

## RESEARCH ARTICLE

# The State of the Evidence Base for Psychodynamic Psychotherapy for Children and Adolescents

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## ABSTRACT

This paper reviews the outcomes of psychodynamic psychotherapy (PP) for children and adolescents reported in papers identified by a comprehensive review of the literature on treatment evaluations of psychological and medical interventions for mental disorders in pediatric populations. The review identified 48 reports based on 33 studies. Reports were individually evaluated in terms of methodological rigor. Randomized trials, quasi-experimental and observational studies are considered separately. RCTs were independently rated on a 25-item scale of methodological strengths. Although a small number of studies with findings indicating beneficial effects of PP for pediatric mental disorder were identified, the review found no compelling evidence from RCT data supporting the use of PP as an individually delivered psychological therapy. In almost all the studies, when contrasted with family-based interventions, PP fares no better and appears to produce outcomes with some delay relative to family-based therapies. While the review shows PP to be an effective treatment, it is clearly understudied and its treatment principles may be most efficaciously delivered in non-traditional contexts such as parent–child or family therapy. Further rigorous evaluations are needed but evidence to date suggests that the context in which PP is delivered should be extended from the traditional context of individual therapy.

**Keywords:** Psychodynamic, psychotherapy, children, adolescents, mental health, depression, anxiety

## Introduction

The requirement for rigorous professional standards and clear accountability for clinical decisions is widely recognized in all branches of healthcare, and increasingly in mental health<sup>1</sup>. To be guided by empirically substantiated intuition enhances professional accountability as well as the transparency of clinical judgment<sup>2</sup>. It has been robustly argued that evidence-based psychotherapies (EBPs) must replace treatment as usual (TAU) in everyday clinical care.g.,<sup>3</sup>. Many – particularly those from a psychodynamic or systemic orientation – have raised significant objections to this<sup>4 5</sup>. Much of the debate focuses on the external validity of findings from randomized controlled trials (RCTs) because (1) the demographic and clinical characteristics of the patients included in trials differ in terms of severity and comorbidity; (2) the timing of dosage and concomitant treatments in trials correspond poorly to the treatment regimens normally available, even in relation to normal clinical application of EBPs; (3) the settings in which EBPs are administered in empirical studies tend to be more highly specialized and incorporate a superior level of care; and (4) the outcomes normally used are argued to be of limited relevance to ordinary clinical practice.

At the heart of these questions on external validity is the issue recently raised eloquently by Cartwright and Munro<sup>6</sup>. These authors point to the increasing reliance in healthcare policy on RCTs. The basic logic of RCTs is that of John Stuart Mill's "method of difference"<sup>7</sup>, which attempts to locate differences in the probability of a particular outcome with or without the treatment intervention in two groups with

identical characteristics in relation to factors associated with the likelihood of change. RCTs are placed at the top of the hierarchy from the point of view of the clarity of causal association between intervention and change<sup>8</sup>. Cartwright and Munro<sup>6</sup> question this assumption in relation to supporting policy decision making. They formulate their doubt about RCTs in relation to “stable capacities” (p. 262). This concept is introduced in place of the notion of external validity. External validity may indeed be too narrow to bear the burden of meaning in relation to the question decision makers are faced with. A successful RCT demonstrates that the intervention works somewhere, but “will it work for us?” (p. 265). This question points to the need for further research in relation to those treatments that appear to be effective in some contexts but not in others. Multisystemic Therapy, for example, can boast of successful trials in the United States and Norway, but failed replication in Sweden and Canada<sup>9-21</sup>.

To extract ourselves from this quandary, further evidence is required in relation to understanding how a treatment achieves the desired outcome, and what conditions are necessary for these outcomes to be realistic. Evidence concerning moderating factors, as well as the impact of concurrent processes, for example, medication, must be available to judge the applicability of an RCT to a particular setting. Alan Kazdin, in his exploration of the gap in research concerning disease and therapeutic mechanisms, came to a similar conclusion<sup>22</sup>. In order for a treatment to be considered evidence-based, more than RCTs are required.

This argument, however, has often been taken to imply that RCTs can be replaced by methods that do not comply with Mill’s “method of difference”. In particular, often those favoring a psychoanalytic model use arguments concerning the limitations of RCTs to argue for “practice-based evidence”, the replacement of causal arguments

with a correlational, observational approach. We accept that evidence from RCTs is not necessarily the only base for determining what constitutes EBP. The American Psychological Association's Presidential Task Force on evidence-based practice (2006) explicitly proposed requiring evidence from clients' values and preferences, and clinicians' real-world observations, in addition to research evidence as a basis for establishing EBP. So, some argue that not only are RCTs for psychotherapy flawed (see above) but also that there are alternative ways of establishing psychotherapy as "evidence-based". However, the denial of RCTs as a key part of establishing the validity of a therapeutic modality is misguided. The history of medicine is littered with interventions that did remarkable duty as therapies and yet when subjected to RCT methodology were shown to have no benefit over alternative treatments or, in fact, to prevent the patient from benefitting from a superior intervention, in terms of either effect size or speed. Perhaps the most dramatic example is the RCT that ended 100 years of radical mastectomies for breast carcinoma only 30 years ago. The study showed that half a million women, who had been subjected to disabling, horrendously mutilating operations performed with the best of intentions, on the basis of a fallacious theory about the way in which carcinoma spread, could have had equally good outcomes with lumpectomies<sup>23</sup>.

RCTs are necessary but not sufficient. This is a problem because RCTs consume money, time and energy. Rawlins<sup>24 4012</sup> reminds us that of 153 pharmaceutical RCTs performed between 2005 and 2006, the median cost was over £5 million, with the interquartile range stretching to £10.5 million. As we have pointed out before, RCTs are an imperfect tool; almost certainly their results are best seen as one part of a research cycle<sup>25 2885</sup>.

Empirical knowledge is multifaceted and complex, and in line with this, the practice of EBP requires sophistication in relation to the scrutiny of empirical data.

Uncontrolled trials such as single case studies, open trials or time-series studies have a contribution to make to the knowledge base, particularly in relation to telling us about the feasibility of an intervention, its likely acceptance by a patient, and its potential for effectiveness. RCTs are the “gold standard”, but there are a number of issues to consider in evaluating RCT investigations, including the design, the size, the characteristics of the sample, the outcome measures used, the clinicians implementing the psychotherapy, data analyses, and qualitative assessment of unintended consequences, both positive and negative. For example, factors such as the quality of randomization are known to reflect outcome, but clinicians are generally not well situated to make judgments concerning technical details such as the exact timing of randomization. This is why critical reviews that summarize and synthesize a body of research are of great value. Sadly, for the field of psychotherapy research, the number of reviews in a range of areas exceeds the number of original studies, probably because of the expense of RCTs and the relatively low cost of reviewers' time<sup>26</sup>.

Further, narrative reviews have major limitations. They rely on the statistical significance of a study to determine the efficacy of an intervention, but statistical significance is determined in large part by sample size. Meta-analyses pool results from multiple studies and thus bypass the low statistical power that handicaps psychotherapy research. Because of the relationship between statistical significance and sample size, studies need to be evaluated in terms of observed effect sizes to determine whether they are likely to be of clinical significance. Effect sizes tend to be grouped, with those below an  $r$  of 0.15 (or  $d$  of 0.3) being considered small and those

above an  $r$  of 0.35 (or  $d$  of 0.75) considered large<sup>27</sup>. Meta-analyses aggregate effect sizes arithmetically, giving an indication of the size of the effect that one might expect if the RCTs upon which the analysis is based are representative. Such aggregation is possible if RCTs are sufficiently homogeneous in terms of the target population and the treatment method and outcome measures. Sadly, the literature on psychodynamic interventions for children does not include a sufficient number of studies evaluating the same treatment with the same or similar set of measures to permit valid and meaningful aggregation. In this review, therefore, we will compromise between providing a simple narrative review of findings and providing a systematic assessment of study quality and effect sizes on primary outcome measures.

### **Aims of this review**

This review aimed to identify, describe and review studies evaluating the efficacy and/or effectiveness of psychodynamic treatment for children and adolescents with mental health problems. We also aimed to evaluate the quality of the studies identified by carrying out a qualitative review, and using the Randomized Controlled Trial Psychodynamic Quality Rating Scale (RCT-PQRS)<sup>28</sup> for RCTs and quasi-randomized studies.

### **Method of this review**

We have attempted to ensure a systematic process by searching the literature on children and adolescents with most mental disorders, using an exhaustive algorithm to identify treatment trials. This was part of our comprehensive review of pediatric mental health outcome literature<sup>29</sup>, for which we have reviewed over 15,000 references. In our computer search of all major databases (PubMed, Psycinfo,

Cochrane, Medline and Embase), we used 100 terms referring to different aspects of child and adolescent mental health and combined these with 11 terms describing psychotherapy<sup>1</sup>.

The computer search identified 1212 abstracts, which were reviewed. A hand search of bibliographies, key journals and publicly available reports also identified 51 abstracts. All 1263 references were screened and from this a corpus 48 papers reporting on 33 primary studies was identified. The search covered the period up to May 2012. See Figure 1.

To be included in the review, articles had to meet the criteria of relevance, outcome and design.

*Relevance:* Studies that reported evaluations of psychodynamic interventions with children and/or adolescents (aged 0–18) with mental health problems.

*Outcome:* Studies were selected only if they reported outcomes that were either directly related to a disorder (e.g., symptom reduction) or to intermediary variables. In the latter case, the reviewers had independent evidence of an impact on mental health associated with the outcome or an impact on mental health was plausible.

*Design:* The review focused on studies with an experimental or quasi-experimental design. Observational studies such as cohort or case studies were also considered, but possible effects of bias are indicated throughout the paper. This was a necessary relaxation of exclusion criteria because a preliminary exploration of evidence suggested that excluding poorly controlled studies would severely limit the available evidence. We have reviewed all available evidence, highlighting in the review the

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<sup>1</sup> The search algorithms are available on request from the authors.

methodological shortcomings and cautioning readers to interpret the results with appropriate care.

*Inclusion criteria were:*

1. A clear description was provided of the patient population in the study, in terms of either diagnosis or specific problems addressed in the treatment.
2. Psychodynamic psychotherapy (PP) or a therapy sharing a substantial number of features with the psychodynamic approach was used as a treatment (see below for an elaboration of this point).
3. Participants were children and adolescents.
4. The study was reported in the English language.
5. There was a systematic effort to measure the outcome, using a standardized measure, at least at pre- and post-test.

While the review that this subsample draws from considered all mental health interventions for children and adolescents, here we were interested only in studies that included a therapy with a substantial psychodynamic component. We define 'psychodynamic' following Fonagy and Target<sup>30</sup> as a stance taken to human subjectivity that is comprehensive, and aimed at a comprehensive understanding of the interplay between aspects of the individual's relationship with her or his environment, external and internal. Freud's great discovery "where id was, there ego shall be", <sup>31 p.80</sup>, often misinterpreted, points to the power of the conscious mind radically to alter its position with respect to aspects of its own functions, including the capacity to end its own existence through killing the body. Psychodynamic, as elaborated by Fonagy and Target<sup>30</sup>, refers to this extraordinary potential for dynamic self-alteration and self-correction – seemingly totally outside the reach of nonhuman



species. We therefore define the 'psychodynamic approach' in terms of eight basic postulates which encapsulate this self-correcting process<sup>30</sup>: 1) the notion of psychological causation (mental disorder can be conveniently thought about as 'caused' by the mental activity: viz. thoughts, feelings, wishes and the like); 2) there are limitations on consciousness and non-conscious mental states have influence; 3) the assumption of the internal representations of interpersonal relationships; 4) the ubiquity of psychological conflict as one of the drivers of psychopathology; 5) the assumption of psychic defenses to moderate experiences of distress; 6) the assumption of complex (multiple) psychological meanings of experience; 7) an emphasis on the therapeutic relationship in models of change; and 8) that a developmental perspective on both pathology and treatment is vital.

Unlike many previous reviews, in this summary of the literature we will consider as psychodynamic treatments studies exploring the effectiveness of therapies that integrated significant psychodynamic components into a multimodal package. We feel justified in doing this because the boundary between what is and is not within a particular modality has been growing increasingly fuzzy over recent years. Thirty-five years ago psychoanalysis could be readily distinguished from behavior therapy in terms of its model of the mind, its theory of change, and its clinical methods<sup>32</sup>. In the 21st century, changes in both cognitive behavioral approaches and psychodynamic theory and technique have led to an increasing convergence of both understanding and clinical method. The work of McCullough<sup>33</sup>, Ryle<sup>34</sup>, Weissman<sup>35</sup>, Young<sup>36</sup>, Safran<sup>37</sup> and others has occupied a conceptual space in between psychodynamic and non-psychodynamic domains. It is justifiable to review some of the findings from this boundary domain as it bears on the validity of the psychodynamic approach.

Throughout the review we will consider traditional psychodynamic alongside integrative dynamic approaches.

### *Quality Rating*

Whilst all persons may be created equal, the studies of psychotherapy they in turn create are certainly not. Similarly, standards for reviewing these studies are often not as transparent as they could be, giving rise to further heterogeneity. To meet this challenge, in this review the quality of the studies was judged using the Randomized Controlled Trial Psychotherapy Quality Rating Scale (RCT-PQRS)<sup>28</sup>. This scale, which was created by the the *Ad Hoc Subcommittee for Evaluation of the Evidence Base for PP of the APA Committee on Research on Psychiatric Treatments* to evaluate the quality of RCTs, consists of 24 items relating to study design, reporting and execution. The items cover the domains of description of subjects, definition and delivery of treatment, outcome measures, data analysis, treatment assignment, and overall quality of the study. Each item is rated on a scale from 0–2, with 0 being a poor description, execution or justification, 1 being a brief description or either a good description or an appropriate criteria but not both, and 2 being a well-described, executed and, where necessary, justified design element. A 25<sup>th</sup> item is an omnibus rating on a scale ranging from 1 (exceptionally poor study) to 7 (exceptionally good study). Two raters independently scored each paper and achieved high interrater reliability on the total scores across 13 studies ( $r=0.97$ ). Where there was disagreement between the two raters, we aggregated the scores. We include the total RCT-PQRS rating with each RCT (please see Table 2) and draw attention to particular problems in relation to each study.

### *Data Extraction*

For all RCTs and quasi-randomized controlled trials, a quantitative analysis was carried out. Using data provided in the papers, between-group and pre-post effect sizes ( $r$ ) on primary outcome measures were calculated.

## Review

The best and most comprehensive review of outcome studies of psychodynamic approaches to child and adolescent mental health problems is the recent excellent paper by Midgley and Kennedy<sup>38</sup>, which covers very similar ground to the current review, although perhaps arrives at slightly different conclusions. Other reviews in books and chapters by our group<sup>29 30</sup> provide less systematic but helpful summaries. Overall, the literature is sparse. In comparison with other modalities, PP has been poorly served by empirical investigations. Scholarly and clinical reviews of psychosocial treatments reflect the cumulative impact of repeated statements of the mantra that “the absence of evidence does not indicate evidence for the absence of effectiveness”. Sadly, whereas 10–15 years ago reviews of evidence-based psychosocial treatments would have included psychodynamic treatments to ensure comprehensive coverage e.g.<sup>39 40</sup>, more recent compilations e.g.<sup>41 42 43</sup> do not have any coverage of PP. Time may be running out for dynamic psychotherapy for children.

There are relatively few randomized trials of PP and most of those that are available have, as we shall see, contrasted PP with another evidence-based treatment rather than provide comparison with a genuine control condition. We shall consider quasi-randomized methods separately, as well as studies using matched cases, non-matched control groups and open trials. Notwithstanding the shortcomings of RCTs, we will give most space in this review to studies where patients were randomized at

baseline and fidelity to treatment protocol could be examined in relation to an explicitly detailed manual. Table 1 summarizes each study.

### *Randomized controlled trials*

#### *Comparison with TAU*

**Smyrniotis and Kirkby**<sup>44</sup> carried out one of the first RCTs of PP ( $n=30$ ) comparing time-limited psychotherapy, time-unlimited psychotherapy and a minimal contact group in Australia. Children were randomly divided into three groups of 10: one group received “time-unlimited” psychoanalytic therapy using a Kleinian model (on average 28 sessions, with a range from 3 to 62 sessions); one group received short-term therapy (on average 10.5 sessions, with a range from 5 to 12 sessions); and one group was offered a three-session consultation. Participants were 5–9-year-old children with a diagnosis of emotional disturbance specific to childhood. Assessment took place at baseline, at end of treatment and at 4-year follow-up. Measures included the Goal Attainment Scales, Target Complaint Scales, Van der Veen Family Concept Inventory and Bristol Social Adjustment Scale. All three groups showed significant improvements from pre-test to post-test on a number of individual and family ratings, but the effect size was greatest for the time-unlimited treatment. At 4-year follow-up, the effect sizes for target complaints were no longer significantly different from the control group, who are likely to have had other treatments. In line with this, the consultation group caught up with the treated groups and reported significant improvement relative to post-treatment on follow-up, severity of target problems and measures of family functioning. All groups improved significantly on therapist measures of goal attainment from pre-test to 4-year follow up, but only the minimal contact group reported significant improvements on severity of target problems and measures of family functioning. This study, admittedly with a very

small sample size, but with random allocation to the minimal contact, time-limited, and time-unlimited groups, appears to show a reverse dose-response effect, with those in treatment for longest and most intensively showing relatively less gain. There was substantial attrition from the trial and the last observed value carried forward analysis used is a poor technique for dealing with missing data points in an RCT. With almost half of the participants missing for follow-up, the study was dramatically underpowered and there were no significant interaction effects between group and time – only differences between the patterns of significant differences across groups. The severity of presentations was mild, and in other studies the benefit of long-term intensive intervention was observed only for children with relatively severe emotional problems (multiple diagnoses with low level of functioning)<sup>45</sup>. In brief, the study holds no implications for the ‘stable capacity’ of PP.

**Muratori** et al.<sup>46</sup> carried out a small random-allocation study ( $n=30$ ) of children (age 6–11) with “severe emotional disorders” (pure emotional disorders [ICD-10]  $n=17$ , mixed emotional disorders [ICD-10]  $n=13$ ). While the study used an inadequate method of treatment allocation, based on treatment vacancies, there is no reason to assume that the allocation was not at least quasi-random. Fifteen children who underwent Brief Dynamic Psychotherapy (BDP) (11 sessions, child-only and parent–child sessions) were compared with matched controls ( $n=15$ ) who received other types of treatment in community services. Both groups were evaluated at baseline, 6 months and 18 months using the Children’s Global Assessment Scale (CGAS) and Child Behavior Checklist (CBCL). There was a positive change in the experimental group (total problems). Both groups improved on the CGAS scale, but the BDP group did better at both 6- and 18-month follow-up. The authors also report better outcomes for children under 9 and for those with a diagnosis of “pure emotional

disorder". The conclusions we can draw from this study are limited by its small sample size, lack of random assignment and by the fact that children in the control group did not receive homogeneous treatment.

Adding to the participants so that the study was adequately powered, the authors reported on a follow-up with a larger sample size<sup>47</sup>. In both reports, at end of treatment, the between-group effect sizes were small. Unusually for trials of psychotherapy, treatment effects increased during the 2-year follow-up period (the so-called "sleeper effect"), including a move into the nonclinical range for the average child with internalizing problems (in the psychodynamically treated group only)<sup>48</sup>. There were no significant differences between treatments on the CBCL at end of treatment. The experimental group showed greater improvement in the CGAS at end of treatment as well as at follow-up, with a medium between-group effect size reported at 6 and 12 months. Whilst the comparison group also showed improvement, at follow-up only the BDP group's mean moved to the functional range. Between baseline and follow-up only the treatment group improved significantly on all three scales of the CBCL, but improvement was more marked on the emotional than the externalizing subscale. Pre-post effect sizes for the PP were generally large for the symptom scores but small for changes in social competence. At 2-year follow-up, 34% of the PDP treated group were in the clinical range on symptomatic measures, compared with 65% of the TAU controls. The conclusions from this trial are limited because of the small sample size and the lack of random allocation. However, it is encouraging that PP patients sought mental health services at a significantly lower rate than those in the TAU comparison condition over the 2-year follow-up period and the study weakly confirms the stable capacity of PP.

**Trowell** et al.<sup>49</sup> compared an individual and a psychoeducational group psychotherapy in terms of the outcomes for traumatized, sexually abused girls (age 6–14). The girls were randomly assigned to 30 sessions of individual psychotherapy ( $n=35$ ) or up to 18 sessions of group psychotherapy ( $n=36$ ). Both treatments were manualized and both included parent work. Assessment took place prior to therapy, 1 year, and 2 years after. The measures used included Orvaschel's PTSD scale, the K-SADS and the K-GAS. These young people presented with a range of psychiatric problems, most commonly PTSD and depression. At baseline, the main DSM-IV diagnoses were mixed: PTSD (73%), MDD (57%), general anxiety disorder (GAD; 37%) and separation anxiety disorder (58%). Both treatment groups showed a substantial reduction in psychopathology, and there were no differences between the two treatments on the K-GAS. Pre-post K-GAS effect sizes were very large ( $r>0.70$ ) at all time points. Psychodynamic treatment was somewhat superior to psychoeducation but the difference was not as marked as might be expected. Superiority was particularly evident in relation to PTSD and GAD. Depression, however, was relatively less likely to improve, as was separation anxiety. Individual therapy led to a greater improvement on measures of the manifestations of PTSD, particularly on the re-experience of traumatic event and persistent avoidance of stimuli dimensions of the PTSD scale. GAD was the most likely to remit; of the 26 participants who had this disorder at baseline, 81% no longer had it at 1-year follow-up. 69% of those with MDD and 50% of those with separation anxiety disorder no longer had these disorders at 1-year follow up. A subsequent report underscored the importance of the mother's support for the therapy as a predictor of improvement in the children and the benefit that the mothers gained in terms of their own mental health from the child's treatment<sup>50</sup>. Thus, while there were some indications of the

superiority of individual treatment, the differences appear to be relatively small. Little support can be harnessed from this study for the psychodynamic approach in general, despite the very impressive effect size, because the psychoeducational group comparison probably had few features of the psychodynamic arm crucially lacking the individual interpretative therapeutic interventions.

**Kronmuller** et al,<sup>51</sup> carried out a prospective study in two stages: the first was an RCT examining the efficacy of short-term PP compared with a wait-list control, and the second was a naturalistic study to assess the effectiveness of long-term psychoanalysis with no control group. Seventy-one patients (aged 6–18 years) with externalizing and internalizing problems received an average of 82 therapy sessions. The therapies were carried out using a manual. In the context of this study instruments were developed or translated and psychometrically evaluated. Compared with the wait-list control, patients receiving short-term psychotherapy showed a significantly greater reduction in the PSCR total score. For longer term treatment, there were significant improvements on all of the PSCR subscales. Long-term treatment effect sizes were higher than for short-term treatment. The study had a relatively small sample, which was heterogeneous, and the long-term treatment was carried out without a control. Nevertheless, the short-term treatment results indicates the benefits of psychodynamic for a mixed neurotic condition.

A very small RCT ( $n=30$ ) of adolescents showed a surprisingly strong statistically significant benefit from 10 sessions of PP in a school setting in India. The vast majority of young people improved in PP (over 90%, reported effect size 1.8)<sup>52</sup>. Notably, young people with externalizing problems were specifically excluded from this sample. Therapy outcome was independently, but not blindly, assessed by teachers. No implications can be drawn from this report for PP.



### *Active treatment comparisons*

In its traditional formulations a great deal of significance has been attached to the 1:1 relationship between therapist and patient in the mechanisms of change in psychodynamic child therapy<sup>53 54</sup>. A number of studies have been performed to test the validity of this assumption by contrasting individual dynamic therapy with other models to a lesser or greater extent informed by psychoanalytic ideas.

**Szapocznik et al.**<sup>55</sup> carried out an RCT ( $n=69$ ) comparing Individual Psychodynamic Child Therapy (IPCT;  $n=26$ ), Structural Family Therapy (SFT;  $n=26$ ) and a Recreational control group ( $n=11$ ) in a sample of Hispanic boys (age 6–12) with behavioral and emotional problems (32% oppositional defiant disorder [ODD], 30% anxiety disorder, 16% conduct disorder [CD]). All subjects received weekly sessions of 50–90 minutes. Five types of measure were used: the Revised Child Behavior Checklist (RCBC), Revised Behavior Problem Checklist (BPC-R), Child Depression Inventory (CDI), Children’s Manifest Anxiety Scale, Psychodynamic Child Rating Scale (PCRS), and Structural Family Systems Ratings. Assessment took place at baseline, end of treatment and 1-year follow-up. Both treatments were found to be effective in reducing both behavioral and emotional problems relative to a no-treatment control group. The improvements were maintained at 1-year follow-up. There was significantly greater attrition in the control group (43%) than in the SFT (16%) and the IPCT conditions (4%). Final data analyses were carried out only on subjects who had completed treatment. Four times as many families were lost from family therapy than individual therapy, but family functioning improved following family therapy and deteriorated following individual PP. It is not clear whether the uneven attrition might have contributed to the apparently greater deterioration of

family functioning in the individual psychotherapy group<sup>56</sup>. This strongly supports the acceptability of PP but is equivocal in relation to its effectiveness.

**Trowell et al.**<sup>57</sup> carried out a multicenter experimental study to assess the effectiveness of individual PP (FIPP) and systemic family therapy (SIFT) in a sample of children and young adolescents aged between 9 and 15 years (mean 12 years) with moderate and severe depression. Participants were randomized to one of two active treatments, based on caseness (FIPP,  $n=35$ ; SIFT,  $n=37$ ). Treatment was carried out over nine months and participants received a mean of 11 90-minute sessions of family therapy or a mean of 25 50-minute sessions of individual therapy plus parallel sessions of therapy for parents. Assessment took place at baseline, end of therapy and at 6-month follow-up. At the end of treatment, 74.3% of the FIPP group and 75.7% of the SIFT group were no longer clinically depressed. At 6-month follow-up the rates of depression had decreased further; 100% of cases in the SIFT group and 81% of cases in the FIPP group were no longer clinically depressed, suggesting a 'sleeper effect' for family therapy as well as individual dynamic therapy. The FIPP was effective for major depressive disorder, dysthymia, and double depression, and there were no relapses in the follow-up period. There was also a reduction in comorbid conditions across the study<sup>58</sup>. The results are consistent with the suggestion that SIFT may achieve its results more quickly than FIPP but by 6 months post-treatment there were no substantial differences between the groups. Methodologically, this is a relatively well-designed study, but is limited by the attrition at follow-up and particularly by the lack of a TAU or waiting-list comparison group. It suggests that PP may be an effective intervention for depression but unlikely to be more effective than systemic family therapy.

In a pilot RCT, **Gilboa-Schechtman** and colleagues<sup>59</sup> examined the efficacy and maintenance of developmentally adapted prolonged exposure therapy for adolescents (PE-A) compared with active controlled time-limited dynamic therapy (TLDP-A). Thirty-eight 12–18-year-olds with PTSD related to a single traumatic event were randomly assigned to one of the two treatment arms. Both groups reported decreases in PTSD symptoms and improvements in general functioning. However, the changes were greater for adolescents in the prolonged exposure therapy group. Participants in this arm reported larger mean decreases in posttraumatic symptom scores and depression scores, and greater increases in adaptation. At the end of treatment, 68.4% of the adolescents in the PE-A group and 36.8% of those in the TLDP-A group no longer met diagnostic criteria for PTSD. At 6-month and 17-month follow-up, treatment gains and group differences were maintained. In summary, exposure treatment was more effective than individual psychotherapy. However, the pre-post effect size in the TLDP-A group was substantial, although in the absence of a no-treatment control condition it is hard to assess whether this is due to a spontaneous process of recovery. Methodologically, the study is clearly of high quality, but limitations of sample size (only 19 per arm) of this pilot investigation preclude definitive conclusions in relation to PP. Further, there is considerable heterogeneity even in this small sample, notwithstanding the primary diagnosis of PTSD as an inclusion criterion. However, there is no support from this study to suggest that PP should be used in preference to exposure based therapies in the treatment of PTSD.

RCTs of behavioral family systems therapy (BFST) aimed to contrast BFST with an 'inert' treatment and they chose ego-oriented individual therapy, a specially designed treatment with a clear psychodynamic basis<sup>60 61</sup>. In this small RCT, 37 adolescent

female patients (age 12–19) with anorexia (DSM-III) who received either BFST or Ego Oriented Individual Therapy (EOIT) were compared. Both groups received treatment for 12–18 months. BFST patients received weekly 72-minute therapy sessions, whereas EOIT patients met weekly for 45 minutes and bimonthly with parents for 54 minutes. Subjects were assessed on a variety of physical and psychological measures at baseline, post-treatment and 1-year follow-up. Each patient received 10–16 months of therapy and was assessed post therapy and followed up at 1, 2.5, and 4 years. Both treatments were effective; two-thirds of the girls reached their target weights by the end of treatment, and at 1-year follow-up 80% of those receiving family therapy and 69% of those treated individually had reached their target weights (a difference that was not statistically significant). On BMI, both the BFST and EOIT groups improved, but the BFST group improved more (mean change = 4.7) than the EOIT group (mean change = 2.3). As is often found, the non-psychodynamic approach produced changes faster, but in this instance carried the cost of a somewhat higher rate of hospitalization. Both therapies produced equally large improvements in attitudes to eating and depressed affect and family functioning<sup>62</sup>. Robin and colleagues concluded that parental involvement was essential to the success of their interventions for younger adolescents with anorexia nervosa, but that family dynamics could still be influenced without requiring the adolescent and her parents to be in the room together for all therapy sessions. In other reports the difference between therapies (group vs. individual and family) were small, but therapy of whatever kind is clearly better than no treatment<sup>63</sup>. These studies support the use of PP in the treatment of anorexia, albeit not in preference to family based interventions but perhaps to be offered to patients as alternative approaches as part of showing respect for treatment preference.

The comparability of the effectiveness of family and individual approaches in the above studies contrasts with finding showing the long-term superiority of family therapy for a younger age group of anorexics when family therapy was compared to a psychodynamic approach<sup>64-68</sup>. In these studies at the Maudsley hospital, individuals who were relatively older appeared to benefit more from individual treatment whilst younger individuals benefited more from family-based approaches. A follow-up of individuals treated with individual PP also showed the effectiveness of the psychodynamic approach with eating-disordered patients<sup>69</sup>.

In an attempt to resolve these conflicting observations, **Lock** et al.<sup>70</sup> contrasted individual therapy and family-based treatment (FBT) for individuals meeting criteria for anorexia nervosa. Adolescent focused therapy (AFT) assumes that adolescents confuse self-control with meeting biological needs. The treatment encourages separation-individuation and the enhancement of tolerance of negative affect. At the end of treatment, 23% of the AFT group and 42% of the FBT group had achieved full remission but the difference between the two groups was not significant. However, the difference was maintained and even increased in terms of the percentage of those who met criteria for full remission, showing FBT to be superior to AFT.

Treatment effects were greater for the FBT group on a number of measures but the difference between the groups disappeared on the self-report measure of eating attitudes. This is a very good-quality study, perhaps the best in this body of RCTs. It suggests that family therapy may be the treatment of choice for anorexia when compared to PP but that PP achieves good results with these patients. However, the absence of a TAU control group does not allow us to conclude that individual dynamic therapy is an effective treatment. It should be recognized that, given the

nature of the disorder and the current state of knowledge, anything other than an effective therapy comparison would be unethical for this diagnostic group.

### *Integrative (non-traditional) applications of the psychodynamic model of therapy*

Whilst not strictly speaking individual PP, the approach proposed by **Diamond** to address suicidal behavior in adolescents is relatively close to PP in implementation<sup>71</sup>. Attachment-based family therapy focuses on strengthening the attachment bonds between the adolescent and parent to produce a protective and secure base from which the adolescent can develop. It is based on attachment theory, which is a psychoanalytic model in its origin and, in the view of many, in its current applications<sup>72</sup>. An RCT in the United States compared this attachment-based family therapy ( $n=35$ ) with enhanced usual care (EUC;  $n=31$ ) for suicidal adolescents aged 12–17 years<sup>71</sup>. Outcome measures were the suicidal ideation questionnaire (SIQ-JR)<sup>73</sup>, the Scale for Suicidal Ideation (SSI)<sup>74</sup> and the BDI-II<sup>75</sup>. The adolescents were assessed at baseline, 6 weeks, 12 weeks, and 24 weeks. Compared with EUC, the ABFT group showed a significantly greater rate of improvement on the SIQ-JR, SSI and BDI during the treatment period. On the SIQ-JR at 6, 12 and 24 weeks, 69.7%, 87.1% and 70% of the ABFT group and 40.7%, 51.7% and 34.6% of the EUC group, respectively, no longer reported suicidal ideation at clinical level. The SSI demonstrated similar responses. In addition, 58.1% of the ABFT group and 38.5% of the EUC group showed clinically meaningful change in depression scores. Drop-out was notably lower in the ABFT group. This is an important study because suicidal ideation is a powerful predictor of suicide attempts and a reduction in suicidal ideation may be a key outcome<sup>76</sup>. Whilst we note that there was consistency across self-report, clinician ratings and depression

diagnosis, there was no objective assessment of outcome by blinded assessors. Effects could be observed at 24 weeks, but there is no evidence that these outcomes were maintained in the long term. Nevertheless, the study constitutes preliminary evidence for the value of PP implemented as a family intervention for this group of severely impaired young people.

Another family intervention with children with emotional disorders was reported by **Lieberman et al.**<sup>77</sup>. Again, this was a treatment that is undoubtedly psychodynamic in its conception, but non-traditional in its implementation. In a hallmark RCT of dyadic therapy, Lieberman studied 75 dyads of mothers and preschool-aged children (39 females and 36 males; age  $M=4.06$ ,  $SD=0.82$ ). The selection criteria included high-risk status, embodied in exposure to marital violence but where the perpetrator was no longer in the home. They were randomized to either child–parent psychotherapy (CPP) or monthly case management plus referral to community services (which could include individual therapy). The therapy was relatively long term, with 50 1-hour sessions that focused on the mother’s own history and the way this interacted with her perception of her child. Assessments were carried out at intake, post-therapy and 6-month follow-up. The primary outcome was the CBCL and a structured interview covering emotional and behavioral problems and PTSD symptoms (DC:0-3). Children in the group assigned to CPP improved significantly more than those assigned to TAU; at the end of treatment they showed decreased behavioral problems and PTSD symptoms. The CPP children were also less likely to be diagnosed with PTSD after treatment. Mothers in the CPP group showed significantly less PTSD avoidance symptoms than those in the control group. On the whole, pre-post differences were significant for the child psychotherapy group, but not for the TAU condition. From point of view of the quality of the report, the study

was rated moderate-good. The limitations included a relatively small sample size, which was selected on a risk-experience rather than a presenting symptom or disorder, and the treatment fidelity not being comprehensively reported. Further, the TAU condition is poorly described. Nevertheless, it joins a group of therapies where PP is effectively implemented in the family context.

**Ghosh-Ippen** et al.<sup>78</sup> grouped the sample from the Lieberman study according to the quantity of traumatic and stressful life events (TSEs) they experienced (low risk <4 vs. high risk 4+). Among high-risk children, those in the CPP group showed significantly more improvement than children in the comparison group. High-risk CPP children also showed greater reductions in PTSD (5% vs. 53%) and depression, number of co-occurring diagnoses and behavioral problems. Among the low-risk children, the CPP group showed significant improvement in PTSD symptoms, whereas the comparison group did not. The authors also report that CPP may be especially efficacious for mothers of high-risk children; CPP mothers showed significant reductions in PTSD and depression, while comparison mothers did not show the same improvements. At follow-up, the high-risk group showed significant improvements in the children's behavior and reductions in maternal depression, while the comparison group did not. This study needs replication but points in the direction of important potential moderators for dyadic implementation of PP for families with experience trauma.

The model of dyadic intervention with young children turns out to be a powerful application of the psychodynamic model for early intervention. In a unique trial of PP designed to compare the efficacy of preventive dyadic interventions for maltreated children, **Toth** and colleagues<sup>79</sup> have randomized 87 mothers and their preschoolers into three groups. Participants received preschooler–parent psychotherapy (PPP;



$n=23$ ), psychoeducational home visitation, which was a didactic model of intervention directed at parenting skills (PHV;  $n=34$ ), or community standard intervention (CS;  $n=30$ ). A further group (NC;  $n=35$ ) with no history of maltreatment was used as comparison. The PPP model consisted of 60 minutes a week dyadic interventions with a clinical psychologist, and was designed to provide the mother with “corrective emotional experience” in relation to her own experiences of deprivation and maltreatment. This toddler–parent psychotherapy has as its focus assisting the mother to change her behavior in relation to the child and modify the child’s expectations of the mothers’ behavior. A narrative story-stem task was used to measure the effect of maltreatment in the internal representations. In the task, the chosen narratives depicted moral dilemmas or conflicts and emotionally charged events in the context of parent–child and family relationships. Assessment was made at baseline and 1 year after recruitment. PPP had a better pre-post effect size in each of the four items assessed (Maladaptive maternal representations, Negative Self-representations, Positive Self-representations, and Mother–child relationship expectations). There was no significant difference between the three other groups (PHV, CS and NC) in terms of change scores. There was a significant change in mother–child relationship expectations of PPP children. Children became more positive over the course of the intervention in comparison with NC and PHV children. This attachment-theory-informed PP intervention appeared as more effective at improving representations of self and of caregivers than an intervention based on parenting skills which is often the recommended therapy for this age group. The study is of good methodological quality and provides evidence for recommending dyadic PP for children with maltreatment histories.

A similar study was designed to prevent the risk of insecure attachment in children of mothers with severe affective disorder. The development of insecure attachment relationships in the offspring of mothers with major depressive disorder (MDD) may initiate a negative trajectory leading to future psychopathology<sup>80</sup>. **Toth** and colleagues<sup>81</sup> designed an attachment -theory-guided intervention to promote secure attachment in children of mothers who had experienced MDD since their child's birth. One hundred and thirty mothers were recruited and randomly assigned to toddler–parent psychotherapy (DI – n=66) or to a control group (DC – n=64). There was a further comparison group of non-depressed mothers with no current or history of major mental disorder. Children from that group were also recruited to serve as a non-depressed comparison group (NC; n=68). The mean age of the children was 20.34 months at the initial assessment. Insecure attachment was significantly higher in both clinical groups (DI and DC) at baseline compared with the group of children without maternal psychopathology. Postintervention assessment was at 3 years (36 months). Insecure attachment remained high in the DC group but the rate of secure attachment had increased substantially in the DI group and was significantly higher than that for the DC group. It was also higher than for the NC group where there was little maternal psychopathology, although the group was demographically comparable to both the clinical groups. These results offer strong evidence to support the efficacy of toddler–parent psychotherapy in fostering secure attachment relationships in young children of depressed mothers. This is one of the best controlled studies of integrative dynamic therapy but, along with the study of maltreatment, it addresses an at-risk rather than a diagnosed population and therefore may not be included in many reviews where the presence of a clinical diagnosis represents an entry criterion for the review.

Cognitive analytic therapy (CAT) is another non-traditional implementation of psychodynamic ideas integrated with cognitive therapy. In an RCT, **Chanen et al.**<sup>82</sup> compared the effectiveness of up to 24 sessions of CAT and manualized good clinical care (GCC) for outpatients who fulfilled between two and nine DSM-IV criteria for BPD, including self-harm. Eighty-six participants were randomized, and follow-up data were gathered for 41 participants in the CAT group and 37 in the GCC group. Primary outcomes were reduction in psychopathology (SCID-II, YSR), parasuicidal behavior (semistructured interview) and improvement in global functioning (Social and Occupational Functioning Assessment Scale). The median number of therapy sessions received was 13 for the CAT group and 11 for the GCC group. Both treatment groups demonstrated improvements over the 2-year period from baseline to final follow-up. There were no significant differences between the two conditions at post-treatment; both conditions showed substantial improvement. This study is important because self-harm, when accompanied by depression, is an important predictor of suicidal behavior in adolescence. A strong point of the study is that treatments were delivered as intended to be delivered in real-world services and there was a rigorous control condition. To control for therapist effects, the same therapists were used for both interventions; this could have caused a 'leakage' effect (being trained in one orientation impacts on the manner in which the other intervention is delivered), but adherence to the models was rated as excellent. The sample size was small to show a difference between two active treatments. Part of the reason why there may have been no difference observed is because the control condition was "rigorously implemented" in a well-structured design with many of the 'non-specific' features of the experimental treatment. Nevertheless, no support for the use of PP in treatment of self-harm can be gained from the study.

## *Summary*

This review of RCTs have provided stronger support for the use of PP as implemented in a family context rather than as classically envisioned as an individual therapy. In comparison with other individual therapies there is little evidence to recommend PP perhaps with the exception of emotional disorders in younger children. Beyond this, older adolescents with anorexia have been shown to benefit. In other contexts, family interventions appear quicker and as or more effective. However, there is an accumulating body of evidence that a dyadic, parent-child, implementation fo PP may be quite efficacious in a range of contexts, particularly those involving maltreatment or family trauma. It should be noted also that in some studies retaining families in treatment and research appeared to be more difficult than in individual therapy. This was not the case for studies where family based-dyadic treatment was offered to mothers and younger children.

## *Quasi experimental and comparison group studies*

Although opportunities abound, few studies have appeared in the literature to show the effects of PP compared with an appropriate comparison population. The yield of such studies is primarily in providing practice-based evidence (to answer the “Will it work for me?” question after an RCT has demonstrated treatment effects due to the intervention).

## *Comparison with TAU*

A naturalistic longitudinal study<sup>83</sup> examined the effectiveness of individual psychotherapy for adolescents (age 12–18) with a range of severe mental illnesses diagnosed according to DSM-IV criteria. Forty participants were offered psychoanalytic psychotherapy once or twice weekly for 4–12 months; 40 other participants were offered TAU. A variety of outcome measures were used: CBCL,

Youth Self Report (YSR), Family Assessment Device (FAD), Global Assessment of Functioning (GAF) and the Global Assessment of Relational Functioning (GARF). Assessment took place at baseline and 12 months. At 12 months, psychotherapy was associated with a greater reduction in depressive, social and attentional problems compared with TAU. Psychotherapy was associated with increases on the GAF and FAD. However, the greater effectiveness of the treatment depended on the level of psychopathology at baseline. Almost half the participants offered PP did not engage (17 of 20) and there was a high rate of attrition in the TAU group at 1-year follow up (24 of 40 were not followed up). Taking these considerations together, there is little in this study to support PP as an intervention for adolescents with severe mental disorder.

A series of reports of the **Tavistock** Study of children in the care system<sup>84-87</sup> provided a systematic investigation of PP for children in care. The study aimed to assess whether these severely deprived children could benefit from psychotherapy. The research had a secondary aim to devise a methodology suitable for evaluating PP. In all, 38 children received PP (seven drop-outs). The comparison group consisted of 13 cases where therapy was recommended but refused. Whilst the refusal was not necessarily based on the child but on circumstances beyond him or her, nevertheless, comparability between the groups would be hard to assume. At baseline there were few differences between the two groups. At 2-year follow-up the majority showed improvement in their relationships with adults and with friends, changes in inner representations, and improvements in learning and thinking processes. Although improved self-image was seen, the change came slowly and not as easily as in other domains<sup>84-87</sup>. The study also produced interesting qualitative data on the therapists' thoughts about therapy and its outcomes. The study did not

use established outcomes measures, making it hard to interpret the effect size of change. However, individual psychotherapy offered to these children was found to improve the objective indicators of the quality of life circumstances in which these children lived, namely, more permanent placements, less disruption of care. The findings were supported by a further study with a single case experimental design<sup>88</sup>. In addition, the results mainly depended on the therapists' assessments and could therefore be seen as low in objectivity. However, some of the ratings were done by blinded external raters. On the whole, there is indication here, that were RCTs available on the PP treatment of children in care, the likelihood is that the effects might generalize to ordinary clinical contexts (show stable capacity).

There is a tradition of psychodynamic work with individuals with chronic physical conditions such as asthma and diabetes<sup>89</sup>. Trial data are hard to come by, however. The work of George **Moran** with diabetic children is one of the only counterexamples. One small trial demonstrated psychoanalytic psychotherapy to be effective in reducing glycosylated hemoglobin levels relative to a comparison group<sup>90</sup>. The study compared the effects of psychoanalytic treatment plus routine care and routine care in 22 (aged 6–18) diabetic children and adolescents with grossly abnormal blood glucose profiles requiring repeated hospital admissions. Participants in the treatment group were offered psychoanalytic psychotherapy three to four times a week on the hospital ward; those in the control group received routine medical care and minimal psychological intervention. Assessment was conducted at baseline, 3 months and at 1 year. The treatment was highly effective in improving the diabetic control of children (measured by glycosylated hemoglobin concentration [Hb1Ac]) and this was maintained at 1-year follow-up. Hb1Ac concentration fell to a clinically acceptable range for diabetes in six of the treated subjects. None of the

untreated group showed such an improvement ( $p < .025$ ). At follow-up nine of the experimental group patients remained below their pre-admission average HbA1c levels, whereas only three of those in the comparison group did so. In a series of experimental single case studies, individual PP was found to improve several growth parameters probably associated with improvement of diabetic control<sup>91</sup>. An earlier study of day-to-day variations of diabetic control of a young girl in child analysis showed an association between the discussion of material in the analytic session and subsequent improvements in diabetic control<sup>92</sup>. These studies deserve consideration because outcomes were measured not by psychological assessment, but by standard measures for diabetes control (M-value and HbA1c). Yet, as pointed out by the authors themselves, the small group size limits the conclusions that could be drawn. While this appeared to be a promising approach, particularly given the robust non-reactive measure of treatment outcome, it has sadly not been followed up by subsequent investigations of somatic problems and therefore it is not possible to recommend PP for somatic disorders on the basis of one poorly controlled study (however innovative).

In a further small-scale study, **Apter et al.**<sup>93</sup> reported on eight adolescents with obsessive-compulsive disorder (OCD) who were inpatients in a psychiatric hospital in Israel. Four cases were allocated to intensive psychodynamically oriented psychotherapy and four to supportive educational therapy. Response to non-specific psychotherapy and milieu therapy was surprisingly good; seven of the eight patients were much improved within 3-4 months (in terms of checking, cleaning, ruminations, slowness symptoms) and four of eight were completely symptom-free. The study suggests that observational data of improvement alone may exaggerate the

apparent impact of PP for OCD. The conclusions of this study are limited by its small sample size and lack of randomization.

#### *Comparison with convenience sample*

**Slonim** and colleagues<sup>94</sup> reported a study of a group of adolescents ( $n=30$ , age 15–18) with mixed diagnoses in outpatient clinics in Jerusalem, who were treated with psychoanalytic psychotherapy. The control group consisted of 42 participants with similar age and demographic background, studying in the same school as the treated patients. Assessment occurred at the beginning of treatment or school year, and after 12 months. Outcome was measured by the Youth Outcome Questionnaire Self-Report (Y-OQ-SR) and Target Complaint Scales (TCS). The main goal of the study was to correlate rigidity (assessed with the Core Conflictual Relationship Theme [CCRT] method) with treatment outcome. The treatment group showed significant changes in rigidity over the course of a year of psychotherapy, while no such changes were detected in the community group. The results of the outcome measures indicate that the treatment group improved significantly more than the community group between baseline and end of treatment ( $ES=.27$  for Y-OQ and  $.78$  for TCS), and that this improvement was significantly correlated with a decrease in symptoms within the treatment group. However, the comparison group does not protect from the bias of regression to the mean as the two groups differed substantially at baseline and greater changes would be expected from the group with higher initial mean scores. The evidence from this study cannot therefore be interpreted as supporting PP in the context of community mental health care.

**Deakin** and colleagues<sup>95</sup> examined the effectiveness of child psychoanalytic psychotherapy in a clinical outpatient sample of 55 children in Brazil aged 6–11 years with mixed diagnoses. The Rorschach, Bender and WISC III were



administered to 23 children aged 6–11 years, and the CBCL was completed by the parents at baseline and after 12 months of intervention. The control group was a heterogeneous group of 22 matched children from a local school who did not receive any intervention. In the intervention group, the children showed significant reductions in behavioral and emotional problems. CBCL effect sizes between groups at 12 months were small on the internalizing scale, negligible on the externalizing scale and insignificant overall. This was a controlled observational study, carried out at a clinic with no research culture. There was a high drop-out rate (54%) and no manual was used for ICPP so it was not possible to ensure that the therapy was carried out as intended. While offering little solid basis for recommending PP, the greater impact on internalizing than externalizing problems of PP reflects other findings from correlational designs.

#### *Active treatment comparisons*

**Scholte** and colleagues<sup>96</sup> carried out a quasi-experimental study ( $n=105$ ) with adolescents (mean age 14.9 years) admitted to four different residential programs in the Netherlands aiming to treat severe behavioral and emotional difficulties. The following treatment methods were used: behavioral modification, psychodynamic treatment, structured community living, and adventurous learning. The treated children were also compared with a drop-out control group ( $n=22$ ). Outcome measurement (with CBCL) and assessment took place 1 month into the treatment and at the end of treatment. All programs produced positive outcomes on all three domains of the CBCL (internalizing, externalizing and total problems). The psychodynamically treated group's pre-post effect size was large. This group showed greater improvement than the behavioral modification group, but not quite as large as the structured community living and adventurous learning groups. However,

only a small portion of patients moved to a non-clinical condition after one year, and thus treatment often had to be extended. The use of drop-outs as a control condition and the lack of randomization introduce a bias that has probably increased the apparent effect sizes of the treated groups precluding valid conclusions in relation to PP. Outcomes based entirely on CBCL scores may create concerns about the reactive nature of the assessment approach as the context of the therapy (individual versus community) may have moderated the way youths and/or informants completed the measures.

A classic study, for many years one of the only studies that considered the issue of intensity of psychological therapy, focused on specific learning difficulties as a target of therapy<sup>97 98</sup>. In the first study, eight boys received psychoanalytic treatment; four received therapy once a week, and the others received therapy four times a week. At the end of treatment, the children seen four times a week showed greater improvement in adaptation compared with those receiving treatment once a week. This study had a small sample and used unvalidated measures. In the second study, 12 boys (mean age 9 years) presenting with ADHD were split into three groups, which received different intensities of psychoanalytic psychotherapy. The treatments given to the groups were: once weekly psychoanalytic psychotherapy for the first year and then four times a week for the rest of the therapy (total duration 36 months); once a week throughout the whole therapy (27 months); and four times a week throughout the whole therapy (28 months). All boys made improvements, but those seen more frequently (four times a week for 1 or 2 years) showed greater improvements in self-esteem, capacity for relationships, frustration tolerance, and flexible adaptation. The study is limited by its small sample size, but suggests that more frequent sessions trigger qualitative process variables, and that quantitative

measurement is not always enough to understand improvements after psychotherapy. Without an untreated control group it is not possible to say whether the improvement would not have occurred spontaneously, except that there was a dose-response relationship that became apparent over the 2 years post-treatment. The eight children who had received more intensive help (more sessions per week) showed increasing benefits in terms of self-esteem, the capacity to form relationships, and the capacity to work, including frustration tolerance.

### *Summary*

Surprisingly, quasi experimental studies have not been as productive in the field of PP testing as in the case of other psychotherapy investigations. Notwithstanding the problems of interpretation that can bedevil these studies, they potentially provide evidence in relation to the replicability of size of effects observed in RCTs. The studies reviewed in this section have not provided conclusive data in relation to the value of PP for outpatient or institutional treatment contexts.

### *Observational studies*

Controlled trials teach us a great deal about a therapy, but we can learn much from follow-along or observational studies too. The learning in these instances is less from the size of the improvement of the group overall, but rather from comparisons within the sample potentially identifying the subgroups who benefit most from a treatment.

### *Clinic-based studies*

In a series of papers, **Baruch** and colleagues<sup>99-101</sup> report the evaluation of a community-based psychoanalytic psychotherapy service for young people between 12 and 25 years old. In the initial report<sup>99</sup>, 106 participants with multiple difficulties are described. They were assessed at intake, at 3 months, 6 months, 1 year, and

annually thereafter. The median number of weeks in treatment was 17. The adolescents and young adults in the sample had a median number of three diagnoses and four significant psychosocial stressors. After 3 months, there was significant improvement ( $p < .01$ ) in Internalizing Problem scores and Total Problem scores on the YSR. The authors report that externalizing problems appeared more difficult to treat with PP. Twice as many participants improved if they had internalizing disorders, which was a statistically significant difference. Comorbidity with emotional problems increased the likelihood of externalizing problems responding to psychodynamic treatment, as did more frequent treatment. Detailed analysis revealed that participants who improved for externalizing problems also improved for internalizing problems. The majority of subjects who reported deterioration for externalizing problems did not deteriorate for internalizing problems. Similar conclusions emerged from a report of follow-up of 61 participants from the same study<sup>100</sup>.

**Baruch and Fearon**<sup>102</sup> reported a 1-year follow-up of 151 participants from the same service. According to self-report data, participants showed an improvement in mean scores on the YSR, fewer participants were in the clinical range, and the participants demonstrated significant reliable change in level of adaptation. Rate of improvement did, however, drop significantly over time. The sample of young people who were reached on follow-up, however, appeared to be unrepresentative of the overall population who received therapy from the service. In a further study<sup>101</sup>, the focus was on the difficulty in collection of observational data, with levels of attrition at 12-month follow up for self, significant other and therapist reports being 19.4%, 10.3% and 16.0%, respectively.

The Anna Freud Centre (AFC) retrospective study provided information concerning the relative benefits obtained from psychodynamic treatments of varying intensity for a number of diagnostic groups. Using data from this study, **Target and Fonagy**<sup>103</sup> examined the efficacy of psychoanalysis for children with emotional disorders. They compared 254 children and adolescents who underwent full psychoanalysis (4–5 times a week) with 98 children and adolescents treated with psychoanalytic psychotherapy (1–3 times a week) for an average of 2 years. Treatment outcome was assessed with CGAS at referral and termination. There was only very preliminary evidence that PP may be effective in the treatment of anxiety disorders<sup>45</sup>. In this chart review study, children with anxiety disorders (with or without comorbidity) showed greater improvements than those with other conditions, and greater improvements than would have been expected on the basis of studies of untreated outcome. Over 85% of 299 children with anxiety and depressive disorders no longer suffered any diagnosable emotional disorder after an average of 2 years of treatment. Looking in more detail at specific diagnostic groups, it was found that phobias ( $n=48$ ), separation anxiety disorders ( $n=58$ ) and overanxious disorder ( $n=145$ ) were resolved in around 86% of cases. OCD was more resistant, ceasing to meet diagnostic criteria in only 70% of cases. There are serious limitations to a retrospective study, and there was no control group or follow-up. However, these rates of improvement appear to be above the level expected from longitudinal studies. For emotional disorder diagnoses, less severe principal diagnosis, better initial adaptation and younger age were significant predictors of good outcome. A further finding was that children with severe or pervasive symptomatology, such as GAD, or multiple comorbid disorders, required more frequent therapy sessions,

whereas more circumscribed symptoms, such as phobias – even if quite severe – improved comparably with once-weekly sessions.

The AFC chart review study<sup>104</sup> included 65 children and adolescents with dysthymia and/or major depression, who had been treated for an average of 2 years. By the end of therapy, over 75% showed reliable improvement in functioning and no depressive symptoms. However, the episodic course of depression means that these pre-post findings with no control group or follow-up cannot be taken as evidence of efficacy. A clearer finding was that children and adolescents with depressive disorders appeared to benefit more from intensive (4–5 sessions per week) than from non-intensive (1–2 sessions per week) therapy, after controlling for length of treatment and level of impairment at referral. This is of some interest given that the depressed cases were mostly adolescents, who generally did not gain additional benefit from frequent sessions.

In the AFC retrospective study<sup>105</sup>, although children and young people treated for major depression were likely to improve even if they remained in the dysfunctional range after treatment, diagnoses related to conduct problems (CD and ODD) appeared particularly resistant to PP. Children with ODD benefited more than those with CD. The difference was mostly explained by premature termination of treatment. Children and young people with disruptive disorder who also had an anxiety disorder diagnosis were more likely to benefit<sup>105</sup>. As noted above, individual child psychotherapy is now rarely carried out in practice without family work. In the AFC retrospective study, concurrent work with parents was a predictor of good outcome<sup>45</sup>.

In a smaller sample from the AFC long-term follow-up, Schachter and Target<sup>106</sup> examined the outcomes of child psychotherapy in adulthood. Thirty-four former child

patients treated at the AFC between 1952 and 1991 participated. The subjects took part in a comprehensive interview process comprising three or four sessions, each lasting between 2 and 2 hours. The results of five different measures were synthesized into a single index, the Adult Functioning Index (AFI). Overall, participants treated as children were not characterized by severe impairment or poor functioning in adulthood. Most reported that they had at least one significant support figure, had experienced relatively low levels of adversity during their adult lives, had few severe life events in recent years, had good health, and had made minimal use of medical services. There was a strong association between positive adult outcome and secure attachment status. Correlation and regression analyses between assessment (pretreatment), termination (conclusion of treatment) and adult outcome showed that the best predictor of adult outcome was the child's overall level of functioning, assessed on the Hampstead Child Adaptation Measure (HCAM score,<sup>107</sup> before receiving treatment. While this is a unique study, there is little expectation on the part of the authors of representativeness. Clearly, in the case of long-term follow-up, those with least difficulty in their current lives may indeed be those who are most readily reached.

Midgley and Target<sup>108 109</sup> looked at the outcome of child psychoanalysis from the perspective of the patient. This study was also part of the AFC long-term follow-up study. The authors examined the memories of adults who received psychoanalysis as children. Two-thirds of those who took part felt that the therapy had been helpful to them at the time, despite difficulty in assessing how their lives might have been different if they had not received it. There was a range of different ways, both positive and negative, in which the participants felt that psychotherapy had impacted their lives. In both papers the authors report that many participants emphasized the

value of being able to talk and being listened to. The authors report that those who remembered psychoanalysis in a positive way tended to be in treatment as quite young children<sup>109</sup>. There was an emphasis on being accepted and listened to. About a quarter of patients remembered child therapy predominantly in relation to their lack of engagement with the process. The study's length of follow-up is unique and it produced an interview protocol for the assessment of long follow-ups.

### ***Case series studies***

**Vilsvik and Vaglun**<sup>110</sup> carried out a small naturalistic study, following the outcome of 17 adolescents (age 13–17) with anorexia nervosa who participated in an outpatient program of individual psychotherapy for 1–9 years (mean 4 years). The average duration of treatment was 11 months, with weekly sessions. Outcome was measured by weight gain, menstrual status and analysis of case notes. The authors report that at follow-up all patients had improved significantly medically and socially; nine had recovered fully and six had minor anorectic symptoms. However, the conclusions are limited by the small sample size, the lack of a control group and by the fact that referring agencies may have selected an unrepresentative sample. The authors also recognize that the younger age and stable family situation of the subjects may have helped produce the positive outcome.

Non-directive play is often used to promote communication skills in children with autism<sup>111</sup>. Although such interventions have common components, they are not specifically psychodynamic. The Tavistock Clinic has developed a specialized psychodynamic approach to the treatment of individuals with autism<sup>112</sup>. The approach has some similarities with the intensive emotional support-oriented approach taken by Stanley Greenspan and colleagues in the United States<sup>113</sup>, and the Mifne method in Israel<sup>114</sup>. These approaches aim to strengthen non-autistic



aspects of the child's functioning, working in a family context as much as possible.

**Vorgraft**<sup>115</sup> demonstrated significant improvement in 23 children carefully diagnosed as suffering from autistic disorder and treated at the Mifne Institute. They found a modest but statistically significant change at 6-month follow-up of an intensive 3-week treatment. Despite these findings, outcome data are rather sparse in this area, and the retrospective chart review study at the AFC indicated that psychoanalysis was not helpful with this diagnosis<sup>116</sup>. However, follow-up of these psychoanalytically treated individuals into adulthood identified some individuals with symptoms of pervasive developmental disorder, generally Asperger syndrome, who showed a surprisingly high level of functioning in adulthood<sup>117</sup>.

**Pynoos** and colleagues have developed a program for adolescents who experienced or witnessed violence<sup>118</sup>. The UCLA School-Based Trauma/Grief Intervention Program for children and adolescents includes a systematic method for screening students, a manualized 16–20-week group psychotherapy protocol, which addresses current stresses and conflicts not limited to the trauma exposure, and adjunctive individual and family therapy. As a package, the protocol is a skills-based cognitive behavioral therapy (CBT) program and is very far from a prototypical unfocused insight-oriented group psychotherapy, but the attention to developmental considerations and the model of traumatic stress within which the treatment is rooted<sup>119</sup> make the intervention deserving of consideration under a general psychodynamic heading. Two uncontrolled studies of this approach<sup>120 121</sup> found that participation was associated with improvements in trauma-related symptoms and in academic performance. The same group assessed a modification of this protocol for 55 war-traumatized Bosnian adolescents. There was an observed reduction in

psychological distress and positive associations between distress reduction and improved psychosocial adaptation.

**Heede** et al.'s<sup>122</sup> prospective uncontrolled study examined the effect of three psychodynamic milieu therapeutic institutions for children aged 6–15 years of age suffering from severe trauma or early deprivation. Over 4 years, 24 Danish-speaking children were included in the research project. Measurement points were baseline and after 2 years of treatment. The study's objective was to give a qualified estimation of whether the child's personality structure had changed during the course of psychodynamic milieu therapy. The authors reported improvements in the children's cognitive and emotional functioning, self-confidence, and capacities for self-reflection, based on the WISC (Wechsler, 1991) and psychometric tests (Rorschach ad modum, (Exner 2003) and Thematic Aperception Test (scored by systems developed by Western (1990) and Cramer (1991)). The therapy was not as effective in terms of the children's interpersonal relations. However, the lack of a control group limits the conclusions that can be drawn from these results in relation to the potential of PP. Further, we do not know whether the measure chosen was sensitive to therapeutic change.

**Eresund** and colleagues<sup>123</sup> report on a study carried out in Sweden examining a long-term supportive expressive play psychotherapy for children and parents. The participants were nine boys aged 6–10 years with disruptive behavior disorder, and their parents. All the boys had a DSM-IV diagnosis of ODD, and some had comorbid ODD, CD and DAMP (dysfunction of attention, motor control and perception). The boys received therapy for their problems twice weekly initially; this was reduced to once a week after 1.5 to 2 years. Parents had sessions of their own with the child's therapist every second week (sometimes every week). Treatment lasted between 2

and 5 years, with a median of 2.5 years. At the end of treatment, only one boy still fulfilled DSM-IV ODD criteria. Parents (CBCL) and teachers (TRF) reported better social function after therapy. Improvements were less marked in boys who, in addition to initial diagnoses of ODD or CD, had ADHD. At 1-year follow-up, parent-reported improvements were maintained. This study had a very small sample and no control group. However, this study is important in underscoring the potential of long-term PP in helping children with conduct problems.

**Odhammar** et al.<sup>124</sup> report on an observational study, which was part of the Erica Process and Outcome Study (EPOS). The EPOS evaluates goal-formulated, time-limited psychotherapy in conjunction with parallel work with parents. The study aimed to investigate whether children's global functioning improves after PP. Thirty-three children (age 5–10) with mixed diagnoses (29 children had at least one DSM-IV diagnosis and 15 children had comorbid conditions) underwent PP once or twice a week, with parallel work with parents, for 6 months to 2.5 years. Subjects were assessed with the CGAS and HCAM pre- and post-treatment. A significant difference was found between CGAS pre- and post-treatment ( $p < .001$ ), which had a large effect size. A similar result was found for the HCAM. The four subscales of the HCAM that showed the largest changes were: general mood, and variability of mood; ability to tolerate frustration and control impulses; development of confidence and self-esteem; and ability to cope with very stressful events. The authors also undertook qualitative analyses of two patients, which highlighted the difficulty of capturing and understanding change processes using quantitative measures. The clear limitation of the study design, which compromises conclusions in relation to PP, is that psychotherapists themselves rated the children's global functioning with the CGAS.

**Carlberg** et al.<sup>125</sup> explored children's expectations and experiences of PP in a small subsample of participants from the EPOS study. The participants were children aged between 6 and 10 years who had at least one DSM-IV diagnosis at the start of psychotherapy; the most common was ADHD ( $n=6$ ). Seven of the children had more than one diagnosis. The children's attitudes were assessed at the start and end of treatment through semistructured interviews using self-rating instruments, drawing materials and toys. According to the self-ratings, the children showed a moderate degree of improvement in their problems. The children were able to communicate their expectations and experiences, and most were positive about in their expectations and their experiences of therapy after termination.

### **Limitations and Conclusions**

While we aimed at exhaustive coverage, key contributions may have been missed for a range of administrative and practical reasons. Studies not published in the English language were not accessible to review. Anecdotal case reports, which represent a large proportion of the psychodynamic literature, were not included. We did not aggregate the studies using meta-analytic methods; there are too few studies using genuinely comparable treatment procedures for aggregation to be justified.

The body of rigorous research supporting psychodynamic therapies for adults for most disorders remains limited, particularly relative to research supporting pharmaceutical treatments and even other psychosocial approaches such as CBT<sup>126-</sup><sup>129</sup>. There are both practical and theoretical difficulties in mounting trials of dynamic therapies, which go some way to explaining the lack of evidence (e.g., the bias against research by many practitioners of psychodynamic therapies and their epistemological problems with accepting the canons of modern scientific studies, the

reluctance of funding bodies to invest in research on clinical problems considered to be “solved” by a combination of drug and cognitive behavioral treatments, the expense of mounting trials sufficiently powered to yield information on what treatments are appropriate for which disorder, the failure to tightly manualize psychodynamic treatments, etc.).

Currently there is some evidence to support the use of PP for children whose problems are either internalizing or mixed but with an element of anxiety and emotional disorder. There is also evidence that the support and inclusion of parents is an important aspect of this treatment. There is some evidence that effects tend to increase following the end of treatment. There is evidence that behavioral problems are more resistant at least to a classical, insight-oriented psychodynamic approach. The distinction between family approaches and individual psychodynamic approaches is narrowing. This is particularly clear in the treatment of young children and adolescents with eating disorders, where it seems that combinations of these two approaches are as effective as any other kind of treatment. In line with the grouping together of family and individual approaches, the evidence is stronger for younger children, where parents are almost always included in treatment, and where a dyadic therapeutic model exploring the dynamics of the parent–child relationship may be especially helpful. In our view, it is probably an error to confound the mode of treatment delivery (individual long-term insight-oriented psychotherapy) with the psychological ideas that underpin formulations of pathology and cure which have their origin in that approach. It is, in our view, more than possible that PP has not yet found the best setting and the most efficacious mode of delivering its therapeutic aims. Much of what we had noted as non-traditional applications of psychoanalytic

therapy may actually end up as the most commonly used methods for delivering these therapeutic ideas. And why not?

On a separate note, a group of studies where non-reactive measures of outcome were used (cognitive ability, physiological indications of compliance with medical treatment) yielded surprisingly large effect sizes, which suggests that researchers of PP need to be willing to look beyond the field of psychological symptoms for the effects of treatment. Those who argue (correctly in our view) for continued investment in this approach point to the limitations of the evidence base supporting CBT e.g. <sup>130</sup> or pharmacological approaches e.g. <sup>131</sup>. Notwithstanding the general weakness of the evidence base of mental health treatments for children, this weakness is particularly pronounced for psychodynamic treatments, and the shortage of research studies needs to be addressed urgently. In the light of the limitations of CBT in severe disorders. in comparison with medication<sup>132-134</sup>, it behoves us to investigate the effectiveness of alternative treatment approaches. Ultimately, however, such a negative case cannot persuade policy makers and funders, and, without intense research on the effectiveness of the method deeply rooted in and shaped by psychological models of pathology, the long-term survival of this orientation is not assured<sup>8</sup>. This is not to say that the techniques that have evolved as part of this approach will not survive (they are effective, and clinicians, being pragmatic people, will continue to discover and use them), but they will be increasingly absorbed into alternative models, and the unique approach pioneered by Freud and outlined in this volume might then not continue.

## References

1. President's New Freedom Commission on Mental Health. *Achieving the promise: Transforming mental health care in America. Final report.* Rockville, MD: Department of Health and Human Services Report No. SMA- 03- 3832, 2003.
2. Weisz JR, Kazdin AE, editors. *Evidence based psychotherapies for children and adolescents.* 2nd ed. New York,: Guilford, 2010.
3. Clark DM. Implementing NICE guidelines for the psychological treatment of depression and anxiety disorders: the IAPT experience. *International review of psychiatry (Abingdon, England)* 2011;23(4):318-27.
4. Stratton P. Formulating Research Questions that are Relevant to Psychotherapy. *Mental Health and Learning Disabilities Research and Practice* 2007;4(2):83-97.
5. Leichsenring F, Rabung S. The Role of Efficacy vs. Effectiveness Research in Evaluating Psychotherapy. *Mental Health and Learning Disabilities Research and Practice* 2007;4(2):125-44.
6. Cartwright N, Munro E. The limitations of randomized controlled trials in predicting effectiveness. *Journal of evaluation in clinical practice* 2010;16(2):260-6.
7. Mill JS. *On the Definition of Political Economy and on the Method of Philosophical Investigation in that Science reprinted in Collected Works of John Stuart Mill, Vol. IV.* Toronto: University of Toronto Press, 1836 [1967].
8. Gabbard GO, Gunderson JG, Fonagy P. The place of psychoanalytic treatments within psychiatry. *Arch Gen Psychiatry* 2002;59(6):505-10.
9. Borduin CM, Mann BJ, Cone LT, Henggeler SW, Fucci BR, Blaske DM, et al. Multisystemic treatment of serious juvenile offenders: Long-term prevention of criminality and violence. *J Consult Clin Psychol* 1995;63:569-78.
10. Borduin C, Schaeffer C. Multisystemic treatment of juvenile sexual offenders: A progress report. *Journal of Psychology and Human Sexuality* 2001;13:25-42.
11. Henggeler SW, Melton GB, Smith LA. Family preservation using multisystemic therapy: An effective alternative to incarcerating serious juvenile offenders. *J Consult Clin Psychol* 1992;60:953-61.
12. Henggeler SW, Melton GB, Brondino MJ, Scherer DG, Hanley JH. Multisystemic therapy with violent and chronic juvenile offenders and their families: The role of treatment fidelity in successful dissemination. *J Consult Clin Psychol* 1997;65:821-33.
13. Henggeler SW, Pickrel SG, Brondino MJ. Multisystemic treatment of substance-abusing and -dependent delinquents: outcomes, treatment fidelity, and transportability. *Mental Health Services Research* 1999;1:171-84.
14. Henggeler SW, Halliday-Boykins CA, Cunningham PB. Juvenile drug court: enhancing outcomes by integrating evidence-based treatments. *J Consult Clin Psychol* 2006;74:42-54.
15. Ogden T, Hagen KA. Multisystemic treatment of serious behaviour problems in youth: sustainability of effectiveness two years after intake. *Child and Adolescent Mental Health* 2006;11:142-49 (follow up paper).
16. Rowland MD, Halliday-Boykins CA, Colleen A, Henggeler SW, Cunningham PB, Lee TG, et al. A randomized trial of multisystemic therapy with Hawaii's Felix class youths. *Journal of Emotional and Behavioral Disorders* 2005;13:13-23.
17. Timmons-Mitchell J, Bender MB, Kishna MA. An independent effectiveness trial of multisystemic therapy with juvenile justice youth. *Journal of Clinical Child and Adolescent Psychology* 2006; 35:227-36.
18. Borduin CM, Schaeffer CM, Heiblum N. A randomized clinical trial of multisystemic therapy with juvenile sexual offenders: effects on youth social

- ecology and criminal activity. *Journal of consulting and clinical psychology* 2009;77(1):26-37.
19. Schoenwald SK, Chapman JE, Sheidow AJ, Carter RE. Long-term youth criminal outcomes in MST transport: the impact of therapist adherence and organizational climate and structure. *J Clin Child Adolesc Psychol* 2009;38(1):91-105.
  20. Butler S, Baruch G, Hickey N, Fonagy P. A randomized controlled trial of multisystemic therapy and a statutory therapeutic intervention for young offenders. *J Am Acad Child Adolesc Psychiatry* 2011;50(12):1220-35 e2.
  21. National Institute for Health and Clinical Excellence. *Antisocial personality disorder: treatment, management and prevention*. London: NICE, 2010.
  22. Kazdin AE. Understanding how and why psychotherapy leads to change. *Psychother Res* 2009;19(4-5):418-28.
  23. Fisher B, Wolmark N, Redmond C, Deutsch M, Fisher ER. Findings from NSABP Protocol No. B-04: comparison of radical mastectomy with alternative treatments. II. The clinical and biologic significance of medial-central breast cancers. *Cancer* 1981;48(8):1863-72.
  24. Rawlins M. *De Testimonio: On the evidence for decisions about the use of therapeutic interventions*. London: Royal College of Physicians (The Harveian Oration), 2008.
  25. Roth A, Fonagy P, Parry G. Psychotherapy research, funding, and evidence-based practice. In: Roth A, Fonagy P, editors. *What works for whom? A critical review of psychotherapy research*. New York: Guilford Press, 1996:37-56.
  26. Fonagy P, Target M, Cottrell D, Phillips J, Kurtz Z. *What Works for Whom? A Critical Review of Treatments for Children and Adolescents* New York: Guilford, 2002.
  27. Cohen J. *Statistical power analysis for the behavioural sciences*. 2nd ed. Hillsdale, NJ: Erlbaum, 1988.
  28. Gerber AJ, Kocsis JH, Milrod BL, Roose SP, Barber JP, Thase ME, et al. A quality-based review of randomized controlled trials of psychodynamic psychotherapy. *The American journal of psychiatry* 2011;168(1):19-28.
  29. Fonagy P, Cottrell D, Phillips J, Bevington D, Glaser DE, Allison E. *What Works For Whom? A Critical Review of Treatments for Children and Adolescents*. 2nd ed. New York: Guilford, in press.
  30. Fonagy P, Target M. Psychodynamic treatments. In: Rutter M, Bishop D, Pine D, Scott S, Stevenson J, Taylor E, et al., editors. *Rutter's Child and Adolescent Psychiatry*. 5th ed. Oxford: Blackwell, 2008:1079-91.
  31. Freud S. New introductory lectures on psychoanalysis. In: J.Strachey, editor. *The standard edition of the complete psychological works of Sigmund Freud*. London: Hogarth Press, 1933:1-182.
  32. Wachtel P. *Psychoanalysis and behaviour therapy: Toward an integration*. New York: Basic Books, 1977.
  33. McCullough JP, Jr. Treatment for chronic depression using Cognitive Behavioral Analysis System of Psychotherapy (CBASP). *Journal of clinical psychology* 2003;59(8):833-46.
  34. Ryle A, Kerr IB. *Introducing cognitive analytic therapy: Principles and practice*. Chichester: J. Wiley, 2002.
  35. Weissman MM, Markowitz JC, Klerman GL. *Clinician's quick guide to interpersonal psychotherapy*. New York: Oxford University Press, 2007.



36. Young JE. Schema focused therapy for borderline personality disorder, 2002.
37. Safran JD. The Relational Turn, the Therapeutic Alliance, and Psychotherapy Research: Strange Bedfellows or Postmodern Marriage? . *Contemporary Psychoanalysis* 2003;39:449-75.
38. Midgley N, Kennedy E. psychodynamic psychotherapy for children and adolescents: a critical review of the evidence base. *Journal of Child Psychotherapy* 2011;37(3):232-60.
39. Hibbs ED, editor. *Psychosocial Treatments for Child and Adolescent Disorders: Empirically Based Strategies for Clinical Practice (2nd edition)*: American Psychological Association, 2004.
40. Weisz JR. *Psychotherapy for Children and Adolescents: Evidence-Based Treatments and Case Examples*. Cambridge: Cambridge University Press, 2004.
41. Weisz JR, Kazdin AE. *Evidence-based youth psychotherapies for children and adolescents: second edition*. NY: Guilford, 2010.
42. Kazdin AE. Mediators and mechanisms of change in psychotherapy research. *Annual review of clinical psychology* 2007;3:1-27.
43. Kazak AE, Hoagwood K, Weisz JR, Hood K, Kratochwill TR, al. A meta-systems approach to evidence-based practice for children and adolescents. *American Psychologist* 2010;65(2):85-97.
44. Smyrniotis KX, Kirkby RJ. Long-term comparison of brief versus unlimited psychodynamic treatments with children and their parents. *Journal of Consulting and Clinical Psychology* 1993;61(6):1020-27.
45. Target M, Fonagy P. The efficacy of psychoanalysis for children with emotional disorders. *J Am Acad Child Adolesc Psychiatry* 1994;33:361-71.
46. Muratori F, Picchi L, Casella C, Tancredi R, Milone A, Patarnello MG. Efficacy of brief dynamic psychotherapy for children with emotional disorders. *Psychother Psychosom* 2002;71(1):28-38.
47. Muratori F, Picchi L, Bruni G, Patarnello M, Romagnoli G. A two-year follow-up of psychodynamic psychotherapy for internalizing disorders in children. *Journal of the American Academy of Child & Adolescent Psychiatry* 2003;42(3):331-39.
48. Muratori F, Picchi L, Bruni G, Patarnello M, Romagnoli G. A Two-Year Follow-up of Psychodynamic Psychotherapy for Internalizing Disorders in Children. *J Am Acad Child Adolesc Psychiatry* 2003;42(3):331-39.
49. Trowell J, Kolvin I, Weeramanthri T, Sadowski H, Berelowitz M, Glaser D, et al. Psychotherapy for sexually abused girls: psychopathological outcome findings and patterns of change. *The British journal of psychiatry : the journal of mental science* 2002;180:234-47.
50. Rushton A, Miles G. A study of a support service for the current carers of sexually abused girls. *Clinical Child Psychology and Psychiatry* 2000;5(3):411-26.
51. Kronmüller K, Stefani A, Geiser-Elze A, Horn H, Hartmann M, Winkelmann K. The Heidelberg study of psychodynamic psychotherapy for children & adolescents. In: Tsiantis J, Trowell J, editors. *Assessing Change in Psychoanalytic Psychotherapy of Children and Adolescents*. London: Karnac, 2010.
52. Sinha UK, Kapur M. Psychotherapy with emotionally disturbed adolescent boys: Outcome and process study. *NIMHANS Journal* 1999;17(2):113-30.

53. Fonagy P, Target M. Mentalization and the changing aims of child psychoanalysis. *Psychoanalytic Dialogues* 1998;8:87-114.
54. Higgitt A, Fonagy P. The psychotherapeutic treatment of borderline and narcissistic personality disorder. *British Journal of Psychiatry* 1992;161:23-43.
55. Szapocznik J, Rio A, Murray E, Cohen R, Scopetta M, Rivas-Vazquez A, et al. Structural family versus psychodynamic child therapy for problematic Hispanic boys. *J Consult Clin Psychol* 1989;57(5):571-8.
56. Szapocznik J, Rio A, Murray E, Cohen R, Scopetta M, Rivas-Valquez A, et al. Structural family versus psychodynamic child therapy for problematic Hispanic boys. *J Consult Clin Psychol* 1989;57:571-78.
57. Trowell J, Joffe I, Campbell J, Clemente C, Almqvist F, Soininen M, et al. Childhood depression: A place for psychotherapy - An outcome study comparing individual psychodynamic psychotherapy and family therapy. *European Child and Adolescent Psychiatry* 2007;16(3):157-67.
58. Garoff FF, Heinonen K, Pesonen A-K, Almqvist F. Depressed youth: treatment outcome and changes in family functioning in individual and family therapy. *Journal of Family Therapy* 2012;34(1):4-23.
59. Gilboa-Schechtman E, Foa EB, Shafran N, Aderka IM, Powers MB, Rachamim L, et al. Prolonged exposure versus dynamic therapy for adolescent PTSD: a pilot randomized controlled trial. *Journal of the American Academy of Child and Adolescent Psychiatry* 2010;49(10):1034-42.
60. Robin AL, Siegel PT, Moyer A. Family versus individual therapy for anorexia: Impact on family conflict. *International Journal of Eating Disorders* 1995;17:313-22.
61. Robin AL, Siegel PT, Moyer AW, Gilroy M, Baker-Dennis A, Sikard A. A controlled comparison of family versus individual therapy for adolescents with anorexia nervosa. *J Am Acad Child Adolesc Psychiatry* 1999;38:1482-89.
62. Robin AL, Siegel PT, Moyer A. Family versus individual therapy for anorexia: Impact on family interaction. *Int J Eat Disord* 1995;17:313-22.
63. Crisp AH, Norton KRW, Gowers SG, Halek C, Levett G, Yeldham D, et al. A controlled study of the effect of therapies aimed at adolescent and family psychopathology in anorexia nervosa. *British Journal of Psychiatry* 1991;159:325-33.
64. Dare C, Eisler I, Russell G, Treasure J, Dodge L. Psychological therapies for adults with anorexia nervosa: randomised controlled trial of out-patient treatments. *Br J Psychiatry* 2001;178:216-21.
65. leGrange D, Eisler I, Dare C, Russell GF. Evaluation of family treatments in adolescent anorexia nervosa: A pilot study. *Journal of Eating Disorders* 1992;12:347-57.
66. Russell GFM, Szukler G, Dare C, Eisler I. An evaluation of family therapy in anorexia nervosa and bulimia nervosa. *Arch Gen Psychiatry* 1987;44:1047-56.
67. Eisler I, Dare C, Hodes M, Russell G, Dodge E, Le Grange D. Family therapy for adolescent anorexia nervosa: The results of a controlled comparison of two family interventions. *Journal of Child Psychology & Psychiatry* 2000;41:727-36.
68. Eisler I, Dare C, Russell GFM, Szukler G, le-Grange D, Dodge E. Family and individual therapy in anorexia nervosa: A 5-year follow-up. *Arch Gen Psychiatry* 1997;54(11):1025-30.

69. Vilsvik SO, Vaglum P. Teenage Anorexia Nervosa: A 1 to 9 year follow up after psychodynamic treatment. *Nord Psykiatr Tidsskr* 1990;44:249-55.
70. Lock J, Le Grange D, Agras WS, Moye A, Bryson SW, Jo B. Randomized clinical trial comparing family-based treatment with adolescent-focused individual therapy for adolescents with anorexia nervosa. *Archives of general psychiatry* 2010;67(10):1025-32.
71. Diamond G, Josephson A. Family-based treatment research: a 10-year update. *J Am Acad Child Adolesc Psychiatry* 2005;44(9):872-87.
72. Fonagy P. *Attachment theory and psychoanalysis*. New York: Other Press, 2001.
73. Reynolds WM. *Professional Manual for the Suicidal Ideation Questionnaire*. Odessa, FL: Psychological Assessment Resources, 1988.
74. Beck AT, Kovacs M, Weissman A. Assessment of suicidal intention: the Scale for Suicide Ideation. *J Consult Clin Psychol* 1979;47(2):343-52.
75. Beck A, Steer R, Brown G. *The Beck Depression Inventory—Second Edition*. San Antonio, TX: Psychological Corporation, 1996.
76. Hawton K, James A. Suicide and deliberate self harm in young people. *British Medical Journal* 2005;330:891-94.
77. Lieberman AF, Van Horn P, Ippen CG. Toward evidence-based treatment: child-parent psychotherapy with preschoolers exposed to marital violence. *J Am Acad Child Adolesc Psychiatry* 2005;44(12):1241-8.
78. Ghosh Ippen C, Harris WW, Van Horn P, Lieberman AF. Traumatic and stressful events in early childhood: can treatment help those at highest risk? *Child Abuse Negl* 2011;35(7):504-13.
79. Toth SL, Maughan A, Manly JT, Spagnola M, Cicchetti D. The relative efficacy of two interventions in altering maltreated preschool children's representational models: implications for attachment theory. *Dev Psychopathol* 2002;14(4):877-908.
80. Murray L, Cooper PJ, Wilson A, Romaniuk H. Controlled trial of the short- and long-term effect of psychological treatment of post-partum depression: 2. Impact on the mother-child relationship and child outcome. *Br J Psychiatry* 2003;182:420-7.
81. Toth SL, Rogosch FA, Manly JT, Cicchetti D. The efficacy of toddler-parent psychotherapy to reorganize attachment in the young offspring of mothers with major depressive disorder: a randomized preventive trial. *Journal of consulting and clinical psychology* 2006;74(6):1006-16.
82. Chanen AM, Jackson HJ, McCutcheon LK, Jovev M, Dudgeon P, Yuen HP, et al. Early intervention for adolescents with borderline personality disorder using cognitive analytic therapy: randomised controlled trial. *Br J Psychiatry* 2008;193(6):477-84.
83. Tonge BJ, Pullen JM, Hughes GC, Beaufoy J. Effectiveness of psychoanalytic psychotherapy for adolescents with serious mental illness: 12 month naturalistic follow-up study. *Australian and New Zealand Journal of Psychiatry* 2009;43(5):467-75.
84. Lush D, Boston M, Morgan J, Kolvin I. Psychoanalytic psychotherapy with disturbed adopted and foster children: a single case follow-up study. *Clinical Child Psychology and Psychiatry* 1998;3(1):51-69.
85. Lush D, Boston M, Grainger E. Evaluation of psychoanalytic psychotherapy with children: Therapists' assessments and predictions. *Psychoanalytic Psychotherapy* 1991;5(3):191-234.

86. Boston M, Lush D. Further considerations of methodology for evaluating psychoanalytic psychotherapy with children: Reflections in the light of research experience. *Journal of Child Psychotherapy* 1994;20(2):205-29.
87. Boston M, Lush D, Grainger E. Evaluation of psychoanalytic psychotherapy with fostered, adopted and 'in care' children. In: Midgely N, Anderson J, Grainger E, Nestic-Vuckovic T, Urwin C, editors. *Child Psychotherapy and Research New Approaches, Emerging Findings*. London: Routledge, 2009.
88. Lush D, Boston M, Morgan J, Kolvin I. Psychoanalytic psychotherapy with disturbed adopted and foster children: a single case follow-up study. *Clinical Child Psychology and Psychiatry* 1998;3(1):51-69.
89. Shaw RJ, Palmer L. Consultation in the medical setting: A model to enhance treatment adherence. In: Steiner H, editor. *Handbook of Mental Health Interventions in Children and Adolescents*. San Francisco: Jossey-Bass, 2004:917-41.
90. Moran G, Fonagy P, Kurtz A, Bolton A, Brook C. A controlled study of the psychoanalytic treatment of brittle diabetes. *J Am Acad Child Adolesc Psychiatry* 1991;30:926-35.
91. Fonagy P, Moran GS. Studies on the efficacy of child psychoanalysis. *J Consult Clin Psychol* 1990;58:684-95.
92. Moran G, Fonagy P. Psycho-analysis and diabetic control: A single-case study. *British Journal of Medical Psychology* 1987;60:357-72.
93. Apter A, Bernhout E, Tyano S. Severe obsessive compulsive disorder in adolescence: a report of eight cases. *Journal of adolescence* 1984;7(4):349-58.
94. Slonim DA, Shefler G, Gvirsman SD, Tishby O. Changes in rigidity and symptoms among adolescents in psychodynamic psychotherapy. *Psychother Res* 2011;21(6):685-97.
95. Deakin EK, Nunes MLT. Effectiveness of child psychoanalytic psychotherapy in a clinical outpatient setting. *Journal of Child Psychotherapy* 2009;35(3):290-301.
96. Scholte EM, van der Ploeg JD. Residential treatment of adolescents with severe behavioural problems. *J Adolesc* 2006;29(4):641-54.
97. Heinicke CM. Frequency of psychotherapeutic session as a factor affecting the child's developmental status. *The Psychoanalytic Study of the Child* 1965;20:42-98.
98. Heinicke CM, Ramsey-Klee DM. Outcome of child psychotherapy as a function of frequency of sessions. *Journal of the American Academy of Child Psychiatry* 1986;25:247-53.
99. Baruch G. Evaluating the outcome of a community-based psychoanalytic psychotherapy service for young people between 12–25 years old: work in progress. *Psychoanalytic Psychotherapy* 1995;9(3):243-67.
100. Baruch G, Fearon P, Gerber. Evaluating the outcome of a community-based psychoanalytic psychotherapy service for young people: one year repeated follow up. In: DAVENHILL R, PATRICK M, editors. *Rethinking Clinical Audit*. London: Routledge, 1998.
101. Baruch G, Vrouva I. Collecting routine outcome data in a psychotherapy community clinic for young people: Findings from an ongoing study. *Child and Adolescent Mental Health* 2010;15(1):30-36.

102. Baruch G, Fearon P. The evaluation of mental health outcome at a community-based psychodynamic psychotherapy service for young people: A 12-month follow-up based on self-report data. *Psychology and Psychotherapy: Theory, Research and Practice* 2002;75(3):261-78.
103. Target M, Fonagy P. Efficacy of psychoanalysis for children with emotional disorders. *Journal of the American Academy of Child & Adolescent Psychiatry* 1994;33(3):361-71.
104. Target M, Fonagy P. The efficacy of psychoanalysis for children: Developmental considerations. *J Am Acad Child Adolesc Psychiatry* 1994;33:1134-44.
105. Fonagy P, Target M. The efficacy of psychoanalysis for children with disruptive disorders. *Journal of the American Academy of Child and Adolescent Psychiatry* 1994;33:45-55.
106. Schachter A, Target M. The adult outcome of child psychoanalysis: the Anna Freud Centre long-term follow-up study. In: Midgley M, Anderson J, Grainger E, Nasic-Vuckovic, Urwin C, editors. *Child Psychotherapy and Research: New Approaches, Emerging Findings*. London: Routledge, 2009.
107. Schneider T. *Measuring adaptation in middle childhood: the development of the Hampstead Child Adaptation Measure*. University College London: Unpublished PhD thesis, 2000.
108. Midgley N, Target M, Smith J. The outcome of child psychoanalysis from the patient's point of view: A qualitative analysis of a long-term follow-up study. *Psychology and Psychotherapy: Theory, Research and Practice* 2006;79(2):257-69.
109. Midgley N, Target M. Recollections of being in child psychoanalysis : A qualitative study of a long-term follow-up project. *Psychoanal Study Child* 2005;60:157-77.
110. Vilsvik SO, Vaglum P. Teenage anorexia nervosa: a 1–9 year follow up after psychodynamic treatment. *Nordic Journal of Psychiatry* 1990;44(3):249-55.
111. Cogher L. The use of non-directive play in speech and language therapy. *Child Language Teaching and Therapy* 1999;15(1):7-15.
112. Reid S, Alvarez A, Lee A. The Tavistock Autism Workshop Approach. In: Richer J, Coates S, editors. *Autism-The Search for Coherence*. London: Jessica Kingsley, 2001:182-92.
113. Wieder S, Greenspan SI. Climbing the symbolic ladder in the DIR model through floor time/interactive play. *Autism* 2003;7(4):425-35.
114. Alonim H. The Mifne Method — ISRAEL: Early intervention in the treatment of autism/PDD: A therapeutic programme for the nuclear family and their child. *Journal of Child and Adolescent Mental Health* 2004;16:39–43.
115. Vorgraft Y, Farbstein I, Spiegel R, Apter A. Retrospective evaluation of an intensive method of treatment for children with pervasive developmental disorder. in press.
116. Fonagy P, Target M. Predictors of outcome in child psychoanalysis: A retrospective study of 763 cases at the Anna Freud Centre. *Journal of the American Psychoanalytic Association* 1996;44:27-77.
117. Target M, Fonagy P. Attachment theory and long-term psychoanalytic outcome: Are insecure attachment narratives less accurate? In: Leuzinger-Bohleber M, Dreher AU, Canestri J, editors. *Pluralism and Unity? Methods of Research in Psychoanalysis*. London: International Psychoanalytical Association, 2003:149-67.

118. Layne CM, Pynoos RS, Cardenas J. Wounded adolescence: School-based group psychotherapy for adolescents who sustained or witnessed violent injury. In: Shafii M, Shafii SL, editors. *School violence: Assessment, management, prevention*. Washington, DC: American Psychiatric Association, 2001:163-86.
119. Pynoos R, Steinberg A, Wraith R. A developmental model of childhood traumatic stress. In: Cicchetti D, Cohen DJ, editors. *Developmental Psychopathology (vol. 2)*. New York: Wiley, 1995:72-95.
120. Saltzman WR, Pynoos RS, Layne CM, Steinberg AM, Aisenberg E. Trauma- and grief-focused intervention for adolescents exposed to community violence: Results of a school-based screening and group treatment protocol. *Group Dynamics* 2001;5(4):291-303.
121. Layne CM, Pynoos RS, Saltzman WR, Arslanagic B, Black M, Savjak N, et al. Trauma/grief-focused group psychotherapy: School-based postwar intervention with traumatized Bosnian adolescents. *Group Dynamics* 2001;5(4):277-90.
122. Heede T, Runge H, Storebo OJ, Rowley E, Hansen KG. Psychodynamic milieu-therapy and changes in personality - what is the connection. *Journal of Child Psychotherapy* 2009;35(3):276-89.
123. Eresund P. Psychodynamic psychotherapy for children with disruptive disorders. *Journal of Child Psychotherapy* 2007;33(2):161-80.
124. Odhammar F, Sudin EC, Jonson M, Carlberg G. Children in psychodynamic psychotherapy: changes in global functioning. *Journal of Child Psychotherapy* 2011;37(3):261-79.
125. Carlberg G, Thorén A, Billström S, Odhammar F. Children's expectations and experiences of psychodynamic child psychotherapy. *Journal of Child Psychotherapy* 2009;35(2):175-93.
126. Roth A, Fonagy P. *What works for whom? A critical review of psychotherapy research*. 2nd ed. New York: Guilford Press, 2005.
127. Leichsenring F, Rabung S. Effectiveness of long-term psychodynamic psychotherapy: a meta-analysis. *Jama* 2008;300(13):1551-65.
128. Leichsenring F, Rabung S. Long-term psychodynamic psychotherapy in complex mental disorders: update of a meta-analysis. *Br J Psychiatry* 2011;199:15-22.
129. Shedler J. The efficacy of psychodynamic psychotherapy. *The American psychologist* 2010;65(2):98-109.
130. Westen D, Novotny CM, Thompson-Brenner H. The empirical status of empirically supported psychotherapies: assumptions, findings, and reporting in controlled clinical trials. *Psychological bulletin* 2004;130(4):631-63.
131. Whittington CJ, Kendall T, Fonagy P, Cottrell D, Cotgrove A, Boddington E. Selective serotonin reuptake inhibitors in childhood depression: systematic review of published versus unpublished data. *Lancet* 2004;363(9418):1341-5.
132. Swanson JM, Arnold LE, Vitiello B, Abikoff HB, Wells KC, Pelham WE, et al. Response to commentary on the multimodal treatment study of ADHD (MTA): mining the meaning of the MTA. *J Abnorm Child Psychol* 2002;30(4):327-32.
133. Goodyer I, Dubicka B, Wilkinson P, Kelvin R, Roberts C, Byford S, et al. Selective serotonin reuptake inhibitors (SSRIs) and routine specialist care with and without cognitive behaviour therapy in adolescents with major depression: randomised controlled trial. *BMJ (Clinical research ed)* 2007;335(7611):142.

134. March J, Silva S, Petrycki S, Curry J, Wells K, Fairbank J, et al. Fluoxetine, cognitive-behavioral therapy, and their combination for adolescents with depression: Treatment for Adolescents With Depression Study (TADS) randomized controlled trial. *Jama* 2004;292(7):807-20.