmes, only one of which is focused on service evaluation (Phillips 1991). The majority of research compares different therapy outcomes and aims to understand the process by which those outcomes are achieved. The issue of service evaluation needs therefore to be addressed as a topic of research in its own right.

2.3 Psychotherapy Evaluation and Audit

Approaches to evaluating and improving psychotherapy service delivery include service evaluation, operational research, professional audit, service
audit, quality assurance and total quality management. All of these methodologies are applicable to psychotherapy research but there are clear distinctions between them.

Service Evaluation arose in the United States during the 1960's and 1970's initially in response to concerns about the cost and effectiveness of federal human service programmes (Attkisson et al 1978). Rossi & Freeman (1982) define service evaluation as 'the systematic application of social research procedures in assessing the conceptualization and design, implementation and utility of social intervention programmes'. Trained external evaluators investigate a service or project and report back to the 'stakeholders'. This has the benefit of being carried out by people trained in the methods of evaluation and, as they are external to the service under question, are likely to be more objective than internal evaluators. However, the evaluation is not a routine part of the service which may lead to problems with implementing identified necessary changes in the service. Green & Attkisson (1984) state that service evaluation has tended to be less concerned with process and more concerned with outcomes.

Operational Research methods evolved as a management tool in improving cost effectiveness of programmes (Hillier & Lieberman 1974). Mathematical models are constructed which are based on organizational prototypes and these are then manipulated to provide solutions to the problems under study. Fox & Kuldau (1968) advocated their use in mental health service evaluation. Yates (1980) has
advocated their use for the evaluation of psychotherapy services. Parry (1992) gives an example of operational research methods being used to link structure, process and outcome in service systems to minimise treatment delays and under-utilisation or to find the quickest or least costly route through the network of mental health service providers. However, although the prototypes are relatively easy to understand, the technical details of applying the mathematical models have served to preclude their use by non-specialists in routine service delivery evaluation.

Medical Audit is defined by the Department of Health (1989) as “the systematic, critical analysis of the quality of medical care, including the procedures used for diagnosis and treatment, the use of resources and the resulting outcomes and quality of life for the patient”. In practice medical audit usually refers to professional self-monitoring, based on peer review of the care process, often utilising the retrospective study of case notes. This form of quality monitoring was originally developed for medical professionals, but is now being extended to encompass non-medical workers in the NHS (Normand 1991). Despite the all-encompassing nature of medical audit, there are a number of potential difficulties with the method. Firstly, peer review is open to bias (Horrobin 1982). Secondly, the potential appropriation of confidential audit notes in negligence litigation reduces compliance (Charlton 1983). Thirdly, the high cost of the professional audit process in relation to minimal benefits is problematic (Fulchiero et al 1980). Fourthly, Parry (1992) indicates the limited usefulness of single profession audit
in psychotherapy services which are very often provided by multi-disciplinary teams or at least inter-disciplinary cooperation.

Service Audit is defined as a system of self-monitoring methods which are not confined to a single profession, with the aim of describing service process and outcome (Parry 1992). It is a form of Service Evaluation but is undertaken as a routine part of service delivery. It has particular use in the evaluation of psychotherapy services which may be delivered from a number of professional backgrounds.

Quality Assurance monitors the process by which therapy is delivered. The aspect which differentiates this service evaluation method from the others described here is that particular standards of performance are set following the initial evaluation and inspection is routinely carried out to monitor if these are achieved (Lalonde 1982). Ideally, psychotherapists themselves choose the criteria for judging service quality, define the norms for good care, set specific standards of performance and monitor adherence to these (Mohr and Mohr 1983). As Parry (1992) points out, inevitably those standards which are easiest to monitor, such as waiting time from referral to first appointment, are likely to take precedence over those which are more difficult, such as aspects of therapist in-session behaviour.

Total Quality Management is based on a management-led commitment to continual improvements in quality by improving existing processes and devising
new and better processes (Collard 1989). The aim of this method is to move away from an accusatory inspection model of service evaluation towards an organisational climate in which people are enthusiastic about identifying deficiencies in quality and to work together to rectify them and thus improve the overall quality of the service. The underlying assumption is that poor quality arises from bad systems, not bad people.

2.4 Audit Methods to be Used in the Current Study

Despite the divergent definitions of the many different types of evaluation that are undertaken within psychotherapy services, Berwick (1990) indicates that these methods can be creatively combined. They all serve the same principle of service practitioners or service planners reflecting on current practice to learn from experience, embodied in the concepts of the reflective practitioner (Schon 1983), the learning organisation (Garratt 1987), and the self-evaluating organisation (Wildavsky 1972). The present study aims primarily to utilise the methods of Quality Assurance, using the definition outlined here. However, given the history of the Clinical Psychology Service - Child & Adolescent Specialty in which the data is being compiled, the question of evaluation of psychotherapy services is in its earliest stages. Therefore only the earliest stages of the quality assurance process is to be implemented within this study. The full aims of the current study will be discussed in further detail later.
Rosenthal & Weiss (1966) point out four circumstances in which performance feedback within organisations is crucial: where new services are being developed, where the activities of a service require justification to an outside group, where crisis threatens and where there are turbulent organisational environments. This is where the history of the present department comes into play: from February 1992 to October 1994 the Child & Adolescent Specialty consisted of only one whole time equivalent (wte) Clinical Psychologist. Prior to 1992 there was no child and adolescent service. It is now made up of 2.6 wte clinical psychologists. Therefore it is necessary, as Rosenthal & Weiss indicate, to evaluate the service at this point, as essentially a new service is being set up, or at least a much expanded one. The second point made by the above authors, regarding service activities requiring justification to outside groups, is clearly the ethos of the present NHS structure in which purchasers are increasingly demanding the provision of a service that fulfils the needs of their target population. It seems that all health care services now fall into this group. This is further reason for the development of the current study in it's broad sense, and more specifically why it was seen as important to survey the views of referrers and potential referrers to the Child & Adolescent Specialty; they are the purchasers in the present equation and thus the group to whom a quality service must be targeted.

Given the definitions of psychotherapy audit and evaluation as set out in the above section, and that the need for such a study at this time and in this service has been highlighted, the past literature of referrer satisfaction surveys will now
be reviewed and the literature drawn together in order to illustrate how this has
guided the development of the current study.

2.5 Review of Referrer Satisfaction Surveys

The 1989 White Paper 'Working for Patients' stresses the importance of the
consumer's perspective on health services. A number of surveys have been
carried out in recent years with this aim, sampling from an inpatient psychiatric
service (Bond et al 1992), outpatient service (McAuliffe & MacLachlan 1992),
child and adolescent psychology service (Dagan & Fish 1991) and services for
older adults (Stennett-Cox et al 1992). The usual interpretation of 'consumer'
has been taken to mean the patients who are at the receiving end of services.
However, there is a growing body of research into the views of a different group
of 'consumers', that is the purchasers of mental health services, whom Chadwick
& Stallard (1991) highlight as an important group of consumers.

This is not surprising, given that the NHS is currently in a period of major
change, with the distinction between purchasers and providers at the fore and the
current ethos of market forces. The growing number of GP fundholders and the
power they now hold over the decision of purchasing particular services has
resulted in the majority of this second type of consumer research being carried
out with GP's.
The early research into referrer satisfaction with clinical psychology services tended to focus not only on GP's but more specifically on the services of clinical psychologists practising within the primary care setting, e.g. Johnston (1978) and Clark (1979). This was initiated by the findings of the Trethowan Report (1977) on the future of clinical psychology services which recognised the need for 'increased participation by psychologists with general practitioners in the primary care setting' and called for 'pilot studies with built-in full evaluations'. The British Psychological Society echoed this sentiment in 1990 when they noted that there was a demonstrable need for psychological therapies in primary care services. Most of the very early work looked at treatment outcomes, as was the case with the two studies quoted above, or GP's attitudes towards working with clinical psychologists e.g. Davidson (1977) and Dhillon (1980).

Jerrom et al (1983) produced a seminal paper aimed specifically at GP's satisfaction with primary care psychology provision. This study confirmed the findings by Dhillon (1980) that the majority of GP's are interested in direct referrals to clinical psychologists for specific treatment purposes. Jerrom et al (1983) went further to show that where such a service is available it is both widely used and high valued. Results of this study showed that overall 98% of the GP's who responded to the survey were satisfied with the service they received, a promising result that has been replicated in studies carried out in other settings. For example, Espie & White (1986) asked GP's 'What effect has
(psychological) treatment had upon patients' problems?'; 78% replied that it had been of 'definite benefit' with the remaining 22% reporting 'some benefit'.

In a more recent study, Griffiths & Cormack (1993) surveyed GP's satisfaction with psychology services, comparing satisfaction levels between services provided in the health clinic with those provided from external bases. Results showed that GP's who referred patients to health centre based serviced were more satisfied that those who referred to external bases. The reason for reduced rates of satisfaction tended to be due to the GP's perceptions that external services were less accessible than those held within their health centres. However, even given this reduced satisfaction rate, there remained overall high levels of referrer satisfaction with psychology services.

Powell & Williams (1991) carried out a more encompassing study of satisfaction in their survey of referrers' and potential referrers' opinions about their clinical psychology service. Their reasons for widening the group of participants lay in the fact that previous studies appear to have looked only at GP's opinions and referrals, whereas these authors hoped that all referrers would be able to provide useful information regarding the services or service improvements they wanted from the psychology department. The percentage who were satisfied within each professional group varied. Overall, referrers reported high levels of satisfaction and the results were very supportive of the psychology service. Respondents
offered many suggestions about ways in which the service could be improved and ideas for planning future services that would meet the referrers' needs.

The current study focuses specifically on clinical psychology child and adolescent services, as was the focus of a study carried out by Stallard & Hudson (1993). The purpose of that study was to assess the satisfaction on a case-by-case basis of all referrers to a child and adolescent psychology service. A questionnaire was sent to the referrers of all children who had their last contact with a child psychologist over an eight month period. The questionnaire was sent approximately three to four weeks after their last contact with the service. This methodology enabled specific areas of dissatisfaction with specific cases to be identified as they arose, rather than looking only at overall levels of satisfaction.

Results from the Stallard & Hudson (1993) study corroborated previous findings that referrers are generally satisfied with the services they receive. However, as previously found by Jerrom et al (1983), only half of the referrers were able to report that the situation was now better and in the Stallard and Hudson study almost one third of referrers were unable to comment on outcome.

This review of the literature on referrer satisfaction studies has shown that the majority of past research has focused solely on GPs and, more specifically, on psychology services within primary care settings. All studies, or at least all of those that have been published, including those that have widened their field of
study to include all referrers or potential referrers to a particular service, have reported high levels of overall satisfaction and respondents have provided useful suggestions about ways in which the service could be improved. It is the present author's interest to investigate if the current study replicates such positive findings, given the history of a severely under-resourced child and adolescent clinical psychology specialty.

2.6 Consumer Behaviour

Consumer Behaviour covers the acquisition and use of goods. In the present context the 'consumer' is the referrer and the 'goods' are the Psychology Service - Child & Adolescent Specialty. The professional purchaser has the power to make the choice of whether or not they will purchase the services offered. The degree to which the service meets their needs, i.e. the level of satisfaction they feel, will be a major contributing factor in this decision.

The most widely accepted and influential models of consumer behaviour derive largely from cognitive psychology (Foxall 1990). As a result, consumer choice is usually understood as a problem solving and decision making sequence of activities, the outcome of which is determined primarily by the buyer's intellectual functioning and rational goal-directed processing of information (Howard 1983).
The major comprehensive theories of consumer behaviour (Nicosia 1966; Engel et al 1986; Howard & Seth 1969; and Howard 1977) invest consumers with extensive capacities to receive and handle considerable quantities of information and to engage in means-ends processing involving comparison and evaluation of alternative brands in relation to the consumer's aims.

The casual chain common to these approaches to the analysis of consumer choice is summarised by Howard (1983) as information-attitude-intention-purchase. This includes the extended process in which information is obtained, classified, and interpreted by the prospective buyer and, subsequently, via further mental processing, transformed into attitudinal and intentional structures that determine the purchase outcome. This is the predominant form of explanation in social sciences such as economics and psychology (Earl 1983; MacFadyen & MacFadyen 1986; and Van Raaij et al 1988).

Consumer choice is portrayed as an ego-involving sequence of cognitive, affective and conative changes which precede and predetermine the purchase/no purchase outcome. The fundamental premise is that behavioural change cannot be conceived in the absence of prior, corresponding attitudinal change (Robert & Pinson 1973). Choice itself is portrayed as a mental process initiated by the consumer's awareness of a multiplicity of options. The internal conflict that is thus generated is reduced by cognitive evaluations of the possible availability, consideration of the costs and benefits that each entails and, finally, decision
making itself (Hansen 1976). In this case the options available to the consumer include the use of other sources of psychological input, such as Community Psychiatric Nurses, Counselling Psychologists or Nurse Behaviour Therapists, to name but a few.

Explanations of consumer behaviour are founded on two types of concepts; those that relate to an observable, behavioural realm of activity from which the phenomena to be explained are derived and those that refer to an unobservable, usually mental or conceptual, realm of pre-behavioural events, states or processes in terms of which the explanation itself is couched (Moore 1981). This is most explicit in Howard and Seth's 'Theory of Buyer Behaviour' (1969). The Howard-Seth theory is a sophisticated integration of the various social, psychological and marketing influences on consumer choice into a coherent sequence of information processing. It serves to illustrate the elaborate use of unobservables, representing intervening variables and hypothetical constructs, to account for observed consumer choice.

In the process of learning, the consumer's motives, attitudes and comprehension of the brand (in this case the psychology service) determine the degree of confidence they are willing to place in it, their purchase intentions and actual purchase behaviour. The extent to which the buyer is satisfied with the purchase (the extent to which it fulfils their goals) feeds back as modifying information that
effects attitudes, confidence, purchase intentions and subsequent activity (Foxall 1990).

In gaining an understanding of consumer behaviour it is seen that there are a number of factors that influence the decision to purchase or not purchase a particular product. Consumer behaviour does not proceed on a hit and miss basis, but through a thorough sequence of cognitive processes.

It is as important to understand the reasons why a group of professionals have made the choice to not purchase the services of the clinical psychology child and adolescent specialty as it is to gain an insight into the levels of satisfaction felt by those who do purchase the service. It is only by understanding both sets of behaviour that a service can be developed that will meet the needs of all referrers within the district. This then is the aim of the current study.
The present study is exploratory in nature and therefore is guided by purely exploratory objectives and aims.

The overall objective of the present study is:-

To obtain the views of all current and potential referrers to the Worthing Priority Care NHS Trust Psychology Service - Child & Adolescent Specialty about this service.

The aims of the present study are:-

1. To elicit the levels of satisfaction felt by all current referrers to the above Service on a number of given variables as follows:
   a) average time a referred person had to wait for their first appointment
   b) amount of communication referrer received from the service following a referral
   c) overall satisfaction with the assessment or intervention made by the service

2. To obtain the referrers impressions of the benefits that referring to the service had for the referred family and/or the referrer themselves.
3. To gain an understanding of the factors that affect a professionals' decision to refer to the service.

4. To gain insight into the reasons why some professionals who can refer to the service currently do not.

5. To outline future directions for improving the service.
3. METHOD

3.1 Measures

A questionnaire consisting of eight questions was designed by the author. The aim was to identify levels of satisfaction felt by those professionals who currently do or have in the past referred to the Clinical Psychology Service - Child and Adolescent Speciality on a number of specific dimensions.

These dimensions were:

1. length of wait between referral and first appointment.
2. amount of communication received about the referred family following referral
3. overall satisfaction with the assessment or intervention made by the service.
4. specific benefits that resulted following the psychologists involvement.

The questionnaire also aimed to identify factors which affect the professionals' reasons for referring to the service. Those professionals who do not refer to the service were asked for their reasons for not referring.

Questions 1 - 4 were forced choice. Questions 5 - 7 were checklists containing several questions each being yes/no and not all requiring an answer. The final question was an open question which aimed to identify
ways in which the respondents felt the service could be improved. Respondents were asked to indicate their profession, but not their name.

The full questionnaire is presented in Appendix A.

3.2 Sample

The questionnaire was sent to 239 professionals within the Worthing Health District and the County of West Sussex Southern Education Area boundaries.

The following chart shows the distribution pattern of the questionnaires.

<table>
<thead>
<tr>
<th>PROFESSIONAL</th>
<th>NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL PRACTITIONER</td>
<td>100</td>
</tr>
<tr>
<td>TEACHER</td>
<td>62</td>
</tr>
<tr>
<td>HEALTH VISITOR</td>
<td>50</td>
</tr>
<tr>
<td>EDUCATION WELFARE OFFICER</td>
<td>10</td>
</tr>
<tr>
<td>EDUCATIONAL PSYCHOLOGIST</td>
<td>5</td>
</tr>
<tr>
<td>SOCIAL WORKER</td>
<td>4</td>
</tr>
<tr>
<td>PAEDIATRICIAN</td>
<td>4</td>
</tr>
<tr>
<td>PSYCHIATRIST</td>
<td>1</td>
</tr>
<tr>
<td>PHYSIOTHERAPIST</td>
<td>1</td>
</tr>
<tr>
<td>SPEECH AND LANGUAGE THERAPIST</td>
<td>1</td>
</tr>
<tr>
<td>OCCUPATIONAL THERAPIST</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>239</strong></td>
</tr>
</tbody>
</table>
3.3 Procedure

One copy of the questionnaire and one stamped addressed envelope was sent to each of the above professionals. There was no second send out of the questionnaire to those who did not reply, as all responses were anonymous and the cost of a second send out was prohibitive.
4. RESULTS

4.1 Descriptive Data, One Way Analysis Of Variance and Chi-Square Tests Of Association

**TABLE 1: PARTICIPANTS AND RETURNED QUESTIONNAIRES**

<table>
<thead>
<tr>
<th>PROFESSION</th>
<th>NUMBER RETURNED</th>
<th>PERCENT RETURNED</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL PRACTITIONERS</td>
<td>61</td>
<td>61</td>
</tr>
<tr>
<td>TEACHERS</td>
<td>40</td>
<td>65</td>
</tr>
<tr>
<td>HEALTH VISITORS</td>
<td>42</td>
<td>84</td>
</tr>
<tr>
<td>EDUCATION WELFARE OFFICERS</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>PAEDIATRICIANS</td>
<td>2</td>
<td>50</td>
</tr>
<tr>
<td>EDUCATIONAL PSYCHOLOGISTS</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>PHYSIOTHERAPISTS</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>TOTAL</td>
<td>150</td>
<td>63</td>
</tr>
</tbody>
</table>
In the following results, only data from the first three groups of respondents (General Practitioners, Teachers and Health Visitors) are reported as there are insufficient numbers of respondents in the remaining groups to enable meaningful statistical analysis to be carried out. However, where the replies from the remaining groups are of interest, they will be reported in the discussion in descriptive terms.

The scoring procedure for the questionnaire involved simply allocating one point to each affirmative response indicated on the returned questionnaires.

The groups were compared on their ratings of satisfaction with time before a referral was seen, satisfaction with communication and overall satisfaction by a series of one way ANOVAs (see Table 2). Lower numbers indicate higher levels of satisfaction. Post hoc comparison of means indicated that General Practitioners were significantly less satisfied than teachers with the average waiting time \((F = 7.4, \ p < .001)\).

**TABLE 2: LEVELS OF SATISFACTION - Questions 2, 3 and 4 -**

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>TEACHERS</th>
<th>GPs</th>
<th>HEALTH VISITORS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>SATISFIED WITH TIME</td>
<td>2.9</td>
<td>4.1</td>
<td>3.7</td>
<td>7.4</td>
<td>0.001</td>
</tr>
<tr>
<td>SATISFIED WITH COMMUNICATION</td>
<td>3.0</td>
<td>2.7</td>
<td>3.3</td>
<td>2.1</td>
<td>NS</td>
</tr>
<tr>
<td>OVERALL SATISFACTION</td>
<td>2.6</td>
<td>2.7</td>
<td>3.1</td>
<td>1.6</td>
<td>NS</td>
</tr>
</tbody>
</table>
In order to investigate the perceived benefits of referral, variables were compared with Chi-Square tests of association. This yielded non-significant results for all three variables: reduction in time referrer had to spend with referred client or family ($\chi^2 = 2.5$, $df = 2$, n.s.), less need to refer to another professional ($\chi^2 = 1.3$, $df = 2$, n.s.) and increased knowledge or understanding of the Child & Adolescent Specialty ($\chi^2 = 2.4$, $df = 2$, n.s.).

### TABLE 3: BENEFITS OF REFERRING TO SPECIALTY - PERCENTAGES OF AFFIRMATIVE RESPONSES - Question 5 a, b and c

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>TEACHERS</th>
<th>GPs</th>
<th>HEALTH VISITORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>REDUCTION IN TIME REFERRER SPENT WITH CLIENT</td>
<td>34.8</td>
<td>54.5</td>
<td>51.9</td>
</tr>
<tr>
<td>LESS NEED TO REFER TO ANOTHER PROFESSIONAL</td>
<td>47.8</td>
<td>54.5</td>
<td>40.7</td>
</tr>
<tr>
<td>INCREASED KNOWLEDGE OR UNDERSTANDING OF SPECIALTY</td>
<td>65.2</td>
<td>45.5</td>
<td>51.9</td>
</tr>
</tbody>
</table>
In order to investigate factors affecting the decision to refer to the Child & Adolescent Specialty a series of Chi-Square tests of association were performed. Results yielded non-significant results for two variables: perceived need for diagnosis of psychological factors in the presenting difficulty ($\chi^2 = 4.0$, $df = 2$, n.s.) and perceived need for psychological intervention on part of the family ($\chi^2 = 0.57$, $df = 2$, n.s.), with a significant effect for perceived need for psychological intervention on part of the referrer ($\chi^2 = 5.0$, $df = 2$, $p < 0.08$).

### TABLE 4: FACTORS AFFECTING DECISIONS TO REFER - PERCENTAGES OF AFFIRMATIVE RESPONSES - Question 6 a, b and c

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>TEACHERS</th>
<th>GPs</th>
<th>HEALTH VISITORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERCEIVED NEED FOR DIAGNOSIS OF PSYCHOLOGICAL FACTORS IN PRESENTING DIFFICULTIES</td>
<td>88.0</td>
<td>67.4</td>
<td>73.1</td>
</tr>
<tr>
<td>PERCEIVED NEED FOR PSYCHOLOGICAL INTERVENTION ON PART OF FAMILY</td>
<td>80.0</td>
<td>80.4</td>
<td>73.1</td>
</tr>
<tr>
<td>PERCEIVED NEED FOR PSYCHOLOGICAL INTERVENTION ON PART OF REFERRER</td>
<td>68.0</td>
<td>76.1</td>
<td>50.0</td>
</tr>
</tbody>
</table>
In order to investigate factors affecting the decision to not refer to the Child & Adolescent Specialty percentages of all responses were calculated (see Table 5i). Responses were then analysed by profession and percentages calculated (see Table 5ii).

**TABLE 5i: REASONS FOR NOT REFERRING TO THE CHILD & ADOLESCENT SERVICE - PERCENTAGES OF TOTAL RESPONSES - Question 7 -**

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>PERCENT OF AFFIRMATIVE RESPONSES N = 96</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAITING TIME FOR FIRST APPOINTMENT TOO LONG</td>
<td>17.3</td>
</tr>
<tr>
<td>UNAWARE OF TYPE OF INTERVENTION OFFERED BY SERVICE</td>
<td>16.3</td>
</tr>
<tr>
<td>UNAWARE OF PRESENCE OF CHILD PSYCHOLOGY SERVICE</td>
<td>15.4</td>
</tr>
<tr>
<td>UNAWARE OF TYPE OF DIFFICULTIES TO REFER</td>
<td>13.5</td>
</tr>
<tr>
<td>DO NOT KNOW HOW TO REFER TO CHILD PSYCHOLOGY SERVICE</td>
<td>12.5</td>
</tr>
<tr>
<td>REFER TO OTHER PROFESSIONALS WHO REFER TO PSYCHOLOGY</td>
<td>12.5</td>
</tr>
<tr>
<td>PSYCHOLOGY INPUT RECEIVED FROM OTHER SOURCES</td>
<td>9.6</td>
</tr>
<tr>
<td>DO NOT SEE CHILDREN WHO REQUIRE PSYCHOLOGICAL INPUT</td>
<td>2.8</td>
</tr>
</tbody>
</table>
TABLE 5ii: REASONS FOR NOT REFERRING TO THE CHILD & ADOLESCENT SPECIALTY - PERCENTAGES OF RESPONSES BY PROFESSION - Question 7

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>TEACHERS</th>
<th>GPs</th>
<th>HEALTH VISITORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAITING TIME FOR FIRST APPOINTMENT TOO LONG</td>
<td>9.8</td>
<td>13.0</td>
<td>31.3</td>
</tr>
<tr>
<td>UNAWARE OF TYPE OF INTERVENTION OFFERED BY SERVICE</td>
<td>19.5</td>
<td>13.0</td>
<td>18.8</td>
</tr>
<tr>
<td>UNAWARE OF PRESENCE OF CHILD PSYCHOLOGY SERVICE</td>
<td>12.2</td>
<td>30.4</td>
<td>6.3</td>
</tr>
<tr>
<td>UNAWARE OF TYPE OF DIFFICULTIES TO REFER</td>
<td>17.1</td>
<td>4.3</td>
<td>15.6</td>
</tr>
<tr>
<td>DO NOT KNOW HOW TO REFER TO CHILD PSYCHOLOGY SERVICE</td>
<td>12.2</td>
<td>13.0</td>
<td>6.3</td>
</tr>
<tr>
<td>REFER TO OTHER PROFESSIONALS WHO REFER ON TO PSYCHOLOGY</td>
<td>12.2</td>
<td>17.4</td>
<td>9.4</td>
</tr>
<tr>
<td>PSYCHOLOGY INPUT RECEIVED FROM OTHER SOURCES</td>
<td>17.1</td>
<td>4.3</td>
<td>6.3</td>
</tr>
<tr>
<td>DO NOT SEE CHILDREN WHO REQUIRE PSYCHOLOGY INPUT</td>
<td>0.0</td>
<td>4.3</td>
<td>6.3</td>
</tr>
</tbody>
</table>
In order to investigate ways to improve the service responses were categorised into groups. Percentages were calculated for the total number of responses in each category (see Table 6i). Percentages were then calculated by profession (see Table 6ii).

Table 6i: SUGGESTED WAYS TO IMPROVE THE CHILD & ADOLESCENT SPECIALTY - PERCENTAGES OF TOTAL RESPONSES - Question 8

<table>
<thead>
<tr>
<th>SUGGESTION</th>
<th>PERCENT OF RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SHORTEN WAITING TIME BEFORE FIRST APPOINTMENT</strong></td>
<td>39.6</td>
</tr>
<tr>
<td><strong>MORE INFO TO PROFESSIONALS RE: SERVICE</strong></td>
<td>25.5</td>
</tr>
<tr>
<td><strong>MORE FEEDBACK TO REFERRER RE: PROGRESS OF CLIENT</strong></td>
<td>13.2</td>
</tr>
<tr>
<td><strong>NEW TYPE OF SERVICE E.G.: CRISIS INTERVENTION</strong></td>
<td>10.4</td>
</tr>
<tr>
<td><strong>MORE TEAM WORK WITH OTHER PROFESSIONALS</strong></td>
<td>9.4</td>
</tr>
<tr>
<td><strong>MORE INFORMATION TO CLIENTS RE: SERVICE</strong></td>
<td>1.9</td>
</tr>
</tbody>
</table>
### TABLE 6ii: SUGGESTED WAYS TO IMPROVE THE CHILD & ADOLESCENT SERVICE - PERCENTAGES OF RESPONSES BY PROFESSION - Question 8

<table>
<thead>
<tr>
<th>SUGGESTION</th>
<th>TEACHERS N = 34</th>
<th>GPs N = 42</th>
<th>HEALTH VISITORS N = 30</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHORTEN WAITING TIME BEFORE FIRST APPOINTMENT</td>
<td>14.7</td>
<td>57.1</td>
<td>43.3</td>
</tr>
<tr>
<td>MORE INFO TO PROFESSIONALS RE: SERVICE</td>
<td>41.2</td>
<td>16.7</td>
<td>20.0</td>
</tr>
<tr>
<td>MORE FEEDBACK TO REFERRER RE: PROGRESS OF CLIENT</td>
<td>20.6</td>
<td>7.1</td>
<td>13.3</td>
</tr>
<tr>
<td>NEW TYPE OF SERVICE E.G.: CRISIS INTERVENTION</td>
<td>2.9</td>
<td>9.5</td>
<td>20.0</td>
</tr>
<tr>
<td>MORE TEAM WORK WITH OTHER PROFESSIONALS</td>
<td>17.6</td>
<td>9.5</td>
<td>0.0</td>
</tr>
<tr>
<td>MORE INFORMATION TO CLIENTS RE: SERVICE</td>
<td>2.9</td>
<td>0.0</td>
<td>3.3</td>
</tr>
</tbody>
</table>
4.2 Multidimensional Scalogram Analysis

Associations will be presented in groups of six, three from the high satisfaction group, followed by three from the low satisfaction group. The group membership will be indicated as necessary. This was felt to be the clearest way in which to present the MSA data in order to facilitate any comparisons between the high and low satisfaction groups.

The association between overall satisfaction and satisfaction with time child had to wait for an appointment following referral - High Satisfaction Group (Plots 3 and 4)

The plots suggest that the majority of respondents who were somewhat satisfied with the length of time the referred person had to wait before their first appointment (plot 4) were more likely to be somewhat satisfied with the overall service they received (plot 3). There is no clear relationship between those respondents who were very satisfied with the overall service they received from the specialty (plot 3) and their satisfaction with waiting time for first appointment (plot 4).

The association between overall satisfaction and satisfaction with the amount of communication received from the specialty following referral - High Satisfaction Group (Plots 3 and 5)

The plots suggest that those respondents who were very satisfied with the overall service they received (plot 3) were more likely to be either very satisfied or somewhat satisfied with the amount of communication they received from the specialty following referral (plot 5). The majority of respondents who were
somewhat satisfied with amount of communication received (plot 5) were also somewhat satisfied overall with the service (plot 3).

The association between satisfaction with time child had to wait for an appointment following referral and satisfaction with the amount of communication received following referral - High Satisfaction Group (Plots 4 and 5)

The majority of respondents who were very satisfied with amount of communication received (plot 5) were very or somewhat satisfied with length of wait before first appointment (plot 4). Respondents who were somewhat dissatisfied with the amount of communication received following a referral (plot 5) were very dissatisfied with the length of wait between referral and first appointment (plot 4). The majority of respondents who were very dissatisfied with the length of wait (plot 4) were somewhat satisfied with the amount of communication they received following referral (plot 5).

The association between overall satisfaction and satisfaction with time child had to wait for an appointment following referral - Low Satisfaction Group (Plots 6 and 7)

The plots suggest that those respondents who were very dissatisfied with the overall service they received (plot 6) were very dissatisfied with the time a child had to wait for a first appointment (plot 7). There was also a group of respondents who were very dissatisfied with the length of time a child had to wait for a first appointment (plot 7) who overall were either not really satisfied or somewhat dissatisfied with the service they received (plot 6).
wait for a first appointment (plot 7) who overall were either not really satisfied
or somewhat dissatisfied with the service they received (plot 6).

The association between overall satisfaction and satisfaction with the amount of
communication received from the specialty following referral - Low
Satisfaction Group (Plots 6 and 8)
The majority of respondents who were very dissatisfied overall (plot 6) were
also very dissatisfied with the amount of communication they received after
making a referral (plot 8). The majority of respondents who gave the higher
rating of somewhat satisfied with the amount of communication they received
(plot 8) were actually somewhat dissatisfied with the service overall (plot 6).

The association between satisfaction with time child had to wait for an
appointment following referral and satisfaction with the amount of
communication received following referral - Low Satisfaction Group (Plots 7
and 8)
The plots suggest that the majority of respondents who were very dissatisfied
with length of wait before a first appointment (plot 7) were very dissatisfied
with the amount of communication they received following making a referral
(plot 8).
The association between benefits of making a referral - reduction in time spent by referrer with referred person and less need to refer on to another professional - High Satisfaction Group (Plots 9 and 10)

The plots suggest that there is a link between a reduction in time a referrer spends with a referred person (plot 9) and less need to refer on to another professional (plot 10) as benefits of referring to the child and adolescent specialty. There was a small group of respondents who found that a benefit of referral was the need to spend less time with the referred family (plot 9) but who did not perceive there to be less need to refer the family on to another professional following referral to the child and adolescent specialty (plot 10).

The association between benefits of making a referral - reduction in time spent by referrer with referred person and increase in referrers knowledge or understanding of the Child & Adolescent Specialty - High Satisfaction Group (Plots 9 and 11)

The majority of respondents who felt that referral resulted in less time spent with the referred person (plot 9) felt they gained an increased knowledge or understanding of the specialty as a result of making the referral (plot 11). Most respondents who did not spend less time with the referred person (plot 9) also gained increased knowledge or understanding of the specialty (plot 11).
The association between benefits of making a referral - less need to refer on to another professional and increase in referrers knowledge or understanding of the Child & Adolescent Specialty - High Satisfaction Group (Plots 10 and 11)

The plots suggest that the majority of respondents who found that a benefit of referral was less need to refer on to another professional (plot 10) also benefited by an increase in their knowledge or understanding of the specialty (plot 11).

The association between benefits of making a referral - reduction in time spent by referrer with referred person and less need to refer on to another professional - Low Satisfaction Group (Plots 12 and 13)

The majority of respondents who did not find that there was a reduction in time spent with the referred person (plot 12) also did not perceive there to be less need to refer on to another professional (plot 13).

The association between benefits of making a referral - reduction in time spent by referrer with referred person and increase in referrers knowledge or understanding of the Child & Adolescent Specialty - Low Satisfaction Group (Plots 12 and 14)

The plots suggest that the majority of respondents who did not find that there was a reduction in time spent with the referred person (plot 12) also did not feel that they benefited by an increase in knowledge or understanding about the specialty (plot 14). Of the respondents who did benefit by spending less time with the referred person (plot 12) most did not increase their knowledge of the
specialty (plot 14) whereas most respondents who felt they increased their knowledge of the specialty (plot 14) did not benefit by spending less time with the referred person (plot 12). There were only two respondents in this group who benefited by spending less time with the referred person (plot 12) and increasing their knowledge of the specialty (plot 14).

The association between benefits of making a referral - less need to refer on to another professional and increase in referrers knowledge or understanding of the Child & Adolescent Specialty - Low Satisfaction Group (Plots 13 and 14) The plots suggest some association between those who did not feel that they gained either benefit - neither did they find less need to refer on to another professional (plot 13) nor did they benefit by an increase in their knowledge or understanding of the Child & Adolescent Specialty (plot 14). There were only four respondents who benefited both by less need to refer on to another professional (plot 13) and by an increase in their knowledge or understanding of the Child & Adolescent Specialty (plot 14).

The association between factors affecting the decision to refer to the Child & Adolescent Specialty - perceived need for diagnosis of psychological factors in the presenting difficulty and perceived need for psychological intervention on the part of the referrer - High Satisfaction Group (Plots 15 and 16) The majority of respondents whose decision to refer was based on the need for diagnosis of psychological factors (plot 15) also based their decision on their perceived need for psychological intervention (plot 16). There were a number of respondents who based their decision to refer on either one or the other of
these factors; those who did not require psychological diagnosis (plot 15) did perceive a need for psychological intervention (plot 16). Similarly, those who did not base their decision to refer on a perceived need for psychological intervention (plot 16) did base their decision on a perceived need for diagnosis of psychological factors in the presenting difficulty (plot 15).

The association between factors affecting the decision to refer to the Child & Adolescent Specialty - perceived need for diagnosis of psychological factors in the presenting difficulty and perceived need for psychological intervention on the part of the family - High Satisfaction Group (Plots 15 and 17).

The plots suggest a link between the need for diagnosis of psychological factors in the presenting difficulty (plot 15) and the perceived need for psychological intervention on the part of the family (plot 17). The majority of those who did not base their decision to refer on the need for diagnosis of psychological factors (plot 15) did refer due to a perceived need for psychological intervention on the part of the family (plot 17).

The association between factors affecting the decision to refer to the Child & Adolescent Specialty - perceived need for psychological intervention on the part of the referrer and perceived need for psychological intervention on the part of the family - High Satisfaction Group (Plots 16 and 17).

The majority of respondents based their decision to refer on perceived need for psychological intervention by both the referrer (plot 16) and the family (plot 17). Of the referrers who did not perceive a need for psychological
intervention (plot 16) the majority of families did perceive a need (plot 17) and this then formed the basis of the referrers decision to refer to the specialty.

The association between factors affecting the decision to refer to the Child & Adolescent Specialty - perceived need for diagnosis of psychological factors in the presenting difficulty and perceived need for psychological intervention on the part of the refer - Low Satisfaction Group (Plots 18 and 19)

The majority of respondents who based their decision to refer on the perceived need for diagnosis of psychological factors (plot 18) also perceived a need for psychological intervention on the part of the referer (plot 19). Those who did not base their decision to refer on the need for diagnosis (plot 18) did base their decision on the perceived need for psychological intervention (plot 19) and vice versa.

The association between factors affecting the decision to refer to the Child & Adolescent Specialty - perceived need for diagnosis of psychological factors in the presenting difficulty and perceived need for psychological intervention on the part of the family - Low Satisfaction Group (Plots 18 and 20)

The plots suggest there is some link between the perceived need for diagnosis of psychological factors in the presenting difficulty (plot 18) and the perceived need for psychological intervention on the part of the family (plot 20). However, of the respondents who did not perceive there to be a need for diagnosis of psychological factors (plot 18) the majority based their decision to refer on the perceived need for psychological intervention on the part of the family (plot 20).
The association between factors affecting the decision to refer to the Child & Adolescent Specialty - perceived need for psychological intervention on the part of the referrer and perceived need for psychological intervention on the part of the family - Low Satisfaction Group (Plots 19 and 20) 

The plots suggest that the respondents who did not base their decision to refer on their own perception of need for psychological intervention (plot 19) did base their decision on the perception of need for psychological intervention on the part of the family (plot 20). Half of the respondents based their decision on both their own perception of need for intervention (plot 19) and that of the family (plot 20).
MSA Plot 1: Plot of the respondents - High Satisfaction Group

Each point represents a referrer to the Child and Adolescent Specialty. Numbers 1 - 10 = General Practitioners, 11 - 20 = Teachers, 21 - 30 = Health Visitors. The closer together any two individuals are the more similar are their profiles on the data matrix. All subsequent plots in the High Satisfaction Group are overlain on Plot 1 to study the relationship between the variables with the initial distribution of respondents.
MSA Plot 2: Plot of the respondents - Low Satisfaction Group

Each point represents a referrer to the Child and Adolescent Specialty. Numbers 1 - 10 = General Practitioners, 11 - 20 = Teachers, 21 - 30 = Health Visitors. The closer together any two individuals are the more similar are their profiles on the data matrix. All subsequent plots in the Low Satisfaction Group are overlain on Plot 2 to study the relationship between the variables with the initial distribution of respondents.
MSA Plot 3: Overall Satisfaction - High Satisfaction Group

1 = Very Satisfied
2 = Somewhat Satisfied
MSA Plot 4: Satisfaction with length of wait between referral and first appointment - High Satisfaction Group

1 = Very Satisfied
2 = Somewhat Satisfied
3 = Not Really Satisfied
4 = Somewhat Dissatisfied
5 = Very Dissatisfied
MSA Plot 5: Satisfaction with amount of communication received following referral - High Satisfaction Group

1 = Very Satisfied
2 = Somewhat Satisfied
3 = Not Really Satisfied
4 = Somewhat Dissatisfied
MSA Plot 6: Overall Satisfaction - Low Satisfaction Group

1 = Not Really Satisfied
2 = Somewhat Dissatisfied
3 = Very Dissatisfied
MSA Plot 7: Satisfaction with length of wait between referral and first appointment - Low Satisfaction Group

1 = Somewhat Satisfied
2 = Not Really Satisfied
3 = Somewhat Dissatisfied
4 = Very Dissatisfied
MSA Plot 8: Satisfaction with amount of communication received following referral - Low Satisfaction Group

1 = Somewhat Satisfied
2 = Not Really Satisfied
3 = Somewhat Dissatisfied
4 = Very Dissatisfied
MSA Plot 9: Benefits of referring to Child & Adolescent Specialty - Reduction in time spent by referrer with referred person or their family - High Satisfaction Group

1 = Yes
2 = No
MSA Plot 10: Benefits of referring to Child & Adolescent Specialty -
Less need to refer to another professional - High Satisfaction Group

1 = Yes
2 = No
MSA Plot 11: Benefits of referring to Child & Adolescent Specialty - Increase in referrer’s knowledge or understanding of the Specialty - High Satisfaction Group

1 = Yes
2 = No
MSA Plot 12: Benefits of referring to Child & Adolescent Specialty - Reduction in time spent by referrer with referred person or their family - Low Satisfaction Group

1 = Yes
2 = No
MSA Plot 13: Benefits of referring to Child & Adolescent Specialty -
Less need to refer to another professional - Low Satisfaction Group

1 = Yes
2 = No
MSA Plot 14: Benefits of referring to Child & Adolescent Specialty -
Increase in referrer's knowledge or understanding of the Specialty - Low Satisfaction Group

1 = Yes
2 = No
MSA Plot 15: Factors affecting decision to refer to Child & Adolescent Specialty - Perceived need for diagnosis of psychological factors in presenting difficulties - High Satisfaction Group

1 = Yes
2 = No
MSA Plot 16: Factors affecting decision to refer to Child & Adolescent Specialty - Perceived need for psychological intervention on the part of the referrer - High Satisfaction Group

1 = Yes
2 = No
MSA Plot 17: Factors affecting decision to refer to Child & Adolescent Specialty - Perceived need for psychological intervention on the part of the family - High Satisfaction Group

1 = Yes
2 = No
MSA Plot 18: Factors affecting decision to refer to Child & Adolescent Specialty - Perceived need for diagnosis of psychological factors in presenting difficulties - Low Satisfaction Group

1 = Yes
2 = No
MSA Plot 19: Factors affecting decision to refer to Child & Adolescent Specialty - Perceived need for psychological intervention on the part of the referrer - Low Satisfaction Group

1 = Yes
2 = No
MSA Plot 20: Factors affecting decision to refer to Child & Adolescent Specialty - Perceived need for psychological intervention on the part of the family - Low Satisfaction Group

1 = Yes
2 = No
5. DISCUSSION

This section of the study provides a summary and discussion of the results in relation to the objectives and aims, a comparison of the findings to existing empirical literature, suggests possible directions for the development and improvement of the service, and outlines the limitations of the current study and implications for future research.

5.1 Summary of Results in Relation to Objectives and Aims and Comparison with Existing Research:

The overall objective of this study was to obtain the views of all current or potential referrers to the Worthing Priority Care NHS Trust Psychology Service - Child & Adolescent Specialty. The results shown in Table 1: Participants and Returned Questionnaires, indicates that this objective was well met. Two hundred and sixty-nine questionnaires were sent out and one hundred and fifty completed questionnaires were returned. This indicates an overall response rate of 63% which compares favourably with reported return rates of 30 to 46% in broadly similar studies (Lebow 1982). The rate ranged from 84% of Health Visitors to 20% of Educational Psychologists. Although this study was limited to a particular geographical area, it did attempt to sample the entire population of professionals who can refer to the service. It therefore seems likely that the current findings can be generalised to all referrers within this area. In carrying out statistical analysis of the data, the information supplied by teachers, general practitioners and health visitors was utilised. The numbers of other professionals who responded did not make up large enough samples to which statistical
procedures could be validly applied. It does not follow however, that the responses made by these professional groups or individuals are not important or worthy of comment. Therefore the answers given by these professionals will be reported throughout the following discussion by descriptive methods in order to insure that adequate representation is given to their views.

A series of one way ANOVAs and Chi-Square tests of association were performed to explore the relationship between responses and membership of particular professional groups. Multidimensional Scalogram Analysis (MSA) was then performed to enable an investigation of the way in which responses to particular issues related to responses to other issues, thus allowing any pattern in types of responses to be illustrated. The results are initially discussed in terms of the relationship between professional group membership and responses, followed by a discussion of the results of the MSA procedure.

5.1.1 Satisfaction with waiting time before first appointment -

The first aim of the current study was to elicit the levels of satisfaction felt by all actual referrers to the service on a number of specified variables. Previous research findings (e.g. Powell & Williams 1991 and Cookson & Fuller 1995) reporting significant differences in satisfaction levels between different professional groups informed the current study. A one-way analysis of variance indicates that such a difference was present in the current study for the variable of satisfaction with waiting time between making the referral and when the family were seen by a clinical psychologist. The group of General Practitioners
were significantly less satisfied with the average length of waiting time for the first appointment than were the group of Teachers who responded. This result is not surprising when taken with the results from Table 5ii: Reasons for Not Referring to the Child & Adolescent Specialty, in which it becomes apparent that a large proportion of those teachers who choose not to refer to the clinical psychology service make this decision because the children in their care receive psychological input from other sources, predominantly Educational Psychologist. It appears that the GPs who responded to the questionnaire have an expectation that clients who require psychological input should do so soon after referral is made. This of course is not an unreasonable expectation. However, the history of under-funding within the Worthing Priority Care NHS Trust has resulted in very low levels of clinical psychology input for the child & adolescent population. The GPs therefore appear to be responding to a very real inadequacy within the service as it stands at present, as the waiting time for a first appointment with the Child & Adolescent Specialty has in the past been as long as two years, although currently stands at a greatly reduced time of approximately eight months. The referrers appear to be indicating that even this wait is too long.

This finding of the current study confirms much of the previously published work in this area. Eastman & McPherson (1982), for example, carried out structured interviews with 30 randomly selected general practitioners to discover how they perceived and handled psychological problems in their patients and their perceptions of the input they received. They found that one of the two
most common reasons for the GP’s discontent with existing services was that there were long delays involved between a patient being referred and being seen by a clinical psychologist. A more recent study by Broome (1994), which aimed to investigate professional’s perceptions of psychology and how well the services meet consumers’ requirements, also found that although GPs put a high value on psychologists, most respondents in her study indicated that they had got tired of long waiting lists. Chadd & Svanberg (1994) utilised a repertory grid technique to analyse the results of their survey of GPs’ perceptions of different mental health professionals. Their analysis indicated that clinical psychologists were regarded as more inaccessible than other service providers. This point will be returned to later with reference to future improvements to the specialty under current examination.

5.1.2 Satisfaction with communication received following referral -
Statistical analysis of the different professional’s satisfaction with the amount of communication they received following a referral being sent to the Child & Adolescent Specialty shows no significant difference between the groups. However, it is worth noting that the overall satisfaction with this variable indicated that teachers and health visitors were “not really satisfied” with the amount of communication they received, and the GPs indicated that they were only “somewhat satisfied”. When asked if they wanted more or less communication from the psychology service following a referral, the only two respondents who indicated that they wanted less were GPs. This result was replicated in the answers given by the other groups of professionals who
responded to the questionnaire. Both of the paediatricians reported that they would like more communication following a referral, as did the one physiotherapist who responded and one of the three education welfare officers (the other two did not supply an answer to this question). This appears to be another area in which the service is falling short of referrers expectations, in terms of failing to supply the referrer with an adequate amount of information about what has happened to a referral once it has been received. Previous research carried out by Stallard & Hudson (1993) investigating referrer satisfaction with a child and adolescent psychology service, reported a high percentage of respondents (60%) satisfied with the amount of communication they received after making a referral. This is a marked discrepancy with the current findings. However, similar to the current study, Stallard & Hudson (1993) found that those respondents who were not satisfied indicated that they would value more follow-up letters. Therefore, in the previous and current studies dissatisfaction was not due to referrers feeling that they receive too much redundant information, rather that they felt inadequately informed about the work carried out with the clients they refer. This is clearly an area for future improvement and will be returned to later.

5.1.3 Overall satisfaction -

Overall satisfaction with the service was not statistically different for the three main groups of respondents. However, overall satisfaction was indicated as being at the "somewhat satisfied" level for teachers and general practitioners and at the lower level of "not really satisfied" for health visitors. Previous research
into satisfaction with health care provision has resulted in contradictory findings. Many published studies indicate high levels of overall satisfaction, e.g. Stallard & Hudson (1993) and Espie & White (1986). However, Ware et al (1983), in a comparison of satisfaction scores, found that those respondents who were more satisfied with the care they received were less likely to return their questionnaires. This raises two questions; one regarding the ability to accurately generalise the results of the current study and the other regarding the possible artefact created by the publication of only those studies which achieve positive results. The latter point is a problem which plagues all areas of psychological research and as such can not be easily redressed. However, it is an issue that is valuable to keep in mind during the exploration of previous research findings and their comparison with current results. In answer to the former point, the author refers again to the high response rate of the three statistically analysed groups: 84% of health visitors, 65% of teachers and 61% of general practitioners. While acknowledging the point raised by Ware et al (1983), it seems likely that these high response rates indicate a true reflection of the overall levels of satisfaction with the Child & Adolescent Psychology Service.

The low levels of overall satisfaction are disappointing for the psychology service under scrutiny as they indicate a lower level than past studies have reported. Stallard & Hudson (1993), for example, report that 69% of respondents to their referrer satisfaction survey indicated that they were very or mostly satisfied with the service they received. However, when taken in the context of the severe under-funding in which the specialty in the current study has had to operate in
the past, it is perhaps not a surprising result. It is clearly not enough however to excuse the low levels of satisfaction because of historical under-funding. One of the aims of the current study was to highlight ways in which the service could be improved so that in the future referrers may be increasingly satisfied with the Child & Adolescent Specialty. These issues will therefore be returned to later.

5.1.4 Benefits of referring to the specialty -

The second main aim of the current study was to obtain referrers impressions of the benefits that referring to the specialty had for the referred family and/or the referrer themselves. The benefits of the psychologists' involvement was targeted as another way to access the referrer's feelings of satisfaction with the service they received. A study by Powell & Williams (1991) formed the basis of the questions asked in this section. Results of the Powell & Williams study indicated that 51.1% of respondents felt that the psychologist's involvement led to a reduction in time the referrer had to spend with the client. The same percentage of respondents replied that referral resulted in less need to refer on to another professional and 57.9% of referrers felt that the psychologists involvement resulted in a reduced stigma associated with a referral to a psychiatric hospital. This latter point was not relevant to the current study and thus the question of increased referrer understanding of the Child & Adolescent Specialty was substituted as it was believed that such knowledge would be lacking if no referral had taken place, as a function of the limited time that the service has in the past been able to devote to education of referrers due to limited resources.
1) REDUCTION IN TIME SPENT WITH CLIENT FOLLOWING REFERRAL -

Results indicated that membership of a specific group of professional referrer did not affect the perception that making the referral reduced the time that the professional subsequently had to spend with the referred child or family. As might be expected, however, more respondents in the group of teachers answered negatively to this question as they would have contact with children in the course of their day regardless of the psychological problems that the child presents with.

Two well controlled studies investigating clinical psychology in primary care settings explored the benefits of psychological involvement with clients (Earll & Kincey 1982 and Robson, France & Bland 1984). Both studies report that the subject group, i.e. those who saw a psychologist, made fewer visits to their GP than the control group, i.e. those who continued to only be seen by their GP. Interestingly, the Robson et al (1984) results showed this benefit was maintained 24 weeks after psychological intervention had finished. Analysis of responses in the current study indicated that 48.9% of all those professionals who refer to the service felt that by making the referral they subsequently had to spend less time with the referred family.

It is of interest to note that the three Education Welfare Officers (EWOs) replied that this benefit occurred as a result of referring to the specialty. This is an
important finding as the majority of children with whom the EWOs become involved are children or adolescents who are involved in school refusal. By indicating that psychologists’ involvement is beneficial, it appears that the joint work undertaken between the psychologists and EWOs is largely successful in limiting the school refusal of these children, thus reducing the time that the EWOs need to devote to the children. This is clearly only an hypothesis drawn from the current results, but is one that is worthy of further investigation and as such will be returned to later in this discussion.

2) LESS NEED TO REFER TO ANOTHER PROFESSION

Results indicated that this potential benefit of referring did not differ between groups. 48.9% reported that referring to the Child & Adolescent Specialty resulted in less need to refer on to another professional. The one educational psychologist who responded to this question and all three of the EWOs also stated that this benefit resulted from clinical psychology involvement. On the other hand, neither the paediatrician nor the physiotherapist noted this benefit. It is likely the children with whom these two groups of professionals are involved have a number of other physical difficulties which contribute to their presentation. It would be expected therefore that the involvement of the psychologist would not reduce the need for these health care workers to refer on to another professional for input into their physical needs.
3) INCREASE IN REFERREES KNOWLEDGE OR UNDERSTANDING OF CHILD & ADOLESCENT PSYCHOLOGY SPECIALTY

Slightly more than half of the respondents (52.1%) felt that by making the referral they had increased their knowledge or understanding of the Child & Adolescent Clinical Psychology Specialty, with no significant between group differences. However, it is interesting to note that this benefit was particularly indicated by the group of teachers. Of the teachers who replied to this question, almost twice as many felt that it was a benefit compared to those who did not. This finding may result from the fact that both general practitioners and health visitors are trained within the health service and are subsequently likely to have some previous knowledge of the type of work that is carried out by a clinical psychology service, whereas teachers may not have had the opportunity to gain this knowledge until making a referral to the specialty. This too is purely an hypothesis at this stage and might warrant further investigation in the future.

5.1.5 Factors effecting the decision to refer to the specialty -

Referral to secondary services represents a decision by the primary carer, and possibly the client, to involve a third party in the management of the problem (Farrow & Jewell 1990). Referral to specialist services may be straightforward, as in the case of a GP who diagnoses an acute surgical condition. At other times, however, referral to a particular specialist may be only one of a number of options available to the primary care worker. Farrow & Jewell (1990) use as an
example of the complex factors effecting decisions to refer, the case of a patient who presents to their GP with a psychological problem. The GP is faced with the decision of referring the patient on for either simple counselling and support, pharmacological or non-pharmacological measures prescribed by the doctor of first contact, referral to other doctors or paramedical workers within the primary health care team, various forms of complimentary medicine, referral to a psychiatrist or referral to a clinical psychology service. The options available to teachers and health visitors when faced with a similar problem are just as daunting in their variety.

Given the complexity of paths down which a primary carer could choose to travel when faced with a problem of suspected psychological origin, it was deemed necessary to ascertain the reasons why a referral may be made to the Child & Adolescent Specialty. In doing so it was hoped that a profile of referrers expectations of the specialty could be drawn-up with the aim that future service provision could be targeted at meeting these specific expectations. The options presented in this section of the questionnaire were based on a study carried out by Coulter et al (1989) who analysed reasons for referral from general practitioners to secondary health care professionals. The findings indicated five main areas that affected the decision to refer: 1) perceived need for diagnosis by a specialist, 2) perceived need for particular treatment, 3) advice on management, 4) perceived need for reassurance of the patient and 5) requests for consultants to take over cases. Clearly the latter of these findings was not relevant to the current specialty under consideration as the GP will always
maintain the overall duty of care in cases that are being seen by a clinical psychologist, so this point was omitted from the current study. The other four issues were consolidated and refined into a format that was felt to pertain to all professional referrers in the current study.

Analysis of the current results indicated that both the perceived need for diagnosis of possible psychological factors in the presenting problem and the perceived need for psychological intervention on the part of the family were independent of the referrer's profession. Three quarters of all respondents indicated that these elements were important factors in determining their decision to refer. This point will be returned to later with regard to developments for future services offered by the Child & Adolescent Clinical Psychology Specialty.

Analysis of responses relating to perceived need for psychological intervention on the part of the referrer indicated that membership of a particular professional group does have an effect on this variable. Results indicate that the group of teachers and general practitioners are more likely to base their decision to refer to the service on this factor, than was the group of health visitors in the sample.

Two thirds of all respondents to this question indicated that the referrers perception of need played a part in their decision to refer. This was a lower percentage than was evident in the previous two questions regarding decision to refer. It appears therefore, that the need for diagnosis of psychological factors in presenting difficulties and the family's desire for psychological intervention were
more likely to affect the decision to make a referral to the specialty than was the referers perceived need for intervention.

The question and specified options regarding the decision to refer drew upon previous research (Coulter et al. 1989). However, it was believed that the list supplied was not fully inclusive. Contrary to expectations, only two professionals specified a further reason for referring (both respondents were teachers who indicated that their decision to refer was based on their perceived need for guidance regarding ways to deal with specific problems that had arisen with children in their care). There are two possible reasons for this result; firstly that the question did encompass all the factors that effect the decision to refer and therefore the respondents did not feel it necessary to specify any further reasons, or secondly that the format of the question did not encourage respondents to specify further answers. It seems likely that the second of these possibilities constitutes the answer. By having three possibilities already generated, the respondents may have been discouraged from including more of their own. This is a drawback of using a questionnaire to gather information. It is not possible to judge the effect that demand characteristics had on the responses that were supplied.

5.1.6 Reasons for not referring to the Child & Adolescent Specialty

The fourth aim of the current study was to gain insight into the reasons why some professionals who can refer to the specialty currently do not do so. The importance of undertaking such an exploration is highlighted in the literature
which indicates that consumers have a considerable capacity to receive and handle information about the products or services they have a choice of purchasing (Engle et al. 1986). Consumer choice is portrayed as an ego-involving sequence of cognitive, affective and conative changes which precede and predetermine the purchase/no purchase outcome.

In the current study there are three factors which appear to be of particular significance in affecting the professionals’ decisions to not refer to the specialty (see Table 5i). Potential referrers perceive that waiting time for the first appointment is too long, they are unaware of the type of intervention offered by the service and/or they are unaware of the presence of the service, with almost 50% of the total number of responses to this question falling into these three categories. It is clear that with negative perceptions of these elements the potential consumers (referrers) remain just that - potential - and do not move on to make the choice of actually purchasing the service.

In his model of consumer behaviour Foxall (1990) indicates that the consumers motives and comprehension of the product determine the degree of confidence they place in it and subsequently effects their actual purchase behaviour. These elements appear to play a role in purchasing behaviour of the professionals who do not refer to the specialty. Results from the current study indicate that referrers want their clients to be seen quickly, but the reality is a substantial wait for the first appointment. In this way the referrer’s motives in making a referral are unachievable in the current service delivery. In terms of comprehension, the
results indicate a substantial lack of understanding about the service which they could purchase. This finding seems to indicate that there is some comparability between models of consumer behaviour and health purchasing decisions - motives and comprehension of the Child & Adolescent Specialty appear to have a major impact on purchase behaviour, as indicated by Foxall's (1990) model of consumer behaviour.

It may prove useful to have the model of consumer behaviour to draw upon when the Child & Adolescent Specialty begins to encourage those professionals who currently do not refer to the service to change their behaviour and increase the referrals to the specialty. The model provides insight into the purchasing behaviour of consumers and in this way may enable the specific elements which contribute to the no-purchase decision in this particular situation to be targeted for change.

It appears that professionals are currently choosing not to purchase, as opposed to not having contact with children or adolescents who require input. Only 2.8% of all respondents to this question indicated that they do not actually see children who require psychological input and this was from professionals who were newly qualified or who had recently moved to the area.

There are marked discrepancies in the reasons for not referring as given by the different professional groups. The group of teachers were most likely to respond that they were unaware of the type of intervention offered by the specialty, that
they were unaware of the type of difficulties to refer and that their psychology input was received from other sources. The other two groups had very low percentages of responses to the question of input being received from other sources. The children they see with psychological elements to their presenting difficulties appear not to receive any psychological input, or if they do it may be in very limited supply and possibly not from clinical psychologists. The largest number of GPs indicated that they were unaware of the presence of the child psychology service, a finding that is not surprising given the lack of time that has been available in the past for the advertising of the service or the education of professional referrers. The second main reason for GPs not referring was that they refer to other professionals who then refer to psychology. This is not surprising given the number of professionals with whom general practitioners have contact. It may be that they attempt to avoid the long wait for a first appointment which is inevitable with a referral to psychology, by referring to a professional who they believe may be able to facilitate change more quickly.

The primary reason stated by health visitors for not referring was the long wait for first appointment. Given that this group of professionals has direct contact with clients in the community, it may be that they are in the most regular contact with the whole family. They are likely to acutely feel the distress that may be caused to families by the presenting problem in the long interval between referral and first appointment. Although very few respondents indicated that they were unaware of the presence of the specialty, the second and third largest number of responses from health visitors indicated that they were unaware of the type of
intervention offered and the type of difficulties to refer. There is clearly a need here for the psychologists in the specialty to devote more time to the dissemination of information about the specialty. This carries with it its' own problems however, which will be returned to later in terms of future developments for the service.

5.1.7 Suggested ways to improve the Child & Adolescent Specialty

A number of suggestions were made regarding ways to improve the service. The most frequently made suggestion overall was, not surprisingly, to shorten waiting times. However, the group of teachers were most likely to suggest that it would be helpful to have more information about the service. This goes along with the findings reported in the previous section regarding reasons for not referring to the specialty, i.e. teachers responded most frequently that a lack of awareness about the service and type of difficulties to refer was the reason for not referring. Another common suggestion was an increase in feedback to referrers regarding progress of clients. This tallies with the finding that most referrers were only somewhat satisfied with the amount of communication they received from the specialty following receipt of a referral. An interesting and commonly stated response was the suggestion of new types of service provision. This was predominantly by health visitors and included such suggestions as home visits, out-reach work to facilitate easier access for clients living in the remote geographical areas of the health district, clinics for specific difficulties such as enuresis and encopresis, assessment clinics and finally a crisis intervention service (a suggestion commonly made by general practitioners).
These responses reflect the particular way in which health visitors work and would no doubt result in a service which more closely met their needs. It might, however, prove to be at the cost of a satisfactory service to the other groups of professional referrers, such as teachers. Although the service can not be all things to all men, it is useful to have this information in order that future services may be tailored to meet referrers needs as much as possible.
5.1.8 Discussion of Multidimensional Scalogram Analysis results

In analysing the results of the current study using the MSA procedure it was necessary to base the analysis on a subset of the data collected, as the quantity of data was too great to utilise it all in such an analysis. Therefore, twenty respondents from each professional group of General Practitioners, Teachers and Health Visitors was chosen. The subsets “High Satisfaction Group” and “Low Satisfaction Group” were based on the respondents’ rating of their overall satisfaction with the service they received from the Child & Adolescent Specialty. The MSA procedure was carried out on the High Satisfaction Group made up of ten respondents from each of the three main professional groups who indicated high overall satisfaction (very satisfied or somewhat satisfied) and then on the Low Satisfaction Group made up of ten respondents from each of the three professional groups who indicated low overall satisfaction (not really satisfied, somewhat dissatisfied or very dissatisfied) with the service.

Nine variables were used in the analysis which included satisfaction ratings on three variables: length of time between referral and first appointment, amount of communication received following referral and overall satisfaction with the service received; the referrers impressions of the benefits that referring to the specialty had for the referred family and/or the referrer; and the factors that affect a professionals’ decision to refer to the specialty. In conducting MSA procedures on the data in this way associations could be made, based on the aims of the current study, which highlight the links between different measures of satisfaction, benefits of making the referral, decisions to refer and links
between the high and low satisfaction groups. Patterns in types of responses are discussed below.

It emerges from the analysis of the high satisfaction group that there is no clear relationship between ratings of very high overall satisfaction and degree of satisfaction with length of wait between making the referral and the first appointment. There does appear to be a link, however, between high overall satisfaction and high satisfaction with amount of communication received after making a referral. It appears that amount of communication has more bearing on level of overall satisfaction than does the length of wait for a first appointment. This is contradictory to the findings discussed previously which emphasized the importance that different professional groups, General Practitioners in particular, placed on waiting time and the apparent dissatisfaction with the current length of the wait.

It is in exploring the association that emerges between overall satisfaction and satisfaction with waiting time in the low satisfaction group that some clarity begins to emerge. There is a link between these two variables in the low satisfaction group - those who were very dissatisfied overall were also very dissatisfied with length of wait. It appears therefore, that it is those referrers for whom there is general dissatisfaction with the service who felt the current long waiting time to be particularly significant. It is interesting to note that those respondents in the low satisfaction group who were very dissatisfied overall were also very dissatisfied with the amount of communication they received following making a referral, indicating that the length of wait combined with
low levels of communication contributed to the overall dissatisfaction with the service for this group of respondents. However, there was a subset of respondents in the low satisfaction group who were somewhat satisfied with the communication received, but who were still dissatisfied overall. This is another indication of the importance that the low satisfaction group placed on the waiting time. It appears to be more influential in determining overall satisfaction, or lack there of, than does amount of communication.

In exploring the links between the different benefits of making a referral to the Child & Adolescent Specialty, it becomes clear that for those respondents in the high satisfaction group there is an association between making a referral and an increase in the referrer's knowledge or understanding of the specialty, regardless of the other benefits experienced. For the low satisfaction group however, there seem to be generally fewer perceived benefits of referring. Those who did not benefit by spending less time with the referred family also did not benefit by having less need to refer on to another professional and on top of this they generally did not feel that they gained an increase in knowledge or understanding of the specialty. It is difficult to draw any conclusions about the causal relationships of these variables in the low satisfaction group. It may be that they perceived fewer benefits and were therefore less satisfied overall with the service they received, or it may be the case that their lower level of overall satisfaction coloured their perception of the benefits of referral. Although the former is the more intuitively appealing explanation, without further
investigation into causal relationships within this group one should avoid
drawing premature conclusions. This may be an area of further study arising
from the current investigation.

In relation to observed links between the factors that affect the professionals’
decisions to refer to the specialty it becomes clear that, in contrast to the two
previous sets of data investigated for associations, level of overall satisfaction
does not play a role in the factors that affect the decision to refer. The majority
of professionals who based their decision to refer to the specialty on the
perceived need for diagnosis of psychological factors in the presenting difficulty
also indicated that they and the family perceived a need for psychological
intervention for those difficulties. However there was a small subgroup who
based their decision on one of other of these factors.

In the case where the referrer did not perceive a need for diagnosis, there
appeared to be general agreement between the professional and the family
regarding the need for psychological intervention which served to prompt the
professional to refer to the specialty. In cases where the professional neither
wanted diagnosis nor psychological intervention, it seems that they were willing
to base their decision to refer on the families desire for psychological
intervention, thus apparently willing to be guided by the families’ wishes for
psychological intervention. In all of the associations between the various
factors affecting the professionals decision to refer the same was found within
both the high and low overall satisfaction groups.
The discussion will now move on to focus on the future development of the Child & Adolescent Specialty given the quantity of information that has been accumulated and explored in the preceding sections.
5.2 Future directions for development of the child & adolescent specialty

This section will outline the directions for future development to the Child & Adolescent Specialty in relation to responses to the questionnaire.

The first and most obvious suggestion for improving the specialty would be to decrease the waiting list. The long wait between referral and first appointment was the main reason for dissatisfaction in those professionals who do refer to the specialty and the main reason why professionals chose not to refer. The difficulty is that the problems clients present to referrers are invariably and understandably perceived as urgent by the client or their family. It is likely that there will always be the desire, on the part of clients and referrers, to be seen within a very short space of time from first presentation of the problem. To meet this need the service would have to offer all first appointments within a week or two of referral. This is clearly an unrealistic goal as the reality of the specialty is one of limited funds and therefore limited psychology time. Reducing waiting times to an absolute minimum would potentially result in a greater number of referrals being received, as those professionals who currently do not refer for this reason would be likely to start referring. With the increased numbers of referrals would potentially come a resulting increase in waiting time.

One possible solution to the problem of long waiting times, and one that was suggested by at least two general practitioners, is to develop a system in which all referrals are seen for an initial assessment appointment before being placed on a waiting list. This model of working has many inherent difficulties however.
Firstly, it may set up false expectations for the family that they would receive a full treatment package, only to be told after their initial session that they then have to wait for many months for a further series of appointments. This leads on to the second difficulty, one that may affect the clinical psychologist who carries out the assessment interview. There is the potential for a high level of distress to be carried with the parting of such information to clients, given that there is likely to be the expectation of treatment offered at this time. In adopting such a model of service delivery the specialty might inadvertently be contributing stress to an already stressful job. The third difficulty with this type of service provision is that there is the potential for initiating a second waiting list, i.e. clients waiting for initial assessment interviews. This would clearly be a counterproductive measure. Therefore the provision of assessment interviews prior to placement on a waiting list would not in reality either reduce the amount of time a family had to wait for treatment or serve to improve the working practice of the specialty.

The second suggestion for improvement is to supply more information to referrers about the service. This would have the benefit of countering the 57.7% of respondents who indicated a lack of understanding about the service as the reason for not referring. These included a lack of awareness in the following areas: the type of intervention offered, the presence of the specialty, type of difficulties to refer and knowledge of how to refer. By supplying more information to professionals about the service, these difficulties could largely be overcome. In response to a similar result, Powell & Williams (1991) developed
a leaflet explaining the services that were offered and targeted it at the professions who were under using their service. This might be a way forward for the current specialty, as it would represent the most time- and cost-effective way of disseminating the information.

Another change to existing services would involve the development of new types of services, such as crisis intervention, outreach and specialist clinics. Such developments would require financial input and might result in the dissatisfaction of some referrers who are satisfied with existing service provision. However, it is worth noting that specialist clinics were frequently requested, primarily by health visitors, and this might prove to be a valuable way forward in the future.

Finally, given that almost three-quarters of respondents stated that their reason for referring to the specialty was for the diagnosis of psychological factors in presenting difficulties, future services would benefit by being aimed at this element of psychological intervention. In order to satisfy referrers that diagnosis was being made, more information could be provided regarding the formulation of the presenting difficulties. This would also serve to remedy the dissatisfaction with the amount of communication that referrers currently receive following referral.

It seems therefore, that improvements to the specialty could involve the production of a leaflet for referrers with the aim of informing them about the
working practice of the specialty, an increase in communication to referrers including the likely length of wait for a first appointment and of the initial formulation following assessment, and an increase in the range of services offered to incorporate specialist and outreach clinics. However, the ultimate improvement would be a greatly reduced waiting list.

5.3 Methodological issues

At this point it is appropriate to move on to a critical analysis of the methodology of the current study. The overall objective was to obtain the views of all current and potential referrers to the Worthing Priority Care NHS Trust Psychology Service - Child & Adolescent Specialty. This objective was well met, with a response rate of 63%. However, there are a number of methodological issues that arise as a result of the format that was use to gather this information. The use of satisfaction ratings, by definition, elicits subjective data. They capture a personal evaluation of services received. Satisfaction ratings are often criticised because they do not necessarily correspond perfectly with an objective reality or with the perceptions of providers of services (Ware et al 1983). However, this is also their unique strength. They bring new information to service evaluation, reflecting personal preferences and expectations of service provision. This assumption formed the basis of utilising satisfaction measures in the current investigation.

With the acceptance of the value of satisfaction measures, the reason for their inclusion in the current study becomes clear. However, there is a
methodological flaw in the specific way in which they were utilised in the current study. The questionnaire failed to specify the period of time to which the rating of satisfaction should pertain. Therefore it is not clear from the results to exactly what time period the respondents are referring in their indication of satisfaction. This would be valuable information to have as there have been a number of changes to the service in recent months, i.e. increases in staffing levels, which may have contributed to differing levels of satisfaction with the service. A clarification of the time period to which respondents were referring would have made it more possible for the current study to identify the elements of the service which contributed to varying degrees of satisfaction. Therefore, if the questionnaire was to be reused in the future the addition of a specific time frame of satisfaction for which respondents to refer would be a valuable improvement.

The use of a structured questionnaire raises a number of methodological issues. McAuliffe & MacLachlan (1992) highlight the implications of such an approach in their critical analysis of studies of consumers' views. They state that one drawback is that particular aspects of a service are highlighted as being important to clients' "needs" and "wants" by their inclusion in a questionnaire, but that the origin of such prioritised aspects is not always clear. In the current study, these aspects were drawn from the authors knowledge of the specialty and the understanding of the particular elements that make up the service provision, as well as the findings from previous research. Time restrictions meant that it was not possible to carry out a pilot study aimed at formulating a list of priority
topics for questions to target. Carrying out such a pilot study may have improved the validity of the current study.

Cang (1989) stated that “surveys deal not with what (referrers) think, but with what survey makers think they think”. The current study attempted to overcome this criticism by including both closed and open-ended questions. The latter were designed to allow respondents to make general and unprompted comments about the service. It is possible, however, that the comments elicited were influenced by the closed questions which preceded them. This is clear in the paucity of responses generated by the open-ended elements of the questions which were preceded by forced choices. Respondents may have felt that the possible reasons stated in the questionnaire were the only possibilities, thereby limiting the generation of their own responses.

In an attempt to overcome these criticisms, McAuliffe & MacLachlan (1992) utilised a different methodology. They presented consumers with an open opportunity to write what they wished about the service they received. Participants were presented with a letter describing the study and two A4 sheets of paper on which they were required to describe one incident which represented for them an example of good service, one which represented poor service and their suggestions for improving the service. The study achieved its aim of providing high quality idiographic data which was not simply a reflection of the researchers’ expectations. However, there appeared to be a trade off of high
quality data against the number of responses received - they report a response rate of only 20%.

These criticisms are noted as possible limitations of the quality of the data gathered in the current study. However, it was felt to be vital to ascertain the views of as many referrers or potential referrers as possible, as it was the first survey of any kind carried out by the Child & Adolescent Specialty, and as such was exploratory in nature. In the same way that McAuliffe & MacLachlan (1992) traded off higher quality data for lower numbers, so the current study may have unwittingly traded off higher numbers for lower quality data.

Another difficulty with the current data is raised by the question of validity. Given both time and financial constraints it was not possible to undertake full investigations of these aspects of the questionnaire developed for the current study. However, the research began by formulating hypotheses about the nature and number of specific characteristics of the specialty that should be represented by the questionnaire to achieve content validity. Together with a review of the published literature, the items that made up the questionnaire were settled upon. Although as thorough as the time limitations would allow, the process of the questionnaire development was far from scientifically rigorous. This has been born in mind throughout the process of data analysis and it is the author's belief that in reporting the results, no unfounded claims about the data have been made.
5.4 Future research

The above discussion of methodological flaws in the current study immediately highlights a need for further research. A review of the literature on satisfaction studies within psychology services, those involving clients or referrers, indicates that the questionnaires utilised in data collection are invariably developed by the researcher for the purpose of the study they plan to undertake. Very little attention appears to be paid to the question of validity of the elements that make up the questionnaire. Given that measures of satisfaction are becoming increasingly popular in service evaluation studies, the development of an adequately tested satisfaction questionnaire aimed at psychology services specifically, would prove to be invaluable.

In reviewing the research on service evaluation it becomes evident that there are multiple perspectives on the question of quality of service provision. There are numerous stakeholders in all health services and psychology is no exception. Clients, their families, the general managers of provider units, the service purchasers, as well as the referral agents, all have a vested interest in the services that psychology departments provide. Each also has different requirements from such a service. As Vuori states "evaluation is by definition a value-laden activity, and must be acknowledged to be so, thus suggesting the need to take all relevant parties' views into consideration" (1982, p. 5). Therefore, in order for future research based within the Child & Adolescent Specialty to develop a full picture of satisfaction with the service, further research must be undertaken involving all users of the service.
The responses generated by the Education Welfare Officers, in answer to the question regarding the benefits of referral, point to another area for future research. They indicated that referral resulted in a reduction of time they had to spend with the referred child. The author postulates that this indicates that the involvement of a psychologist results in a reduction in school refusal, and thus less need for the EWOs to be involved with the child. If this assumption is true it points to a valuable area of work which, if capitalised on, might lead to a reduction in a number of other difficult behaviours in the children concerned. This is postulated as there are clear links between school refusal and further acting-out behaviours. Clearly these statements are at present based only on the initial findings of this study. Future research could usefully investigate further the actual benefits that result from psychology involvement, thus highlighting areas in which the most effective work with children and adolescents could be targeted.

5.5 Conclusion

In conclusion the current research serves to discover and analyse the impressions that the majority of actual and potential referrers to the Child & Adolescent Specialty have about the service. Although the survey was limited to a particular geographical area, it did manage to elicit the views of a large percentage of the target population. The many detailed findings are discussed. Specifically, in directly examining referrers levels of satisfaction, it has been shown that the group of general practitioners who responded were significantly less satisfied.
than the teachers with the average length of time between making a referral and the client being seen by the clinical psychologist. The general satisfaction with length of waiting time was very low, and the implications of this finding for future developments of the service are discussed. The overall levels of satisfaction reported are lower than those reported by much of the previous research in this area. It seems likely that the history of under funding that has plagued this service has led to a general feeling of discontent with the service provision. There also appear to be specific areas in which changes in current working practice would result in an increase in overall satisfaction, for example increasing the amount of communication sent to referrers, especially regarding the formulation of psychological factors effecting the presenting difficulty.

The present research also shows that the factors that affect the decision to refer to the Child & Adolescent Specialty are more likely to involve the referrers desire for the diagnosis of psychological factors in the presenting difficulties and a perceived need for psychological intervention on the part of the family than they are on the referrers perception of a need for psychological intervention. This was somewhat surprising, as it might be expected that the referrer will have more knowledge of the type of intervention offered by the specialty than would the families of clients. However, it appears that this knowledge is greatly lacking. As a result, future services may need to be targeted at educating the referrers about the work undertaken in the specialty.
Finally, the findings of this study will be fed back to the Psychology Service Manager as they make up a body of knowledge that is entirely new to the Child & Adolescent Specialty, and as such are of major importance despite the methodological flaws inherent in questionnaire data. The results may serve to support the argument for greater funding to be made available to the specialty. In that way the changes that are outlined may begin to be implemented in order to go at least some way towards increasing the levels of satisfaction felt by those professionals responsible for providing the client base of the specialty.
6. REFERENCES


APPENDIX:

REFFERER SATISFACTION QUESTIONNAIRE
CLINICAL PSYCHOLOGY SERVICE
CHILD & ADOLESCENT SPECIALTY
REFERRER SURVEY

We are writing to all professionals who currently do or could refer to the Worthing Priority Care Psychology Service Child & Adolescent Specialty to ask them about the service they received or their reasons for not referring. We are doing this to try to make our service better by identifying those things you found to be less than satisfactory in order to improve upon them.

Please can you help by completing this short questionnaire and returning it in the enclosed pre-paid envelope. Your reply will be treated in the strictest of confidence.

Please tick boxes as appropriate.

1. Have you ever referred a child or adolescent to the Clinical Psychology Child & Adolescent Specialty?
   
   Yes □  No □

   If Yes, please continue with question 2. If No, please go to question 7.

2. How satisfied were you with the average time a referred person had to wait before receiving an appointment?
   
   Very satisfied □
   Somewhat satisfied □
   Not really satisfied □
   Somewhat dissatisfied □
   Very dissatisfied □

3. How satisfied were you with the amount of communication you received from the Clinical Psychology Service following your referral?
   
   Very satisfied □
   Somewhat satisfied □
   Not really satisfied □
   Somewhat dissatisfied □
   Very dissatisfied □
If you were dissatisfied, do you want more or less information than you receive at present?

More □ Less □

4. What was your overall satisfaction with the service you received from the Child & Adolescent Specialty?

Very satisfied □
Somewhat satisfied □
Not really satisfied □
Somewhat dissatisfied □
Very dissatisfied □

5. Please indicate the benefits, if any, that occur as a result of the Clinical Psychologists involvement.

a) Reduction in time spent by referrer with referred person or their family □

b) Less need to refer to another professional □

c) Increase in referrer’s knowledge or understanding of the Child & Adolescent Psychology Service □

d) Other, please specify □
6. What factors affect your decision to refer a child or adolescent to the Psychology Service? (Please indicate as many as appropriate)

a) Perceived need for diagnosis of possible psychological factors in presenting difficulties

b) Perceived need for psychological intervention on part of the referrer

c) Perceived need for psychological intervention on part of family

d) Other, please specify

7. If you have not referred to the Psychology Service Child & Adolescent Specialty, please indicate which, if any, apply. (Please indicate as many as appropriate)

a) Do not see children/adolescents who require psychological input

b) Psychological input is received from other sources

c) Waiting time between referral and first appointment is felt to be too long

d) Unaware of the presence of the Psychology Service

e) Do not know how to refer

f) Refer to another professional who then refers on to the Psychology Service

g) Unaware of the type of difficulties to refer to a Clinical Psychologist

h) Unaware of the type of assessment/intervention a Clinical Psychologist could offer

i) Other, please specify
PLEASE ANSWER QUESTION 8 WHETHER OR NOT YOU HAVE PREVIOUSLY REFERRED ANYONE TO THE PSYCHOLOGY SERVICE - CHILD & ADOLESCENT SPECIALTY

8. We are particularly keen to receive suggestions about how our service can be improved. Can you make any suggestions that would help us to improve it?

Profession of person completing this questionnaire..................................................

Date...........................................

Please return the completed questionnaire to the Psychology Service using the enclosed pre-paid envelope.

THANK YOU VERY MUCH FOR YOUR HELP.