

Child and Adolescent Psychotherapy: A Systematic Review of Psychoanalytic Approaches

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Welcome

The Child Psychotherapy Steering Group of the North Central London Strategic Health Authority (NCL SHA) is the lead commissioner for child psychotherapy training on behalf of 8 Strategic Health Authorities/Workforce Development Confederations in London and the South East of England. It also has a national advisory role to other SHAs/WDCs for child psychotherapy training and workforce development. It is in this role that the Group recently commissioned this report which draws together a valuable selection of current evidence based research into the application and impact of psychoanalytic child psychotherapy in modern comprehensive child and adolescent mental health services.

The aim of the report is to help ensure that child psychotherapists across England and Wales have improved access to the latest evidence of the appropriate use of their skills. I believe that this will not only contribute to the continuous improvement in the care that is provided, but will also enable the profession to demonstrate more clearly to others the growing value of psychoanalytic child psychotherapy.

I therefore warmly welcome this report which is the first of its kind. I should also like to take this opportunity to thank the Child Psychotherapy Steering Group for the excellent work that they continue to do on behalf of their profession and, particularly, the many children that benefit from the care that child psychotherapists provide.

Nic Greenfield
Director of Workforce Development and Human Resources
North Central London Strategic Health Authority



Foreword

This systematic review of the evidence base for child psychotherapy is the first of its kind in the UK and is very timely. The Government is intending to publish the Children's National Service Framework, with an emphasis on promoting best practice, based whenever possible on evidence of effectiveness. Given the increasing emphasis on evidence based commissioning of services, it is important that all the evidence for the effectiveness of psychoanalytic child psychotherapy, according to accepted criteria, is being made available for scrutiny. For many years, the charge levelled at many of the psychological therapies used in child mental health services has been that their outcomes have not been scientifically evaluated. The ethical and scientific complexities of researching clinical populations, with high levels of comorbidity, is widely acknowledged. So too, are the great difficulties that would-be researchers in this field have had in obtaining research grants. Given these conditions, the finding of thirty clinically based studies, showing varying degrees of effectiveness, of which there were five completed randomised controlled trials is important information. One particular strength of many of these studies is the length of follow-up. Despite the limitations in all the studies, this review shows that there can be a growing confidence, both that child psychotherapy may make a lasting difference to the mental health of young people, particularly those with internalising disorders and that there is a willingness by therapists to have their work evaluated scientifically. The challenge now is to ensure that further refinement of these findings is made through funded research, which will enable the development of appropriate methodologies and clarify which young people are most likely to benefit from individual psychotherapy.

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Executive Summary

Aims

To review systematically the research evidence for the effectiveness of psychoanalytic child and adolescent psychotherapy.

Methods

Database searches were conducted in the following bibliographic databases: PsycInfo; Embase; Medline; Cinahl; Cochrane; British Education Index; ERIC; Care Data; Child Data; Assissa; Index to Scientific and Technical Proceedings; Campbell Collaboration. Searches were conducted over the entire lifespan of each resource and covered the period up to February 2004. Supplementary searching was undertaken, including: hand searching of relevant journals; relevant websites; book catalogues; citation searching; contacting key researchers. Studies were included or excluded according to pre-specified criteria. A descriptive (non-quantitative) data synthesis was undertaken i.e. key study characteristics were presented in the form of a tabular summary.

Results

Thirty seven study reports met the inclusion criteria. Some of these reports represented the same study at different time points. In all thirty two different studies were identified. The key characteristics of these studies were described and presented in tables. A critical appraisal was undertaken of each study report. Thirty studies were categorised according to a design hierarchy for studies of effectiveness (Centre for Reviews and Dissemination, 2001). Five completed randomised controlled trials, one ongoing randomised controlled trial and a protocol for a randomised controlled trial were identified and come into the highest category of evidence of effectiveness. i.e. Level 1. Evidence, (experimental studies). One ongoing and three completed quasi-randomised controlled trials are in the next highest category, Level 2. Evidence, (quasi-experimental studies). Seven completed and three ongoing studies fulfil the criteria for Level 3. Evidence, (controlled observational studies) and ten studies can be considered to provide Level 4. Evidence of effectiveness (observational studies without control groups).

Main Findings

Beneficial effects were shown on a broad range of outcome measures. Most studies used standardised psychiatric and psychological measures. In addition some incorporated measures of family functioning or psychoanalytic outcome. One study was notable in focusing exclusively on physical outcomes. e.g. height, height velocity and glycosylated haemoglobin levels. The positive impact of analytic treatment on these physical outcomes provides robust confirmation of clinical change. In addition treatment led to improvements in: social and educational adjustment, behaviour, symptoms, relationships, family functioning, as well as psychiatric and psychological disorder. Adverse effects were noted in two studies. A deterioration in family functioning at follow up was identified in one study where children were treated individually

with child psychotherapy in the absence of any parallel parent work. Another ongoing study which looked at the adult outcome of treatment in childhood raised the possibility that children who received insufficient treatment in childhood may be worse off in terms of their attachment security compared with an untreated control group.

The vast majority of studies were undertaken in clinically referred samples rather than samples specifically recruited for research (there were only two exceptions to this). A range of diagnoses/problems was looked at. Many of the children/young people studied presented with high levels of clinical disturbance. When the study participants were less impaired they responded to briefer, less intensive interventions. Those with more severe levels of difficulty were less responsive to treatment and often required more intensive intervention, indeed for certain disorders intensive treatment seemed necessary in order to bring about substantial change.

A number of studies comparing treatments of different intensities showed greater benefits with intensive treatment particularly at long-term follow-up. Two studies suggest that younger children are more likely to improve with treatment. Parent or family work appears to be an important component of the treatment of younger children.

The proportion of randomised or quasi-randomised studies in this review is high (33.3%) and compares favourably with the percentage of experimental/quasi-experimental studies identified when the evidence base for treatments in child mental health in total is looked at (7.4%; Fonagy et al., 2002).

Conclusions

There is evidence to support the effectiveness of psychoanalytic psychotherapy for children/young people with a range of psychological disorders. Beneficial effects are shown with treatment on a variety of outcome measures and many studies showed that improvements were sustained or even enhanced at long-term follow-up.



Child and Adolescent Psychotherapy: A Systematic Review of Psychoanalytic Approaches

Introduction

Aims

This review aims to look systematically at the research evidence for the work of psychoanalytic child and adolescent psychotherapists. The intention is to provide as complete a picture as possible of the research base enabling more refined questions to be asked regarding the nature of the current evidence and gaps requiring further exploration. The review is divided into two parts: Part I which looks at the research evidence in relation to the therapeutic effectiveness of psychoanalytic child psychotherapy and Part II which looks at other relevant child psychotherapy research. The findings from Part II will hopefully be presented in a separate volume.

In addition, the nature of the work undertaken by psychoanalytic child and adolescent psychotherapists, as well as the wider clinical and research contexts in which they work, will be described.

Background

Child and Adolescent Psychotherapists

There are only 469 qualified child and adolescent psychotherapists in the U.K. and some 159 in training (ACP, 2004). The majority of child psychotherapists (75% of the total number) are employed in the London region. This is despite being deemed a core professional group in relation to the delivery of CAMHS services (DOH, 2003) and the recognition that their specialist skills if more widely deployed would make a valuable contribution to child mental health services in the UK. (NHS Executive, 1996). There are currently six child psychotherapy training centres in the UK (three in London and one each in Birmingham, Scotland and the North of England).

Child psychotherapy training is intensive (Box 1; Lanyado and Horne, 1999) and takes a minimum of four years (full time) to complete. All trainees have an honours degree and previous experience of work with children in a professional setting. In addition it is necessary to complete a pre-clinical course either in parent-infant observation (two years) or young child observation (one year). The training focuses on developing the skills and capacities to

work with children in a range of predicaments, potentially on a long-term basis, although briefer interventions have increasingly become the norm. The training is characterised by an emphasis on experiential learning and the development of personal judgment and understanding, through regular clinical supervision with senior colleagues, small group seminars and personal analysis. On completion of training the trainee is eligible for membership of the Association of Child Psychotherapists. Eligibility for registration with the association is required in order to practice within the NHS.

Child psychotherapists work in a variety of settings (Table 2; Settings where child psychotherapists work) and often with the most disturbed and disadvantaged children. The skills of a child psychotherapist may be sought when other treatment interventions have failed. In this sense they 'reach the parts that others can't reach' (Kraemer, 2000). A range of approaches is employed, including consultative work and supervision of colleagues as well as direct therapeutic work (Table 1; Type of work undertaken by child psychotherapists, 2001).

Historical Background

Theoretical ideas regarding child analysis developed from the work of Melanie Klein and Anna Freud. Despite many areas of contention they uniquely combined thinking based on the close observation of children with psychoanalytic theory (Liekerman and Urban, 1999). These two pillars remained central in the development of psychoanalytic child psychotherapy (Liekerman and Urban, 1999). In the 1920's when child guidance clinics were set up in the US then in the UK, an interest in applying psychoanalytic understanding to children grew. In the 1930's the first training courses in child psychotherapy were established. The Second World War led to a number of influences, among others highlighting the predicament of children separated from their parents. The Hampstead Clinic (now the Anna Freud Centre) was established in 1947 and a clinical training based on the approach of Anna Freud was established. The training at the Tavistock Clinic was instituted the following year by John Bowlby and Esther Bick and under Bick's influence was broadly Kleinian in its theoretical orientation. In 1949 the Association for Child Psychotherapists was founded and brought together professionals with backgrounds in child guidance and psychoanalysis. By 1974 child psychotherapy was established as a recognised profession within the NHS (Rustin, 2003). In the 1980's and 1990's three further training schools started (The Scottish Institute of Human Relations, the Birmingham Trust for Psychoanalytic Psychotherapy and the London based British Association of Psychotherapists). The latest to be set up is the Northern Child Psychotherapy Training School, with locations in Leeds, Manchester, Newcastle and Liverpool.

Political Context

A 1994 review of mental health services for children and young people in England identifies the important contribution of child psychotherapists to Child Mental Health services (Kurtz and Wollkind, 1994). The highly specialised training of child psychotherapists was seen to contrast with the inconsistent levels of training of other workers. It was noted that child psychotherapists could enable other professionals to remain child centred in their work and that by keeping the emotional needs of the child within focus could prevent the child becoming lost in 'institutional routines' (NHS Executive, 1996). More recently the National Service Framework and the planned expansion of Child and Adolescent Mental Health Services (including an envisaged 20% expansion of therapists) highlight the need for a range of skills in such services (DOH, 2003).

Child Psychotherapy Research

The discrepancy between clinic and research settings

While ‘psychoanalytic’ child psychotherapy is the specific focus of this review, the term ‘child psychotherapy’ can be used more broadly to cover all psychotherapeutic interventions with children whatever actual model of intervention is used. There have been few published reviews of psychoanalytic child psychotherapy research (Rustin, 2003) and this contrasts with a substantial number of reviews and meta-analyses of ‘child psychotherapy’ research in general (for an overview see Target and Fonagy 1996; Fonagy et al, 2002a). It is estimated that at least 1,500 controlled outcome studies have been completed and meta-analytic reviews of this research show child psychotherapy to be effective (effect sizes in the region of 0.7) (Kazdin, 2002). However there is a growing recognition that many of these research findings are not generalisable to routine clinical work. Most children in therapy studies are recruited rather than clinically referred. Not surprisingly their difficulties are not as severe or entrenched and they have fewer co-morbid conditions (Kazdin, 2002). They are less impaired in functioning and come from less disadvantaged family backgrounds and environments. In short, recruited samples do not present with the complexity of difficulty commonly found in clinical practice.

Meta-analytic reviews of child psychotherapy research show that while the effect sizes of research undertaken in non-clinical samples are impressively large (0.71-0.84) they drop to much more modest levels (ES -0.4 to 0.29) when research is undertaken with clinical populations (Weisz et al., 1995). In addition there are far fewer controlled clinic based studies (Weisz et al., 1995). Awareness of this discrepancy is therefore important when interpreting the findings of child psychotherapy efficacy research. Proven therapeutic efficacy in a non-clinical sample may indicate little about effectiveness in a clinical context. This is likely to be of particular relevance in relation to psychoanalytic approaches which tend to be reserved for more complex cases, often after other treatments have become ‘stuck’ (Child Psychotherapy Trust, 2001; Lanyado and Horne, 1999). The differences in preferred treatment modalities between non-clinic settings (behavioural/cognitive therapies) and clinic settings (psychodynamic/systemic therapies) may also in part be accounted for by the differing clinical needs of each setting (Kazdin, 2002).

The Challenges of Research in a Child Mental Health Setting

A recent comprehensive review of the evidence base for all treatments in child mental health notes that the research base was such that ‘there was a necessary relaxation of normal exclusion criteria as a preliminary exploration of the available evidence indicated that the exclusion of poorly controlled studies would drastically curtail the available database’ (Fonagy et al., 2002a). A particular problem was randomisation; only 7.4% of the studies identified adhered to rigorous randomisation procedures (Fonagy et al., 2002a). There may be many reasons for this, not least the ethical problem of random allocation particularly to a non-treatment control group and the obviation of clinical judgment that can result. These challenges are especially relevant in the context of clinically referred samples where there is greater identified need, complexity and severity of difficulty (Trowell, 1995).

For example in a complex disorder such as Anorexia Nervosa difficulties arise from randomising patients with wide variations in clinical features into a fixed treatment plan (Treasure and Kordy, 1998). These problems are illustrated in a study where women in their late teens and early twenties with Anorexia were randomly assigned to four treatment options of differing intensities (Crisp et al., 1991). There was poor adherence to allocated treatment and particularly those patients assigned to 'no treatment' sought treatment elsewhere. The authors note that the research study exacerbated the usual difficulty in engaging patients with Anorexia in treatment, stating: 'we were distressed to find patients refusing treatment or dropping out because of forced allocation when they would have preferred and we would have preferred to offer them another (treatment)' (Crisp et al., 1991). Other studies of children and adults also highlight the importance of patient preference in adherence to treatment regimens (Apter et al., 1984; Leff et al, 2000; Richardson and Hobson, 2003). Problems with randomisation are compounded in children where the capacity to give informed consent is an issue. Such considerations have inhibited research in many areas including pharmacotherapy where the evidence base for the treatment of child and adolescent psychiatric disturbance is thin (Riddle et al., 2001; Jureindini et al., 2004).

These difficulties might be dismissed were it not that, in relation to evaluating treatment, the randomised controlled trial is considered the 'gold standard'. As well as the aforementioned problems there are other challenges in applying this type of research design to psychoanalytic/psychodynamic psychotherapy (Fonagy, 2002b; Richardson, 2003). A major point of difficulty is the tendency for RCTs to focus clinicians on diagnosis-based interventions rather than on the development of individualised formulations and treatment (Slade and Priebe, 2001). Arguably this can lead to a situation where 'complex internal states are oversimplified to more easily measurable states such as depression. Such diagnoses can become reified and the very measures used to assess such phenomena can be conflated with the phenomena themselves further complicating the situation' (Fonagy, 2002b). In psychoanalytic work (and indeed much psychotherapeutic work) there is a relatively greater emphasis on individual experience and the exploration and elaboration of individual meanings (Rustin, 2001). Child psychotherapists do not offer standardised diagnosis-based treatment interventions (Lanyado and Horne, 1999). While 'diagnoses' are made, such formulations are generally embedded in an emerging understanding of internal states and in the case of children in a developmental and systemic context, in this sense they tend to be 'complex/unique' rather than 'simple/general'.

The developmental context especially is important in relation to children and adolescents. Treatment research too often ignores developmental issues and many salient problems are not addressed (Weisz and Hawley, 2002). Concepts such as 'equifinality' (the process whereby a single disorder is produced via different developmental pathways), 'multifinality' (the notion that the same developmental events may lead to different adjustment outcomes) and 'heterotypic continuity' (that a given pathological process will be exhibited differently with continued development) enable developmental complexity to be taken into account and hopefully assist clinicians in making appropriate judgments regarding treatment and long term outcome (Holmbeck, 2003). The implication of such developmental understanding is that treatment should not be guided exclusively by diagnostic status (Shirk, 2003).

Hence it is perhaps not surprising that child psychotherapists prefer to use individual case reports as a means of sharing insights regarding their work (Hodges, 1999). Research trials that in the main provide information about groups rather than individuals may be seen as less informative (Williams and Garner, 2002).

There are further complexities in relation to 'evidence' in a child mental health setting. Assessment of outcome is inevitably multifaceted and there are numerous variables to consider. Indeed there is no clear consensus as to what constitutes empirical validation of psychotherapeutic treatment (Fonagy et al., 2002a). Arbitrary criteria may be used to specify effectiveness and there is ambiguity about how to identify meaningful change (Fonagy et al., 2002a)

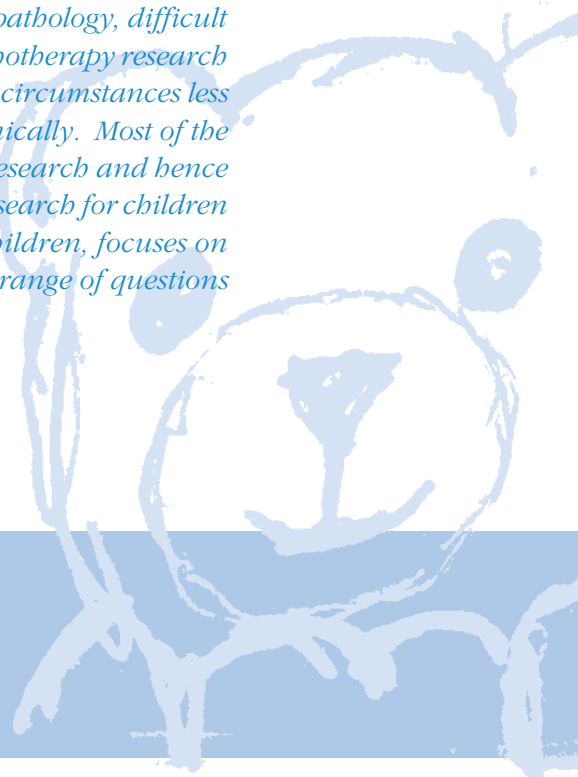
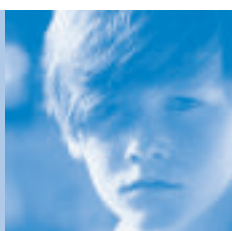
Child Mental Health: The Evidence-Base

Overall there is limited evidence for most interventions in a CAMHS setting (Audit Commission, 1999). It is acknowledged to be particularly difficult to demonstrate the effectiveness of interventions in children and families who have severe and long-standing difficulties (Audit Commission 1999; Wallace et al., 1997). The research that is available mainly concerns treatments for defined psychiatric conditions in children. There is little research on problems as they present in school or in the clinic. More is therefore known about the treatment of single conditions that are not associated with others, or that do not have serious complicating factors and about the shorter rather than the longer-term effects of treatment (Audit Commission, 1999; Kurtz, 1996).

Children presenting to CAMHS services in the U.K frequently have more than one problem and several complexity factors (Audit Commission, 1999). The 1999 Audit Commission report found that only around 20% of children, across all age groups, had no complexity factors. Parental mental illness, unemployment and single parent or re-constituted families are all highly represented in CAMHS samples. In addition around 9% of children presenting to CAMHS are looked after by the local authority (Audit Commission, 1999).

In conclusion:

'The vast literature becomes a 'minute literature' if one includes those studies that examine therapy with clinical samples and in clinical settings. Treatment effects are likely to be diminished when dysfunction is more severe, when individuals have multiple (co-morbid) disorders, and when child and adolescent dysfunction is embedded in adverse family conditions (e.g. parent psychopathology, difficult living circumstances). The majority of youths studied in psychotherapy research are likely to be much less severely impaired and to come from circumstances less likely to exacerbate dysfunction than those cases referred clinically. Most of the treatments used in clinical practice are not those studied in research and hence covered by the research reviews. Overall, current treatment research for children and adolescents samples a very special set of non-referred children, focuses on brief and time-limited treatment, and addresses a restricted range of questions about treatment'. (Kazdin, 2000)



Psychoanalytic Child Psychotherapy

There are many detailed descriptions of how child psychotherapists work and only a brief outline will be given here (for further reading see: Bleiberg et al., 1977; Boston and Daws, 1977; Hunter, 2001; Lanyado and Horne, 1999; Rustin and Quagliata, 2000).

A child psychotherapist's involvement with a child or young person may range from a few meetings as part of an assessment, which is considered a potentially therapeutic intervention in itself, to work over a longer period of time. Where long term individual psychotherapy seems appropriate this will generally be once weekly for up to two years, although there are circumstances where the needs of the child or young person require more intensive work. The involvement of parents and carers in both the assessment and treatment phases is considered essential to success of any therapeutic intervention (Rustin, 1999).

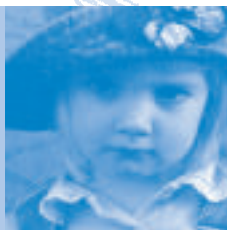
Key concepts guiding the therapeutic process include an interest in unconscious processes and the 'internal' world of the child. Children's play is thought to provide a window onto the child's unconscious thoughts and feelings. The child's play and behaviour is therefore used by the therapist in order to understand the child's inner world. As in analytic work with adults, there is use of the transference relationship as well as interpretation and containment of thoughts and feelings as a means of enabling integration and change (Lanyado and Horne, 1999). Attunement to the child in order to be receptive to the minutiae of what is being emotionally exchanged is one of the primary tasks (Hunter, 2001). Another important skill is the ability to gather fine details regarding how a child responds to the setting and relates to the therapist. The training of child psychotherapists in the naturalistic observation of the interactions between babies, young children and their carers is aimed at developing the capacity 'for recording in the mind a large array of observations which may in due course acquire pattern and meaning as they are reflected upon' (Rustin, 1999). Supervision of the work is an important part of this process as it provides an opportunity for 'second order' reflection and helps ensure that the observations are properly rounded and not distorted by prejudice, limitations, professional interests etc. (Rustin, 1999).

It follows that the most essential therapeutic 'equipment' is the mind of the therapist (Hunter, 2001). It is necessary therefore that they should be self-aware and balanced in their dealings with patients (Hunter, 1999). Rigorous training, personal analysis, supervision structures and professional scrutiny are designed to ensure high standards of practice and discipline in this regard (Hunter 2001; Lanyado and Horne, 1999; Box 1).

With the focus very much on the individual child, it can be difficult to define specific aims of this type of work. In broad terms the aim might be seen as endeavouring to understand and influence the child's inner experience of the world. External factors in the child's situation are of course vitally important and need to be addressed but in the context of an individual session with a child the psychotherapist is primarily concerned with the impact of such factors on the child's internal world i.e. what the child makes of his experience (Boston, 1977). In engaging with the meaning of this inner experience it is hoped that the therapeutic process will foster the child's development and enable an optimal developmental trajectory. Indeed child psychotherapists are well aware of the developmental context of their work: 'Child psychotherapists have long appreciated that psychoanalytic work with children cannot simply be about analysing conflicts, removing repressions or reconstructing the past. More often it involves enabling processes and structures to develop to allow for the possibility of

thought, reflection and sustained emotional experience in the first place' (Urwin, 2000). The approach differs from other methods that are targeted primarily at symptom relief (Barrows, 2001).

As increasingly children with severe pathology, difficult family circumstances or personal histories are seen at clinics, therapeutic approaches have evolved to meet the needs of this group of children (Rustin, 2003). A greater range of psychoanalytically based interventions are now offered including group psychotherapy, family work, consultation and brief psychotherapy treatments (Rustin, 2003).



Review methodology

The review methodology followed established guidelines for undertaking systematic reviews (Clarke and Oxman, 2003; CRD, 2002).

Aim

To identify research studies in the area of psychoanalytic/psychodynamic child psychotherapy.

Objectives: (Therapeutic Efficacy)

1. Identify and describe studies of treatment effectiveness.
2. Categorise studies according to a hierarchy of evidence of therapeutic effectiveness.
3. Examine outcome in different groups of children/young people and look at the impact of setting (clinical or research), type of presenting problem and severity of disturbance on outcome.
4. Examine the impact of age/developmental stage on treatment outcome
5. Examine the impact of treatment frequency/intensity on outcome
6. Examine the impact of variables within the intervention itself such as therapist training and parent work on treatment outcome
7. Examine outcome measures used and the main findings in relation to treatment effectiveness

Methods

Given the eclectic nature of the subject area, it was decided to search four types of electronic databases: biomedical, psychological, educational and childcare and general databases given below. To retrieve book and grey literature (types of publications not traditionally indexed in electronic databases), library catalogues and web sites of specialist psychotherapy institutions were searched. In addition, to ensure non-published and ongoing research was captured, the project leader contacted leading experts in the field. Finally, key journals were hand searched and the reference lists of previously captured journal articles were scanned for further relevant material.

Bibliographic Databases

Database searches were conducted in PsycINFO, Embase, Medline, Cinahl, Cochrane, British Education Index, ERIC (Educational Resources Information Centre), CareData, ChildData, Assia (Applied Social Sciences Index and Abstracts), Index to Scientific and Technical Proceedings and the Campbell Collaboration. To be as inclusive as possible, searches were conducted over the entire life span of each resource. The search covered the period up to Nov 2002. This search was subsequently updated in the main databases to cover the period up to February 2004.

Supplementary Searching

Hand searching of relevant journals; Relevant Websites (Anna Freud Centre, Tavistock Centre, Menninger Institute); Book catalogues (Karnac, Tavistock Library, Anna Freud Centre Library); Citation searching (i.e. references of the references); Key researchers/experts in the field.

Search Strategy

From the outset it was felt that a single search strategy would not easily identify all relevant research in the field of psychoanalytic child psychotherapy. Thus, it was decided to compile separate search strategies to be run against both the biomedical, educational and childcare databases. These search strategies focused on the following four areas:

1. Psychoanalytic/psychodynamic child psychotherapy research
2. Psychoanalytic/psychodynamic child development research
3. Psychoanalytic/psychodynamic attachment research
4. Key authors/institutions in psychoanalytic child psychotherapy research

The search strategies were initially developed in the specialist psychology and psychiatry database, PsycINFO and later translated for use in the other databases. Each search was conducted using a combination of thesaurus terms (index terms used to retrieve references) and text words and phrases to find relevant studies. To ensure research studies were retrieved, where applicable, the search was restricted to the following publication types (roughly equivalent to research designs): experimental replication, follow-up study, longitudinal studies, prospective studies, treatment outcomes study and clinical trials. (See Appendix 2. for sample search strategies used in PsycINFO).

A descriptive (non-quantitative) data synthesis was undertaken i.e. key study characteristics were summarised, appraised and presented in tables.

Studies were included or excluded according to the following criteria:

Inclusion Criteria

- (a) Age: children and adolescents (the age range of adolescence is variably defined. For the purposes of this review it was decided to include studies where at least some of the participants were 18 years or younger but none of the participants were over 25 years)
and
- (b) Location: all locations
and
- (c) Research methodology: any study fulfilling the inclusion criteria to which research methods have been applied.
and
- (d) Study quality: as a meta-analytic summary of results would not be undertaken and it was intended to look at all available research, it was decided to undertake a post-hoc assessment of study quality.
and
- (e) Psychodynamic model: studies which designated the model of intervention as psychodynamic, or psychoanalytic or used descriptive terms derived from these theoretical models were included. While psychodynamic approaches to the treatment of children are based on a heterogeneous set of theories, it can be assumed that there is a core set of assumptions to which all psychodynamic therapists would, to a greater or lesser extent, subscribe (Bleiberg et al., 1997).
and
- (f) Interventions: Studies involving individual psychodynamic/psychoanalytic psychotherapeutic interventions with children.

Exclusion Criteria

Studies that did not designate the model of intervention as psychodynamic or psychoanalytic or did not use descriptive terms derived from these theoretical models were excluded even if in practice the model of intervention resembled that of a dynamic psychotherapy.

Relevant areas not systematically covered

It was considered beyond the remit of this review to systematically review the literature on single case studies where no clearly specified research methodology was employed.

Results of Search Strategy

Where possible the records from the search were exported into Reference Manager software package and the de-duplication facility was used to restrict the search to unique records. Overall there was a small degree of overlap between the references found in the four search strategies in the biomedical databases (see Appendix 3).

The computer search identified 3103 abstracts from which 306 were selected for closer inspection. A further 43 articles/studies were identified from the supplementary search. From this group 32 studies were considered to fulfil the inclusion criteria for this stage of the review (focusing on the effectiveness of individual child psychotherapy). Reasons for inclusion or exclusion of studies were documented and records maintained such that the criteria for inclusion/exclusion could be independently reviewed.



Findings

Studies looking at individual psychoanalytic/psychodynamic child psychotherapy treatment are presented below. Other psychoanalytically based therapeutic interventions (i.e. group psychotherapy, parent-infant psychotherapy, in-patient and day-patient treatment) will be looked at in a supplementary section.

Studies which focus on non-treatment based child psychotherapy research will be presented in a separate volume.



Therapeutic Approaches

Thirty seven study reports were identified. Some reports represented findings from the same study at a different time point. In all thirty two different studies were identified. A detailed description and appraisal of each individual study is given in Table 4.

The studies included are discussed in relation to: study design; level of evidence of effectiveness; type of presenting problem; age/developmental stage of participants; intensity/frequency of therapeutic intervention; variables within the intervention itself (therapist training, parent and family work); outcome measures used; principal findings.

Study Design

Randomised Controlled Trials

Five completed randomised controlled trials were identified. These studies compared: behavioural family systems therapy with ego orientated individual therapy (Robins et al., 1999); psycho-dynamically oriented supportive therapy with a no treatment control (Sinha and Kapur, 1999); time limited psychodynamically oriented treatment with time unlimited psychodynamically oriented treatment and a minimal contact control (Smyrniotis and Kirby, 1993); individual psychodynamic child psychotherapy with structural family therapy and a recreational control (Szapocznik et al., 1989); individual psychodynamic child psychotherapy with psycho-educational group therapy (Trowell et al., 2002).

One multi-centre randomised controlled study of psychodynamic child psychotherapy treatment for depression as compared with family therapy has been completed but is awaiting full collection of data (Trowell et al., 2003). A protocol for a randomised controlled trial of analytic treatment for children with severe and complex emotional disorders as compared with once weekly psychotherapy or cognitive behaviour therapy or treatment as usual was also identified (Target et al., 2002). This represents the first planned randomised study of psychoanalytic psychotherapy and psychoanalysis in children (age 6-12 years).

Only one of these randomised trials (Sinha and Kapur, 1999) had a no treatment control group and this study was unusual in that the sample was recruited from a school rather than a clinically referred group. Another study used a 'recreational' control group but again the sample in this study was recruited through a 'media campaign and school counsellors' rather than being clinically referred (Szapocznik et al., 1989). Most studies used another treatment group as a comparison, citing ethical reasons (notably situations where a high level of clinical need was identified) for doing so (Trowell et al., 2002; Trowell et al., 2003).

Non Randomised Controlled Trials

Fourteen non-randomised controlled clinical studies were identified. Four of these studies are in progress and have yet to publish full results (EPOS, 2002; Target and Fonagy, 2002; Fonagy et al., 2002; Reid et al., 2001).

Four studies employed quasi randomised methods of assignment i.e. sequential assignment (Fonagy 2002); assignment according to postcode (Moran et al., 1991) or therapist vacancy (Muratori et al., 2002; Muratori et al., 2003). In these studies post hoc analysis revealed groups to be matched on important clinical and demographic variables. These studies compared: treatments of different intensity (Fonagy, 2002); psychoanalytic treatment with standard medical and psychological care (Moran et al., 1991); brief structured focused psychodynamic therapy with assessment/feedback sessions and direction to community services (Muratori et al., 2002; Muratori et al., 2003).

Six of the studies matched the comparison group/s, a priori, on the basis of various clinical and demographic characteristics. These studies compared: psychoanalytic psychotherapy with standard treatment (EPOS, 2002); extended psychotherapeutic assessment with standard treatment (Reid et al., 2001); the outcome for children with a diagnosis of emotional disorder compared to a diagnosis of disruptive disorder (Fonagy and Target, 1994); the outcome for children and adolescents in different age groups (Target and Fonagy, 1994b); the outcome of treatments of different intensities (Heinicke and Ramsay-Klee, 1986; Heinicke, 1965).

Two studies used a non-matched control group (Apter et al., 1984; Boston and Lush 1994; Lush et al., 1991). In one of these there was a strong likelihood of bias as patient characteristics were used to determine allocation to treatment groups (Apter et al., 1984). The authors of a study of psychoanalytic child psychotherapy treatment for severely deprived children in care or adopted did not consider it ethical to offer an alternative less comprehensive treatment to the children referred to them for help (Boston and Lush 1994; Lush et al., 1991). They therefore opted to use, as a comparison group, children who had been recommended for treatment but failed, for a variety of reasons, to start therapy. As stated previously the authors acknowledge the potential biases of a comparison group selected in this way.

In one study although the authors describe a control group, the quality of reporting was so poor it was impossible to determine how this group was selected and whether there had been any attempt to match groups (Jordy and Gorodosczy, 1996).

Two studies had a no treatment control group (Boston and Lush 1994; Lush et al., 1991; Target and Fonagy, 2002). One of these studies followed up children who had received analytic treatment into adulthood and compared them with untreated siblings as well as a matched sample whose disorder had been untreated in childhood (Target and Fonagy, 2002). The other study used a no treatment group that was small, unmatched and openly identified by the authors as providing a poor comparison group (Boston and Lush 1994; Lush et al., 1991).

The majority of studies (twelve) were prospective in design. Two studies used information from case notes gathered retrospectively (Target and Fonagy 1994; Target and Fonagy 1994b). One study was entirely retrospective in focus and used information from case notes to compare a treatment and matched control group (Target and Fonagy, 1994b). The authors acknowledge the limitations of a retrospective/case note study but the matched control group provided an informative comparison group.

Open Non Controlled Trials/Case Series

Six studies were in the form of an open trial, employing no comparison group. One such study (Baruch et al 1995; Baruch et al., 1998) looked at the outcome of psychoanalytic psychotherapy for young people presenting to a community based psychotherapy clinic. Another landmark study looked at an almost total sample of cases (90% of all cases, n=793) presenting to the Anna Freud Centre over a 40 year period (Fonagy and Target, 1996). This study took the form of a retrospective review of case notes and, using validated diagnostic criteria and outcome measures, the authors looked at the effect of diagnosis and severity of disorder on outcome as well as frequency of treatment. A further open non-controlled study, which was a sub-sample of this larger study, looked specifically at the outcome for children with a diagnosis of emotional disorder (Target and Fonagy, 1994a). One case series focused on I.Q level as an outcome in a sample of ten children receiving psychoanalytically based treatments (Zelman et al., 1985). A German group (Winkelmann et al., 2000) followed up 133 children engaged in long term therapy at the Institute for Psychoanalytic Psychotherapy Heidelberg over a period of five years. Another German study followed up 78 patients over a year (Petrie and Thieme, 1978). A Norwegian study looked at the long-term outcome of individual psychodynamic psychotherapy for young people with Anorexia Nervosa (Vilsvik and Vaglum, 1989).

Case Studies

Case reports have been used by child psychotherapists as the principal means of disseminating developments in concepts and technique derived from clinical work. For the purposes of this review it has been decided to look only at the small number of case studies to which some formal research methodology/evaluation has been applied. Three such studies were identified (Fonagy and Moran 1990; Lush et al., 1998; Moran and Fonagy, 1987). Each of these studies represented a closer look at individual cases that were part of a larger study. One study (Fonagy and Moran, 1990) looked at three diabetic children who also had significant growth retardation (below the 3rd centile). Another single case study (Moran and Fonagy, 1987) used a time series analysis to examine the relationship between diabetic control and psychological conflict in an adolescent with poorly controlled diabetes receiving analytic treatment. Finally a case study of psychoanalytical child psychotherapy treatment of a ten year old boy who had a traumatic early history of abuse and neglect uses a range of psychological/psychiatric measures (in the form of rating scales and questionnaires) to assess change/outcome at the start of treatment, end of treatment and one year follow up (Lush, et al., 1998).

Qualitative Studies

One study exclusively used qualitative methodology (Carlberg, 1997). This study focused on the process of psychoanalytic child psychotherapy (Carlberg, 1997). The aim of the study was to look at the process of change by examining sessions considered to be 'turning points' in the therapy. This study was prospective in design and adhered to a pre-defined methodology. Therapists were interviewed immediately after the turning point session and one year and two years later.

Quality of Evidence:

Levels of Evidence of Therapeutic Effectiveness

Please see Table 3 for the categorisation of studies according to a design hierarchy of therapeutic effectiveness (Centre for Reviews and Dissemination, 2001; Appendix 5). As can be seen five completed and one ongoing study come into the highest category of evidence, Level 1 Evidence (see appendix 5 for definitions of levels of evidence). Three completed and one ongoing study are in the next highest category, Level 2 Evidence. Six completed and three ongoing studies fulfil the criteria for Level 3 Evidence and ten studies can be considered to provide Level 4 Evidence of effectiveness. Two of the total thirty two studies were excluded from this categorisation, one because on closer inspection the study design was not what was claimed (Jordy and Gorodscy, 1996) and another qualitative study which looked at therapeutic process rather than effectiveness (Carlberg, 1997).

Diagnosis/Type of Problem/Setting

Most studies focused on children and young people presenting with a range of difficulties rather than on specific diagnostic groups (Baruch, 1995; Baruch et al., 1998; Carlberg, 1997; EPOS, 2002; Fonagy et al., 2002; Fonagy and Target 1996; Petrie and Thieme, 1978; Smyrios and Kirby 1993; Szapocznik et al., 1989; Target and Fonagy, 1994b; Target et al, 2002; Target and Fonagy, 2002; Winkelmann et al., 2002). Some studies involved particular groups of children/young people i.e. children and adolescents with a history of abuse and neglect (Boston and Lush 1994; Lush et al., 1991; Lush et al., 1998); a diagnosis of poorly controlled diabetes (Fonagy and Moran 1990; Moran et al., 1991; Moran and Fonagy 1987); a history of sexual abuse (Trowell et al., 2002); reading retardation (Heinicke and Ramsay Klee, 1986; Heinicke 1965). Some studies did focus on specific diagnostic categories e.g. emotional disorders (Target 1994a; Muratori et al., 2002; Muratori et al., 2003; Sinha and Kapur, 1999; Target et al., 2002); depression (Trowell et al., 2002); disruptive disorders (Fonagy and Target 1994; Jordy and Gorodscy 1996; Zelman et al., 1985); obsessive compulsive disorder (Apter et al., 1984); autism (Reid et al., 2001) and anorexia (Robin et al., 1995; Robin et al., 1999; Vilsvik and Vaglum 1989).

The majority of studies were clinic based and used clinically referred samples. The two exceptions were an Indian study which used a school based sample (Sinha and Kapur 1999) and an American study which recruited a sample through a 'media campaign and school counsellors' (Szapocznik et al., 1989). For some studies the method of sample selection was such that it could be concluded that the most severe cases were likely to be excluded and that the samples represented a less clinically impaired group (Sinha and Kapur 1999; Smyrios and Kirby 1993; Szapocznik et al., 1989). Other studies emphasised the fact that they were focusing on a severely disturbed group (Apter et al., 1984; Baruch 1995; Baruch et al., 1998; Boston & Lush 1994; Carlberg, 1997; Fonagy et al., 2002; Fonagy and Moran 1990; Lush et al., 1991; Lush et al., 1998; Moran et al., 1991; Moran and Fonagy 1987; Target et al., 2002; Trowell et al., 2002; Trowell et al., 2003). In addition in some studies the differential response of a more severely disturbed sub-sample is examined (Fonagy and Target, 1994; Target and Fonagy, 1994a).

It can be concluded therefore that the vast majority of research involved children and young people with high levels of disturbance who were referred for treatment because of clinical need rather than specifically recruited for the purposes of a research study.

Influence of Diagnosis/Type of Problem /Setting on Treatment Outcome

Broad Diagnostic Categories: Emotional & Disruptive Behaviour Disorders, Internalising & Externalising Problems

The large Anna Freud Centre study (n=763) looked at differences in outcome according to diagnostic category (Fonagy and Target, 1996). In general children diagnosed with emotional disorders did better ($p<0.0001$). Those with a diagnosis of disruptive disorder were harder to treat, particularly if the diagnosis was of conduct disorder rather than oppositional defiant disorder (Fonagy and Target, 1994). Children with disruptive disorders were difficult to maintain in treatment and more liable to drop out. Prognosis improved for younger children and those in intensive treatment. Indeed when those children treated intensively for three years were compared, the differences in outcome between those diagnosed with disruptive disorder and those diagnosed with emotional disorder were no longer significant (Fonagy and Target, 1994). Those diagnosed with emotional disorder proved amenable to psychoanalytic treatment with the vast majority showing a favourable response (Target and Fonagy, 1994a). Children within this category designated as being 'severely disturbed' were substantially more likely to improve if in intensive treatment (78.7% vs. 26.1%). In contrast less severely disturbed children were almost as likely to benefit from non-intensive rather than intensive treatment. Some specific diagnoses were less liable to remit with treatment (obsessive compulsive disorder, over anxious disorder) and those diagnosed with depression more often remained in the dysfunctional CGAS range. Younger children were more likely to improve. Diagnostic variables that predicted improvement in the disruptive disorders group included: the presence of an anxiety disorder, absence of co-morbidity and school reported problems. For the emotional disorders group, less severe principal diagnosis, better initial adaptation and the absence of enuresis were important variables predictive of improvement.

These findings indicating a better response for emotional or 'internalising' problems are reflected in other studies. A community based study by Baruch et al. (Baruch et al., 1998; Baruch, 1995) of psychoanalytic treatment for adolescents and young adults presenting with multiple severe difficulties (median no of ICD-10 diagnosis 3, median score for psychosocial stress 4, severe) showed that 'internalising' problems were more responsive to treatment. 'Externalising' problems were more difficult to treat although the likelihood of improvement increased if the externalising problems were associated with internalising/emotional problems or if the individual was in more frequent treatment.

An Italian study (Muratori et al., 2002) of structured focused psychodynamic psychotherapy (11 sessions) for children (age 6-11 years) with emotional disorders showed that internalising problems were particularly responsive to treatment although externalising problems also improved. The outcome was better for those children with 'pure' emotional disorders (ICD-10) as opposed to 'mixed' emotional disorders (ICD-10).

A follow up of this study with a larger sample size revealed interesting findings (Muratori et al., 2003). While both the experimental treatment group and the control improved on measures of global functioning, assessed by C-GAS, (Schaffer et al., 1983) in the first six months only the experimental group showed evidence of a shift to a non-clinical range maintained at two year follow-up (the authors hypothesise that the initial therapeutic improvement might be attributable to the assessment that the control group also received). On the other outcome measure

used, the CBCL (Achenbach, 1991a) the authors note evidence of the 'sleeper' effect. No differences between the groups were noted in the first 6 months but at two year follow up significant changes, including a move into the 'non-clinical' range for internalising and total problems scales, were noted in the group that received psychodynamic psychotherapy. While internalising problems improved so did externalising problems (ES 0.61 and 0.59, respectively). The improvement in externalising problems had not been expected. The authors speculate that the level of clinical disturbance in this sample (largely comprised of 'intact' Italian families of 'middle' socioeconomic status with lower than average mean scores on the CBCL) was such that a short term focused treatment was able to effect change (Muratori et al., 2003).

A randomised trial in an Indian school setting (Sinha and Kapur, 1999) selected young people who were identified as having emotional problems on the GHQ (Goldberg, 1979) and who scored high on the internalising scale and low on the externalising scale of the YSR (Achenbach, 1991c). Significant improvements were seen with treatment (ten sessions of Psychodynamic Orientated Supportive Therapy) in this sample which had high levels of internalising problems. A high percentage (>90%) showed clinically significant improvements in almost all areas of functioning. There was a significant improvement in internalising problems, adjustment and interpersonal confidence.

Depression

An ongoing multi-centre randomised trial by Trowell et al., focuses on childhood depression (children age 10-14 yrs) and compares individual psychodynamic therapy (with parallel parent work) and family therapy (Trowell et al., 2003). The young people in this study had a severe form of depression (all had a diagnosis with the K-SADs of major/moderate depression or dysthymia) and many had failed to respond to other treatment interventions. Preliminary results show both forms of treatment to be effective at six months follow up. Family work appeared to have a highly effective initial impact whereas the response to individual work was slower but more sustained. It was noted that as the young people became less depressed, behavioural problems became more prominent. Those children whose depression was associated with anxiety did better with individual therapy, as did children with a diagnosis of 'double depression' (i.e. depression and dysthymia). Depressed children where there was associated oppositional defiant disorder or conduct disorder did better with family therapy (Dr Judith Trowell, personal communication).

Obsessive Compulsive Disorder

A small Israeli study showed improvements in young people with OCD treated with psychotherapy who had previously failed to comply with behavioural treatment (Apter et al., 1984).

Personality Disorder

An ongoing study (Fonagy et al., 2002c) compares psychotherapy and psychoanalysis for young adults with at least one axis II diagnosis (narcissistic and borderline personality disorder being the most common diagnoses) and one axis I diagnosis (mostly mood disorders). Preliminary results indicate that analytic treatment is markedly superior in achieving clinically significant symptomatic change (79% vs. 12%).

Learning Difficulties

Some studies focused on children with learning problems. One non-controlled study focused on a small sample of very young children (mean age 3 years and 8 months) with developmental delay, oppositional defiant disorder or in some cases pervasive developmental disorder and showed gains in I.Q level following psychoanalytically based treatments (Zelman et al., 1985). One Brazilian Study (Jordy and Gordscy, 1996) looked at children with hyperactivity and identified improvements in this group but the quality of reporting is poor and it is hard to be certain about the accuracy of the results. A study by Heinicke et al., (Heinicke and Ramsay-Klee, 1986) looked at boys aged 7-10 years referred with reading retardation and associated emotional disturbance. The children were given psychoanalytic psychotherapy over a period of two years. All of the children improved with treatment but those seen more frequently (four times a week for one or two years) improved most, particularly with regard to self esteem, flexible adaptation, capacity for forming and maintaining relationships, frustration tolerance and ability to work. A smaller pilot study by the same group had similar findings (Heinicke, 1965).

Autism

An ongoing research study is assessing the impact of psychoanalytic child psychotherapy for children with autism and their families (Reid et al., 2001). The authors of the study have developed a specialised psychotherapeutic technique that takes into account the particular developmental difficulties of this group of children (Alvarez and Reid, 1999). One component of this approach is to endeavour to work with the intact 'non-autistic' parts of the child's personality and to appreciate the individual differences and personal motivation of the children. Close attention is also paid to the impact on families of living with a child with such a profound level of disability. The study authors predict that children and families receiving an extended psychotherapeutic assessment (over 6-12 months) will show developmental change of a nature and degree significantly different from a control group who do not receive such input. The study is ongoing but preliminary results appear to support the author's hypothesis (Reid et al., 2001).

Anorexia Nervosa

Two studies looked at Anorexia Nervosa (Robins et al., 1999; Robins et al., 1995; Vilsvik and Vaglum, 1989). One Randomised Controlled Trial (Robins et al., 1999; Robins et al., 1995) compared Behavioural Family Systems Therapy (BFST) with Ego Orientated Individual Therapy (EOIT). The authors who conducted the study had developed the BFST approach. The background of the EOIT therapists is not entirely clear, although efforts seem to have been made to ensure fidelity to this psycho-dynamically derived model of treatment. The sample was in part recruited rather than entirely clinically referred which may have resulted in a less impaired sample. All participants were age twelve to nineteen. Both treatments were shown to be effective in the treatment of Anorexia. The BFST group showed faster change on some weight measures but more cases in the BFST group required hospitalisation. In both groups there were improvements in measures of observed family conflict, illustrating, the authors conclude, that family therapy is not necessary in order to bring about a change in parent child interactions (in the EOIT group the adolescents were seen individually and the parents in parallel).

Another study (Vilsvik and Vaglum, 1989) looked at the long-term follow up in a group of adolescents who had received individual psychodynamic therapy for Anorexia (parents and young people were seen for about an hour a week over a period of eleven months on average). The follow up period ranged from one to nine years (mean four years). While the authors acknowledge that in an uncontrolled study it is not possible to attribute positive outcomes to the treatment received they note that most of the young people had a good outcome. All were physically well at follow up and 60% were doing well in terms of their 'interpersonal situation'. The authors note that younger age and stable family background may have contributed to the positive outcome.

Miscellaneous Diagnosis

Children & Young People with Poorly Controlled Diabetes

As stated many studies did not focus on psychiatric diagnostic categories or symptom categories (e.g. internalising/externalising) but rather looked at particular groups of children/young people. An example of this is a study (Moran and Fonagy, 1987) which rather than looking at psychiatric diagnostic categories instead focused on the physical diagnostic category of poorly controlled diabetes (although this was associated with high rates of psychiatric disorder). Physical rather than psychological measures were used to assess treatment outcome. The studies revealed an improvement in physical parameters (e.g. height, height velocity and glycosylated haemoglobin levels) in the treated group as compared to the control.

Severely Deprived Children and Young People in within the Care System

The Tavistock study of severely deprived children in care also chose not to describe difficulties primarily according to psychiatric diagnostic categories (Lush et al., 1991; Boston and Lush, 1994). The researchers instead focused on factors of significance to children who had been in the care system. For each child an index of discontinuity of care was calculated in order to provide an indication of how much disruption of care the child had experienced. In addition the stability of the current placement was also rated on a five point scale. The authors devised two forms, one completed following the initial assessment, the other at the end of treatment. The forms were designed to identify change according to the psychotherapeutic model used. The forms focused on personality and emotional development as well as symptomatic improvement and changes in the child's external situation and relationships. Beneficial effects were noted with treatment and found to broadly concur with the therapists predictions of likely progress in therapy. Not surprisingly for this group there was a tendency for good progress to be related to more stable current placements and good external support for therapy. A single case experimental study which was a sub-sample of this larger study showed beneficial effects of treatment on a range of standardised outcome measures from multiple perspectives (Lush et al., 1998).

Sexually Abused Girls

A multi-centre randomised trial by Trowell et al., (2002) looked at sexually abused girls age 6-14 years. The study participants appeared to be more seriously abused than in other studies (e.g. over 30% had been exposed to multiple perpetrators). The most common diagnosis amongst the girls was post traumatic stress disorder (73%) followed by major depressive disorder (57%) and separation anxiety disorder (58%). This study compared treatment with focused individual psychotherapy and psycho-educational group therapy. Both treatments

were similarly effective but individual psychotherapy was superior on the PTSD scale dimensions of re-experience of traumatic event and persistent avoidance of stimuli (Orvaschel, 1989). In relation to psychiatric diagnosis generalised anxiety disorder proved most liable to remit. Depressive disorder and separation anxiety disorder were less likely to remit, although 2/3 of those with depressive disorder and half those with separation anxiety disorder no longer had this disorder one year on.

Other

A number of studies focused on children in middle childhood with a range of presenting difficulties and did not specifically focus on outcomes in relation to diagnostic category (EPOS, 2002; Smyrios and Kirby 1993; Szapocznik et al., 1989).

The Erica Process and Outcome study is still in progress and aims to compare child psychotherapy with treatment as usual in a matched control sample of children who have been referred for similar reasons (EPOS, 2002).

One study (Smyrios and Kirby, 1993) focused on children age five to nine with 'disturbances of emotion specific to childhood' (WHO, 1978) who had sought assistance from the Child and Family centre where the study was based. Quite stringent exclusion criteria were applied (i.e. exclusion of single parent families, those with a history of mental illness, children with a previous history) suggesting that the families involved in the study were a less disadvantaged group. This study randomised participants to three groups of treatment of different lengths, all of which did well on a variety of outcome measures, although the group seen least did rather better.

A further study by Szapocznik et al., looked at Hispanic boys age 6-12 years presenting with a range of diagnoses (e.g. 32% ODD, 30% anxiety disorder, 16% conduct disorder). The participants in this study were recruited through a media campaign and school counsellors rather than being clinically referred. The inclusion criteria were quite stringent (those not living in a two parent family were excluded as were families with a history of mental health care or those who had not been living in the US for more than 3 years). Of the 979 families initially screened 102 met the inclusion criteria. This study compared structural family therapy with individual psychodynamic child psychotherapy and a 'recreational' control. Attrition was greatest in the control group (43%) and greater in the family therapy group as compared to the individual therapy (16% vs. 4 %). Both family therapy and individual psychodynamic therapy were similar in reducing behavioural and emotional problems on a variety of outcome measures, including family systems and individual psychodynamic rating scales. These improvements were maintained at one year follow up. On measures of family function the control group stayed the same, the family therapy group improved but those receiving individual psychodynamic psychotherapy showed deterioration at one year follow up. This finding may possibly be biased as an intention to treat analysis was not carried out despite variable drop outs in the three groups and, unusually, the individual psychodynamic child therapy was undertaken in the absence of any parallel parent work (see discussion of findings regarding parent work).

Two German studies (Petrie and Thieme, 1978; Winkelmann et al., 2000) involved naturalistic follow up of children and adolescents with a range of difficulties referred to clinics specialising in psychoanalytic psychotherapy. One of these studies (Winkelmann et al., 2000) noted that improvement in the period after treatment seldom occurred if difficulties were not resolved in the therapy itself but improvements seen during therapy continued after therapy.

Age of children/young people studied

Under Five years of age

Three studies looked at this age group. An ongoing study focuses on children under five referred to the Tavistock Clinic with autism who received an extended psychotherapeutic assessment compared with an age matched control (Reid et al., 2001). Another study looked at I.Q changes in children (mean age 3 years and 8 months) who had received psychoanalytically based treatments (Zelman et al., 1985). One study focused specifically on age and compared the outcome in three different age groups: under six, six to twelve years, and adolescents (Target and Fonagy 1994b). Parent-Infant work will be discussed in a separate section of this review.

Five to twelve years of age

Eleven studies looked at this age group: (Carlberg, 1997; EPOS, 2002; Heinicke and Ramsay Klee, 1986; Jody and Gorodscy 1996; Lush et al., 1998; Muratori et al., 2002; Smyrios and Kirby, 1993; Szapocznik et al., 1989; Winkelmann et al., 2000). As stated above one study focused specifically on age and compared outcome for children age six to twelve with children in other age groups (Target and Fonagy, 1994b). One study protocol intended to focus exclusively on the six to twelve age group (Target et al., 2002).

Twelve Years to Young Adulthood

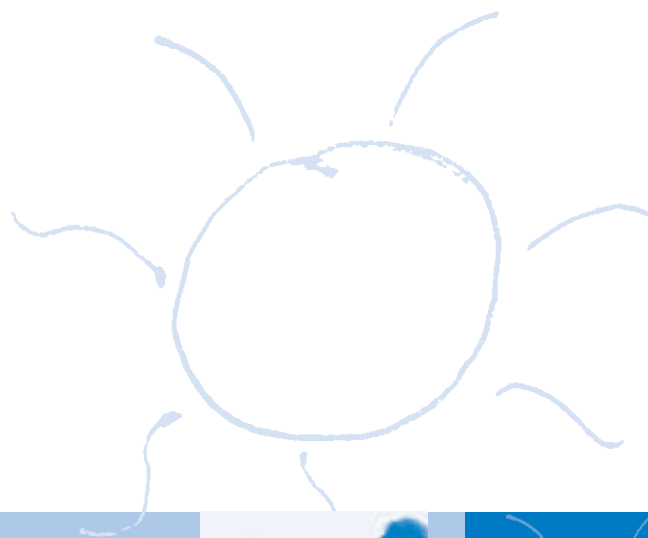
There were six studies in this category. One looked at young people aged twelve to twenty five, mean age 18.7 years, (Baruch 1995; Baruch et al., 1998). Another involved young adults aged eighteen to twenty five years (Fonagy et al., 2002). One focused exclusively on adolescents age fourteen to fifteen (Sinha and Kapur, 1999). Other studies looked at adolescents, age thirteen to seventeen and a half (Visvik and Vaglum, 1989) and age twelve to nineteen (Robin et al., 1999). Finally the study by Target and Fonagy mentioned above compared outcome in young people age twelve to nineteen with other age groups (Target and Fonagy 1994b).

Other Age Groups

Many studies included children across the age range (Target and Fonagy, 1994a; Target and Fonagy 1994b; Fonagy and Target 1996; Fonagy and Target, 1994). One study specified age six to eighteen years as its inclusion criteria in terms of age, but although younger children did participate, focused predominantly on adolescents presenting with poorly controlled diabetes (Fonagy and Moran, 1990; Moran et al., 1991; Moran and Fonagy, 1987). Another study of deprived children who'd been in the care system included children and young people age two to eighteen with half of the final sample being under ten years (Boston and Lush 1994; Lush et al., 1991). An ongoing multi-centre study of childhood depression looked at the ten to fourteen year age group (Trowell et al., 2003). A study of sexually abused girls looked at girls age six to fourteen, mean age ten (Trowell et al., 2002). An Israeli study of young people with obsessive compulsive disorder focused on the ten to sixteen year age group (Apter et al., 1984).

Influence of Age on Treatment Outcome

One study specifically looked at the impact of age on treatment outcome (Target and Fonagy, 1994b). A sample of 127 was drawn from a larger sample of those treated at the Anna Freud Centre over a forty year period (n=763). This sample was selected on the basis of matching on key clinical variables. Three matched groups (Under six years, six to twelve years, twelve to nineteen years) were then compared with regard to treatment outcome. The principal finding was that younger children were more likely to improve with psychoanalytic treatment. On each predefined criterion of improvement (no diagnosable psychiatric disorder and adaptation level above 70; C-GAS score above 68 at termination; statistically reliable change in adaptation; change in C-GAS score as a continuous measure) the likelihood of improvement during treatment declined with age. Interestingly the results indicated that children in the two younger age groups also benefited more from intensive than from non-intensive treatment. This was not true of adolescents who did not show the greater response to intensive treatments found in younger children. The authors postulate that older children may suffer from disorders more resistant to psychoanalytic help. In relation to the finding that adolescents may not benefit from more intensive treatment they note that Anna Freud and others (Freud, 1958; Sandler, 1980) have cautioned against intensive therapy in adolescence as the regression and dependence required in therapy is thought to run counter to the developmental push towards separation and independence. There is a need to 'fight for the past' because of the adolescent's fear of regression (Sandler, 1980). This was the only study to specifically examine the impact of age/developmental stage on treatment outcome. Another study from the sample from the Anna Freud Centre looked at children with a diagnosis of disruptive behaviour (Fonagy and Target, 1994) and also found age to be an important factor. Children younger than 9 years showed a mean improvement in C-GAS of 10.0 points compared with a change of 5.3 points in the group of older children and adolescents. In the Tavistock study of children in care, at the time of the initial follow up the four cases which had not done so well were all adolescents yet the most damaged child in the study who was also the youngest (2 years) did very well (Lush et al., 1991).



Intensity of Treatment

Influence of Treatment Frequency /Intensity on Treatment outcome

One study specifically set out to look at the outcome of child psychotherapy as a function of treatment frequency (Heinicke and Ramsay-Klee, 1986). This was a small study ($n=12$) and was also limited by non-random allocation to groups. Three groups of children age seven to ten years with reading and emotional difficulties were compared: those in treatment once a week for two years, those in treatment four times a week for the same period and those in treatment once a week for the first year and four times a week for the second. Those seen once a week did better initially, but in the year after the end of treatment, those seen four times a week for either one or two years did significantly better. Improvements were noted in the intensively treated group not only in reading ability but also in self-esteem, relationships and adaptation. The conclusion was that intensity of treatment had an impact on outcome but that some findings were not evident until follow up. The author of this study previously undertook a small pilot study which had similar findings (Heinicke, 1965).

The findings of these studies concur with those of Fonagy and Target who found that intensive treatment was more effective (Fonagy and Target, 1996). In their study of 763 cases treated at the Anna Freud Centre over a forty year period they identified that 56% of those in intensive treatment (4-5 times/week) moved from the clinical to the normal range as compared with 44% of those in less intensive (1-3 times per week) treatment ($P<0.005$). There was a clinically significant improvement in 62% of those treated 4-5 times/week as compared with 49% of those in 1-3 times per week treatment, ($P<0.0005$). The average effect size associated with 4-5/week treatment of at least 6 months was 1.00 and 0.64 for non-intensive treatment. The authors point out that allocation to intensive or non-intensive treatment at the Anna Freud Centre was made largely on pragmatic grounds rather than based on patient or therapist characteristics although clearly without random allocation there may be confounding variables. When specifically looking at those children treated at the Anna Freud Centre with emotional disorders ($n=352$) greater benefits were shown for more intensive psychoanalytic treatment (Target and Fonagy, 1994a). 87% of the sample in full psychoanalysis (4-5 times/week) showed reliable change as compared with 67% of those in psychotherapy (1-3 times/week). Intensive treatment generally led to greater improvements independent of treatment length. Children with emotional disorders who were categorised as severely disturbed were much more likely to show reliable improvement if in intensive treatment (4-5 times/week) rather than psychotherapy (78.7% vs. 26.1%). By contrast less severely disturbed children were almost as likely to benefit from non-intensive treatment. The authors highlight this finding and question the efficaciousness of less intensive treatment for the less severely disturbed group.

A retrospective controlled trial from the same centre compared outcome in children diagnosed with emotional disorders as opposed to those diagnosed with disruptive disorders (Fonagy and Target, 1994). Attrition from the study was far more likely to occur in children with disruptive disorders treated non-intensively as opposed to those treated intensively (40% in non-intensive treatment dropped out vs. 25% in intensive). More than two thirds of the children with disruptive disorders who dropped out of treatment within the first year were receiving non-intensive help. It is worth noting that the improved outcome for children with emotional disorders as compared to those with disruptive disorders is no longer statistically significant when children in intensive treatment for at least 3 years are compared. It is concluded that

psychoanalysis can bring about improvement in children with disruptive disorders but that such children are difficult to keep in treatment. The beneficial effects of more intensive treatment were greatest in younger children with disruptive disorders. A further study by Target and Fonagy (Target and Fonagy, 1994b) focusing on the impact of age on treatment outcome revealed that increased intensity of treatment (4-5 times per week compared to 1-2 times per week) was associated with improved outcome in children under twelve years but not in adolescents where no clear benefits were associated with increased intensity of treatment.

As discussed a randomised controlled trial (Smyrios and Kirby, 1993) compared families with children age five to nine years who were allocated to: time limited psycho-dynamically orientated treatment (twelve sessions); time unlimited psycho-dynamically orientated treatment; a minimal contact control group (on average two assessment interviews, a feedback session and a follow up interview twelve weeks after the feedback session). At follow up four years later all groups had improved but to the authors surprise the minimal contact control group improved most. The authors speculate that the minimal intervention may have been effective in enhancing the families' own coping mechanisms. The stringent inclusion and exclusion criteria for this study (excluded were children from a single parent family or a family with a history of mental illness or who had a learning difficulty or previous therapy) resulted in over half of the initial sample of 58 families introduced to the program being excluded and made it likely that this was a relatively high functioning group who might more easily respond. The outcome measures also focused mainly on family/parental work rather than individual child outcomes and as such may have failed to adequately capture child outcomes. Another study (Szapocznik et al., 1989) that compared individual child therapy (unusually without any concurrent parental work) with family therapy suggests that a good outcome for the child may not necessarily be reflected in improved family functioning. Nonetheless the study by Smyrios and Kirby raises the possibility that in certain circumstances (perhaps when the level of difficulty is not severe) a brief, clearly defined, time limited intervention may be the most effective option.

In the study of children adopted or in care referred to the Tavistock Clinic for treatment a trend was noted for more intensive and longer therapy to be more effective (Boston and Lush 1994; Lush et al., 1991). A community based study of analytic treatment for adolescents and young adults revealed that increased frequency of sessions enhanced the likelihood of improvement for externalising problems but not for internalising or total problems (Baruch et al., 1998)

A study in progress (Fonagy et al., 2002c) compares psychoanalysis and psychotherapy for young adults with mood disorders and personality disturbance. Preliminary results indicate the superior effectiveness of psychoanalysis. Another study in progress compares the long-term outcome of those treated in childhood with psychoanalysis or psychotherapy (Target and Fonagy, 2002). It is hypothesised that those children with more severe disturbance will show substantial impairment in adulthood unless they received long-term and intensive psychoanalytic intervention whereas differences between intensive and non-intensive treatment will be narrower in those children who are less severely disturbed. A proposed randomised controlled trial which is awaiting funding plans to compare once weekly psychotherapy with psychoanalysis or cognitive behaviour therapy or treatment as usual (Target et al., 2002).

Types of Therapeutic and Control Interventions

For the purposes of this review it was decided to include studies incorporating a model of psychodynamic therapy in the broadest understanding of this term. Inevitably this means there are variations across studies in the model of intervention used. Below is a description of therapeutic and control interventions according to different criteria.

Therapist Training

Fourteen studies involved interventions undertaken by therapists trained or in training in established child psychotherapy/child analytic trainings in the UK (Boston and Lush 1994; Fonagy and Moran 1990; Fonagy and Target 1996; Fonagy and Target 1994; Lush et al., 1991; Lush et al., 1998; Moran et al., 1991; Moran and Fonagy 1987; Reid et al., 2001; Target and Fonagy 1994b; Target and Fonagy, 2002; Target et al., 2002; Trowell et al., 2002; Trowell et al., 2003). Six studies involved similarly trained Swedish (Carlberg 1997; EPOS 2002; EPOS 2002), German (Petrie and Thieme 1978; Winkelmann et al., 2000), or American (Heinicke and Ramsay Klee 1986; Heinicke 1965) therapists. An Italian study used child psychiatrists and graduate psychologists trained in a model of time-limited psychodynamic psychotherapy (Muratori et al., 2002; Muratori et al., 2003). One UK study reported that therapists came from a variety of training backgrounds but clearly described the therapy as psychoanalytic psychotherapy, albeit in a community setting (Baruch 1995; Baruch et al., 1998). Another UK study of young adults used qualified psychoanalysts (Fonagy et al., 2002). In seven studies the intervention itself was described but the nature of the therapists' training was not clear (Apter et al., 1984; Robin et al., 1999; Sinha and Kapur 1999; Smyrios and Kirby 1993; Szapocznik et al., 1989; Vilsvik and Vaglum, 1989). In these studies different descriptive terms were used including: 'Psycho-dynamically Orientated Supportive Therapy' (Sinha and Kapur, 1999); 'Psycho-dynamically Orientated Treatment' (Apter et al., 1984; Smyrios and Kirby 1993); 'Individual Psychodynamic Psychotherapy' (Vilsvik and Vaglum, 1989); 'Ego Orientated Individual Therapy' (Robin et al., 1999). One of these studies (Szapocznik et al., 1989) describes the intervention as 'Individual Psychodynamic Child Psychotherapy' and stated that particular guidelines were adhered to (Adams, 1974). In two studies it was difficult to ascertain exact details of the training or intervention other than it was designated as 'psychodynamic/psychoanalytically' based (Jordy and Gorodscy, 1996; Zelman et al., 1985).

With regard to control treatments four studies used or planned to use 'treatment as usual' as a comparison intervention (EPOS 2002; Moran et al., 1991; Reid et al., 2001; Target et al., 2002) and no indication was given of the training background of those undertaking treatment. Some studies had no treatment comparison groups (Boston and Lush 1994; Boston et al., 1991; Sinha and Kapur 1999; Target, 2002). One study used supportive educational therapy (Apter et al., 1984) as a comparison and this was undertaken by paediatricians in contrast to a psycho-dynamically orientated treatment which was delivered by child psychiatrists. In another study psycho-educational group therapy was the comparison treatment (Trowell et al., 2002) and those providing the treatment were senior registrars in child psychiatry and other senior members of the child mental health team. Some studies compared treatments of different frequency (Fonagy et al., 2002; Heinicke and Ramsay Klee, 1986) so the type of intervention and training of those providing the treatment did not vary. One study (Smyrios and Kirby, 1993) compared treatments of different lengths e.g. time limited (twelve sessions) as compared to time unlimited treatment. This study also employed a 'minimal intervention' control group

involving, two assessment interviews, a feedback session and a follow up interview twelve weeks after the feedback session. While there were variations in the level of experience of individuals involved in treatment, theoretical background and training was similar. Another pilot (Muratori et al., 2002) and follow up study (Muratori et al., 2003) also used a reduced intervention control. In these studies the control group received two assessment interviews and one feedback interview with direction to community services. Again it appears that individuals with similar training to those providing longer treatment were used to provide the reduced intervention control. One study used structural family therapy as a comparison treatment (Szapocznik et al., 1989) and in this study it was made clear that the training and therapeutic allegiance of those providing family therapy as a treatment differed from those providing individual psychodynamic child therapy. This study also had a 'recreational control group' that appears to have had a minimal therapeutic component. A study looking at interventions for young people with Anorexia Nervosa (Robin et al., 1995; Robin et al., 1999) compared a family based treatment developed by the on study authors (Behavioural Family Systems Therapy) with a psycho-dynamically derived intervention (Ego Orientated Individual Therapy). Adherence to the different models of intervention was assessed during the study. Another ongoing study uses family therapy as the comparison intervention (Trowell et al., 2003) and those providing family therapy have extensive training and experience in this model and therefore provide a robust comparison for the group receiving individual psychodynamic psychotherapy.

Parent and Family Work

Parallel work with parents or carers is an essential component of child psychotherapy work (Rustin, 1999). In nineteen studies there was parallel parent/carer work: (Boston and Lush 1994; EPOS 2002; Fonagy and Moran 1990; Fonagy and Target 1996; Fonagy and Target 1994; Heinicke and Ramsay Klee 1986; Heinicke 1965; Lush et al., 1991; Lush et al., 1998; Moran et al., 1991; Reid et al., 2001; Target and Fonagy, 1994a; Target and Fonagy 1994b; Target et al., 2002; Trowell et al., 2002; Trowell et al., 2003; Smyrnis and Kirby, 1993; Robin et al., 1995; Robin et al., 1999; Vilsvik and Vaglum, 1989; Winkelmann et al., 2000.)

Four studies included family work as part of a psychoanalytic treatment intervention. In two studies, a pilot (Muratori et al., 2002) and follow up study (Muratori et al., 2003), involving children with emotional disorders the therapeutic intervention focused evenly on family work as well as individual work with the child. The authors emphasise that, as the intervention aimed to elicit a 'core conflictual theme', this was assumed in childhood to lie in the interaction of the child with the parents, hence the importance of family based work. Similarly a randomised trial of psychoanalytic interventions of different durations offered a mix of family and individual sessions (Smyrnis and Kirby, 1993). An ongoing study examining the impact of extended psychotherapeutic assessment of children with autism involves parents and siblings in the assessment process as well as the autistic child (Reid, et al., 2001).

A randomised trial comparing structural family therapy with individual psychodynamic child therapy (Szapocznik et al., 1989) diverged from usual practice in that individual therapy for the child was undertaken without any parallel parent/family work. In this study while improvement was noted at follow up in the children who received individual therapy, the functioning of their families was found to deteriorate compared with a no treatment control group and a group who received family therapy (Szapocznik et al., 1989). This study highlights the potential adverse effects of individual therapy undertaken in the absence of family or parent work.

In another randomised trial comparing family therapy with individual psychoanalytic child therapy for childhood depression, parallel work with parents was offered as part of the process of individual treatment (Trowell et al., 2003). It was noted such work could be challenging as, while initially the parents seemed relieved at the prospect of help, 'as the child began to show signs of improvement, the family dynamics were altered, the parents needed to take back their own projections and face their own real problems-their own depression or issues within the marriage' (Trowell et al., 2003). The authors of this study observed important differences in the response to family and individual therapy. Family therapy was noted to be particularly effective in reducing anxiety in the initial stages of assessment whereas the response to individual therapy with parallel parent work was slower yet more sustained with both treatments found to be equally effective at six month follow up. The results are still being looked at but such findings are informative regarding the patterns of response to different treatment modalities and the likely optimal balance between family and individual approaches (Dr Judith Trowell, personal communication).

A further randomised trial comparing individual and group therapy for girls who had been sexually abused assigned the girls' carers to groups or to individual support. Randomisation was not maintained for the carer intervention (Rushton and Miles, 2000; Trowell et al., 2002). The level of support given to carers varied according to clinical need with many being seen weekly. A significant proportion of the girls' mothers had suffered abuse in childhood themselves though only a small minority said that their disclosure of abuse was believed. The girls' mothers were also found to have high rates of psychological difficulty and were mainly in poor, often violent relationships. Overall carers were found to be positive about the therapeutic help offered to the girls and this was found to be related to improvement in the girls' psychosocial adjustment at one year follow up although this was not the case at two years follow up. Carers seemed to benefit from the help offered to them in their own right but there was no simple correlation between the characteristics of the carers and outcome for the girls over a two year follow up period. The authors conclude that the girls were eventually able to make improvements, independent of the relationship with their carer, but the rate of improvement seemed to be enhanced if the carers were positive about the therapeutic help offered.

Studies of young people with anorexia invariably involved some work with the young person's parents (Robin et al., 1995; Robin et al., 1999; Vilsvik and Vaglum, 1989). In one study individual therapy with parallel parent work and family therapy were compared (Robin et al., 1995; Robin et al., 1999). While both approaches were shown to be effective the authors were interested to note that there was a clear observable improvement in family functioning in the former group despite not being seen together as a family (Robin et al., 1995).

Those studies that did not offer parent or family work mainly involved adolescents and young adults (Baruch 1995; Baruch et al., 1998; Fonagy et al., 2002; Sinha and Kapur 1999).



Other Characteristics of Included Studies

Length of follow up

A number of studies had follow up periods of six months or less: Apter et al., 1984 (3–4 months); Baruch 1995 (3 month follow up on a study planned to run for 3 years); Sinha and Kapur 1999 (5 week follow up); Trowell et al., 2003 (6 month follow up). Six studies had follow up periods of one year: Baruch, et al., 1998; Heinicke and Ramsay Klee 1986; Jordy and Gorodscy 1996; Moran, et al., 1991; Szapocznik et al., 1989; Trowell et al., 2002. One study had a follow up period of a year and a half: Muratori et al., 2002. There were seven studies with follow up periods of two years: Boston and Lush 1994; Carlberg 1997; Fonagy and Moran 1990; Lush et al., 1991; Target et al., 2002; Trowell et al., 2002; Muratori et al., 2003. One study in progress has a planned follow up period of three years: EPOS, 2002. Another study in progress has a follow up period of on average three and a half years (Fonagy 2002). Four studies followed participants up for four years: Lush et al., 1998; Moran and Fonagy 1987; Smyrios and Kirby 1993; Zelman et al., 1985. One study had a five year follow up Winkelmann et al., 2000. The longest length of follow up was a study that looked at the adult outcome of children who had received treatment in childhood (Target and Fonagy, 2002).

Size of Study

There were five single case studies that employed an experimental design (Fonagy and Moran 1990; Moran and Fonagy 1987; Lush et al., 1998). One qualitative study looked in detail at five cases (Carlberg et al., 1997). A study examining the impact of treatment frequency had twelve participants (Heinicke and Ramsay Klee, 1986). One study had a sample size of twenty two (Moran et al., 1991). Many studies had sample sizes of thirty (Fonagy et al., 2002c; Muratori et al., 2002; Sinha and Kapur, 1999; Smyrios and Kirby 1993) or slightly larger (Boston and Lush 1994; Lush et al., 1991; EPOS 2002; Jordy and Gorodscy 1996). Four studies had moderately large sample sizes of around seventy (Petrie and Thieme 1978; Szapocznik et al., 1989; Trowell et al., 2002; Trowell et al., 2003; Muratori et al., 2003). Three studies involved large samples of more than a hundred participants (Baruch 1995; Target and Fonagy, 1994b; Winkelmann et al., 2000). The largest study (Fonagy and Target, 1996) had a sample size of seven hundred and sixty three and the next largest study (a sub-sample of the larger study) included two hundred and seventy participants (Fonagy and Target, 1994).

Study Quality

Because of the limited empirical evidence regarding which criteria are important in the assessment of study quality it was decided in accordance with the cochrane systematic review guidelines to avoid the use of 'quality scores' and undue reliance on detailed quality assessments (Clarke and Oxman, 2003). A critical appraisal was undertaken of each included study that focuses on potential sources of bias in the design and conduct of the study (see table 4). All studies were categorised according to a design hierarchy for studies of effectiveness (see table 3; CRD, 2001). Randomised controlled trials were graded according to the adequacy of concealment of allocation (Clarke and Oxman, 2003; Appendix 4).

Outcome Measures

The majority of studies employed standard psychiatric/psychological outcome measures. Most studies included standard diagnostic classifications i.e. ICD-10, ICD-9, DSM-III-R, DSM-IV (Apter et al., 1984; Baruch 1995; Baruch et al., 1998; EPOS 2002; Fonagy et al., 2002; Fonagy and Target 1996; Fonagy and Target 1994; Heinicke and Ramsay Klee 1986; Muratori et al., 2002; Smyrrios and Kirby 1993; Szapocznik et al., 1989; Reid et al., 2001; Target and Fonagy 1994b; Trowell et al., 2002; Trowell et al., 2003; Zelman et al., 1985).

To assess global functioning many studies used the Children's Global Assessment Scale (C-GAS; Schaffer et al., 1983) or adaptations of this such as the K-GAS (Apter et al., 1984; Fonagy and Target 1994; Lush et al., 1998; Muratori et al., 2002; Target and Fonagy 1994b; Trowell et al., 2002; Trowell et al., 2003). Other assessments of global functioning included the Global Assessment of Functioning Scale (Baruch, 1995; Baruch et al., 1998) and the Hampstead Child Adaptation Measure (HCAM; Target and Fonagy, 1992) (EPOS, 2002; Fonagy and Target 1996) that correlates with the C-GAS but is thought by some authors to have greater reliability in the context of analytic treatment.

With regard to symptom assessment the Child Behaviour Checklist (CBCL; Achenbach, 1991a) or adaptations of this was used (Baruch 1995; Fonagy and Target 1996; Fonagy and Target 1994; Muratori et al., 2002; Muratori et al 2003; Szapocznik et al., 1989) as well as the Strengths and Difficulties Questionnaire (S.D.Q; Goodman, 1997) (EPOS, 2002). The Youth Self Report form (Achenbach, 1991c) was used in two of the studies involving adolescents (Baruch 1995; Baruch et al., 1998; Sinha and Kapur 1999).

Some studies used psychiatric diagnostic interview schedules (Fonagy et al., 2002; Reid et al., 2001; Trowell et al., 2003; Trowell et al., 2002). A number of studies focused on changes in I.Q (Zelman et al., 1985) and improved educational attainment (Heinicke and Ramsay Klee 1986; Heinicke, 1965). Other ongoing studies have incorporated measures of attachment into their outcome schedules, as well as measures of personality functioning (Fonagy et al., 2002; Target et al., 2002).

In relation to particular diagnostic categories such as depression (Trowell et al., 2003; Szapocznik et al., 1989), obsessive compulsive disorder (Apter et al., 1984) post-traumatic stress disorder (Trowell et al., 2002) and autism (Reid et al., 2001) specific outcome measures such as the Childhood Depression Inventory (Kovacs, 1992), The Moods and Feelings Questionnaire (Angold et al., 1987), Severity Rating for O.C.D. (Bolton et al., 1983), the Post Traumatic Stress Disorder Scale (Orvaschel, 1989) and the Childhood Autism Rating Scale (Schopler et al., 1986) were used.

Two studies involving interventions that targeted families (Smyrrios and Kirby 1993; Szapocznik et al., 1989) employed outcome measures of family functioning such as the Van Der Veen Family Concept Inventory (Van der Veen and Olsen, 1983) and a structural family systems rating (Szapocznik et al., 1986). One of these studies (Smyrrios and Kirby, 1993) devised a 'Goal Attainment Scale' where the child therapists and parent therapists agreed three goals for each family with at least one goal that related directly to the child. Also used in this study was a 'Target Complaints Scale' where each parent listed, in order of severity, up to three problems that had led them to seek assistance, rated on a 5 Point Scale.

A number of studies as well as using conventional psychiatric/psychological measures also used measures that specifically focused on the analytic process. One study used a 'Feeling

Word Checklist' in order to follow the therapists counter transference feelings (EPOS, 2002). In another study therapists completed a weekly 500 item checklist where they reported the main themes of treatment and their interpretative work (Fonagy et al., 2002). One qualitative study of analytic treatment (Carlberg, 1997) specifically looked at 'turning point' sessions by conducting in depth interviews with therapists regarding the features of sessions identified as such. Process notes were used in many studies (EPOS, 2002; Fonagy et al., 2002; Fonagy and Target 1996; Reid et al., 2001). Some studies (Fonagy and Target, 1996; Heinicke and Ramsay Klee, 1986) used the Diagnostic Profile devised by Anna Freud as a means of recording details of patients' profiles (Freud, 1965). In some studies sessions were tape-recorded (EPOS, 2002; Trowell, 2003) or videotaped (Reid et al., 2001). A study comparing individual psychodynamic child therapy with structural family therapy used a Psychodynamic Child Rating Scale to assess outcome (Szapocznik et al., 1986). Another study devised forms in order to chart the progress of analytic treatment (Lush et al., 1991). The first form (form 2) was completed after assessment. In this form clinical judgments were recorded as were aims for therapy and criteria for improvement. A rating was also made regarding the anticipated improvement. A second form (form 3) was used to record actual progress/change at follow up. This study also devised baseline measures of severity relevant to the group of severely deprived children under study. This included an index of discontinuity of past care and a scale rating the stability of current placement (Lush et al., 1991). One of the aims of this study was to devise a suitable methodology for evaluating psychoanalytic treatment and to develop ways of making transparent therapists' aims for their patients. These aims were reflected in the way the outcome measures were structured. In a single case study, which formed part of this larger study (Lush et al., 1998) such outcome measures were supplemented by a range of standard outcome measures. These standard outcome measures were found to reflect the findings of the outcome forms devised specifically for the study.

Some studies did not use psychological outcome measures. In one group of studies the authors cite their scepticism about the ability of conventional psychological measures to capture deep psychological change, as well as their concern that such outcomes could be contaminated by the treatment process, as reasons for relying on physical outcome measures instead (Moran et al., 1991; Fonagy and Moran 1990; Moran and Fonagy, 1987). Physical outcome measures such as improved diabetic control as indicated by a reduction in glycosylated haemoglobin concentration (HbA1c) and the number of readmissions to hospital were used to chart progress (Moran et al., 1991). One of these studies (Fonagy and Moran, 1990) used changes in height, height velocity and predicted adult height as measures of treatment outcome. A further single case study (Moran and Fonagy, 1987) examined the association between diabetic control and variation in the themes of psychoanalysis. Diabetic control was estimated on the basis of weekly urine glucose testing. The content of the analysis was assessed by independent ratings of the analyst's weekly reports. The reports (approx 1,000 words) contained a summary of major themes of the week. A selected set of analytic themes was operationalised and two independent raters rated a random selection of weekly reports.



Discussion

Principal Findings

Overall the quality of the studies was reasonably high (see Table 4 for appraisal of individual studies). The vast majority of studies were conducted in clinical settings using clinically referred rather than recruited samples. A majority of studies also employed therapists working in a way that reflects day-to-day practice among child psychotherapists in the U.K. Taking these factors into account it might be assumed that the findings of the included studies in this review are generalisable to a 'real world' context.

Most impressive was the number of studies that focused on long-term follow up. Seven studies followed participants for a year or a year and a half. Another seven studies followed participants for two years and four studies had follow up periods of four years. One study had a five year follow up period and another looked at the adult outcome of children treated in childhood. This emphasis on the long-term is possibly reflective of the belief that treatment results in representational and structural changes with benefits that accrue over time. Such long follow up periods add to the quality of the studies in that more robust inferences regarding the long-term impact of interventions can be made.

As discussed, included studies incorporated a range of standard psychological outcome measures as well as physical and psychoanalytically based outcomes so that multiple perspectives and correlations between these were looked at.

Clearly there were limitations in the design of many of the studies (see appraisal of individual studies in Table 4 and classification of studies according to hierarchy of study design Table 3). Notably many authors cited a reluctance to randomise, particularly to a no treatment control group, as a major factor influencing the eventual design of the study. There appear to be many reasons for caution regarding randomisation but foremost amongst them seems to be the ethical difficulty of offering no treatment to a clinically impaired child/young person as well as the therapeutic difficulty of getting families to consent to randomisation to different treatments (Trowell et al., 1995; Treasure and Kordy, 1998; Target et al., 2002).

Despite these difficulties a number of randomised controlled trials were identified (see classification according to study design hierarchy, Table 3). The majority of studies were quasi-randomised in design or non-randomised controlled studies which constitute reasonably high levels of evidence of effectiveness. The proportion of randomised studies might be seen as relatively high. A recent comprehensive review of the evidence base for all treatments in child mental health revealed that only 7.4% of studies identified adhered to rigorous randomisation procedures (Fonagy et al., 2002d). In this review the proportion of randomised studies is much greater than this at 21.8%. If studies employing a quasi-randomised design are included the proportion is even greater at 34.3%.

Looked at in total, the findings of the included studies indicate that psychoanalytic child psychotherapy is an effective treatment with evidence at the highest level (see hierarchy of evidence of effectiveness; Table 3) to support this.

In samples that can be assumed to have lesser degrees of difficulty either because of the setting

or selection criteria, short term and even minimal interventions were shown to be effective (Muratori et al., 2002; Muratori et al., 2003; Sinha and Kapur 1999; Smyrniotis and Kirby, 1993). Certain disorders appear to be more responsive to treatment e.g. emotional/internalising disorders as opposed to disruptive/externalising disorders (Baruch 1995; Baruch et al., 1998; Fonagy and Target, 1996; Fonagy and Target 1994; Muratori et al., 2002; Muratori et al., 2003; Sinha and Kapur, 1999). When children present with more marked difficulties e.g. with conduct disorder or severe emotional disorder, the intensity of the treatment appears to be particularly important. Certain studies suggest that such children do not easily improve in anything less than intensive treatment (Fonagy and Target, 1996; Fonagy and Target, 1994; Target and Fonagy, 1994a). The same could be said of young adults presenting with both a personality disorder and an Axis I Diagnosis. In this instance the frequency of treatment makes all the difference (Fonagy et al., 2002c). Similarly for severely deprived children in care a trend was noted for intensive treatment to be more beneficial (Lush et al., 1991; Boston and Lush, 1994). A small study specifically looking at intensity suggests that more frequent weekly sessions for children with similar difficulties leads to a better outcome in the long term (Heinicke and Ramsay Klee, 1985; Heinicke, 1965). The superior effectiveness of intensive treatment may not, however, apply in adolescence (Target and Fonagy, 1994b). Indeed the authors of this study, which looks specifically at age as a factor influencing outcome, speculate that adolescence is a time when the drive towards separation is such that intensive treatment may be resisted.

An ongoing study looking at the adult outcome for children treated in childhood examines the hypothesis that those children with severe and pervasive difficulties who merited intensive intervention in childhood yet did not receive it, would present with residual difficulties in adulthood compared with a similar group who were offered intensive treatment in childhood (Target and Fonagy, 2002). Preliminary results from this study support this hypothesis and also highlight the possibility that children unsuccessfully treated in childhood may be worse off in relation to their attachment styles compared with an untreated sibling control group. Qualitative research undertaken as part of this study also reveals that a significant proportion of those treated in childhood had a poor understanding of the reasons for being in treatment (Midgley, 2004). Another finding was that many felt that the treatment in childhood had an ongoing beneficial impact on their adult lives and had provided them with 'skills' or 'tools' for dealing with feelings of anxiety, stress or depression in adulthood (Midgley, 2004).

As discussed many of the children/young people in this review presented with severe levels of disturbance of a nature that might be expected to be hard to treat. One study (Trowell et al., 2002) looking at children who had been sexually abused noted that the participants had suffered extreme levels of abuse (e.g. over 30% had been exposed to multiple perpetrators). It is not hard to imagine that children who have been subjected to such experiences will present with profound and complex difficulties even beyond what psychiatric diagnosis and psychological assessments might reveal. While gains were made with treatment it is not surprising that this population continued to present with residual difficulties after a relatively brief intervention (thirty individual sessions of focused psychotherapy as compared with eighteen group sessions). Similarly a study looking at severely deprived children who were adopted, fostered and in residential children's homes acknowledges from the outset the serious impact of such children's early experiences on their subsequent development. In this study the judgment of the therapists is relied upon in order to make predictions regarding possible areas of improvement. Such predictions were found to be accurate. Despite the serious nature of the difficulty the vast majority of children improved considerably in once weekly (on average) treatment over a period of less than two years with parallel parent/carer work (Lush et al., 1991; Boston and Lush 1994; Lush et al., 1998).

There is some evidence too that individual psychotherapy using some principles derived from psychodynamic understanding, although the training background of the practitioners is unclear, is an effective treatment for adolescents with anorexia nervosa (Robin et al., 1995; Robin et al., 1999). An open Norwegian study points to the benefits of individual psychodynamic psychotherapy for young people with anorexia nervosa at long-term follow up (Vilsvik and Vaglum, 1989).

Preliminary results indicate that an extended psychoanalytic psychotherapeutic assessment for children with autism and their families may result in benefits for children with such profound developmental difficulties (Reid et al., 2001). An ongoing randomised trial of psychoanalytic child psychotherapy for depression suggests that good outcomes can be achieved, for this disturbed group of children/young people, with a relatively brief psychotherapeutic intervention (Trowell et al., 2003).

Certain categories could be considered 'in between' in terms of severity. For instance the study which focused on young people with 'dangerously controlled' Insulin Dependent Diabetes Mellitus offered psychoanalytic psychotherapy to a group of young people who were clearly in difficulty and presented with high rates of psychiatric disorder but who possibly did not have the same degree of disturbance as the aforementioned groups. In this case psychoanalytic psychotherapy three to five times a week over fifteen weeks resulted in a marked improvement in diabetic control and hospital readmission rates at one year follow up. The control group received standard medical inpatient care, which included psychological/psychiatric input, but even so, intensive analytic input, albeit over a short period of time, appears to have made a significant difference (Moran et al., 1991). A sub-sample of this study employed a single case experimental design to look at improvement in height, height velocity and predicted adult height velocity in three children who presented with growth retardation in addition to Insulin Dependent Diabetes Mellitus. Remarkably there were substantial increases in height, height velocity and predicted adult height in all three cases (Fonagy and Moran, 1990).

The positive impact of analytic treatment on physical outcome parameters convinces that real, clinically important, change has taken place. The correlation between improved diabetic control and the working through of psychic conflict in one single case study provides putative evidence regarding possible mechanisms for the beneficial effects of treatment (Moran and Fonagy, 1987).

What is clear therefore is that interventions with groups where there is a high level of disturbance need to be more 'potent' both in terms of the quality of the intervention itself and the 'dose'. It could be argued that if child psychotherapists were eager to prove the benefits of analytic treatment they should seek out samples with minimal levels of difficulty where randomisation to a no treatment control group would pose fewer ethical dilemmas. Equally a lesser standard of proof is required when the comparison group receives no intervention.

However much of the research included in this review is reflective of current practice in that child and adolescent psychoanalytic treatment is reserved for those who present with difficulties of such a nature that such a skilled intervention is required. As has been discussed, included studies which focus on less impaired samples identify benefits with less intensive intervention.

Possible adverse effects of treatment were highlighted in some studies. For example one study suggests that those who received inadequate treatment for their level of difficulty might be

worse off in certain areas compared to an untreated control (Target and Fonagy, 2002). Another study identifies a deterioration in family functioning in a group of children treated exclusively with individual psychotherapy, without any concurrent family or parent work (Szapocznik et al., 1989).

The issue of training is interesting. One could speculate that this is a major factor determining the quality of the intervention itself be it brief or long-term. Indeed a preference for using analytically trained clinicians in research of cognitive-behavioural treatments has been identified (Fonagy et al., 2002e). The emphasis in analytic child psychotherapy is on training and supervision of sufficient depth rather than a mechanistic focus on procedures, although manuals are increasingly employed to support the work. In this review the majority of studies involved therapists trained (or in training) in established child psychotherapy/child analytic trainings within the UK. Those studies where the nature of the training was difficult to ascertain or might be assumed to be less intensive, mostly focused on samples with lower levels of clinical disturbance.

The majority of studies, particularly those involving children rather than adolescents, included regular meetings with parent/carers as well as individual work with the child. Such work with parents/carers is viewed as an essential component of the therapeutic process (Rustin, 1999). As discussed previously, a study which compared individual psychodynamic psychotherapy with structural family therapy for boys age six to twelve years diverged from common practice in that the individual psychotherapy was undertaken in the absence of any parallel parent work (Szapocznik et al., 1989). While both forms of therapy were similar in reducing many problems, family functioning deteriorated in the group treated individually compared to those receiving family therapy or no treatment. The authors argue that this is perhaps proof of a systemic perspective in that the child's difficulties could be understood as reflective of wider problems in the family and once treated the underlying family problems became more apparent. This finding is echoed in the preliminary results from a study of childhood depression which compares individual therapy plus parallel parent work and family therapy for childhood depression (Trowell et al., 2003). The authors observed that as the children improved with treatment, parental difficulties came more to the fore and needed to be worked with. The data from this study is still being scrutinised but important differences in the pattern of response to different therapeutic approaches were also identified which may have implications regarding how different treatments are optimally delivered (Dr Judith Trowell, personal communication). This study also reveals different patterns of response to different treatment modalities (i.e. family or individual therapy) which may have implications for the timing of different interventions (Dr Judith Trowell, personal communication).

Another study looking at treatment for young people with anorexia nervosa, identifies an improvement in family functioning similar to that achieved by family therapy despite parents and young people being seen separately for a psychodynamic intervention rather than together as a family unit (Robin et al., 1995). This finding was not anticipated by the study authors whose background was in family therapy.

A number of studies point to the benefits of offering individual child psychotherapy together with family work (Muratori et al., 2002; Muratori et al., 2003; Smyrniotis and Kirby, 1993) and to the value of family meetings as part of a treatment programme (Reid et al., 2001). Thus emphasising the importance of taking the family system into account when undertaking individual work with children (Hopkins, 1999).

Age emerges as another important factor influencing outcome. While there are many studies which support the effectiveness of treatment with adolescents and young people (Baruch, 1995; Baruch et al., 1998; Fonagy et al., 2002; Moran et al., 1991; Sinha and Kapur, 1999), one study which specifically looks at the impact of age/developmental stage on outcome found that the younger the child the greater the responsiveness to treatment (Target and Fonagy, 1994b). It was also noted that children under twelve benefited more from intensive than from non-intensive treatment but that this was not true of adolescents, although duration of treatment did make a difference. It is perhaps no surprise that early intervention is likely to be more effective but such findings suggest that difficulties in childhood should not be minimised but rather optimally addressed, if necessary with intensive treatment, in the hope of precluding the need for input at a later stage when problems may be more entrenched and harder to treat.

Strengths and Weaknesses of the Review

One of the main strengths of this review is the comprehensive search strategy. All relevant biomedical, psychological, educational and childcare electronic databases were searched. Searches were conducted over the entire lifespan of these databases and research published in foreign languages was included. In addition searches were supplemented by hand-searching and contacting researchers in the field. The search was undertaken systematically according to a predefined methodology.

This is the first systematic review to specifically focus on psychoanalytic child psychotherapy. Recent reviews of the evidence base for a range of treatments in childhood and adolescence were, inevitably perhaps, due to the breadth of treatments covered more restricted in focus in terms of the number of databases searched, the time-span covered and exclusion of foreign language research (Carr, 2000; Fonagy et al., 2002d). The specific focus of this review allows a look at the totality of research, both past and current and enables comparison across studies. The relatively broad inclusion criteria (see methods section) means that some studies have been included that would have been excluded if more stringent criteria had been applied. The proportion of poorer quality studies is however relatively low.

The heterogeneity of clinical populations studied as well as variations in the nature of the intervention itself limits the degree to which comparisons can be made across studies and firm inferences drawn. Nonetheless there was possibly more commonality across studies than might have been expected given the broad inclusion criteria.



Conclusions

There is evidence to support the effectiveness of psychoanalytic psychotherapy for children/young people with a range of psychological disorders. Beneficial effects are shown with treatment on a variety of outcome measures and many studies showed that improvements were sustained or even enhanced at long-term follow-up. While short-term treatment is shown to be effective, particularly where the level of clinical disturbance is not severe, there is evidence to support the view that greater benefits accrue with longer more frequent treatment. There is a suggestion too, that the younger the child the greater the treatment response and that responsiveness to treatment may decline with age, from childhood into adolescence. Parent or family work appears to be an essential component of the treatment of younger children.



Recommendations

Without detracting from the existing body of research, it is clear that there is scope for further research in order to clarify a range of questions regarding the effectiveness of psychoanalytic child psychotherapy.

While there is evidence regarding the beneficial effects of treatment, the mechanisms whereby such change is brought about and the specific essential components of treatment are poorly understood. Equally, limited attention has been paid to the potential adverse effects of treatment. Vigilance in relation to adverse effects should also apply to the research process. A recurrent issue for many researchers involved in studies included in this review was their concern that research might disrupt the therapeutic process. Caution in this regard is not confined to psychoanalytic child psychotherapy. Increasingly patients are resisting participation in rigid research designs (Jadad, 1998). This is leading to the development of more sophisticated methods of randomisation, for example those that involve dialogue with patients and take patients needs and preferences into account (Jadad, 1998). There needs to be further debate about how research can be adapted to a clinical context as well as greater clarity and transparency about the possible deleterious effects of the research process itself.

The relevance of the outcome measures employed in psychotherapeutic research also requires greater scrutiny. Do such measures adequately capture meaningful change for the child and his/her family? What is the impact of the measures on the therapeutic process? Is there a risk of constraining the creative possibilities for change? Do outcome measures simply not manage to assess what we are most interested in?

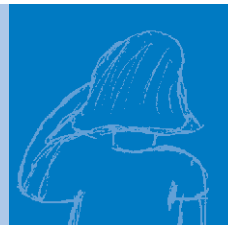
Another area which requires investigation is how best to describe children's psychological difficulties. Current psychiatric diagnostic categories for children and adolescents, while useful, in their present state are insufficiently discriminating, pay too little attention to developmental factors and fail to reflect individual complexity. More accurate descriptors would convey a greater sense of what exactly needs to be dealt with in any individual situation and therefore provide a more robust baseline from which change could be assessed. Child psychotherapists are adept at individualised assessments and formulations. Are there ways in which such approaches could be standardised and adapted for use in a research context? Efforts in this regard were made in some of the studies included in this review but there were difficulties both with establishing reliability and achieving acceptability in the wider research context (Lush et al., 1991; Boston and Lush, 1993).

As discussed much of the research in psychoanalytic child psychotherapy is undertaken with children with high levels of clinical disturbance. One way of circumventing the ethical difficulties associated with certain research designs might be to focus on populations of children where the level of impairment would be expected to be less (e.g. samples recruited through schools or in hospital liaison settings). In such circumstances the application of a randomised controlled design would be less problematic. Interventions of shorter duration and intensity could be assessed and there would be scope for having a no treatment control group. It might be hypothesised that it is the quality of the capacities developed through a long specialist training that is one of the key beneficial components of treatment, and if so it would be interesting to determine the benefits of this in different contexts.

Whether long-term intensive psychotherapeutic interventions should be more widely available for those children who need it is a political as well as a clinical issue. There is evidence to suggest that for some children intensive intervention is crucial for their subsequent development. The resources required to undertake this kind of work mean that it merits further evaluation in relation to effectiveness. In addition, uncertainty regarding the circumstances where such treatment is warranted provides the ethical basis for further research. While research in this area is more onerous and difficult, it is even more frustrating if the availability of such treatment is restricted because of insufficient evidence of effectiveness when funding bodies refuse support for a proposed randomised controlled trial to look at this very issue (Target et al., 2002).

The benefits of fixed length treatment programmes could be further explored. Many of the included studies highlight the benefits of such programmes for children and young people with varying degrees of difficulty, although those with more severe problems unsurprisingly remain with residual difficulties at the end of treatment (Trowell et al., 2002). One study points to the possibility that in certain situations a brief, fixed (four session) family intervention may be superior to longer treatments (Smyrniotis and Kirby, 1993). Research might be undertaken to examine the benefits of fixed programmes of different durations compared with each other and with flexible (time un-limited) treatment programmes.

The relative benefits of different therapeutic approaches for different problems at different times in the treatment process requires further exploration. The recent study by Trowell et al., (2003) comparing family and individual therapy enables a clearer understanding of the likely optimal treatment modalities in different situations. Further work of this kind could be undertaken.



Acknowledgements

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Tables

Table 1. Type of work undertaken by child psychotherapists*

Type of Work	% of time
Therapeutic work	43
Supervision and teaching	18
Assessment	13
Consultation to other professionals	12
Management	10
Other	4

Table 2. Settings where child psychotherapists work*

Service and Professionals	Role of Child Psychotherapists
Child and Adolescent Mental Health	Assessment and brief psychotherapy Long-term psychotherapy Family, parent and group work Consultation, supervision and training for other professionals
Primary Health Care Teams	Support GPs in the assessment of children and young people Brief psychotherapy with children and young people Training of health visitors
Children's Health Services	Brief therapy Staff support Support for parents and siblings Support for children with long-term illnesses
Local Authority social services	Support for social workers, staff in residential homes and foster carers Consultation and supervision Assessment of child protection cases Psychotherapy for individual looked after children.
Voluntary organisations	Staff training, support and consultation Direct access for young people in youth consultation centres
Education	Consultation to schools and colleges Staff training and supervision Direct work with children individually or in groups Work with children excluded from school
Youth Justice	Consultation and advice to youth justice workers Intensive psychotherapy for some offenders

The Child Psychotherapy Trust, 2001 *

Box 1: Child & Adolescent Psychotherapy Training

Child & Adolescent Psychotherapy Training

Theoretical and Clinical Seminars on:

- Human growth and development (including non-psychoanalytic perspectives, particularly from attachment theory and developmental psychology)
- Developmental disturbance and psychopathology
- Psychodynamic theories
- Psychotherapeutic techniques
- Research

Clinical experience:

- Three intensive cases (at least three times/week) under weekly supervision from an approved supervisor. Cases are children at different developmental stages (under 5, latency and adolescence). One case must be seen for no less than two years and the other cases for at least one year.
- Additional clinical cases for which the trainee is offered regular supervision (should include a range of clinical problems/levels of disturbance).
- Weekly work with parent(s)/carer of a child.
- Experience of family work, group work, parent-infant psychotherapy and consultation to other professionals and institutions.
- Contact with children in the care system and paediatric inpatient settings.

Parent-Infant observation

- A newborn infant and carer are visited for an hour a week over a two year period. Observations are recorded and explored in a weekly seminar led by an experienced clinician. This process is viewed as crucial in developing detailed observational skills and enabling an integration of psychoanalytic and child development theories.

Personal Psychoanalysis

- A personal analysis is a necessary part of the training. It is thought vital that the child psychotherapist explores his or her own unconscious motivations, defenses and anxieties prior to working with children.

Table 3: Quality of Evidence: Levels of Evidence of Effectiveness

Categorisation of Studies According to Design Hierarchy for Studies of Effectiveness*

(Centre for Reviews and Dissemination York, Guidelines 2001)*

Level 1. Experimental Studies: Five completed randomised controlled trials were identified (Robins et al., 1999; Sinha and Kapur 1999; Smyrios and Kirby 1993; Szapocznik et al 1989; Trowell et al., 2002). One ongoing Randomised Controlled Trial (Trowell et al., 2003) and protocol for a randomised controlled trial awaiting funding (Target et al., 2002) was also identified. The five completed studies showed psychodynamic/ psychoanalytic treatment to be effective (see table 4).

Level 2. Quasi-experimental studies: Four studies employed quasi-randomised methods of assignment (Fonagy et al., 2002; Moran et al., 1991; Muratori et al., 2002; Muratori et al., 2003). Three completed studies (Moran et al., 1991; Muratori et al., 2002; Muratori et al., 2003) showed psychoanalytic psychotherapy to be effective and preliminary results from the third study (Fonagy et al, 2002) suggest effectiveness (see Table 4).

Level 3. Controlled observational studies: Ten studies fell into this category. Three studies are in progress awaiting full publication of results (EPOS 2002; Target and Fonagy, 2002; Reid et al., 2001). Two had a no treatment control group (Boston and Lush 1994; Lush et al., 1991; Target 2002). Six studies matched the comparison groups a priori on the basis of clinical and demographic characteristics (EPOS 2002; Fonagy and Target 1994; Target and Fonagy 1994b; Target 2002; Heinicke and Ramsay Klee 1986; Heinicke, 1965). Two studies used a non-matched control group (Apter et al., 1984; Boston and Lush 1994; Lush et al., 1991). In one study although a control group was described the quality of reporting was so poor the study is assumed to be of low quality (Jordy and Gorodosczy, 1996) and is therefore not included in this category. The seven completed studies showed psychoanalytic/psychodynamic therapy to be effective (see table 4).

Level 4. Observational study without control groups: There were ten studies in this category, seven in the form of open non-controlled trials (Baruch et al 1995; Baruch et al.,1998; Fonagy and Target 1996; Petrie and Thieme 1978; Vilsvik and Vaglum, 1989; Target and Fonagy 1994a; Winkelmann et al 2000; Zelman et al., 1985;) and three in the form of case studies employing an experimental design (Fonagy and Moran 1990; Lush et al., 1998; Moran and Fonagy 1987). All ten studies revealed evidence of effectiveness (see table 4).

Level 5. Expert opinion based on pathophysiology, bench research or consensus: This was considered beyond the remit of this review to look at. However detailed discussion of cases within specialist Journals is widely used as a method of generating hypothesis and thinking around the work. Evidence from primary neuro-developmental/child development research is also used to inform thinking.

Table 4. Child & Adolescent Psychotherapy: Therapeutic Approaches

Authors	Location	n	Design	Intervention	Age/Type of problem	Outcome	Follow-Up	Findings
<p>Apter et al., 1984 Comment <i>Clinical sample (total sample of all patients referred with O.C.D). Selection bias highly likely as non-random assignment to treatments and selection for treatment based on patient characteristics.</i> <i>Model of psychodynamic intervention not clear.</i> <i>Pharmacological treatment likely to bias outcome. Very small sample size. No firm conclusions can be drawn.</i></p>	Israel Tel Aviv	8	<p>Case series</p> <p>Total sample of all patients admitted to the unit diagnosed with OCD during the period 1980-1982.</p>	<p>A behavioural treatment plan involving response prevention and in vivo exposure was devised at a specialist clinic and offered to the young people. The young people did not comply with this plan.</p> <p>N=4 given psycho-dynamically orientated therapy</p> <p>N=4 Supportive educational therapy</p> <p>4 patients received medication.</p> <p>Parent work.</p> <p>Psychodynamically orientated inpatient treatment.</p>	<p>Adolescents with OCD (Obsessive Compulsive Disorder). DSM III criteria. Admitted to a Psychodynamically orientated inpatient unit.</p> <p>Age 10-16years. 3 female, 5 male.</p> <p>4 out of 8 IQ> 130. All had above average I.Q.</p>	<p>Severity rating for OCD (Bolton et al., 1983)</p> <p>K-GAS</p>		<p>Baseline: K-GAS scores less than 40 out of 100. Severity rating for OCD grade 3 i.e. all experienced more than 4 hours each day dominated by symptoms.</p> <p><i>Response to Therapy:</i> Positive response in all patients. At 3-4 months 4 out of 8 completely symptom free. 7 out of 8 much improved.</p> <p><i>Psychodynamic Treatment</i> 2/4 symptom free 1 symptoms unchanged 1 symptoms improved</p> <p><i>Supportive Psychotherapy</i> 3/4 symptom free 1 symptoms improved</p>

Table 4. Child & Adolescent Psychotherapy: Therapeutic Approaches

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<p>Baruch, 1995* Findings up until 20 month follow up. Comment <i>High risk sample. Median no of ICD-10 diagnosis 3. High psychosocial stress and low level of functioning. Minimal exclusion criteria. Selection bias unlikely. Established outcome measures used. Inter-rater reliability high. Multiple perspectives. Outcome assessed by therapist, patient and significant other. Interesting finding that the addition of internalising or emotional problems made the response to treatment more favourable. Reasonably large sample size. Lack of random assignment to treatment and control groups limits the conclusions that can be drawn.</i></p>	UK- Brandon Centre, London	106	Open Non controlled trial	Community based psychoanalytic psychotherapy Median no of weeks in treatment 17. Older subjects were more likely to attend a higher number of sessions.	<p>12-25 years Mean age 18.7 years 73.8 (Female) 26.2 (Male) Single parent (36.8%) Both parents (15.1) Alone, hostel or single parent (60%) Range of presenting problems. Self-referrals often encouraged by G.P (25%). Diagnosis: The median no of diagnoses was 3.</p>	<p>YSR (Youth Self Report) Young person and 'significant other' assessment at baseline, 3 months, 6 months, one year and annually thereafter. Baseline <i>Global Assessment of Functioning Scale (GAF)</i> Therapist rates level of functioning on a scale 1-100. Inter rater reliability high ($r=0.8$). <i>Severity of Psychosocial Stressors Scale</i> 1-6. Reliability ($r=0.8$). Median stressor 4 (severe events or circumstances). <i>ICD-10</i> <i>Presentation of Problems Form</i> Outcome <i>The Youth Self Report Form*</i> 118 statements rated by adolescent. <i>Significant Other Form*</i> adapted from the CBCL (Achenbach and Edelbrock, 1986)</p>	3 months (Current report) Plan to run study for 3 years.	<p>Results <i>YSR Scales</i> A significant decrease in numbers in the clinical range for internalising and total problem scales. A small increase in those in the clinical range for the externalising scale. Changes in mean YSR scales showed a statistically significant improvement for internalising and total problem scales. <i>Predictors of reliable change in YSR Scores</i> <i>Internalising problems: (improvement)</i> Absence of substance misuse, somatic problems and learning difficulty. High internalising YSR problem score at intake. <i>Externalising problems:</i> 75% of those who deteriorated could be predicted if they had a diagnosis from their therapist of personality disorder. Most who improve for externalising problems also improve for internalising (9/13). Most who deteriorate for externalising problems do not deteriorate for internalising (6/8). It seems that the addition of emotional /internalising problems makes the response to treatment more favourable. <i>Differences in assessment of outcome:</i> significant others rated young people as having more externalising problems than the young people themselves.</p>

Table 4. Child & Adolescent Psychotherapy: Therapeutic Approaches

Authors	Location	n	Design	Intervention	Age/Type of problem	Outcome	Follow-up	Findings
<p>Baruch et al., 1998 Comment <i>Authors note that sample followed up for one year differs from the total sample and identify important differences. An open study. Cannot exclude spontaneous remission as there was non random assignment to treatment. Reliability of outcomes assessed. Evidence that increased frequency of sessions increased the likelihood of improvement for externalising problems but not for internalising or total problems. Results show most improvement in the first 6 months with fewer gains after this. Unexpectedly aggression and conduct problems emerged as predictors of improvement.</i></p>	UK - Brandon Centre and UCL	<p>n=61 Subset of larger group for whom follow up data not yet available. (Sample drawn from 231 young people attending the clinic for the first time over a defined period) Authors note that this sample differs from the unanalysed group (n=170). They are older, more likely to self refer, less likely to have conduct or developmental problems. Attrition: At one year follow up 47 out of 61 were still in treatment.</p>	Open non controlled trial. One year follow up of Baruch (1995)	Community based psychoanalytic psychotherapy 13 therapists from a variety of training backgrounds	<p>12-25 Mean age 18 71% female Range of presenting problems Mean Global Assessment of Functioning score 51.26 The median score for severity of psychosocial stressors was 4 (severe). The most common ICD-10 diagnosis was a mood disorder (42%), Followed by neurotic stress-related or somatoform disorder (25%). Mean no of diagnosis 2.28.</p>	<p>YSR (Youth Self report) form. One week test retest reliabilities found to be high ($r=0.91$). Administered by patient's therapist with follow up at 3 months, 6 months, a year and annually thereafter. Outcome assessed by examining: 1) mean change 2) change in numbers from the clinical to the non-clinical range. 3) Statistically reliable change in adaptation level.</p>	1 year	<p>1) Mean change-mean scores for internalising, externalising and total problems all showed statistically significant levels of improvement between intake and one year and the group averages were within the non-clinical range. Most change occurred in the first 6 months. There was no significant difference between those who attended more than 28 sessions and those who attended less. 2) Change from clinical to non-clinical levels of YSR behaviour problems 39.3% moved from clinical to non clinical levels of internalising problems by one year follow up and 52.5% of this group showed improvement in total problems. For externalising problems 20% of the group moved from the clinical to the non clinical range. 3) Reliable Change: Improvement: Internalising (50.8%), Externalising (37.7%), Total Problems (60.6%). Rates of deterioration very small (less than 5%). The majority of those with externalising problems remained unchanged. Improvement in externalising problems was more likely to occur for those patients who attended more frequently. Predictors of improvement in YSR: Internalising problems: improvement more likely if higher somatic complaints, aggressive behaviour, diagnosis of conduct disorder & parents who abuse drugs. Externalising problems: improvement associated with aggressive behaviour, anxiety/depression, family problems, intact parental couple, and higher attendance.</p>

Table 4. Child & Adolescent Psychotherapy: Therapeutic Approaches

Authors	Location	n	Design	Intervention	Age/Type of problem	Outcome	Follow-up	Findings
Boston and Lush, 1994* * See Lush, Boston and Grainger (1991) Follow up report of 1991 study. Comment Clinical sample. Children with severe difficulties. Comparison group acknowledged by authors to be biased. Outcome measures clinically meaningful. Reliability of outcome assessed (see 1991 report). Outcome assessed from multiple perspectives. Long term follow up. Non-random allocation to groups limits the conclusions that can be drawn.	UK (Tavistock Centre) Follow up report of initial study report in 1991.	n=31 n=7 (comparison group)	Non randomised controlled study	Psychoanalytic child psychotherapy 19-once weekly 12-two or three times per week Parallel Parent/Carer Work (13 stopped well before the two year stage. 12 of this group were in once weekly treatment) 23 different therapists	Adopted and in care children age 2-18 referred to the Tavistock Clinic over a three year period who entered and continued psychotherapy. Half the final sample was under 10 yrs. Female (19), Male (12). Adopted (13), Fostered (13), Children's Homes (5)	Therapists Ratings at The End of Treatment (form 3)	2 years	Therapists Ratings Improved 26 rated 1, 2 or 3 26 rated 1, 2 or 3 (some degree of improvement) of whom 23 were rated 1 or 2 (definite or considerable improvement). <u>Doubtful Progress</u> Four <u>No change</u> One <u>Worse</u> None <u>Observations</u> A trend was noted for more frequent and longer therapy to be more effective. There was also a tendency for good progress to be related to more stable current placements and good external support for therapy. <u>Therapists Prediction</u> Therapists predicted outcome well. In 23 out of 31 cases the predictions were the same. In 5 cases the children did worse than expected and 5 cases did better. <u>Comparison group</u> Recommended for Psychotherapy but did not receive it. None in this group improved. <u>Therapists Criteria for Improvement</u> Often exacting, specifying internal as well as external change. <u>Observations</u> Improved relationships were noted. Children showed increased trust, confidence and security. Self-esteem however was slow to improve. Intellectual functioning improved.

Table 4. Child & Adolescent Psychotherapy: Therapeutic Approaches

Authors	Location	n	Design	Intervention	Age/Type of problem	Outcome	Follow-Up	Findings
Carlberg 1997 Comment <i>Study of psychotherapy process. Qualitative methodology. Predelineated area of interest. Taped interviews. Long term follow up. Small sample. Selection bias likely. Detailed exploration undertaken and interesting hypothesis developed about the process of psychotherapy.</i>	Sweden (The ERICA foundation)	5 (therapists were asked by letter to take part in the study)	Qualitative Study of the process of psychoanalytic child psychotherapy. The aim of the study was to increase understanding about the process of change. The method aimed at gathering data that yielded a 'thick description' (Merriam 1998) of 'turning point' sessions in psychotherapy. A turning point session was defined as a session where 'something qualitatively new is identified by the therapist'.	Psychoanalytic child psychotherapy 1-2 sessions per week	7-11 years All diagnosed as 'deeply disturbed'	Therapists phoned the researcher when they identified a 'turning point' session. Therapists provided a detailed written description of the session and the session immediately before and after this session. A questionnaire providing basic information about the child and family background was completed. Therapists were interviewed 1) immediately after the turning point session. 2) one year later 3) two years later Interviews were taped and transcribed	2 years	Two turning points were identified in the introductory phase of therapy, one in the middle phase and two after 3 and 4 years of therapy. <i>Common features in turning points</i> During the session - (a) A process preceding the actual change (b) Identification of a meeting with great emotional impact (c) The change becomes visible The Waiting Room A change was noted in the child in the waiting room. Child seen as a 'whole person'. Verbal Interpretations All therapists made recurrent statements about the framework of therapy. A 'predictable therapeutic space was created'. Break in Therapy 3 of the 5 turning points were identified after a break in therapy. Conclusion A turning point was characterised by something new and unpredictable happening in the rather predictable therapeutic space. Also seemed to be a moment of 'emotional meeting' or 'inter-subjectivity'. Events Outside of Therapy Parallel process in parent work. In 2 cases the child therapist met the parent. Therapist Factors Importance of work environment. In 3 of the 5 cases supervision had a connection to the turning point. Therapists felt the research had a positive impact on their work.

Table 4. Child & Adolescent Psychotherapy: Therapeutic Approaches

Authors	Location	n	Design	Intervention	Age/Type of problem	Outcome	Follow-Up	Findings
<p>EPOS, 2002 (Erica process and outcome study, ongoing) Comment <i>Study in progress. Non random allocation to Groups. A clinic sample. Control group matched on a number of measures. A range of outcome measures looking at psychoanalytic outcome and process as well as more general psychiatric outcome. An interesting study with a control group and a range of outcome measures.</i></p>	Sweden	<p>24 vs. Control group- Referred for the same reason, age and sex matched (assessed with SDQ)</p>	<p>Non randomised Controlled study</p>	<p>Goal directed time limited child psychotherapy with parallel parent work 1-2 sessions per week over 1-2 years for children. Parental work weekly or fortnightly vs. Treatment as usual</p>	<p>Children 5-10 years old with a variety of diagnoses</p>	<p>Assessment at the start, during and after treatment. Outcome measures - <i>DSM-IV</i>, <i>HCAM</i>-the Hampstead Child Adaption Measure, <i>SDQ</i> (parent and teacher versions). For each session the child psychotherapist and parent worker will make <i>process notes</i> and complete a form the <i>FWC</i> - Feeling Word Checklist in order to follow the therapists' counter transference feelings and to facilitate studying sessions of special interest. Every third month <i>questionnaires</i> will be distributed to therapists and parents. <i>Taped interviews</i> in 12 cases twice during treatment.</p>	<p>3 years</p>	<p>Awaited-data collection anticipated in 2003. Aim is to study a form of psychotherapy that can be performed in ordinary clinical settings in Sweden.</p>

Table 4. Child & Adolescent Psychotherapy: Therapeutic Approaches

Authors	Location	n	Design	Intervention	Age/Type of problem	Outcome	Follow-Up	Findings
<p>Fonagy and Moran, 1990*</p> <p>*Cases also participants in a controlled trials see Moran et al., 1999</p> <p>Comment</p> <p><i>Interesting study using a physical outcome measure (height) rather than psychological outcome measures. Authors cite their scepticism about the ability of conventional psychological measures to capture deep psychological change.</i></p>	UK-(Anna Freud Centre & UCL)	n=3	Single case experimental design. (Cases also participants in controlled trial)		6-18 year olds with uncontrolled diabetes and significant growth retardation (all below the third percentile in height).	<p>Three indicators were used:</p> <p>(a) Height standard deviation scores for chronological age.</p> <p>(b) Height velocity standard deviation scores for chronological age.</p> <p>(c) Predicted adult height from height and bone age before and 6 months after treatment.</p>	2 years 5 years	<p>1) The first patient (male) was in treatment between the ages of 8 and 9½. During treatment there was a marked improvement in <i>height velocity</i> scores. This was maintained over the follow up period. His predicted adult height before treatment was 8cm less than at follow up age 10.</p> <p>2) The second patient (female) age 13½ experienced a marked increase in height velocity during treatment. Her predicted adult height increased by 5 cms.</p> <p>3) The third patient (male) age 12½, predicted adult height increased by over 10cms.</p> <p>Catch up growth in all patients was associated with improved diabetic control.</p>

Table 4. Child & Adolescent Psychotherapy: Therapeutic Approaches

Authors	Location	n	Design	Intervention	Age/Type of problem	Outcome	Findings
<p>Fonagy et al., 2002c Study in progress Comment <i>Study in progress. Sequential assignment to treatments which although non random is likely to result in reasonably comparable groups. Multiple validated outcomes from a variety of perspectives. Stringent pre-specified criteria for improvement. Attention paid to analytic process and association between this and improvement. Sample was significantly impaired at the start of treatment, all patients having at least one axis I diagnosis and one axis II diagnosis. Long term follow up (average treatment length 3.5 years). Preliminary results indicate superior results for psychoanalysis as compared to psychotherapy. Attrition was more likely in those treated non-intensively. A study with an impressive range of outcome measures. Close attention paid to process as well as outcome.</i></p>	UK (AFC)	30	Controlled trial Non randomised (sequential assignment)	<p>Psychoanalysis vs. Psychotherapy</p> <p>Treatments delivered by qualified psychoanalysts (all members of the British Psychoanalytical Society). Treatments were transference focused. All analysts attended a monthly supervision meeting supervised by Anne Marie Sandler. Treatment continued in an open ended way with average treatment length 3.5 years.</p>	<p>(18-24) referred to the Anna Freud Centre. All patients had at least one Axis II diagnosis with narcissistic and borderline personality the most common. All patients had at least one Axis I diagnosis (mostly mood disorders). No patient had a diagnosis of psychosis and less than half were on psychotropic medication. About 20% had a previous history of hospitalisation. A significant proportion had a history of violent episodes/self harm.</p>	<p>Psychiatric assessment using structured interviews (SADS-L and SCIDI). At entry-all patients completed SDL-90, the Beck Depression Inventory, the Spielberger State and Trait Anxiety Inventory, the social adjustment scale, the national adult reading test and the Eysenck Personality Inventory. They were also administered the Adult Attachment Interview, the SADS-L and the SCID II. The battery was repeated at 18 month intervals. Patients showing at least significant improvement on at least 3 measures were regarded as having improved. Analysts had to provide a full narrative account of one session per month. Analysts completed a weekly rating scale which was a 500 item checklist where they reported the main themes of treatment and their interpretative work.</p>	<p>Results are in the process of being analysed. Results to date indicate that analytic treatment is superior in achieving clinically significant symptomatic change (Approx 79% vs. 12%). Preliminary scrutiny of the data indicates that improvers can be distinguished from non improvers on the basis of the analytic process. Trends across analyses associated with poor outcome: deterioration of analytic material; decrease in level of all affects; increasing immaturity of mental functions; increasing primitive transferences and boundary problems; increasing use of sexual fantasy to support identity; increasing aggressive themes; decrease in interpretation of problems with timekeeping; increasing importance of the external world. Premature termination was more common in non intensively treated cases.</p>

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<p>Fonagy and Target, 1996</p> <p>Comment</p> <p>Study undertaken in a clinic setting. Almost a total sample of all cases seen at the clinic. Both these factors are likely to enhance generalisability of findings and reduce selection bias. The clinic is a specialist centre which may introduce bias.</p> <p>Detailed recording of information. Reliability of outcome measures assessed. Operational definitions. High prediction of outcome from variables recorded, supports soundness of data. 18% attrition.</p> <p>Retrospective. Non random assignment. No control group.</p> <p>Improvement may be confounded by length of treatment (but intensity shown to be important).</p>	UK-Anna Freud Centre UCL	763 90% of all cases seen at the AFC over 40 years	<p>Retrospective case note study.</p> <p>(1) Effect of age, diagnosis and severity of disorder on outcome.</p> <p>(2) Effect of frequency of treatment on outcome.</p>	<p>Psychoanalytic psycho-therapy</p> <p>76% of cases 4-5 times/week treatment.</p> <p>24% 1-2 times/week.</p> <p>36% of cases treated by experienced analysts.</p>	<p>Children and adolescents</p> <p>Range of problems (90% of all referrals to the clinic over 40 years).</p>	<p>DSM-III-R Diagnosis checked by 3 independent child psychiatrists. Intraclass reliability high (0.8-0.9).</p> <p>Diagnostic Profile (Freud 1965).</p> <p>Process Notes (weekly, 2 page reports of treatment progress)</p> <p>Hampstead Child Adaptation Measure (HCAM) a 100 point rating scale. Reliability (0.75-0.85). Correlates with C-GAS but greater reliability in this context.</p> <p>Child Behaviour Checklist (CBCL)</p> <p>Clinical: characteristics of child and analyst. Reasons for termination. A child was considered a 'case' if the criteria for psychiatric diagnosis were met and HCAM rating < 70.</p> <p>Clinically important change, a difference of at least 8-10 points on HCAM. Severity: 3 or more diagnosis, poor diagnosis, poor HCAM +/-atypical development.</p>	Retrospective	<p>Attrition: 18% of patients dropped out in first year (highest amongst adolescents and children with disruptive disorders). Non-intensive >likely to drop out (14% vs. 31%). Parental psychopathology negatively associated with attrition.</p> <p>Results: 56% of those in treatment (4-5 times/week) moved from the clinical to normal range vs. 44% of those in 1-3 times per week treatment, $P<0.005$. Clinically significant improvement in 62% of those 4-5 times/week vs. 49% of those 1-3 times per week, $P<0.0005$. The average effect size associated with 4-5/week treatment of at least 6 months was 1.00 and 0.64 for non-intensive treatment.</p> <p>Variables found related to greater improvement: Longer treatment ($p<0.0001$); broad diagnostic group (emotional disorders did better, $p<0.0001$); intact family ($p<0.0001$); mother having been in analysis ($p<0.001$); age (younger improved more, $p<0.01$); psychoanalytic diagnostic category (atypical personalities or borderline children improved less, $p<0.001$); parallel parent work ($p<0.02$); higher social class; mother opting for analytic therapy at centre ($p<0.05$). Age: On all outcome criteria the probability of improvement decreased with age regardless of severity and diagnosis. Severity: the severe group benefited more from intensive treatment (but not non-intensive).</p>

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<p>Fonagy and Target, 1994 See Fonagy and Target (1996). Comment <i>A retrospective controlled trial. DSM-III-R diagnosis. A range of validated outcome measures used. Pre-specified primary outcome measure of clinically significant change. Large sample size. Children with disruptive behaviour, a total sample of all children with such disorders attending the clinic therefore selection bias unlikely. Results indicate that children with disruptive behaviour can improve significantly with treatment but are less amenable to treatment than those with emotional disorders. Younger children do better. Treatment is more effective for those with a diagnosis of ODD than conduct disorder. Those in intensive treatment did better. As allocation to intensive vs. non-intensive treatment was largely pragmatic this indicates that intensity may be an important independent factor.</i></p>	UK AFC UCL	<p>n=135 children with a diagnosis of disruptive disorder. n=135 individually matched control - children with emotional disturbance.</p> <p>Match included gender, age, socio-economic status, CGAS and frequency of sessions.</p> <p>Control sample selected from 368 cases treated for emotional disorders.</p>	Retrospective Controlled Trial	<p>Psychoanalytic psychotherapy Length of treatment two years on average.</p> <p>Disruptive group: 67% offered 4-5 times/week psychotherapy, (intensive). Remainder 1-2 times/week (non-intensive). Allocation to intensive vs. non intensive appeared largely on pragmatic grounds rather than diagnostic considerations.</p>	<p>Children and adolescents with a DSM-III-R diagnosis of disruptive disorder: 58% Oppositional Defiant Disorder, 8% Attention Deficit Hyperactivity Disorder, 23% Conduct Disorder, 10% with a V code of antisocial behaviour.</p> <p>A matched control group of children with emotional disorder</p> <p>Generalised Anxiety Disorder, 28%, Separation Anxiety Disorder, 17%, Dysthymia or Depressive disorder, 18%, Phobic or Avoidant disorders 17%, Sleep disorder 8%, OCD 6%, PTSD 6%.</p>	<p>Demographic Measures, DSM-III-R. Reliability checked by independent assessors (0.8-0.9). Child Behaviour Checklist (CBCL) Level of functioning - CGAS a 100 point scale. A score > 70 is within the normal range and < 30 indicates severe impairment. Reliability (0.77, 0.88). Clinical Information standardised Form. Reliability of data extraction high (0.9). Primary Outcome Measures: 'Casesness', clinically significant change in adaptation level.</p>	Retrospective.	<p>1/3 of the sample with conduct disorder and 53% of the sample with emotional disorder were no longer diagnosable post treatment. 46% of the conduct disordered sample and 73% of the emotional disordered sample showed clinically reliable improvements. More effective for younger children rather than adolescents. More effective for children with a diagnosis of Oppositional Defiant Disorder rather than Conduct Disorder. Attrition/Length of treatment 31% of children terminated treatment within 1 year. Of those disruptive children who remained in treatment 69% were no longer diagnosable on termination. More than 2/3's of those who dropped out of treatment within the first year were in non-intensive treatment. 40% in non-intensive treatment dropped out vs. 25% in intensive. The differences in outcome between the two groups are reduced when those receiving non-intensive treatment are excluded.</p>

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<p>Heinicke and Ramsay-Klee, 1986</p> <p>Comment <i>A very small sample size. Appears to be non random allocation to groups although an attempt was made to match groups. Over 70 between group statistical tests. No within group comparisons. No information on sample selection. Nevertheless an interesting study that modifies one variable in the treatment (the frequency) while matching groups on other possible confounding variables. Differences noted in outcome between the groups in spite of small sample size.</i></p>	USA University of California	n= 12 (3x n=4)	<p>Comparative study (appears non-randomised no information given on how the samples were selected).</p> <p><i>Initial Study</i> Once/week vs. Four times/week For 2 yrs vs. Follow on study Once/week for first year and four times/week for second</p> <p><i>Aim: To look at the outcome of Child psychotherapy as a function of the frequency of session.</i></p>	<p>Psychoanalytic child psychotherapy at different frequencies i.e. once/week or four times/week for two years or once/week for the first year followed by four times/week for the second year.</p> <p>Treated by psychoanalytic child psychotherapists with similar training and experience.</p> <p>All mothers were seen once weekly. Some contact also with fathers.</p>	<p>7-10 years referred for reading retardation associated with emotional disturbance.</p> <p>3 samples of four boys were matched for age, I.Q., DSM-III diagnosis, deficit in academic achievement and socio-economic status.</p>	<p><i>At Baseline and End of Treatment and Follow Up</i> Interviews with parents, teachers and child. I.Q. Reading Ability, The Diagnostic Profile (Freud 1965) 45 ten point ratings based on the child profile. (Median inter-rater reliability, Baseline-0.82, Post-treatment-0.87, Follow-up 0.93)</p>	One year	<p><i>Impact of treatment frequency on rate of improvement of reading</i> Those seen once /week did better initially but in the year after the end of treatment those seen four time/week (either for one or two years) did significantly better.</p> <p><i>Impact of treatment frequency on personality function</i> All children improved and did not differ significantly at the beginning of treatment. Those seen more frequently by the end of treatment and one year follow up showed more improvement in effective adaptation and adequate self esteem, frustration tolerance and ability to work capacity for forming and maintaining relationships and flexible adaptation.</p> <p>Conclusion The results suggest that the outcome of psychoanalytic psychotherapy is affected by the frequency of treatment. Of note some of the most striking findings were not evident until follow-up</p>

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Heinicke, 1965 Comment <i>A pilot study on a very small no of cases. Selection bias likely. Only included 'intact' professional families. Bias of researchers likely to favour more intensive treatment. Detailed, recording of therapeutic process and outcome. Long term follow up. Some attempt to match groups at the start with regard to the level of difficulty. Only two therapists (reduced variation in treatment</i>	UK	n=10 4 (intensive treatment) 6 (once weekly, two of which dropped out of treatment)	Cases assigned to try and ensure that the two groups were matched with regard to level of disturbance. Pilot study (see Heinicke and Ramsay Klee, 1986 for follow up).	<p>Psychoanalytic psychotherapy</p> <p>From two child psychotherapists trained at the Hampstead Child Therapy Clinic in London. One therapist saw three pairs of children and the other one pair.</p> <p>All mothers were seen weekly by a psychiatric social worker or other therapist and where appropriate fathers were seen.</p>	Boys age 6-10 years with learning disturbance related to psychological disturbance. They were threatened with being held back or had been held back in school.	<p>Baseline: 2 psychiatric interviews with child. History from mother. Tests (administered by researcher): Stanford Binet, Form L; the Wide Range Achievement Test; the Rorschach; parts of the T.A.T and Michigan Picture test; the Draw a Person test.</p> <p><u>School visits:</u> interview with teacher about the child's academic achievement, behaviour and peer relationships. One year: tests re-administered by researcher. Follow up school visit. Review with parents. One year after the end of treatment: Re-administration of tests parent and child review.</p> <p>Two Years after the end of treatment: reading scores, parental and child review but no further testing.</p> <p>Data Collection: Process recording on audio-tape after the session.</p> <p>Other: Assessment of ego integration, psychiatric and psychological support.</p>	One year, one year after the end of treatment and two years after the end.	<p>Few striking differences were noted at the end of treatment but those children seen four times a week showed a greater spurt in their development in the two years after treatment. Those seen once a week showed a greater improvement in their reading in the first year but those seen four times per week improved faster during the two years after follow up.</p> <p>Those seen four times a week showed greater improvement in relation to self-esteem, relationships, autonomy and effective assertion. They were able to express a greater variety of affects (i.e. showed more feeling) and showed a greater ability to elaborate ideas imaginatively (observation of response to TAT, play etc.). They were more flexible in the use of defenses. They more often made use of 'non defensive humour'. They showed a greater capacity to observe their own behaviour and the motives underlying it. Ego integration was better. Notably there was a move in the group seen four times per week towards emotional self-reliance.</p>

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<p>Jordy and Gorodsky, 1996</p> <p>Comment <i>The quality of reporting in this study is very poor. It is therefore not possible to draw conclusions regarding the study design, conduct or findings. This is noted in the review report.</i></p> <p>Conclusion: <i>*This study fulfilled the initial inclusion criteria for the systematic review but was later excluded because of unreliability in the reporting of results</i></p>	Sao Paulo Brazil	n=22 (experimental group) N =16 (control)	Non-randomised open trial *poor quality reporting of treatment outcome	Individual psychotherapy 1 hour/week 22 children were referred for psychotherapy. Only 13 underwent treatment.	7-12yrs Children referred with a diagnosis of significant 'Hyperactivity and Attention Deficit' and school failure Control group of children attending the same hospital matched for age and sex.	<p>Baseline : Semi-structured Interview with Parents, neurological evaluation, CT, EEG, WISC, Trinica story Drawing test, the concentrated attention test of the CEPA Battery, the Bender Gestalt Test.</p> <p>Follow Up Assessed after six months and one year of treatment. The Story Drawing Procedure and the Bender test.</p>	One year	<p>Baseline Significant differences were noted between experimental and control groups</p> <p>Story Drawing Procedure A projective test based on spontaneous drawings generated by the child. As psychotherapy proceeded the drawings became more elaborated.</p> <p>The Gestalt Visual- Motor Bender Test An improvement in the experimental group's performance was noted. ** Poor reporting of outcome in two groups. No reporting of outcome at follow up in control group.</p>

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<p>Lush et al., 1991*</p> <p>*See Boston and Lush, 1994</p> <p>For further follow up of this study</p> <p>Comment</p> <p><i>The authors of this study are open about the potential biases in the study design. A non-randomised study with a comparison group that is likely to be biased.</i></p> <p><i>Preliminary results presented here on twenty patients.</i></p> <p><i>The study was intended to be a pilot (see study design).</i></p> <p><i>Blind independent rating of outcome at follow up</i></p>	UK (Tavistock Clinic)	<p>n=38 (Treatment group)</p> <p>n=13 (comparison group)*</p> <p><i>Potential for Bias as the comparison group was those who for a variety of reasons didn't start therapy when it had been recommended.</i></p> <p>In total 203 children in care/adopted children were referred to the clinic over a 3 year period. A consecutive series of 51 cases recommended for psychotherapy were identified. Of these 38 actually stated therapy.</p>	<p>Non-randomised, study (with a potentially biased control group).</p> <p>Pilot Study.</p> <p>Aims:</p> <p>1) To test the hypothesis that severely deprived children can benefit from psycho-therapy and that their adjustment in family placements might be facilitated.</p> <p>2) To devise a suitable methodology for evaluating psycho-analytic psycho-therapy. To develop ways of making public therapists aims for their particular patients.</p>	<p>Psychoanalytic child psychotherapy.</p> <p>23 different therapists.</p>	<p>Severely deprived children in residential or foster care or adopted. All referrals of such children to the clinic were monitored in order to identify those proceeding to individual psychotherapy</p> <p>Preliminary results on 20 cases.</p> <p>8 (male)</p> <p>12 (female)</p> <p><i>Frequency</i></p> <p>Once weekly therapy.</p> <p>Only three had therapy more than once/week.</p> <p>12 had stopped therapy by the two year assessment.</p>	<p>Baseline:</p> <p>Index of Discontinuity of Past Care (no of moves, abusive care, murder of parent etc.)</p> <p>Stability of Current Placement</p> <p>Rated on a 5 Point scale.</p> <p>1 (most stable, no moves likely),</p> <p>5 (further moves almost certain).</p> <p>Therapist's Questionnaire (form 2) Completed after assessment. Clinical judgments recorded, aims for therapy and criteria for improvements stated. Anticipated progress rated.</p> <p><i>Follow Up</i></p> <p>Therapist's Questionnaire (form 3) At two years or termination. Records actual progress/change.</p> <p>External Reports on Progress (school, carers etc.).</p> <p>Independent Clinical Rating (by 'blind' clinician rater, senior child psychotherapist from outside the clinic. Filled in form 2 on the basis of process notes).</p>	2 years	<p>Baseline: <i>The psychotherapy group and those not referred for psychotherapy did not differ substantially in terms of background and current placement.</i></p> <p><i>Comparison Group:</i> Similar on most measures apart from stability of current placement which was slightly less stable.</p> <p>Results: <i>Psychotherapy Group.</i> 3 drop outs in less than 3 months, not included in the analyses. 35 remained on in treatment. Preliminary results on 20 cases.</p> <p>Prediction of Progress</p> <p>In 17 out of 20 cases the therapist's predictions of progress agreed well with their assessment of outcome.</p> <p>Progress</p> <p>16 out of 20 made considerable improvement. 4 didn't do well (all adolescents)</p> <p>The most damaged child in the study but also the youngest (2 years) did very well.</p> <p>External Reports</p> <p>Corroborated the improvements seen by therapists.</p> <p>Independent Rater</p> <p>Findings confirmed those of therapists</p> <p><i>Comparison Group</i> (n=13)</p> <p>No information on 6. Of 7 remaining cases none did well over 2 years.</p>

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<p>Lush et al., 1998* See* (Boston & Lush, 1994; Lush et al., 1991) Comment A single case study employing an experimental design. A diverse range of outcome measures were used. Outcome assessed at baseline, end of treatment and follow-up. Four year follow up.</p> <p>Outcome confirmed by two independent raters. Improvement continued after end of therapy.</p>	UK Tavistock Centre	n=1	Single case study Catch up longitudinal design	<p>Psychoanalytic child psychotherapy. 3 years duration.</p> <p>Weekly sessions.</p> <p>Parallel Parent Work.</p>	<p>Ten year old boy (Paul) adopted at age 3 into a loving family.</p> <p>Traumatic early history. Mother was a drug addict and he was taken into care at the age of 9 months.</p> <p>Placed in foster care for a year before being adopted.</p> <p>At the time of referral his parents and school described his feelings of unhappiness, disruptive behaviour and poor concentration</p>	<p>Assessments at the start (A), end of therapy (B) and at 1 year follow up (C).</p> <p>(a) Routine Psychological tests.</p> <p>Therapist questionnaires/rating scales.</p> <p>(b) Similar to (A).</p> <p>(c) Semi-structured open ended questionnaires for gathering family and psychosocial information (Kolvin, et al., 1990)</p> <p>Self-esteem measure (Battle 1981)</p> <p>Parker's Parental Bonding Instrument (PBI) (Parker, 1990)</p> <p>Children's Global Assessment Scale (Schaffer et al., 1983)</p> <p>Newcastle Recent Life Events Schedule (Bemey et al., 1991)</p>	4 years	<p>A-Start of Therapy Cognitive function average. Impulsive and easily distracted. His play showed aggression, confusion and low self esteem but he seemed motivated for therapy.</p> <p><i>Aims of therapy</i> To be more self confident, able to concentrate and learn. To have a capacity for deeper relationships and reflective thought. The therapist predicted considerable progress.</p> <p>B-End of Therapy Paul was rated as making considerable progress with improvement in most areas. The rating was confirmed by two researchers who examined the material independently. Confirmed by parents (stated that he had 'improved beyond expectations'). He was doing well at school.</p> <p>C- 1 year Follow up <i>Battle self esteem questionnaire.</i> Showed good self esteem <i>Parker's Parental Bonding Instrument</i> Father-category of optimal parenting. Mother-mainly positive, some ambivalence. <i>Weissman and Paykel Social Adjustment Interview:</i> Overall social adjustment was satisfactory. <i>Paul's view of Therapy:</i> Paul reported that therapy had allowed him to be more in touch with his feelings. <i>Interview with Mother</i> Supported therapists rating of improvement. <i>Newcastle Recent Life Events Schedule</i> No major life events Children's Global Assessment Scale (CGAS) Ratings fell into the 70-80 range which indicates generally good functioning . <i>Conclusion:</i> Improvement continued after therapy suggesting that the therapeutic processes had given rise to a different outcome trajectory.</p>

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<p>Moran et al., 1991 Comment <i>Quasi-randomised controlled Trial.</i> <i>Patients were consecutive admissions to one of three wards over a three year period. Assignment to groups was based on the family's area of residence which determined to which of the wards the child was admitted. (Potential source of bias due to inadequate concealment of allocation).</i> <i>All those in the experimental group were on the same ward. The existing routine treatment was by national standards of the highest quality. Authors note that ethical and practical constraints imposed by the gravity of the children's illness prevented them from making truly random assignments. Significant differences noted despite small numbers.</i></p>	UK (UCL)	22	Quasi-randomised controlled trial	<p>Psychoanalytic Psychotherapy* 3-5 times/week for a mean period of 15 weeks (range 5-28 weeks). Parent therapy.** Inpatient medical intervention. vs. Inpatient medical intervention (In 5 of 11 cases routine medical management included the involvement of a psychologist or psychiatrist). *Therapists were 2 child analysts with at least 5 years experience. Regular case supervision was provided by senior analysts. **With two exceptions parents were assigned a professional worker. Those involved with the child's treatment met regularly to discuss the management of the child on the ward.</p>	<p>Adolescents with dangerously controlled Insulin Dependant Diabetes. <i>Inclusion criteria</i> Age: 6-18years. IDDM at least two years duration. Diagnosis of 'brittle diabetes' according to specific criteria. 63.6% of the sample.</p>	<p><i>Baseline Assessments:</i> IQ, child psychiatric assessment. Psychological Assessment. <i>Diabetic control</i> 1) The M value 2) The glycosylated haemoglobin concentration (HbA1c). <i>The no of readmissions to hospital up to one year after discharge</i> (The treatment group were encouraged to seek admission for reasons of psychological distress). <i>Psychological</i> <i>Outcome measures (not used).</i> The authors were sceptical about the relevance of available outcome measures and were concerned about contamination of outcome measures by the treatment process. The physical measures were selected as preferable indicators of structural change.</p>	1 year	<p>The two groups were comparable on most demographic and clinical variables. There were three children in the experimental group with growth failure (height velocity below third centile). 73% of the experimental group and 63% of the control had psychiatric disorder. <i>Results:</i> Significant improvement in diabetic control in experimental group compared to control. This was maintained at one year follow up. All but one subject in the experimental group showed a reduction in HbA1c over the course of treatment whereas only four out of eleven in the control group showed an improvement. At one year follow up nine of experimental group patients remained below their pre-admission average HbA1c levels whereas only three of those in the comparison group did so. Clinically relevant was the reduction of HbA1c levels to within the 'acceptable' range for diabetes in six of the experimental group whereas none of the comparison group showed such an improvement. M values not available for all patients but improvement noted in treated group. Four out of experimental group and eight out of comparison group were readmitted in the year after discharge.</p>

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<p>Moran and Fonagy, 1987 *(See Moran et al., 1991; Fonagy and Moran, 1990) Comment Single case design methodology. A time series analysis was used to examine the relationship between diabetic control and psychological conflict. Psychoanalytic themes were operationalised. Independent rating of themes by two raters with reasonable inter-rater reliability. Correlation found between urine blood sugar levels and psychoanalytic themes. Working through of psychic conflict predicted an improvement in diabetic control both in the short term and the long term. Authors point out that tentative inferences regarding causality can be made on the basis of the correlation between processes.</p>	UK	1	<p>Single case design methodology. Aim to examine the association between diabetic control and the variation in the themes of psychoanalysis.</p> <p>Time series analysis. was used to examine the relationship between diabetic control and psychological conflict.</p>	<p>Psychoanalytic Psychotherapy 5 times/week for 3 ½ years.</p>	<p>Sally diagnosed with Diabetes age 8. Referred for psychoanalysis age 13 because of long- standing physical and emotional problems which had failed to respond to psychiatric and medical treatment over the preceding 5 years. Admitted to hospital often with diabetic ketoacidosis 2- 5 times/year. School phobia (which preceded the onset of diabetes by two years) was one of her most prominent difficulties.</p>	<p><i>Diabetic Control:</i> Was estimated on the basis of weekly urine glucose testing. <i>Content of Analysis:</i> Was assessed by independent ratings of the analyst's weekly reports. The reports (approx 1,000 words) contained a summary of the major themes of the week. A selected set of analytic themes was operationalised. Two independent raters (both analysts) were asked to rate a random selection of weekly reports. The inter- rater correlation was mod- to high.</p>	4 years	<p>The association between diabetic control and the therapists ratings of the seven reliable psychoanalytic themes were calculated and 6 of the 7 correlations reached statistical significance. The highest correlation with urine sugar levels was the variable concerned with Sally's feeling unloved by her father and her conflict deriving from her anger with him. Working through of psychic conflict predicted an improvement in diabetic control both in the long term and short term. Her school phobia disappeared and she received excellent examination results. Her relationship with her mother improved. She had only one hospital admission in the 3.5 years of analysis and none in the 4 year follow up period.</p>

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<p>Muratori et al., 2002</p> <p>Comment</p> <p>clinic setting. Non-random assignment. Allocation to treatment and control groups according to therapist vacancies. All admitted patients who met the selection criteria were allocated first to the experimental group and if there was no therapist vacancy allocated to the control group. As no other criteria were used for assignment, can be considered a quasi-experimental design. The control group was well matched on socio-demographic and clinical variables. The control group actually received quite a high level of intervention. This may account for improvement in this group. Possible 'sleepers' effect in experimental group.</p>	Italy Pisa	n=30 n=15 exp. group n=15 control group	Quasi-randomised controlled study Brief psychodynamic psycho-therapy vs. Control two assessment interviews and a feedback session with direction to community services	<p>Experimental group. Structured focused psychodynamic psychotherapy (11 sessions- 5 with family, 5 with child alone & final family session)*</p> <p>vs.</p> <p>Control group. Received 2 assessment interviews a feedback session. At the feedback session the clinician outlined goals to achieve and referred them to community services.</p> <p>Treatment aims to elicit a core conflictual theme but assumes that in childhood the core conflictual theme lies in the interaction of the child with the parents.</p> <p>Therapists were practitioners with a degree in psychology or child psychiatry. All received specific training. Sessions were videotaped and discussed in weekly supervision.</p>	Children with Emotional Disorders (Dyshymic Disorder n= 19, Anxiety Disorder n= 17, Oppositional Defiant Disorder n= 8). Sample further subdivided into (1) Pure Emotional Disorders (ICD-10) n= 17 (2) Mixed emotional disorders n=13 (ICD-10). Mean global functioning of the sample on the CGAS was 60 (SD 10.2) Age: 6.3 -10.9yrs. Mean 8.9 Male (20), Female (10). Therapy conducted in a clinical setting. The children were selected from patients referred to the department.	<p>Outcomes assessed at baseline, 6 months (end of treatment for experimental group) and 18 month follow up.</p> <p>Baseline</p> <p>Treatment and control groups received 2 assessment interviews and a feedback session.</p> <p>CGAS: completed by a blind independent interviewer who interviewed both parent and child</p> <p>CBCL: completed by parents. Total problem, externalising, Internalising and social competence scale.</p>	18 months	<p>No statistically significant differences were found between the two groups for socio-demographic and clinical variables. Seven of the control group did not have any treatment. Eight had a variety of treatments. (Six had individual psychotherapy, one parent work and logo therapy one case). After six months only one in the experimental group and four in the control group were in treatment.</p> <p>Results CBCL: Significant differences between groups appeared only at eighteen month follow up for <i>total problem scale externalising, and internalising problems</i>.</p> <p>Significant positive change in the experimental group. The intervention appeared particularly good at reducing internalising problems. No significant difference on social competence scale.</p> <p>CGAS: Both groups improved. Significant difference at six months in favour of experimental group but not at eighteen month follow up. The experimental group had a faster rate of improvement. Better outcome for children under nine and for those with a diagnosis of 'pure emotional disorder'.</p>

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<p>Muratori et al., 2003* See Muratori et al., 2002 Comment <i>Follow up of pilot study (larger sample, 30 of the patients were included in the earlier pilot study. Quasi-randomised controlled trial. Allocation to treatment or comparison group based on therapist vacancy. Early (at six months) improvement in both groups on C-GAS but only the experimental group made a shift to the non-clinical range that was maintained at two year follow-up. On the CBCL no group differences emerged in the first six months whereas at two year follow up only the experimental group improved significantly. Study authors hypothesise that the positive changes in the comparison group (in global functioning) may result from the assessment process. On the CBCL there appears to be some evidence of the 'sleepier effect'. Authors note the 'non linear' nature of treatment outcomes. Lower service use in experimental group. Authors would have liked outcomes to assess parent and child representations.</i></p>	Italy	<p>58 35 m 23 f (30 of the patients were included previously in the pilot study) A sample size of 58 was calculated on the basis of this pilot study in order to achieve a statistical power of 85% 72 interviewed 12 excluded 2 families did not participate in the 2 year follow up assessment</p>	<p>Quasi-randomised controlled trial Sample size was projected on the basis of the previous pilot study.</p>	<p>*See Muratori et al 2002 above.</p>	<p>Age 6.3-10.9yrs DSM-IV criteria for Anxiety or Depressive Disorder 35 male 23 female mean age 8.8 yrs, S.D. 1.3 <i>Inclusion criteria</i> (a) DSM-IV diagnosis of depressive or anxiety disorder, classified as ID. Dysthymia (38), Anxiety Disorder (36) ODD (19) Anxiety Disorder and Dysthymia (16) ODD and dysthymia (18) ODD and dysthymia (18) and Anxiety Disorder (2) (b) Symptoms and difficulties lasting at least a year and circumscribed to a single or several areas but not to all social areas (c) A C-GAS under 70 <i>Exclusion Criteria</i> I.Q. below 90. Adoptive families and families with active divorce proceedings. 2 single parent families were included. ** CBCL score means lower than other clinical samples (Kendall et al., 2001).</p>	<p>Diagnosis: K-SADS, administered by an independent Psychiatrist. CBCL C-GAS clinician form Baseline 3 assessment interviews K-SADS CBCL C-GAS Observation of child in individual play <i>Feedback session</i></p>	<p>6 months 2 years</p>	<p>CBCL Total, Internalising and Externalising Scales From the end of treatment to follow up only the experimental group improved significantly on all three scales Effect Size: 0.72 for Total Problems, 0.59 for Externalising, and 0.61 for Internalising. CBCL Syndrome Scales At follow up the experimental group had lower mean scores in: withdrawn, anxious, depressed, attention, delinquent and aggressive scales. CBCL Total Problem and Internalising scales- both groups moved to borderline range at end of treatment but a further improvement to non-clinical range noted in the experimental group only. C-GAS: Improvement appears in a short time for both groups, with maintenance at two years, the magnitude of change is greater in the experimental group. The ES for C-GAS was 0.73. At follow up only the mean of the experimental group had moved to the functional range.</p>

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Petrie and Thieme 1978 <i>Comment</i> Poorly conducted study from which few inferences can be drawn	Germany (Berlin)	78	Naturalistic follow up study. Comparison of concluded and interrupted treatments.	Psychoanalytic child psychotherapy (22 child psychotherapists and one psychoanalyst).	No information on age. A large range of descriptive diagnostic categories not according to conventional criteria.	Evaluation by four groups of informants (therapists, parents, patients and clinical judges) Of the total 78 treatments 44 (56%) were terminated prematurely and 34 were concluded properly.	1-5 years	Better outcome for concluded as compared to interrupted treatments
Reid et al., 2001 Ongoing research <i>Comment</i> A controlled study with non-random allocation to groups. Matched control group. Undertaken in a clinic setting with a clinically referred sample. An extensive range of outcome measures.	U.K. Tavistock Clinic	n=12 (Twelve families recruited so far. Three families withdrew from extended assessment and were not available for follow-up. Seven families have undergone the extended psycho-therapeutic assessment.	Non randomised controlled study Clinically referred experimental sample vs. matched control group (although selected from a different clinic) Hypothesis is that the nature and degree of development will be significantly different in the treatment group compared to the control.	Extended Therapeutic assessments on the child with autism and their family (over a period of 6-12 months prior to consideration of more specific input e.g. individual psychoanalytic therapy vs. Standard treatment for autism (without any child psychotherapy input).	<i>Experimental group:</i> Male children with autism referred to the autism team. Age: Under 5 years <i>Control group:</i> 12 children with autism matched for age, sex, severity of autism and developmental level. Control group drawn from a clinic outside London for whom psychotherapy is not currently available.	Baseline (pre-psychotherapeutic assessment). Home visit by research psychologist. Video-tape of a play-based session (capturing what the child typically does at home, the capacity to explore toys and engage in joint play with parent). Separation and reunion event interview with parent to complete the Autism Diagnostic Interview (ADI-R; Lord et al., 1994). The Vineland Adaptive Behaviour Scales (VABS; Sparrow et al., 1984). The research psychologist also completes the Childhood Autism Rating Scale (CARS; Schopler et al., 1986) to provide an index of severity of presenting features. Psychotherapeutic Assessment: (6-12 months duration). All sessions are videotaped and detailed process notes made after each session. Parents are requested to keep a diary of their observations and thoughts. Post treatment: Research psychologist returns to the family and re-administers pre-treatment measures. Control group: Pre and post-treatment outcome measures.		Preliminary findings on 7 families. 6 children have improved in a manner consistent with the predictions of the research team.

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<p>Robin et al., 1999 Comment <i>Sample partly recruited rather than clinically referred. Method of random allocation not clearly described. Authors of the study were allied with BFST having developed this treatment intervention. Lack of no treatment control (not considered ethical to randomise adolescents with a life threatening disease to a no treatment control)</i> <i>Therapy undertaken by 4 psychologists and one social worker. EOIT although presumably derived from psychoanalytic theory does not appear to have been administered by analytically trained child psychotherapists. Training of BFST also not clear. Drop outs may have biased results. Authors note with interest the similar reduction in family eating related conflict despite the EOIT group not attending a conjoint family meeting</i></p>	U.S.	37	<p>Randomised controlled trial Random allocation to BFST (Behavioural Family Systems Therapy) vs EOIT (Ego Oriented Individual Therapy) Participants recruited through: Investigators practices; letters to physicians psychologists, clergy and schools; media; schools and clinics. 120 telephone inquiries 60 adolescents interviewed 56 eligible 41 agreed to participate 4 drop outs Random Assignment: To BFST or EOIT and allocation to a therapist within these groups on the basis of therapist vacancy. Allocation concealment rating* (B)*</p>	<p>BFST: Family seen conjointly, parents were placed in control of the adolescents eating, distorted beliefs were targeted through cognitive restructuring and strategic/behavioural interventions were used to change family interactions. Manualised. EOIT: The adolescent was seen individually, with an emphasis on building ego strength and uncovering the dynamics blocking eating. Parents were seen collaterally. Manualised Therapy: Duration on average 15.9 months. Therapists given a range of 12-18 months per case rather than a fixed time limit. Time: BFST families met weekly for approx 72 minutes EOIT adolescents met weekly for 45 mins and fortnightly with parents for 54 mins Medical and Dietary Regime: Common to all patients</p>	<p>Female Adolescents age 12-19 DSM-III-R criteria for Anorexia</p>	<p>All sessions audio-taped Physical Measures Body Mass Index Target Weight Resumption of Menstruation Psychological Eating Attitudes Test (self-report and parental report) Ego Functioning (scales from the eating disorders inventory) Depressive Affect Beck Depression Inventory (Beck 1976); <u>Internalising behaviour Problem Score</u> from the Youth Self report (Achenbach 1991) Parental CBCL (Achenbach 1991) Family Conflict Parent Adolescent Relationship Questionnaire (PARQ)(Robin et al 1990) Baseline, Post-treatment, one year</p>	1 year	<p>BMI (mean) BFST group improved more and more rapidly Menstruation At post treatment significantly more in BFST group were menstruating but not at one year. Target Weight and BMI percentile criteria Both did well (two thirds of girls reached target weight at one year follow up) Eating Attitudes Improved for both (no significant differences) Depressive Affect Both groups improved Ego Functioning Few changes in both groups Family Relations Eating related family conflict improved in both groups **More BFST than EOIT cases required hospitalisation Conclusion Both treatments are effective for adolescents with Anorexia. BFST produced faster change on some weight measures.</p>

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<p>Robin et al., 1995 Comment ***Earlier report on above study (Robin, 1999) Comment See report by Robin, 1999) for appraisal of study design. Results suggest that E.O.I.T and B.F.S.T. resulted in improvements in family interactions. Authors express surprise at the beneficial effects on family functioning of individual treatment given that none of the individual therapy adolescents attended a family meeting. Conclusion: Family therapy is not necessary in order to bring about a change in parent child interactions.</p>	U.S.	22	A sub-sample of R.C.T (see above) *	<p>BFST: Family seen conjointly, parents were placed in control of the adolescents eating, distorted beliefs were targeted through cognitive restructuring and strategic/behavioural interventions were used to change family interactions. Manualised.</p> <p>EOIT: The adolescent was seen individually, with an emphasis on building ego strength and uncovering the dynamics blocking eating. Parents were seen collaterally. Manualised</p> <p>Therapy: Duration on average 15.9 months. Therapists given a range of 12-18 months per case rather than a fixed time limit.</p> <p>Time: BFST families met weekly for approximately 72 minutes. EOIT adolescents met weekly for 45 mins and fortnightly with parents for 54 mins</p> <p>Medical and Dietary Regime: Common to all patients.</p>	Female Adolescents DSM-III-R Criteria for anorexia Age 12-19 Residing at home.	<p>BMI Target weight Self-reported Family Conflict Parent Adolescent Relationship Questionnaire (PARQ)(Robin et al., 1990) Parents and adolescents independently completed. Observed Family Conflict The use of videotaped interactions coded by two graduate psychologists using the Interaction Behaviour Code.</p>	1 year	<p>BMI Target weight No significant differences between the groups Self-reported Family Conflict Adolescents and Parents perceived very little general conflict at any stage. In contrast families perceived severe conflict over eating before treatment and there were improvements from pre-assessment to post-assessment to follow up. Observed Family Conflict Parents and adolescents received high scores on <i>negative communication</i> before treatment in both general conflict and eating conflict discussions. These scores decreased after treatment in both BFST and EOIT groups. Parents and adolescents received low scores on <i>positive communication</i>. This increased for BFST mothers but not EOIT mothers. (note discrepancy between observed and self-report conflict).</p>

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<p>Sinha and Kapur, 1999 Comment <i>Quality of randomisation unclear. Method of concealment of allocation not described. Short term follow up (five weeks). Small numbers yet differences shown between experimental and control groups. Sample not clinically referred. School based sample. Those scoring high on externalising scale excluded. Sample selected to be high on internalising problems therefore more likely to be responsive to treatment. Exact nature of post-intervention not entirely clear. Reporting of outcome in the control group not clear.</i></p>	India-Bangalore	30 (selected out of 685 boys from 5 different schools on the basis of the GHQ and YSR) n= 15 in experimental group n= 15 in control group	Randomised controlled trial 30 boys randomly assigned to (a) Experimental vs (b) Control group Allocation concealment rating* (B)*	Psychodynamic Orientated Supportive Therapy (POST). Ten sessions. Two sessions per week in a school setting. vs. No treatment control.	Emotionally disturbed adolescent boys in a school setting. 56 subjects were identified as having emotional problems on the GHQ. A sample of 30 subjects who scored high on the internalising scale and low on the externalising scale of the YSR were identified as emotionally disturbed and randomly allocated. Age 14 -15yrs.	GHQ and YSR used as screening measures. Pre Adolescent Adjustment Scale, Interpersonal Competence Scale-Teacher Report, Youth Self Report and Visual analogue scale from SSIS (Semi-Structured Interview Schedule) were used to monitor outcome of therapy. Process of therapy was analysed using the Psychotherapy Process Q sort and Therapy Experience Questionnaire. Audio cassette recorder was used to record therapy sessions. Outcome assessed after 5 weeks.	5 weeks	<p><i>Therapeutic efficacy-significant improvement in internalising problems, adjustment and interpersonal competence and perceived severity of stress and problems.</i></p> <p><i>Process of Therapy-</i> initiating topics, positive emotions, smile and laughter, positive statements about others increased as therapy progressed. Silences and pauses, negative statements about self and others and therapists persuasions decreased in frequency as a result of therapy. 8.18 % of schoolboys screened had emotional problems. There was a higher prevalence of internalising (5.69%) as compared to externalising problems (2.48 %). A high percentage (>90%) showed clinically significant improvements in almost all areas of functioning. The authors acknowledge that lack of long-term follow up is a major limitation of this study.</p>

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<p>Smymios and Kirby 1993</p> <p>Comment</p> <p>A randomised controlled trial. Method of random allocation not clear. Small sample size. Stringent exclusion and inclusion criteria. Selection bias likely. Almost half the initial sample was excluded. Sample young in age (5-9 years). Families with more severe difficulty excluded. The time-unlimited group were treated by a different therapist which may have resulted in differences</p>	Australia	<p>30</p> <p>Out of 58 Families introduced to the program 28 were excluded.</p>	<p>Randomised Controlled Trial</p> <p>Random assignment to</p> <p>(1) Time limited (12 sessions) Psycho-dynamically Orientated treatment.</p> <p>vs.</p> <p>(2) Time unlimited psycho-dynamically orientated treatment</p> <p>vs.</p> <p>(3) Minimal Contact Control</p> <p>Allocation Concealment Rating* (B)*</p>	<p>Therapy conducted by 4 therapists. One worked with the child and the other with the parents.</p> <p>Time Limited Psychotherapy</p> <p>Assessment of child (2 sessions). Feedback to parents. Further phases of therapy with the child. Therapeutic focus/goals of work communicated to child. Final review with parents. 12 sessions in 15 weeks. Parent work.</p> <p>Time Unlimited Therapy</p> <p>Assessment, feedback to parents (as above). Unlimited no of sessions. Parent work.</p> <p>Minimal Contact Group</p> <p>Child and Parents received on average 2 assessment interviews, a feedback session and a follow up interview 12 weeks after the feedback session. Similar initial format to other therapies. Goals presented to family that would have been worked on had there been time and families advised to work independently.</p>	<p>Children and their parents who sought assistance from a child and family centre in Melbourne Australia.</p> <p>25 (male) 5 (female)</p> <p>Inclusion criteria:</p> <p>Diagnosis of 'Disturbance of emotions specific to childhood' (WHO, 1978).</p> <p>Age 5-9 years</p> <p>Assessed by an independent child psychiatrist as needing treatment.</p> <p>Exclusion criteria</p> <p>Single parent family, parental mental illness/drug abuse.</p> <p>Children were excluded if history of Learning difficulty, psychosis or previous therapy.</p> <p>Mean Age 7.54 years</p>	<p>Goal Attainment Scales</p> <p>The child therapists and parent therapists agreed 3 goals for each family with at least one goal that related directly to the child.</p> <p>Target Complaint Scales</p> <p>Each parent independently listed in order of severity up to 3 problems that had led them to seek assistance rated on 5 point scale.</p> <p>Van der Veen Family Concept Inventory (Van der Veen and Olsen, 1983). Each parent independently describes his or her perception of the family as a functional unit.</p> <p>Bristol Social Adjustment Scale (Stott 1974)</p>	4 years	<p><i>Demographics:</i> Mean age: 7years. Socioeconomic Status: mainly middle class. The time unlimited group Received significantly longer therapy than the time limited group.</p> <p>Target Complaints Scales</p> <p>The minimal contact group had significantly improved ratings compared to the time unlimited group. All groups improved.</p> <p>Van der Veen Family Concept Inventory</p> <p>Analysis of changes from pre-treatment to four year follow indicated a significant improvement for the minimal contact control group. Scores for the time limited and time unlimited groups did not change significantly over time (mother's report, similar for fathers).</p> <p>Goal Attainment Scale</p> <p>Significant improvement for all three groups at post treatment and four year follow up.</p> <p>Conclusion</p> <p>All groups improved but the positive results for the minimal contact control group were surprising. Either all groups improved in the course of normal development or the minimal contact was in itself an effective intervention.</p>

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<p>Szapocznik et al., 1989 Comment <i>A randomised controlled trial. Method of random allocation and allocation concealment unclear. A highly selected sample recruited for the purposes of research rather than clinically referred. An intention to treat analysis was not carried out despite differential attrition in the three groups. Authors are open about allegiance to family therapy. However some efforts made to ensure fidelity to the treatment intervention. Despite this the individual child psychotherapy treatment was unusually undertaken in the absence of any parallel parent work</i></p>	USA (Miami)	69 Families were recruited through a media campaign and school counsellors. Of the 979 families screened a total of 102 met the inclusion criteria. 98 presented at intake, 5 were excluded on the basis of further information and 5 failed to return after the initial appointment. 88 boys started treatment and there were 19 drop-outs.	<p>Random assignment to Structural Family Therapy (SFT) vs. Individual Psychodynamic Child Therapy (IPT)</p> <p>vs.</p> <p>Recreational control</p> <p>Allocation concealment rating* (B)*</p>	<p>Structural Family Therapy (emphasis on modifying maladaptive patterns of interaction) vs. Individual Psychodynamic Child Therapy (according to guidelines of Adams 1974) vs. Recreational Control (2-4 children met weekly for recreational activities)</p> <p>Treatment duration a minimum of 12 and maximum of 24 hours.</p> <p>Treatment conducted in Spanish or English. Therapists were selected for commitment to approach.</p>	<p>Inclusion Criteria: Hispanic boys; age 6-12 years; Two parent family; had lived in US for > 3 years; no history of mental retardation, mental health care, suicidal-ideation or psychoactive medication.</p> <p>Demographic Mean age of boys was 9 years and 2 months.</p> <p>Diagnosis (DSM-III): 32%ODD; 30% Anxiety Disorder; 16% Conduct Disorder; 12% Adjustment Disorder; 10% other.</p>	<p>Attrition Rates Behavioural and Self Report measures: revised <i>Child Behaviour Checklist, Revised Behaviour Problem Checklist, Child Depression Inventory, Children's Manifest Anxiety Scale, Psychodynamic Child Rating Scale</i> (Szapocznik et al., 1986), <i>Structural Family Systems Ratings</i> (Szapocznik, et al., 1986). Outcomes administered pre and post treatment and at one year follow up.</p>	One year post treatment	<p>Attrition 43% (13/30) in control group 16% (5/31) in SFT 4% (1/27) in IPT Completed therapy but did not return for follow up (3 in SFT, 5 in IPT and 3 in control). N=69 at post treatment. N=58 at one year follow up. The control group was significantly less effective in retaining cases than the two treatment conditions.</p> <p>Other Results Family therapy and psychodynamic therapy were similar in reducing behavioural and emotional problems based on parent and self-reports and psychodynamic ratings of child functioning. These improvements were maintained at one year follow up. On the family functioning measure an improvement is noted in the family therapy group at follow up. The control group remained the same. The individual psychodynamic psychotherapy group showed deterioration at one year follow-up.</p>

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<p>Target and Fonagy, 1994a</p> <p>Comment</p> <p><i>Retrospective study, non-random assignment and lack of control group. Clear pre-specified outcomes and criteria for clinical improvement. Reliability of data collection assessed. A total sample. Results indicate that emotional disorder responds relatively well to psychoanalytic treatment. The majority of children no longer had any disorder after an average of two years treatment. Improvement was more likely in younger children and those receiving intensive treatment. The more severe the disorder the better the justification for intensive treatment. Of note those with severe disorder treated non-intensively had a poor outcome.</i></p>	UK AFC	n=352 selected from a sample of n=763 (closed treatment files at the AFC and represent 90% of all cases treated at the centre)	Retrospective case note study	254 received full psychoanalytic treatment (4-5 times/week) and the remainder 1-3 times/week for an average of two years. Treatment undertaken by child analysts.	Children and adolescents who met DSM-III-R criteria for emotional disorders or who had sleep or somatoform symptoms with marked emotional disturbance.	<p>1) Demographic Information</p> <p>2) Diagnosis DSM-III-R</p> <p>3) Level of Functioning CGAS</p> <p>4) Clinical Information</p> <p>5) Treatment information</p> <p>Reliabilities for the data collection for the above assessed and found to be satisfactory.</p> <p>Criteria for Improvement</p> <p>1) No diagnosable psychiatric disorder and adaptation level rating above 70</p> <p>2) CGAS score above 68 at termination</p> <p>3) Statistically reliable change in adaptation level</p> <p>4) Change in CGAS score as a continuous measure.</p>	Retrospective	<p>Of those treated for at least 6 months 72% showed reliable improvement in adaptation, 24% had some diagnosis at termination and 15% still had an emotional disorder. Simple phobias were most likely to remit and depressed children were least likely to return to normal C-GAS levels.</p> <p>Intensity: 87% of the sample in full psychoanalysis showed reliable change vs. 67% of those in psychotherapy. Intensive treatment generally led to greater improvements independent of age and treatment length. Children categorised as severely disturbed were more likely to show reliable improvement if in intensive treatment rather than psychotherapy (78.7% vs. 26.1%). By contrast less severely disturbed children were almost as likely to benefit from non-intensive treatment.</p> <p>Predictors of Good outcome:</p> <p>Low C-GAS, longer treatment and good psychological functioning in the mother. Anxiety in mother surprisingly predicted good outcome. Higher IQ, nursery attendance.</p>

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<p>Target and Fonagy, 1994b</p> <p>Comment A well designed controlled trial with matched comparison groups. Retrospective design. The principal finding is that younger children are more likely to improve in psychodynamic treatment. It is possible that older children suffer from disorders more resistant to psychoanalytic help. In children younger than 12 intensity but not duration of treatment was related to good outcome, for adolescents the reverse was true. Authors acknowledge methodological limitations of non-random retrospective design</p>	UK Anna Freud Centre	127 Sample drawn from 763 closed treatment files at the AFC Sample selected on the basis of matching on key clinical variables.	Retrospective controlled Trial looking at whether age has an impact on treatment outcome. Data extracted from case notes. Three groups matched on key clinical and demographic variables.	Psychoanalytic psychotherapy	<p>1) Under 6 2) 6-12 years 3) Adolescents 12-19 years</p> <p>Matched on, diagnosis, gender, SES, global adaptation and frequency of sessions. Some differences in specific diagnostic categories. More adolescents came from 'broken' homes and more latency children were treated by trainees.</p>	<p>1) Demographic Information 2) Diagnosis DSM-III-R 3) Level of Functioning CGAS 4) Clinical Information 5) Treatment information</p> <p>Reliabilities for the data collection for the above assessed and found to be satisfactory.</p> <p>Criteria for Improvement</p> <p>1) No diagnosable psychiatric disorder and adaptation level rating above 70 2) CGAS score above 68 at termination 3) Statistically reliable change in adaptation level 4) Change in CGAS score as a continuous measure.</p>	Retrospective	<p>Rates of Improvement On each of the criterion for improvement the likelihood of improvement during treatment declined with age. These differences remained after exclusion of children who ended prematurely. Diagnostic Group: children with emotional disorders generally improved more than others. Those with disruptive disorders did less well. There was a very high rate of improvement in diagnosis outside the emotional and disruptive categories in the 6-12 age group. Treatment Intensity: Results suggest that children in the two younger age groups benefit more from intensive than from non-intensive treatment. Further analysis with an additional matched sample confirmed that adolescents did not show the greater response to intensive treatment found in younger children. Factors Predicting Premature Termination: Prediction of early termination was poor in all age groups. In the youngest age group none of the drop-outs could be identified. Adolescents were most likely to drop out. % showing reliable improvement in C-GAS: Under 6 years, 53.8% (non intensive, n=13) and 73.6% (intensive, n=91). 6-12 years, 43.7% (non-intensive, n=16) and 60.8 (intensive, n=97). 12-18 years, 63.6 (non-intensive, n=11) and 51.2 (intensive, n=84) Parental Mental Health: In the two younger age groups good paternal psychological function was a strong predictor of good outcome. In adolescence anxiety in the father/marital conflict predicted better outcome (also being in care). Paternal antisocial behaviour/ maternal suicidality-negative predictor. Severe maternal mental illness predictor of poorer outcome in under 6's but better outcome in 6-12. AFC Nursery attendance (positive in under 12's) Problems in school setting-negative Every age group: Positive predictors lower initial C-GAS level, completion of treatment and Jewish Family.</p>

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<p>Target and Fonagy 2002 (ongoing study) Comment <i>A non-randomised controlled study. Two control groups-the siblings of those who received treatment and a group of children referred with apparently similar psychopathology who didn't receive treatment. This study is notable for the long length of follow up. Clear pre-specified hypothesis. A wide range of outcome measures used. Possible adverse effects of unsuccessful treatment in childhood highlighted in addition to the benefits of successful treatment. Ongoing study therefore information regarding numbers of participants and outcomes incomplete.</i></p>	UK Anna Freud Centre		<p>Non-randomised controlled study</p> <p>Follow up into adulthood of those children who received treatment at the AFC in childhood.</p> <p>Two control groups (untreated sibling and referred but untreated sample)</p> <p>Hypothesis: those who appeared to be suffering from pervasive and deep-seated psychopathology would show substantial impairment in adulthood unless they had received long-term and intensive psychoanalytic intervention whereas differences between intensive and non-intensive treatment will be narrower in those with less severe psychopathology.</p>	<p>1) Intensive Psychoanalytic Psychotherapy</p> <p>vs.</p> <p>2) Once or twice weekly psychotherapy</p> <p>vs.</p> <p>3) No treatment i.e. (a) untreated sibling control (b) Matched sample whose disorder was untreated in childhood.</p>	<p>Range of problems –referred to the Anna Freud Centre in childhood. Follow up into adulthood. Subjects are mostly young adults age: 24-35.</p> <p>Individuals whose diagnosis was too severe to permit evaluation using the instruments were excluded.</p>	<p>1) In-depth interview based on objective measures of life events, transitions and plans, current personality functioning, psychiatric and personality disorder diagnosis.</p> <p>2) Self-report measures: symptomatology (SCL-90) Physical Health (SF-36) IQ personality (SCID)</p> <p>3) Psycho-dynamic measures: attachment, object relations, perspective taking, mentalizing.</p>	<p>Follow-up over many years - into adulthood</p>	<p>Preliminary results</p> <p>1) Adversity in childhood greater in treated sibs.</p> <p>2) Untreated sibs experienced more negative life events in adulthood</p> <p>3) Personality functioning in the work domain-all of sample was doing well. In the love domain those successfully treated in childhood were doing better than untreated sibs/control.</p> <p>4) Attachment Security-if immediate outcome was good they did as well as siblings in adulthood. If unsuccessfully treated predominantly preoccupied/entangled. If untreated-predominantly dismissing. It may be possible that those unsuccessfully treated are even worse off than untreated.</p> <p>5) Other findings–agreement in recall between adult recall and childhood case note recordings relatively high (esp. for physical abuse and parental discord). It appears that higher functioning individuals remember adverse experiences somewhat less well. Their recollections are coherent but tinged with idealisation. These idealising subjects were less likely to come from the treated group. Those successfully treated appeared more able to 'mentalize', to reflect on mental states, than all other groups.</p>

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<p>Target et al., 2002 Study protocol Comment <i>A protocol for a Randomised Controlled Trial. Aims to recruit a large (n=160) sample. Four different treatment groups allows for comparison between different treatment options. A no treatment control group was considered un-ethical. A range of out come measures proposed. Economic measures, parent/child satisfaction with treatment to be assessed in addition to symptomatic improvement and clinical change. Manualisation of treatments. Therapists committed to treatments offered. Long-term follow up proposed (until two years after the termination of treatment). A clinical sample. Pilot phase completed. Despite the quality of the design, the study has failed to receive funding.</i></p>	UK Anna Freud Centre	Aims to recruit 160 children	Randomised controlled trial	<p>Psychoanalysis vs. once weekly psychotherapy or Cognitive Behaviour Therapy or Treatment as usual (whatever intervention would normally be arranged by the participating clinics). An untreated control group was considered unethical. Different therapists will administer the psychodynamic and CBT therapies to ensure commitment to the treatment approach. All treatments will be manualised.</p>	Children with severe and complex emotional disorders ages 6-12 years	<p>Team have worked to develop and validate outcome measures with the aim of capturing key aspects of children's functioning and the changes clinicians hope to see.</p> <p>Aim to use measures that look at global adjustment, aspects of attachment, social reasoning and understanding and quality of relationships. These will be used alongside symptom measures.</p> <p>Also assessment of cost effectiveness and parent/child satisfaction with treatment.</p>	<p>Follow up for two years after termination of treatment. It is unlikely that important results will be available in the next five years</p>	<p>This is the first planned randomised study of psychoanalytic child psychotherapy and child psychoanalysis.</p> <p>A pilot phase has been completed but there are funding problems (the study has twice been turned down by the MRC and once by the NIMH) as well as practical difficulties (such as recruiting a sample who gives consent to randomisation to such different treatment models).</p>

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<p>Trowell et al., 2002 Comment <i>A randomised controlled trial. It was considered unethical to have a no treatment control group (the ethics committees in two hospitals refused to endorse a no treatment group). The two comparison treatments were expected a priori to be effective but in different ways. Study participants had experienced severe levels of abuse. An extensive range of standardised outcome measures used. Beneficial effects shown with both treatments. The individual therapy appears to have had more of an impact on the PTSD dimensions of re-experience of traumatic event and persistent avoidance of stimuli.</i></p>	UK	71 (94 subjects recruited, 13 not interviewed, 5 not suitable, 75 randomised, 4 didn't enter therapy)	A randomised controlled trial Multi-centre study Allocation concealment rating* (B)*	<p>Random assignment to:</p> <p>1) Focused individual psychotherapy (30 sessions). Manual of topics to be addressed or</p> <p>2) psycho-educational group therapy (up to 18 sessions). Led by co-therapists. Each group focused on a prearranged topic.</p> <p>* After random allocation of the abused girls to the two interventions the carers were then assigned to carers groups or individual support. It was not possible to maintain the randomisation procedure for the carer intervention (foster carers were excluded from groups)</p>	<p>Symptomatic sexually abused girls (6-14yrs). Mean age: 10 years</p> <p>49 girls were in family home</p> <p>22 girls were looked after and accommodated.</p> <p>Diagnostic categories: PTSD (73%); Major Depressive Disorder (57%); Generalised anxiety Disorder (37%); Separation anxiety Disorder (58%). Study participants appeared to be more seriously abused than in other studies (e.g. over 30% had been exposed to multiple perpetrators).</p>	<p>1) The Schedule for Affective Disorders and Schizophrenia (Kiddie-SADS; shortened version (K-SADS, Kaufmann et al 1997)</p> <p>2) Global impairment of functioning assessed using the K-GAS based on the Children's Global Assessment Scale (C-GAS) (Schaffer et al. 1983)</p> <p>3) Post-traumatic stress disorder –assessed using Onvaschel's PTSD scale (Onvaschel, 1989)</p>	<p>1) Baseline assessment prior to therapy</p> <p>2) One year after the start of therapy</p> <p>3) Two year follow up</p>	<p>1) Comparison of therapy groups: on K-GAS and three PTSD Dimensions: On K-GAS the between group effect sizes never achieved 0.5 (used as the criterion of medium effect). The same was true of the PTSD dimension of 'persistent symptoms of increased arousal'. On the PTSD dimensions of re-experience of traumatic event and persistent avoidance of stimuli the mean change scores of individual therapy as compared to group therapy were associated with effect sizes of 0.5 or greater which represents at least a medium effect in favour of individual therapy.</p> <p>2) All participants: of 36 with major impairment at baseline 23 moved into categories of lesser degrees of impairment. Of 18 with 'moderate' impairment 3 moved to more serious degrees of impairment and 10 moved to lesser degrees of impairment. At baseline 7% fell into the lesser impairment category. At first year follow up this was 47%, 54% at second year follow up and 51% at exit. Psychiatric Diagnosis: Of 26 with Generalised Anxiety Disorder at baseline 21 no longer had this disorder at 1 year. 5 who didn't have the disorder initially developed it at 1 year. Of 32 who were diagnosed with Depressive Disorder at baseline 22 were no longer depressed at 1 year and no-one developed the disorder. Of the 36 with separation anxiety disorder at baseline 18 no longer had the disorder at 1 year and 2 developed the disorder.</p>

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<p>Trowell et al., 2003 (ongoing study) Comment <i>Multi-centre randomised controlled trial in children presenting with a severe form of depression that had not responded to other interventions. Both forms of treatment were shown to be effective but interestingly the pattern of response over time differed in the two groups. The authors speculate that this has implications for how family and individual work are integrated. A longer follow up period would be informative.</i></p>	Multi-centre study UK (Tavistock) Athens Helsinki ERC BIOMED funded	72 in total (24 in each centre)	<p>Randomised controlled trial Random assignment to: (a) family therapy vs. (b) individual psychoanalytic child therapy</p> <p>For ethical reasons no treatment control group. Drop outs used as a rough comparison group</p>	<p>(a) family therapy (15 sessions) vs. (b) individual psychoanalytic child therapy (30 sessions) and parallel parent work (15 sessions).</p> <p>(b) individual psychoanalytic child therapy</p>	<p>Childhood depression 10-14 years Inclusion criteria: The study criteria for depression was either clinical judgement and/or as rated by the CDI screen and then confirmed by the K-SADS interview. All the young people entering the study had a diagnosis with the K-SADS of major depression or dysthymia</p>	<p>Outcome assessed at start, end of therapy and 6 months follow Kiddie-SADS (shortened version) completed by trained interviewer K-GAS. CDI (The Child Depression Inventory) Mood and feelings questionnaire (completed by the child and also rated by the mother describing her perception of the child) Greenberg Adolescent Attachment Questionnaire 5MSS (Five Minutes Speech Sample for Expressed Emotion) At baseline, end of therapy and follow-up. The mother is requested by the researcher to speak into a tape-recorder about her child for five minutes.</p>	6 months	<p>Preliminary Results (personal communication from study author Dr Judith Trowell) At follow up both forms of therapy were shown to be effective. Family Therapy produced a more immediate positive effect but this response lessened and showed deterioration over time. In contrast the individual therapy group showed a slow but sustained improvement. There were significantly more drop-outs in the family therapy group. The children had a severe form of depression that had proven unresponsive to other interventions. The depression was thought of as 'existential' in nature (linked to personality development and identity). Once the depression improved some problems with behaviour began to emerge. Cultural differences noted (Helsinki mothers were less depressed. Nearly all the depressed London children didn't go to school unlike in Athens and Helsinki where they did attend school.)</p>

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<p>Trowell et al., 2003 (ongoing study) Comment <i>Presentation of the findings of two individual case reports from a larger multi-centre randomised controlled trial. Manualisation of treatment. Therapists committed to therapeutic approach. A range of standardised outcome measures used. Detailed recording of process. Authors speculate about the particular 'type' of depression selected for by the CDI and K-GAS (existential anxiety and problems managing aggression). Authors acknowledge the limited conclusions that can be drawn from two cases but note that the intervention was powerful and effective. All of the children returned to school. Parents used their sessions and this seemed to lead to an improved home environment.</i></p>	<p>Preliminary Findings from two children in the London sample of the multi-centre study</p>	<p>72 in total (24 in each centre) Preliminary findings from n=2 (two children from the London sample) 2 case studies</p>	<p>Randomised Controlled Trial Random assignment to (a) family therapy vs. (b) individual psychoanalytic child therapy and parent work For ethical reasons no treatment control group. Drop outs used as a rough comparison group.</p>	<p>15 sessions of family therapy vs. 30 sessions of individual psychoanalytic child therapy (manualised tape-recorded, supervised) and 15 sessions of parallel parent work (Parents seen fortnightly)</p>	<p>Childhood depression 10-14 years. Robert (01) Millie (07) N=15 (male) N=9 (female) <i>Inclusion criteria:</i> The study criteria for depression was either clinical judgement and/or as rated by the CDI screen and then confirmation by the K-SADS interview. (Retrospectively authors speculate that the depression reflected early infantile failure. The CDI seemed to select children with extreme existential anxieties).</p>	<p>Outcome assessed at start, end of therapy and 6 months follow Kiddie-SADS (Puig-Antich and Chambers, 1976) shortened version completed by trained interviewer K-GAS. CDI (The Child Depression Inventory; Kovacs, 1992) Moods and feelings questionnaire (Angold et al., 1987) completed by the child and also rated by the mother describing her perception of the child Greenberg Adolescent Attachment Questionnaire 5MSS (Magana et al., 1986; Five Minutes Speech Sample for Expressed Emotion) At baseline, end of therapy and follow up. The mother is requested by the researcher to speak into a tape-recorder about her child for five minutes. <i>Process notes and audio recording were found to correspond.</i></p>	<p>6 months</p>	<p>CDI Both children had CDI levels well over the threshold at the start. At the end of therapy their CDI levels were still raised. Both had a lower level at follow up which indicated that they continued to improve The Greenberg Adolescent Attachment Questionnaire: Both felt secure with a friend throughout. Robert (01) felt insecure at the start with mother but then was secure. Millie (07) was insecure with her mother throughout. The Moods & Feelings Questionnaire Robert (01) showed a rapid improvement (self and mother rated) Millie (07) did not see herself as improving as much as her mother did. Expressed Emotion For both mothers this improved with treatment. Recurring Themes Underlying common theme of a conflict between striving for life and identity of one's own and the fear that this would damage others (especially Parents). Frequency counts of themes and types of intervention were listed.</p>

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<p>Vilsvik and Vaglum, 1989</p> <p>Comment</p> <p><i>Conventional Diagnostic criteria not used but criteria appear stringent</i></p> <p><i>Psychodynamic treatment undertaken by a psychiatrist rather than a psychotherapist</i></p> <p><i>Authors note good outcome for patients at a mean of 4 years after termination of this psychodynamically based treatment. They attribute this to young age, stable family and good pre-morbid functioning.</i></p> <p><i>Authors note that it is not possible to attribute the positive outcome to treatment received.</i></p>	Norway	17 (consecutive cases who participated in a child psychiatric psychodynamic outpatient and inpatient programme).	<p>Naturalistic Follow up study</p> <p>Teenage</p> <p>Anorexia Nervosa 1-9 year follow up after psychodynamic treatment.</p>	<p>Out-patient individual psychodynamic Psychotherapy.</p> <p>Regular parent counselling and some individual sessions.</p> <p>Adolescent Therapist usually a child psychiatrist or child psychiatric resident. Parent worker from a variety of backgrounds.</p> <p>Weekly sessions for parents and patients of one hour.</p> <p>Therapist aim to support, encourage self assertion and reduce the strength of a strict 'super-ego'. Average duration of treatment was 11 months (range 2-32). Individual therapy was used predominantly in 14 patients and combined with family therapy in 12 cases. Three patients had only family treatment. Two families were offered FT but refused and withdrew (offered individual instead). Eleven had parent therapy.</p>	<p>15 girls and 2 boys who fulfilled criteria for Anorexia Nervosa (Rollins and Piazza, 1978) i.e. Evidence of weight phobia and or distorted body image</p> <p>A pervasive sense of inadequacy</p> <p>Self induced starvation with loss of 20% or more of body weight or weight below 2.5 percentile</p> <p>Mean age at time of referral 15 years (13-17.5) at time of termination 16 yrs (14-18)</p> <p>At follow up 19 years (15-24 years).</p>	<p>Assessed at baseline, end of treatment and 1-9 year follow up.</p> <p>Case-notes</p> <p>Semi-structured Interview with patients and parents at follow up (undertaken by one of the authors).</p>	<p>1-9 years</p> <p>Mean 4 years</p>	<p>One refused follow up</p> <p>End of Treatment</p> <p>15 had weight over 10th percentile</p> <p>Eating problems present in 11 patients 5/11 amenorrhoea</p> <p>All at school or working</p> <p>Follow up 2 didn't participate but were reported to do well.</p> <p>15 others-impression was of a 'resourceful group' doing well. All had good/fair result regarding weight gain. 1 had amenorrhoea.</p> <p>6 had uncomplicated sexual relationships. 3 had problematic and 6 had no experience.</p> <p>14 functioned adequately regarding work/school. All had realistic in part problematic relationships with parents. Ability to have close contact with others-13 good ability 2 remained poor. Difficulties with self-assertion and aggression improved. Global Evaluation All good medical result. 9 good interpersonal situation.</p> <p>Patients Evaluation 9 thought the treatment had been helpful. 6 thought it had been of no help (included 2 boys). Retrospectively could see benefit of weight limit and hospitalisation.</p> <p>Reported finding it helpful to talk to other adults; repetition of the same theme by therapist, promotion of self confidence and encouragement to take responsibility for oneself.</p>

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<p>Winkelmann et al., 2000* Translation from German</p> <p>Comment <i>A large open un-controlled study.</i></p> <p><i>Methodological problems include non random assignment and lack of control group. Only a proportion of patients available at 5 year follow up which limits the conclusions that can be drawn.</i></p> <p><i>Nonetheless such long term follow up is impressive.</i></p> <p><i>Attempt to identify outcome according to different rater perspectives and to look at the stability of outcome over time. A range of outcome measures used. Primary outcome measure identified.</i></p> <p><i>Inter-rater reliability on this outcome was good.</i></p> <p><i>Interesting finding that follow-up improvement is rare if matters not resolved in treatment.</i></p>	<p>Germany</p> <p>The Institute for child and adolescent psychoanalytic psychotherapy Heidelberg and the University of Heidelberg .</p>	<p>133</p> <p>519 patients referred to the clinic of whom 334 were recommended therapy and 145 engaged in long-term therapy.</p>	<p>Open non-controlled trial</p> <p>A follow up Study to look at the stability of therapy outcome from the perspective of children, parents and experts.</p>	<p>Long term psychoanalytic psychotherapy</p> <p>Mean length of treatment 1.54 years (S.D. 0.86;0.25-4.09)</p> <p>Mean frequency 0.94 hours per week. (SD 0.48;0.21-3.5)</p> <p>Parent Work</p>	<p>Female: 84 (63.1%) Male 48 (36.9%) Mean age: 9.16 years (SD=3.44) SES Low SES 54 (40.7%) Middle or Upper 79 (59.3%) Mean length of disturbance 2.88 years (SD 2.36)</p> <p>Diagnosis ICD-10: Childhood emotional disturbance (24.8%). Social relationship disturbance (23.3%). Enuresis (17.3%) 12% Developmental disorder (12%) somatoform (12%) Encopresis (6.8%) 41.4% of children co-morbid for two disorders. 10.5% of children co-morbid for three.</p>	<p>Der Beeinträchtigung Schwere-Score (BSS) (Schepank 1995;Fahrig 1996). The primary outcome measure. Modified for assessment of child and adolescent psychiatric disturbance across a variety of domains (psychic, physical, social, communication and performance capacities). In translation roughly means 'the extent to which capacities are diminished' Inter-rater reliability 0.84. CBCL GBB (Gisner Complaints and Difficulties Checklist) Filled in by the children-subjective physical/emotional difficulties i.e. pain, emotional pain etc. DIJK (adaptation of the Beck Depression Inventory).</p>	<p>5 years</p>	<p>Global outcome at the end of therapy (n=133) Very much improved (36.8%) Moderately improved (33.1%) Unchanged (8.3%) Cured (21.8%)</p> <p>Global outcome at follow up (n=56). Much improved (55.4%) Mod improved (10.7%) Unchanged (14.3%) Cured (19.6%)</p> <p>BSS scale-significant positive change in all scales from beginning of therapy to end. Good outcome remained stable at 5 year follow up (with trend towards improvement). Single variables showed further improvement in the time of follow up, for example social communication with parents (improved most)** Follow up improvement in the period after treatment seldom occurred if difficulties were not resolved in the therapy itself but improvements seen during therapy continued after therapy. ** Children's subjective assessment didn't concur with that of parents/experts (authors conclude that prior to puberty there is difficulty in describing areas of difficulty).</p>

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<p>Zelman et al., 1985</p> <p>Comment</p> <p><i>A case series.</i></p> <p><i>No control group. Biased sample selection i.e. clinicians were asked to refer current cases of children in long-term intensive treatment who they felt had made significant intellectual gains. Three out of ten cases not available for follow-up. Quality of reporting unclear. No firm inferences can be drawn from this study. However the authors do acknowledge the limitations of an uncontrolled study and advocate further controlled outcome studies to test their hypothesis.</i></p>	<p>USA</p> <p>The centre for Preventative Psychiatry New York</p>	<p>10</p> <p>(14 cases referred in total to the investigators. Clinicians were asked to refer current cases of children in long-term intensive treatment who they felt had made significant intellectual gains as part of their overall progress).</p> <p>Three cases were not available for follow up I.Q.</p> <p>One case showed no gain in I.Q.</p>	<p>Case series</p> <p>No control group</p> <p>Pre and Post treatment measures.</p> <p>Aim to test the hypothesis that treatment was associated with I.Q. gains</p>	<p>Psychoanalytically based treatments:</p> <p>1) The Cornerstone Therapeutic Nursery (an analytic therapist works with a child individually in the classroom in collaboration with teachers). 9 cases</p> <p>2) Psychoanalytic psychotherapy. 1 case.</p> <p>3) Corrective object-relations psychotherapy often with parallel parent work</p>	<p>7 (male)</p> <p>3 (female)</p> <p>Mean age 3 years and 8 months (range 20-66 months)</p> <p>Diagnosis DSM-III- ODD (5)</p> <p>PDD (2)</p> <p>ADD with hyperactivity (1)</p> <p>On axis II-7 suffered from developmental language delays.</p> <p>All of the children had lowered mood.</p>	<p>Pre and Post treatment I.Q.</p>	<p>Mean time between initial and final I.Q. test was 52.6 months.</p> <p>Range 20-132 months.</p>	<p>Mean initial I.Q. was 84.9,</p> <p>Mean final I.Q. was 112.8.</p> <p>Mean change in I.Q. was 27.9 with a range of 10-53 points.</p> <p>Gains in I.Q. were attributed by the researchers to a lessening of anxiety and the inhibition of the wish for knowledge.</p>

References

- Achenbach TM (1991a), *Manual for the Child Behaviour Checklist 4-8 and 1991 Profile*. Burlington: University of Vermont Department of Psychiatry
- Achenbach TM (1991b), *Manual for the Teacher's Report Form and 1991 Profile*. Burlington, VT: University of Vermont Department of Psychiatry
- Achenbach TM (1991c), *Manual for the Youth Self-Report and 1991 Profile*. Burlington: University of Vermont Department of Psychiatry
- Achenbach T M, Edelbrock C (1986), *Manual for the Teachers Report Form and Teacher Version of the Child Behaviour Profile*. Burlington, Vermont: Department of Psychiatry, University of Vermont
- Achenbach T M, Edelbrock C (1987), *Manual for the Youth Self- Report and Profile*. Burlington, Vermont: Department of Psychiatry, University of Vermont
- Angold A, Costello E, Pickles A, Winder F, Silver D (1987), Moods and Feelings Questionnaire: the development of a questionnaire for use in epidemiological studies of depression in children and adolescents. London: Institute of Psychiatry
- Adams FL (1974), *A primer of child psychotherapy*. Boston: Little Brown
- Alvarez A, Reid S (1999), *Autism and Personality: Findings from the Tavistock Autism Workshop*. London: Routledge
- American Psychiatric Association (1994), *Diagnostic and Statistical Manual of Mental Disorders* (4th Edition). Washington DC: American Psychiatric Association
- Apter A, Bernhout E, Tyano S (1984), Severe obsessive compulsive disorder in adolescence: a report of cases. *J Adolesc.* 7, 349-358
- Audit Commission (1999), *Children in Mind: Child and Adolescent Mental Health Services (a national report)*. Oxon: Audit Commission Publications
- Baruch G (1995), Evaluating the outcome of a community-based psychoanalytic psychotherapy service for young people between 12-25 years old: work in progress. *Psychoanalytic Psychotherapy* 9(3): 243-267
- Baruch G, Fearon P, Gerber A (1998), Evaluating the outcome of a community-based psychoanalytic psychotherapy service for young people: one year repeated follow up. In: *Rethinking Clinical Audit*, Davenhill R, Patrick M, eds. London, Routledge, pp 157-182
- Barrows P (2001), The aims of child psychotherapy: A Kleinian perspective. *Clinical Child Psychology and Psychiatry* 6(3): 371-385
- Battle J (1981), *Self-esteem interview*. Washington, DC: Special Child Publications
- Beck AT (1976), *Cognitive Therapy and Emotional Disturbances*. New York: International Universities Press
- Berney TP, Bhate SR, Kolvin I, Famiyuwa OO, Barrett ML, Fundadis T, Tyrer SP (1991), The context of childhood depression. *British Journal of Psychiatry* 159 (Suppl. 11): 29-35
- Bleiberg E, Fonagy P, Target M (1997), Child psychoanalysis: critical overview and proposed reconsideration. In: *Child Adolesc Psychiatric Clin N Am*, O' Brien J ed. Philadelphia, Saunders, 6(1) pp 1-39
- Bolton D, Collins S, Steinberg, D (1983), The treatment of obsessive compulsive disorders in adolescence. a report of 15 cases. *Br J Psychiatry* 142: 456-464e
- Boston M (1977), The contribution of the child psychotherapist. In: *The Child Psychotherapist and Problems of Young People*, Boston M, Daws D, eds. London, Wildwood House, pp 15-31
- Boston M, Lush D (1993), Can child psychotherapists predict and assess their own work? A research note. *ACPP Review and Newsletter* 15 (3): 112-119
- Boston M, Lush D (1994), Further considerations of methodology for evaluating psychoanalytic psychotherapy with children: reflections in light of research experience. *Journal of Child Psychotherapy* 20:225-229

- Carlberg G (1997), Laughter opens the door: turning points in child psychotherapy. *Journal of Child Psychotherapy* 23:3:331-349
- Carr A (2000), *What works with children and adolescents: a critical review of psychological interventions with children, adolescents and their families*. London: Routledge
- Centre for Reviews and Dissemination (2001), *Undertaking Systematic Reviews of the Research on Effectiveness. CRD's Guidance for those carrying out or Commissioning Reviews*, CRD report no 4 (2nd Edition): University of York
- Chambers WJ, Puig-Antich J, Hirsch M, Paez P, Ambrosini PJ, Tabrizi MA, Davies M (1985), The assessment of affective disorders in children and adolescents by semi-structured interview. *Arch Gen Psychiatry* 42:696-702
- Child Psychotherapy Trust (2001), *With children in mind: how child psychotherapy contributes to services for children and young people*. London: Child Psychotherapy Trust
- Clarke M, Oxman AD, editors. Cochrane Reviewers' Handbook 4.2.0 (updated March 2003). In: The Cochrane Library, Issue 2, 2003. Oxford: Update Software. Updated quarterly
- Clarke M, Oxman AD (2003), Assessment of study quality. Cochrane Reviewers' Handbook 4.2.0 (updated March 2003); Section 6. In: The Cochrane Library, Issue 2, 2003. Oxford, Update Software. Updated quarterly
- Crisp AH, Norton K, Gowers S, Halek C, Bowyer C, Yeldham D, Levett G, Bhatt A (1991), A controlled study of the effect of therapies aimed at adolescent and family psychopathology in anorexia nervosa. *Br J Psychiatry*, 159, 352-333
- Department of Health (2003), *Getting the right start. The National Service Framework for children, young people and Maternity Services-Emerging Findings*. London: DOH
- EPOS (2002), Erica process and outcome study of goal directed, time-limited child psychotherapy with parental counselling. In: *An open door review of outcome studies in psychoanalysis* (2nd Edition) Fonagy P, ed. London, International Psychoanalytical Association, pp 280-281
- Fahrig H, Kronmuller KT, Hartmann M, Rudolf G (1996), Therapieerfolg analytischer Psychotherapie bei Kindern und Jugendlichen. *Zeitschrift fur Psychosomatische Medizin und Psychoanalyse* 42: 375-395
- Fonagy P, Moran GS (1990), Studies of the efficacy of child psychoanalysis. *J Consult Clin Psychol.*, 58:684- 695
- Fonagy P, Target M (1994), The efficacy of psychoanalysis for children with disruptive disorders. *J Am Acad Child Adolesc Psychiatry*, 33:45-55c
- Fonagy P, Target M (1996), Predictors of outcome in child psychoanalysis: a retrospective study of 793 cases at the Anna Freud Centre. *J Am Psychoanal Assn*, 44:27-73
- Fonagy P, Target M, Cottrell D, Phillips J, Kurtz Z (2002a), Introduction and review of outcome methodology. In: *What works for whom? A critical review of Treatments for children and Adolescents*. Fonagy P, Target M, Cottrell D, Phillips J, Kurtz Z, eds. London, Guilford Press, pp 1-41
- Fonagy P (2002b), Evidence-based medicine and its justifications. In: *Outcomes of Psychoanalytic Treatment: Perspectives for Therapists and Researchers*, Leuzinger-Bohleber M, Target M, eds. Whurr, London, pp53-59
- Fonagy P, Gerber A, Higgitt A, Bateman A (2002c), (in preparation), The comparison of intensive (5 times weekly), and non-intensive (once weekly), treatment of young adults. In: *An open door review of outcome studies in psychoanalysis* (2nd Edition) Fonagy P, ed. London, International Psychoanalytical Association, pp 96-97
- Fonagy P, Target M, Cottrell D, Phillips J, Kurtz Z (2002d), *What works for whom? A critical review of Treatments for children and Adolescents*. London: Guilford Press
- Fonagy P, Target M, Cottrell D, Phillips J, Kurtz Z (2002e), Conclusions and Implications. In: *What works for whom? A critical review of Treatments for children and Adolescents* Fonagy P, Target M, Cottrell D, Phillips J, Kurtz Z, eds. London, Guilford Press, pp 1-41
- Freud A (1958), Adolescence. *Psychoanal Study Child* 13:255-278

- Freud A (1965), *Normality and Pathology in Childhood*. New York: International Universities Press
- Goodman R (1997), The strengths and difficulties questionnaire: A research note. *J Child Psychol Psychiatry* 38:581-586
- Goldberg DP, Hiller YF (1979), A scaled version of the General Health Questionnaire. *Psychol Med* 9:139-45
- Heinicke CM (1965), Frequency of psychotherapeutic session as a factor affecting the child's developmental status. *Psychoanal Study Child* 20:42-98
- Heinicke CM, Ramsay-Klee DM (1986), Outcome of child psychotherapy as a function of frequency of session. *J Am Acad Psychiatry* 25:247-253
- Holmbeck GN, Neff Greenly R, Franks EA (2003), Developmental issues and considerations in research and practice. In: *Evidence-Based Psychotherapies for Children and Adolescents*, Kazdin A, Weisz J, eds. London, Guilford Press, pp 21-41
- Hopkins J (1999), The child and adolescent psychotherapist and the family: the family context. In: *The Handbook of Child and Adolescent Psychotherapy: Psychoanalytic Approaches*, Horne A, Lanyado M, eds. London, Routledge, pp 81-85
- Horne A, Lanyado M (1999), Introduction. In: *The Handbook of Child and Adolescent Psychotherapy: Psychoanalytic Approaches*, Horne A, Lanyado M, eds. London, Routledge, pp 1-16
- Hunter M (2001), *Psychotherapy with young people in care: Lost and Found*. Sussex: Brunner-Routledge
- Jadad AR (1998), *Randomised Controlled Trials: A Users Guide*. London: BMJ Books
- Jordy CF (1996), The hyperactive child and the body: a clinical study. *Arq Neuropsiquiatr* 54 (4):628-636
- Jureindini JN, Doecke CJ, Mansfield PR, Haby MM, Menkles DB, Tonkin AL (2004), Efficacy and safety of antidepressants for children and adolescents. *BMJ*, 328: 879-83
- Kaufmann J, Brimaher B, Brent D, Rao U, Ryan N (1997), Schedule for affective disorders and schizophrenia for school age children. Present and life-time versions (K-SADS.PL). Initial reliability and validity data. *Journal of the American Academy of Child and Adolescent Psychiatry*, 36: 980-8
- Kazdin A (2000), Psychotherapy research in perspective. In: *Psychotherapy for Children and Adolescents: Directions for Research and Practice*, Kazdin A. Oxford, Oxford University Press, pp 209-228
- Kazdin A (2002), The state of child and adolescent psychotherapy research. *Child and Adolescent Mental Health* 7 (2), 53-59
- Kendall PC, Brady E, Verduin T (2001), Comorbidity in child anxiety disorders and treatment outcome. *J Am Acad Child Adolesc Psychiatry* 40:787-794
- Kolvin I, Miller FJ, Scott D, Gatzanis SR, Fleeting M (1990), *Continuities of deprivation*. The Newcastle 1000 Family Study. ESRC/OHSS/Studies in Deprivation and Disadvantage. Aldershot: Avebury
- The Children's Depression Inventory: A self rated scale for school aged youngsters*. University of Pittsburgh School of Medicine: Unpublished manuscript
- Kovacs M (1992), *Children's Depression Inventory (CDI) Manual*. New York: Multi-Health Systems
- Kraemer S (2000), Reviews: The Handbook of child and adolescent psychotherapy. *Journal of Child Psychotherapy*, 26 (1), 119-134
- Kurz Z, Thornes R, Wolkind S (1994), *Services for the mental health of children and young people in England: A national Review*. London: Department of Health
- Kurz Z (1996), *Treating children well*. Mental Health Foundation.
- Lanyado M, Horne A (1999), The therapeutic relationship and process. In: *The Handbook of Child and Adolescent Psychotherapy: Psychoanalytic Approaches*, Horne A, Lanyado M, eds. London, Routledge, pp 55-72
- Leff J, Vearnals S, Brewin C, Wolff G, Alexander B, Asen E, Dayson D, Jones E, Chisholm D, Everitt B (2000), The London Depression Intervention Trial: randomised controlled trial of antidepressants v. couple therapy in the treatment and maintenance of people with depression living with a partner: clinical outcome and costs. *Br J Psychiatry* 177: 95-100
- Levy N (1958), A short form of the Children's Manifest Anxiety Scale. *Child Dev*, 29, 153-154.
- Likerman M, Urban E (1999), The roots of child and adolescent psychotherapy in psychoanalysis. In: *The Handbook of Child and Adolescent Psychotherapy: Psychoanalytic Approaches*, Horne A, Lanyado M, eds. London, Routledge, pp 19-30

- Lord C, Rutter M, Le Couteur, A (1994), Autism Diagnostic Interview-Revised: a revised version of the diagnostic interview for caregivers of individuals with possible pervasive developmental disorders. *J Autism Dev Disord* 24: 659-685
- Lush D, Boston M, Grainger E (1991), Evaluation of psychoanalytic psychotherapy with children: therapists' assessments and predictions. *Psychoanalytic Psychotherapy* 5(3):191-234
- Lush D, Boston M, Morgan J, Kolvin I (1998), Psychoanalytic psychotherapy with disturbed adopted and foster children: a single case follow-up study. *Clinical Child Psychology and Psychiatry* 3(1): 51-69
- Magana AB, Jenkins J, Falloon JR (1986), A brief method for assessing expressed emotion in relatives of psychiatric patients. *Psychiatric Research*, 17: 203-12
- Merriman SB (1988), *Case Study Research in Education: A Qualitative Approach*. San Francisco, Calif: Jossey-Bass
- Midgley N (2004), Sailing between Scylla and Charybdis: Incorporating qualitative approaches into child psychotherapy research. *Journal of Child Psychotherapy* 30 (1), 89-111
- Moran G S, Fonagy P (1987), Psychoanalysis and diabetic control: A single-case study. *Br J Med Psychol* 60: 357-372
- Moran GS, Fonagy P, Kurtz A, Bolton AM, Brook C (1991), A controlled study of the psychoanalytic treatment of brittle diabetes. *J Am Acad Child Adolesc Psychiatry* 30(6): 926-935
- Muratori F, Picchi L, Casella C, Patarnello M, Milone A, Tancredi R (2002), Efficacy of brief dynamic psychotherapy for children with emotional disorders. *Psychother Psychosom* 71:28-38
- Muratori F, Picchi L, Bruni G, Patarnello M, Romagnoli G (2003), A two year follow-up of psychodynamic psychotherapy for internalising disorders in children. *J Am Acad Child Adolesc Psychiatry* 42(3):331-339
- NHS Executive (1996), *NHS psychotherapy services in England: review of strategic policy*. London: Department of Health
- Orvaschel H (1989), *Kiddies SADS-E Section. Designed to assess PTSD*. Philadelphia, PA: Medical College of Pennsylvania
- Parker G (1990), Reliability of the PBI and of the intimate bond measure. *Australian and New Zealand Journal of Psychiatry* 24(2), 199-202
- Petri H, Thieme E (1978), Katamnese zur analytischen psychotherapie im kindes und jugendalter. *Psyche* 1: 21-54
- Puig-Antich J, Chambers W (1976), *The schedule for Affective Disorders and Schizophrenia for School-aged Children*. New York: New York State Psychiatric Institute
- Reid S, Alvarez A, Lee A (2001), The Tavistock Autism Workshop Approach. In: *Autism-The Search for Coherence*, Richer J, Coates S, eds. London, Jessica Kingsley, pp 182-192
- Richardson, P (2003), Evidence-based Practice and the Psychodynamic Psychotherapies. In: *Clinical effectiveness in psychotherapy and mental health*, McPherson S, Richardson P, Leroux P eds. London, Karnac, pp 49-67
- Richardson P, Hobson P (2003), In Defence of NHS Psychotherapy In: *Clinical effectiveness in psychotherapy and mental health*, McPherson S, Richardson P, Leroux P eds. London, Karnac, pp 27-41
- Riddle M, Kaselic E, Frosch E (2001), Paediatric Psychopharmacology. *J Child Psychol Psychiatry* 42(1): 73-90
- Robin AL, Koepke T, Moye A (1990), Multidimensional assessment of parent-adolescent relations. *Psychol Assess J Consult Clin Psychol* 2: 451-459
- Robin A, Siegel T, Moye A (1995), Family versus Individual Therapy for Anorexia: Impact on Family Conflict. *Int. J. Eating Disorders* 17 (4), 313-322
- Robin A, Siegel P, Moye A, Gilroy M, Dennis AB, Sikand A (1999), A controlled comparison of family versus individual therapy for adolescents with anorexia nervosa. *J Am Acad Child Adolesc Psychiatry* 38 (12) 1482-1489

- Rollins N, Piazza E (1978), Diagnosis of Anorexia Nervosa. A quantitative approach to follow-up. *J Am Acad Child Psychiatry* 17: 126-37
- Rushton A, Miles G (2000), A Study of a Support Service for the Current Carers of Sexually Abused Girls. *Clinical Child Psychology and Psychiatry* 5 (3): 411-426
- Rustin M (1998), Dialogues with parents. *Journal of Child Psychotherapy* 24 (2), 233-252
- Rustin M (1999), The Training of Child Psychotherapists at the Tavistock Clinic: Philosophy and Practice. *Psychoanalytic Inquiry* 19 (2), 125-141
- Rustin M, Quagliata E (2000), *Assessment in child psychotherapy*. London: Duckworth
- Rustin M (2000), Introduction. In: *Assessment in child psychotherapy*, Rustin M, Quagliata E eds. London, Duckworth, pp1-8
- Rustin MJ (2001), Research, evidence and psychotherapy In: *Evidence in the Psychological Therapies: A Critical Guide for Practitioners*, Mace C, Moorey S, Roberts B eds. Sussex, Brunner-Routledge, pp27-45
- Rustin MJ (2003), Research in the consulting room. *Journal of Child Psychotherapy* 29(2): 137-145
- Sandler J, Kennedy H, Tyson R L (1980), *The Technique of Child Psychoanalysis*. London: Hogarth Press
- Schepank H (1995), Der Beeinträchtigungsschwere-Score (BSS), Ein Instrument zur Bestimmung einer psychogenen Erkrankung. Göttingen: Beltz Test Gesellschaft, Hogrefe Verlag
- Schopler E, Reichler RJ, Renner BR (1986), *The Childhood Autism Rating Scale (CARS), for Diagnostic Screening and Classification of Autism*. New York: Irvington
- Shaffer D, Gould MS, Brasic J, Ambrosini P, Fisher P, Bird H, Aluwahlia S (1983), A children's global assessment scale (C-GAS). *Arch Gen Psychiatry* 40:1228-1231
- Shirk S, Talmi A, Olds D (2000), A developmental psychopathology perspective on child and adolescent treatment policy. *Dev Psychopathol*, 12, 835-855
- Sinha UK, Kapur M (1999), Psychotherapy with Emotionally Disturbed Adolescent Boys: Outcome and Process Study. *NIMHANS Journal*, 17(2): 113-30
- Slade M, Priebe S (2001), Are randomised controlled trials the only gold that glitters? *Br J Psychiatry* 179: 286-287
- Smyrniotou KX, Kirby R J (1993), Long term comparison of brief versus unlimited psychodynamic treatments with children and their parents. *J Consult Clin Psychol* 61(6): 1020-1027
- Sparrow S, Balla D, Cicchetti D (1984), *Vineland Adaptive Behaviour Scales (Survey Form)*. Circle Pines, MN: American Guidance Service
- Stott D (1974), *Bristol Social Adjustment Guides manual: The Social Adjustment of Children* (5th ed.). London: University of London Press
- Szapocznik J, Hervis O, Rio A, Faraci AM, Foote F, Kurtines W (1986), *Structural Family Systems Ratings: A Manual*. Miami: University of Miami School of Medicine (Mimeographed)
- Szapocznik J, Rio A, Richardson R, Alonso M, Murray F (1986), *Manual for the Psychodynamic Child Ratings*. Miami: University of Miami School of Medicine (Mimeographed)
- Szapocznik J, Murray E, Scopetta M, Hervis O, Rio A, Cohen R, Rivas-Vazquez A, Posada V, Kurtines W (1989), Structural Family versus Psychodynamic Child Therapy for Problematic Hispanic Boys. *J Consult Clin Psychol* 57 (5): 571-578
- Target M, Fonagy P (1992), *Raters' manual for the Hampstead Child Adaptation Measure (HCAM)*: London: UCL
- Target M, Fonagy P (1994a), The efficacy of psychoanalysis for children with emotional disorders. *J Am Acad Child Adolesc Psychiatry* 33: 361-71
- Target M, Fonagy P (1994b), The efficacy of psychoanalysis for children: prediction of outcome in a developmental context. *J Am Acad Child Adolesc Psychiatry* 33(8): 1134-44
- Target M, Fonagy P (1996), The psychological treatment of child and adolescent psychiatric disorders. In: *What Works for Whom?* Roth A, Fonagy P eds. New York, Guilford Press, pp 263-320
- Target M, Fonagy P (2002), The long-term follow-up of child analytic treatments (AFC3). In: *An open door review of outcome studies in psychoanalysis* (2nd Ed) Fonagy P, ed. London, International Psychoanalytic Association, pp 141-146

- Target M, March J, Ensink K, Fabricus J, Fonagy P (2002), Prospective study of the outcome of child psychoanalysis and psychotherapy (AFC5). In: *An open door review of outcome studies in psychoanalysis* (2nd Ed) Fonagy P, ed. London, International Psychoanalytic Association, pp 161-162
- Treasure J, Kordy H (1998), Evidence Based Care of Eating Disorders: Beware the Glitter of the Randomised Controlled Trial. *European Eating Disorders Review* 6:85-95
- Trowell J, Kolvin I, Weeramanthri T, Sadowski, H, Berelowitz M, Glasser D, Leitch I (2002), Psychotherapy for sexually abused girls: psychopathological outcome findings and patterns of change. *Br J Psychiatry* 180:234-247
- Trowell J, Berelowitz M, Kolvin I (1995), Design and methodological issues in setting up a psychotherapy outcome study with girls who have been sexually abused. In: *Research Foundations for Psychotherapy Practice*, Aveline M, Shapiro D eds. Chichester, John Wiley and Sons, pp 247-262
- Trowell J, Kolvin I (1999), Lessons from a psychotherapy outcome study with sexually abused girls. *Clinical Child Psychology and Psychiatry* 4:1:79-89
- Trowell J, Rhode M, Miles G, Sherwood I (2003), Childhood depression: Work in progress. *Journal of Child Psychotherapy* 29(2):147-169
- Urwin C (2000), Reviews: Psychoanalysis and Developmental Therapy. *Journal of Child Psychotherapy* 26 (1): 124-128
- Van der Veen F, Olson RE (1983), *Manual and Handbook for the family concept assessment*. (Available from F. Van der Veen, P.O. Box 73, Encinitas, CA)
- Vilsvik SO, Vaglum P (1990), Teenage Anorexia Nervosa: A 1 to 9 year follow up after psychodynamic treatment. *Nord Psykiatr Tidsskr* 44: 249-255
- Wallace S, Crown JM, Berger M (1997), Child and adolescent mental health. In: *Health care needs assessment: the epidemiologically based needs assessment reviews*, Stevens A, Rafferty J eds. Oxford and New York, Radcliffe Medical Press, pp 55-128
- Weisz JR, Donenberg GR, Han S, Weiss B (1995), Bridging the gap between laboratory and clinic in child and adolescent psychotherapy. *J Consult Clin Psychol* 63(5): 688-701
- Weisz JR, Hawley KM (2002), Developmental Factors in the Treatment of Adolescents. *J Consult Clin Psychol* 70 (1): 21-43
- Weschler D (1974), *Weschler Intelligence Scale for Children-Revised*. New York: Psychological Corporation
- Williams DDR, Garner J (2002), The case against 'the evidence': a different perspective on evidence-based medicine. *Br J Psychiatry* 180: 8-12.
- Wimmer H, Perner J (1983), Beliefs about beliefs: Representation and constraining function of wrong beliefs in children's understanding of deception. *Cognition*, 13:103-102
- Winkelmann K, Hartmann M, Neumann K, Hennch C, Reck C, Victor D, Horn H, Uebel T, Kronmuller KT (2000), Stability of therapeutic outcome after child and adolescent psychoanalytical therapy. *Praxis Kinderpsychol Kinderpsychiatr* 49: 315-328
- Zelmann AB, Samuels S, Abrams D (1985), I.Q. Changes in Young Children Following Intensive Long-term Psychotherapy. *Am J Psychother* XXXIX (2): 15-227

Appendix 1. Databases Searched

Name of Database	Years Searched	Version Searched/Data Provider
Biomedical Databases		
PsycInfo	1887-2002	Ovid
Embase	1980-2002	Ovid
Medline	1966-2002	Ovid
Cinahl	1982-2002	Ovid
The Cochrane Library	1993-2002	Ovid
Educational and Child Care Databases		
British Education Index	1986-2002	Bath Information and Data Services
ERIC (Educational Resources Information Centre)	1965-2002	OVID
Care Data		National Institute for Social Work now the Social Care Institute of Excellence
Child Data		National Children's Bureau
General Databases		
ASSIA (Applied Social Science Index & Abstracts)	1987-2002	Cambridge Scientific Abstracts
Index to Scientific and Technical Proceedings	1990-2002	Institute of Scientific Information

Appendix 2. Search Strategies

PsycInfo: Child psychotherapy search:

For the child psychotherapy search a combination of thesaurus terms (index terms used to describe the subject content of journal articles etc) and text words and phrases were used to retrieve references on psychoanalysis and psychodynamic psychotherapy. A second search utilising the more specific thesaurus terms of child psychotherapy and adolescent psychotherapy was conducted. To ensure outcome research articles were retrieved, the search was restricted to the following form types (roughly equivalent to research designs): experimental replication, follow-up study, longitudinal study, prospective study, treatment outcomes study and clinical trials

#1 child psychotherapy/

#2 exp psychoanalysis/

#3 psychodynamics/

#4 psychoanaly\$ or psychodynamic\$).mp.

[mp=title, abstract, heading word, table of contents, key concepts)

#5 exp adolescent psychotherapy/

#6 interpersonal psychotherapy/

#7 1 or 5

#8 3 or 4 or 6

#9 7 and 8

#10 2 or 3 or 4 or 6

#11 limit 10 to (childhood <birth to 12 years> or adolescence <13 to 17 years>)

#12 9 or 11

#13 limit 12 to ("0800 empirical study" or "0830 experimental replication" or "0840 follow-up study" or "0850 longitudinal study" or "0851 prospective study" or "0852 retrospective study" or "0860 treatment outcome study" or "0861 clinical trial" or "1300 literature review/research review" or 1400 meta analysis or 1900 program evaluation)

#14 limit 12 to ("0830 experimental replication" or "0840 follow-up study" or "0850 longitudinal study" or "0851 prospective study" or "0852 retrospective study" or "0860 treatment outcome study" or "0861 clinical trial" or 1400 meta analysis or 1900 program evaluation)

Appendix 2. Search Strategies continued

PsycInfo: Child development search strategy:

Thesaurus terms were included to broadly cover all areas of development. The same thesaurus terms and text words, as in the child psychotherapy search, were added to the search to ensure that only studies employing a psychodynamic or psychoanalytic approach were found. The strategy was restricted to the same research designs as in the child psychotherapy search.

#1 exp psychoanalysis/

#2 psychodynamics/

#3 (psychoanaly\$ or psychodynamic\$).mp. [mp=title, abstract, heading word, table of contents, key concepts]

#4 1 or 2 or 3

#5 exp childhood development/

#6 exp infant development/

#7 exp early childhood development/

#8 exp emotional development/

#9 exp psychosocial development/

#10 5 or 6 or 7 or 8 or 9

#11 4 and 10

#12 limit 11 to ("0830 experimental replication" or "0840 follow-up study" or "0850 longitudinal study" or "0851 prospective study" or "0852 retrospective study" or "0860 treatment outcome study" or "0861 clinical trial" or "1300 literature review/research review" or 1400 meta analysis or 1900 program evaluation)

PsycInfo: Attachment search strategy:

Text words and thesaurus terms relating to attachment theory were chosen and these were added to the terms describing psychoanalysis and psychodynamic psychotherapy. The studies retrieved were limited to the same eight research designs used in the child psychotherapy strategy.

#1 exp attachment behaviour/

#2 attachment disorders/or separation anxiety/or separation reactions

#3 attach\$.ti.

#4 1 or 2 or 3

#5 exp psychoanalysis/

#6 psychodynamics/

#7 (psychoanaly\$ or psychodynamic\$).mp. [mp=title, abstract, heading word, table of contents, key concepts]

#8 5 or 6 or 7

#9 4 and 8

#10 limit 9 to ("0830 experimental replication" or "0840 follow-up study" or "0850 longitudinal study" or "0851 prospective study" or "0852 retrospective study" or "0860 treatment outcome study" or "0861 clinical trial" or "1300 literature review/research review" or 1400 meta analysis or 1900 program evaluation)

Translation of the PsycInfo search strategy to other databases

Biomedical and Psychological Databases:

The four search strategies compiled in the PsycInfo database were subsequently translated for use in Embase, Medline and Cinahl databases. Each database has a unique thesaurus, hence the need to translate original search strategies.

Education and Child Care Databases:

PsycInfo search strategies had to be modified considerably in the remaining databases due to the different subject emphases of the Educational and Child Care databases. It was not possible to apply research design filters to the searches

The Cochrane Database:

A search strategy was designed to capture references on the main areas of interest.

ASSIA database:

ASSIA is a general social sciences database and thus only a basic version of the search strategy could be created.

Appendix 3. Results of Search Strategies

Database	Years searched	Number of references retrieved before de-duplication
PsycInfo: total no. of references found across all four searches (594). After de-duplication no. of references (482).	1887-2002*	Child Psychotherapy (200) Child Development (117) Attachment (26) Key authors/institutions (139)
Embase: The number of records found across all four searches unique to Embase (831)	1980-2002*	Child Psychotherapy (80) Child Development (372) Attachment (234) Key authors/institutions (653)
Medline: Number of records found across all four searches after de-duplication (394).	1966-2002*	Child Psychotherapy (133) Child Development (80) Attachment (40) Key authors/institutions (293)
Cinahl: Number of records found across all four searches after de-duplication (163).	1982-2002*	Child Psychotherapy (69) Child Development (75) Attachment (12) Key authors/institutions (51)
Cochrane Library	c.1993-2002	A single search strategy to cover child psychotherapy, child development and attachment found 40 records.
British Education Index: Total number of records (98)	1986-2002	Child Psychotherapy (43) Child Development (22) Attachment (6) Key authors/institutions (27)
ERIC: Total number of records (221)		1965-2002 Child Psychotherapy (73) Child Development (50) Attachment (46) Key authors/institutions (52)
Care Data: Total number of records (616)		Child Psychotherapy (151) Child Development (74) Attachment (152) Key authors/institutions (239)
Child Data: Total number of records (208).		Child Psychotherapy (50) Child Development (14) Attachment (12) Key authors/institutions (132)
ASSIA	1987-2002	One general search on psychotherapy was performed which yielded 250 references.
Index to Scientific & Technical Proceedings	1990-2002	One general search.

*Updated to February 2004

Appendix 4. Allocation Concealment

Empirical research has shown that lack of adequate allocation concealment is associated with bias. Concealment of allocation has been found to be more important in preventing bias than other forms of allocation (Oxman and Clarke, 2003). Information should be presented that provides assurance that allocations were not known until, at least, the point of allocation.

Randomised controlled trials were rated according to the adequacy of concealment of allocation (Oxman and Clarke, 2003) as follows:

- (a) adequate
- (b) unclear
- (c) inadequate
- (d) not used

Appendix 5.

Hierarchy of study design for studies of effectiveness*^(CRD, 2001)

Study design hierarchy

Level	Description
1.	Experimental studies (e.g. RCT with concealed allocation)
2.	Quasi-experimental studies (e.g. experimental study without randomisation)
3.	Controlled observational study
4.	Observational studies without control groups
5.	Expert opinion based on pathophysiology, bench research or consensus

Description of selected study designs*^(CRD, 2001)

Experimental

A study in which some conditions, particularly decisions concerning the allocation of participants to different intervention groups are under the control of the investigator.

Randomised Controlled Trial

Follow-up of participants randomly allocated to intervention or control groups, with a comparison of outcome rates during the time covered. Randomisation (with concealment of allocation sequence) avoids bias because both known and unknown determinants of outcome are on average evenly distributed between intervention and control groups.

Quasi-experimental

A study in which the allocation of participants to different intervention groups is controlled by the investigator but the method falls short of genuine randomisation and allocation concealment.

Observational

A study in which natural variation in interventions or exposure among study participants is investigated to explore the effect of the interventions or exposure on health outcomes.



Thanks go to the Siblings Group at the Whittington Hospital for the drawings.

All images of children used in this publication are portrayed by models and are for illustrative purpose only.

