Psychotherapy Outcome Research in Child Psychiatric Disorders

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Objective: To compile, review, and comment upon the application of psychotherapy to the treatment of psychiatric disorders first appearing in childhood and adolescence.

Method: Representative research papers published over the past 4 decades on the subject of psychotherapy of children and adolescents were compiled. Selection for inclusion in this review was based upon salience to the subject of treatment of child psychiatric disorders. Special consideration was given to large-scale and metaanalytic studies, as well as to studies comparing psychotherapy with other forms of treatment.

Results: There is mixed evidence for the efficacy of psychotherapy for child psychiatric disorders. There are few direct comparisons between treatment modalities in the child psychiatric literature. Methodological problems include a history of theoretical development of therapies without reference to current conceptions of mental illness, a paucity of direct comparisons among psychotherapies and between psychotherapy and other psychiatric treatments, inconsistent definition of psychotherapy from study to study, and inconsistency in stated outcome measures. In general, cognitive–behavioural therapies performed better in application to child psychiatric disorders than did insight-oriented therapies.

Conclusions: Outcome research in child-oriented psychotherapy is still in its infancy. There are simply too few studies of many therapies and many conditions to draw firm conclusions about efficacy. More work is needed in matching discrete, consistently applied therapies to selected psychiatric pathologies. Questions regarding psychotherapy’s potential application to prevention of mental illness and to management of distress surrounding mental illness (as distinct from treatment of the illness itself) remain to be answered.

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It is a fitting time to examine what role psychotherapy should occupy in the training of Canadian child and adolescent psychiatrists because the turn of the millennium will mark the hundredth anniversary of Sigmund Freud’s publication of The Interpretation of Dreams.

Within the past 100 years, psychiatry has had its pendulum swings: the medical community of Vienna did not embrace Freud’s “talking cure” when it was introduced, yet analysis grew to become the standard treatment for the mental illnesses of children by the end of the Second World War, with the first publication of The Psychoanalytic Study of the Child in 1945. Its thesis, as well as its power, created the seeds of its own antithesis, and the postwar years saw the growth of psychotherapeutic variants beyond Freud’s original vision. Haworth (1) provides a thorough overview of the state of the art in child therapy at that time. The power of the neoanalysts, in turn, was countered by a rising tide of biologically oriented psychiatrists, whose methodologies were quite convincing.

It is no idle exercise to ask, at this juncture, what place psychotherapy has in contemporary child and adolescent psychiatry. It has more than historical value: in many ways it is the history. It provides us with the vocabulary to examine meaning, the self, relationships, and the process of thought, without which mere description of neurology is irrelevant: the Glasgow Coma Scale would serve as well. As a tool for understanding human intercourse, therapy’s model of the
“why” of thought is the only thing that tells us that philosophy is not the product of a machine: a constantly evolving Turing test, if you will. It serves us well enough as the vehicle by which we understand the internal logic of a mind profoundly different from our own when we examine children with a mental illness. These are psychotherapy’s virtues, which alone merit our teaching it, even if this is all it did, but it isn’t. Psychotherapy was created to be a treatment, and that is where its severest critics have taken issue with it. The question addressed by this paper is not whether psychotherapy helps children and their families, but whether it treats mental illness.

Paul (2) put the problem neatly: “What treatment” he asked, “by whom, is most effective for this individual with that specific problem, under which set of circumstances?” Studies of psychotherapy’s effectiveness in individual cases, when performed by highly skilled practitioners, abound, suggesting that technique alone is a necessary but insufficient ingredient of success. Garfield (3) put the case of therapy “in the best hands” this way: “Not all members of the musicians’ union can play like Heifetz, and it is my guess that not all members of the different psychotherapy unions are equally effective.” He goes on to challenge researchers to examine the track records and methods of unusually skilled practitioners for clues as to why some therapists are effective, even if others are not. His work stimulated studies of the variables intrinsic to the provision of therapy. Weisz and Weiss (4) provided a needed glimpse into therapy as studied in clinics versus laboratories, demonstrating that 93 youths who completed a 6-month course of therapy had no significantly better outcome than 60 controls (who dropped out after initial evaluation) 6 months and one year postevaluation. Kazdin (5) outlined a review of factors that impinge upon our interpretation of laboratory (versus clinic) findings, most notably that few studies focus upon well-defined or severe cases of disorders, and that many studies tend to focus on discrete components of disorders rather than on core symptoms. Weisz, Weiss, and Donenberg (6) gave us more encouraging news of therapy’s utility “in the real world,” but they warned of inapt comparisons between laboratory and clinical results. In a similar vein, Steenbarger (7) looked at client- therapist-, and context-based factors mediating outcome, including client-therapist “match” and posttherapy life events. The conclusions argue for a point of readiness for change in the client that determines duration and therefore outcome of therapy.

The study of individual characteristics of people who respond to psychotherapy appears, on surface, to be worthy of scrutiny, but it has not really yielded fruit as a science. This area of study has, arguably, been best assayed by Luborsky and associates’ (8) insightful book, Who Will Benefit from Psychotherapy? Predicting Therapeutic Outcomes. The bewildering array of treatments that may be subsumed under the general rubric of psychotherapy also poses a problem in matching treatment to disorder. Kazdin (9) enumerates some 230 therapy techniques extant. Note, for example, that Weisz and others (10) define psychotherapy as “any intervention intended to alleviate psychological distress, reduce maladaptive behaviour, or enhance adaptive behaviour through counselling, structured or unstructured interaction, a training program, or a predetermined treatment plan.” Such a definition permits enormous latitude in what might be interpreted as psychotherapy.

The behaviour therapies have perhaps fared best in psychotherapy outcome research (11,12) for 2 principal reasons: 1) they are a more homogenous group of techniques than most other therapeutic forms and 2) they are face-valid, that is, they are likely to be applied when there are behaviour problems as symptoms of a mental disorder, the existence of which, in turn, is inferred by the presence or absence of those symptoms. No symptoms, no disorder. It is also far easier to measure the change in a behaviour than in a thought process.

Selecting an effective therapy technique, then, is certainly difficult, perhaps impossible, at the current state of the art. We may wish to look at the evidence for the utility of psychotherapy as a treatment. The studies chosen for review in this paper are representative and emphasize metaanalytic approaches. The intent is to convey an understanding of psychotherapy’s contribution to the treatment of mental illness in children rather than to list all studies dealing with the subject of psychotherapy for children.

Review of Psychotherapy Outcome Research

Although Eysenck’s series of reviews (13–15) were the best-known of early attempts to quantify psychotherapy’s benefits, it was Levitt’s work (16,17) that was seminal in the examination of therapies applied to children. In general, his findings were much like those of Eysenck’s: children in psychotherapy improved about as rapidly and as much as children who did not receive therapy. Unfortunately, the therapies to which subjects were assigned were either analytic or undefined “eclectic,” so it was difficult to measure just what treatment was actually applied. What was vital to the research of both investigators was the establishment of the “spontaneous remission rate” as a benchmark against which the success of therapies might be compared (Eysenck’s was 60% to 70%, which raises the question of just how seriously disturbed his subjects were).

When enough reviews of individual therapies had been collected, the first of the metaanalyses, or reviews of reviews, began to appear (18). Their power was in the application of effect size: basically, a way to collapse many subjects from many studies as though they were part of the same study, then deduce the amount of effect upon target symptoms attributable to the treatment. Metaanalyses have the advantage of reducing intertherapist differences, demographic variations
(including age), treatment type differences, and applications to different pathological conditions. Casey and Berman (19) conducted one of the larger ones, a metaanalysis of 75 studies published between 1952 and 1983. They concluded that therapy is clearly of benefit, showing that the treated child is 76% better at the end of therapy than the untreated child. Unfortunately, their intention was not to make an argument for psychotherapy’s treatment of mental illness but to analyze net benefit after treatment, a benefit not always predicated upon relief of the core symptoms of pathology.

Casey and Berman’s conclusion was so dramatically at odds with both Eysenck’s and Levitt’s findings that it was not long before it, too, drew sharp criticism. Heinecke and Goldman (20) objected to the use of “defectors,” that is, therapy dropouts, as a control group. Jacobson and Truax (21), in their 1991 examination of the meaningfulness of statistical applications in psychotherapy research, reasonably pointed out that effect size does not comment upon the amount of change in a patient from beginning to end of therapy or how the patient’s life might be altered by the experience. In practice, effect size could be very large if variability within the measured group were low, even if there was little change wrought. Durlak and associates (11) questioned the validity of the study on the grounds that the sample size of studies was small and that too many variables were collapsed. A similar objection by Freedheim and Russ (22) pointed out that many different therapies were treated, for the purpose of the study, as though they were a single entity. Similar objections to Weisz and associates’ (23) metaanalysis were raised by Shirk and Russell (24). A large review of studies on child psychotherapy outcome was reported by Barnett and colleagues (25), who concluded that the number of methodological flaws in the studies reviewed prevented conclusive statements regarding the efficacy of the nonbehavioural therapies examined: in effect, that metaanalysis as a method is only as good as the studies it reviews. Generally speaking, however, metaanalysis has emerged as one of the more powerful research tools developed in recent years and deserves further attention as a methodology.

Jacobson and Truax suggested a multimodal set of criteria by which the effect of psychotherapy might be assessed, based on the face-valid benchmarks of previous researchers. These included “a high percentage of clients improving; a level of change that is recognizable by peers and significant others [26,27]; an elimination of the presenting problem [28]; normative levels of functioning by the end of therapy [29,30]; high end-state functioning by the end of therapy [31]; [and] changes that significantly reduce one’s risk for various health problems” (21). These are valuable suggestions, and they should represent the minimum standard by which any psychotherapy outcome study is judged.

Alan Kazdin argues convincingly that therapy is less intrusive than residential care, may preempt admission to hospital, and is flexible—that is, can be employed in a variety of settings and is applicable to a wide range of child problems. This somewhat dispassionate view of therapy’s utility contrasts sharply with the unbridled enthusiasm of earlier authors. Despite the chilling fact of no response to therapy in 40% of cases studied, Luborsky and associates (32) concluded that “everybody has won and all must have prizes.” What emerges most strongly from a review of therapy outcome research is, at once, the depth and quality of psychotherapy itself, along with an intense frustration in our capacity to measure that perceived worth. Kazdin’s (12) conclusions regarding metaanalytic outcome research are worth quoting: “First, psychotherapy appears to be better than no treatment. Second, the magnitude of these effects closely parallels that obtained from outcome research with adults [33]. Third, treatment differences, when evident, tend to favour behavioural rather than nonbehavioural techniques.”

**Psychotherapy in Application to Discrete Illnesses**

So-called externalizing disorders, including oppositional defiant disorder and conduct disorder (but excluding attention-deficit disorders), collectively comprise the most frequent presentations to mental health clinics, regardless of discipline or specialty (34). This is in part due to their being high-prevalence disorders (2% to 6%) and in part because they are both noticeable and objectionable to others. The most effective approaches to the condition to date have been “ecological,” that is, interventions which alter conditions surrounding the youth rather than as applied to the youth him or herself (35). For example, containment of the youth in a setting providing behavioural, milieu-based management is significantly more effective than nontherapeutic secure placement while the youth is in care (36), though results tend to fade posttreatment (5). Similarly, parent management training (37) is more effective than other treatments in the short term (the first 2 years) than in the long term (more than 5 years). Family therapy, even if atheoretical, has proven very effective (38) in reducing recidivism, whereas individual therapies have produced rather more modest results (39). There is much to be said for the combined effects of Henggeler’s multisystemic (40) therapy in treating conduct-disordered youth, which records some of the best outcome statistics to date. It is noteworthy that no evidence currently exists for reliable effects from pharmacotherapy in treating this condition (41).

For attention-deficit hyperactivity disorder (ADHD) and its variants, stimulant therapy remains the benchmark for treatment (42). Perhaps the most cited research comparing stimulants with behaviour therapy is that of Carlson and associates (43), who showed that behaviour therapy is as effective as stimulants in controlling disruptive classroom
diagnosably anxious at the end of treatment. Similarly, Target significant and lasting, although some children remained promising treatment effects in that the effects were both children treated with a cognitive–behavioural package showed antianxiety medications. Kendall’s study (50) of peripubertal anxious chil-
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number of new serotonergic drugs on the market, whose bavior, there has been growing enthusiasm for ex-
therapy’s results against those achieved by psychopharma-
depression, as distinct from its capacity to assist the depressed
researchers to state conclusively that depressed teens have more cognitive distortions than their well counter-
that cognitive distortion is etiologically related to de-
that repair of cognitive distortion is equatable with a repair of depression. It is also worth mentioning that not all therapies designated as “cognitive” seek to amend cognitive distortion per se. One of the most consistently studied therapies, interpersonal psychotherapy with adoles-
targets attachments rather than cognitions in its treat-
ment of adolescent depression. Surprisingly, the research on psychotherapy outcome in child and adolescent depression has only just begun to emerge (5). What remains unanswered is the question of whether psychotherapy actually modifies depression, as distinct from its capacity to assist the depressed individual from making catastrophic life choices while in the throes of a depressive illness.

Since Conte and associates’ (49) observation that a history of self-reported anxiety might usefully predict response to psychotherapy, there has been growing enthusiasm for exam-
ination of the role of psychotherapy in the treatment of anxiety disorders, with emphasis upon the comparison of therapy’s results against those achieved by psychophar-
ology. This interest coincided with the appearance of a number of new serotonergic drugs on the market, whose safety and efficacy are superior to those of tricyclic antide-
prescians. Kendall’s study (50) of peripubertal anxious chil-
den treated with a cognitive–behavioural package showed promising treatment effects in that the effects were both significant and lasting, although some children remained diagnosably anxious at the end of treatment. Similarly, Target and Fonagy (51), comparing a psychodynamic therapeutic approach with a psychoanalytic one, found that they were of similar effect but, perhaps more interestingly, that outcome was predicted by younger age, presence of phobias, longer treatment duration, and more frequent treatment.

The metaanalysis by van Balkom and associates (52) summarizes 111 studies that examined the effects of psycho-
theraphy on obsessive–compulsive disorder. There were methodological problems with this review. The quality of the studies was not considered, and less than 20% of the studies compared antidepressants (of any sort) directly to either behavio-
ial or cognitive therapy. The number of studies that included follow-up measures was too small to be considered for analysis. Nonetheless, some interesting results emerged. Behaviour therapy appeared to be more effective than the serotonergic antidepressants, and a combination of seroton-
ergics with behaviour therapy was more effective still. Cog-
nitive therapy, alone or in combination, proved superior to placebo but did not appear to be as powerful an agent of change as behaviour therapy. This finding is in accord with Casey and Berman’s (19) and Weisz and associates’ (23,53) observations, which collectively may form the strongest evidence to date of the effectiveness of psychotherapy in the treatment of mental illness. Surprisingly, perhaps, given the volume of written material on the subject of the treatment of sexual abuse in children, Finkelhor concludes that the area lacks a sufficiently solid research base to draw conclusions about psychotherapy’s effectiveness in any modality (54). We may speculate that research is hampered by the fact that sexual abuse is not a disease itself, but a potential precipitant to pathology, and that we yet lack a consistent nosology for the description of posttraumatic effects. If we were agreed upon what that pathology might be, we might be able to determine which psychotherapeutic modalities might best ameliorate it. Several excellent papers provide an overview of the state of the art in treating abused children and lay the groundwork for a conceptual model (55–59); they fall just short, however, of a universally acceptable conclusion.

It is worth mentioning that family-based therapies, despite a late start in outcome research, appear to be a useful adjunct in the treatment of schizophrenia, drug abuse, and anxiety disorders (55), in addition to their powerful role in the treat-
ment of disruptive disorders, as mentioned earlier. The re-
search base pertaining to family-based interventions in the treatment of depression, posttraumatic stress disorder, and eating disorders is, as yet, not comprehensive enough to allow definitive statements regarding their effectiveness (56,57). Early evidence of family-based interventions for anorexia (there are as yet no controlled studies of family therapy in the treatment of bulimia) suggests promise (58,59). Further, the metaanalysis by Shadish and associates (60) of 163 randomized controlled trials showed that family therapy is at least as
effective as, and often more effective than, individual therapy across a variety of conditions.

In summary, there are several comments that may serve as a guide for evaluating outcome research as applied to discrete mental illnesses. First, the diagnosis needs to be established with some reliability, as do the comorbid conditions attendant upon the primary diagnosis. For example, reducing the anxiety of an anxious and depressed youth may produce benefit, but it cannot be said to treat the depression unless it can be demonstrated that the 2 are etiologically linked. All too many studies fail to discriminate adequately between comorbid conditions and the focus of treatment. Second, while the sample does not have to number in the thousands, sample size becomes critical in the analysis of a novel treatment. While metaanalysis reduces the risk of error by pooling samples, it tends to pool treatments as well, even when idiosyncratic. Third, any method of treatment that cannot be adequately replicated in the field, that is, in therapists’ offices, is difficult to credit. A well-designed study is able to specify exactly what was done and able to prove that each subject received the same treatment. Fourth, a well-designed study of psychotherapy needs a basis for comparison of a treatment against some external standard. A study of treatment for depression, for example, should compare psychotherapy against the effects achieved by pharmacotherapy and a control group. As a consequence, such a study should be able to demonstrate that comparable results have been achieved. The previously cited Jacobson and Truax standards are good ones, but these should be supplemented by outcome measures specific to the disorder; for example, in the case of depression, is the youth eating and sleeping better at the end of therapy and have his or her suicidal ruminations disappeared?

Conclusions: Dilemmas in Psychotherapy as Treatment

If we were to treat psychotherapy as “just another” treatment option, knowing what we now know about its strengths and weaknesses, would we endorse it? The answer would appear to be a qualified “yes.” The reasons for the qualification are different from the reasons for the endorsement.

Our major dilemma is the fact of psychotherapy’s history: it works for and against us. On the positive side, we have an incredible depth of material, written by some of the most insightful men and women in history, in pursuit of “meaning” in human experience. The allure of a search for meaning has thus far been like measuring a balloon with a yardstick, although statisticians argue that we are using the best tools we have.

A secondary dilemma is that psychotherapy is not a single entity but a collection of evolved philosophies, most of which are dedicated to the understanding of far more than mental illness (for example, to the experience of maturation); as such, these philosophies are applicable to the guidance of children and their families through variants of normal developmental stages at least as much as they are applicable to conditions outside the range of normal. In this sense, therapy may be seen as a method for testing the coherence of developmental theory. A third and related dilemma is that our conception of the neurological underpinnings of some of the psychiatric disorders first appearing in childhood and adolescence has grown exponentially in the last few decades, and because there has been a parallel growth in the effectiveness of pharmacotherapy, we have been led to draw (perhaps specious) comparisons between “purely biological” treatments and psychosocial interventions.

While family-based therapies have become a vital part of contemporary psychiatry, their origins and development of theory have largely occurred outside psychiatry. Without agreement on the nature of the problem under treatment, or even who should receive that treatment, family therapy and psychiatry have had, in Szmukler and Dare’s (61) words, an “uneasy” relationship. Outcome research may be delayed until professionals are agreed upon who and what needs to change in order to state whether change has occurred. Like the physic of the last century, we have a notion that some part of the good we provide is specific for the condition we aim to treat, but we are unsure what part.

This dilemma is replayed with other disorders listed in DSM and ICD. The state of the art is insufficiently developed to draw categorical conclusions about the origins of diseases, such as anorexia, which have biological, psychological, and social manifestations. Without such a foundation, we remain uncertain whether treatment of the symptoms is treatment of the disease. For other disorders commonly addressed by child and adolescent psychiatrists, such as attachment disorders, we still lack a common nosology. In disorders with a known biological basis, such as pervasive developmental disorder, obsessive–compulsive disorder, attention-deficit disorder, or schizophrenia, we see that psychotherapies add much to total management, although we cannot be sure whether we are altering the disease per se as opposed to the distress that surrounds disease of any sort. This difficulty is compounded by the modern tendency to include much more than we formerly did within the rubric of psychotherapy, such as psychoeducation and special-skills training both for the identified patient and for those who surround him or her.

What does seem certain is that, as Fonagy succinctly put it (62), “the age of generic psychotherapy is dead.” We can no longer afford the blithe assumption that the simple act of talking with people in distress can be equated with treatment.
of mental illness. We cannot afford any treatment that lacks a sound theoretical base, a replicable methodology, and a measurable outcome.

Whether philosophy or treatment, then, it appears that psychotherapy is not yet a fait accompli: it is not yet fully articulated as art or science. Psychotherapy remains one of the keenest tools in the shop, however, and cannot rationally be discarded until we have fully explored its potential.

**Clinical Implications**

- Psychotherapy may not be a specific treatment of child psychiatric pathology.
- Research rarely targets symptoms that would suggest pathology.
- The psychotherapeutic treatment of many pathologies has yet to be systematically studied.

**Limitations**

- This is a representative, not exhaustive, review of the literature.
- Metaanalyses were prioritized for review.
- Results are limited by the accuracy and applicability of studies included in metaanalyses.

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**References**

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Résumé

Objectif : Réunir, examiner et commenter une documentation sur l’application de la psychothérapie au traitement de troubles psychiatriques qui se manifestent pour la première fois à l’enfance et à l’adolescence.

Méthode : On a réuni des documents de recherche représentatifs publiés depuis 4 décennies au sujet de la psychothérapie des enfants et des adolescents. La sélection à des fins d’inclusion à cet examen était fondée sur l’importance par rapport au traitement des troubles psychiatriques de l’enfant. Les études méta-analytiques, les études de grande envergure et les études comparatives de la psychothérapie et d’autres types de traitement ont fait l’objet d’une attention particulière.

Résultats : Les données sur l’efficacité de la psychothérapie afin de traiter les troubles psychiatriques de l’enfant ne sont pas concluantes. La littérature comporte peu de comparaisons directes entre les modalités de traitement. Les problèmes méthodologiques comprennent une tradition de mise au point théorique de thérapies sans se référer aux concepts actuels de la maladie mentale, une rareté de comparaisons directes entre les thérapies et entre la psychothérapie et d’autres traitements psychiatriques, une définition incohérente de la psychothérapie d’une étude à l’autre et une incohérence des mesures des résultats présentés. En général, les thérapies cognitivo-comportementales appliquées au traitement des troubles psychiatriques infantiles ont donné de meilleurs résultats que les thérapies axées sur l’introspection.

Conclusions : La recherche fondée sur les résultats commence à peine en psychothérapie infantile. De nombreuses thérapies et affections ne sont tout simplement pas assez étudiées pour qu’on puisse se prononcer définitivement sur leur efficacité. En effet, d’autres travaux s’imposent pour agencer des thérapies discrètes et appliquées régulièrement à certaines psychopathies. Des questions demeurent sans réponse quant à l’éventualité de la prévention de la maladie mentale et du traitement de la souffrance entourant la maladie mentale grâce à la psychothérapie (à distinguer du traitement de la maladie elle-même).