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5.04

Outcome Findings and Issues in Psychotherapy with Children and Adolescents

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5.04.1 INTRODUCTION

After decades of child treatment guided by psychology's grand theories and rarely subjected to rigorous test, we are moving into an era in which claims of success may have little credence in the absence of outcome research. The forces ushering in this new era are both scientific and fiscal. On the scientific front, both the American Psychological Association (APA) and the American Psychiatric Association are moving toward identification of research-based principles and practices for intervention with adults, adolescents, and children (see, e.g., Task Force, 1995). On the fiscal front, the advent of managed care has brought increased attention to the issue of outcomes, as companies seek to limit the cost of care. In the area of child and adolescent treatment, the body of relevant evidence is now growing fast, with more than 300 child and adolescent treatment outcome studies already published. This chapter summarizes some of the major findings of these studies, and then becomes critical, noting limitations of the available evidence and suggesting issues that will need attention in the future. Throughout the chapter, the term "children" is used to refer to the age period from early childhood through adolescence, except where it is necessary to draw a distinction between children and adolescents.

5.04.2 SOCIAL, DEVELOPMENTAL, AND CULTURAL CONTEXT OF CHILD ASSESSMENT AND THERAPY

Although clinical work with children bears obvious similarities to work with adults, some important differences warrant emphasis. First, because children rarely perceive themselves as "disturbed" or as candidates for therapy, most referrals for treatment, up until late adolescence, tend to be made by parents, teachers, or other adults. These adults may thus be construed as "clients" in the sense that they commission the therapy, pay for it, and identify some or all of the goals the therapist is to pursue. Children may or may not participate in identifying target problems or setting treatment goals, and even when they participate, the adult input may be weighted more heavily. With therapy commissioned by adults, and its goals heavily influenced by adults, it is understand-

able that children may enter the process with little motivation for treatment or personal change, or with different objectives than those shared by the adults involved.

Given marked developmental differences in the self-awareness, psychological mindedness, and expressive ability of their clientele, child therapists must rely heavily on adults for information about the youngsters they treat, and this can present problems of several types. First, parents' and teachers' reports may be inaccurate, based on distorted samples of child behavior, influenced by their own adult agendas, calculated to conceal their own failings as parents (including neglect or abuse), or even biased by their own pathologies (see e.g., Kazdin, 1989); and levels of agreement among different adult informants reporting on the same child tend to be low (Achenbach, McConaughy, & Howell, 1987). Bias and distortion aside, adult reports of child behavior and adult identification of referral concerns are both apt to reflect the values, practices, and social ideals of their cultural reference group (see Weisz, McCarty, Eastman, Chaiyasit, & Suwanlert, 1997; Weisz et al., 1988; Weisz & Weiss, 1991).

Finally, children tend to be captives of their externally engineered environments to a much greater extent than do adults; one consequence may be that the "pathology" the child therapist treats may reside as much in a disturbed environment from which the child cannot escape as in the child himself or herself. This may limit the impact of interventions involving the child as solo or primary participant, and it may argue for involvement of others from the child's social context, but such significant others are not always willing or cooperative. So, in a number of ways, the child therapist faces challenges that are rather different from those confronted by one who treats only adults.

5.04.3 PREVALENCE OF CHILD DYSFUNCTION AND CHILD TREATMENT

Notwithstanding the difficulties of child assessment and child treatment, both practices are widespread, in both clinical practice and research contexts. Systematic efforts at assessment in the general population suggest that large numbers of children suffer from significant levels of disturbance, at least as defined within

the current taxonomic systems. Epidemiologic studies in the late 1980s (summarized by Costello, 1989) indicated that at least 17% of children in the general population met criteria for at least one diagnosis in the *Diagnostic and statistical manual of mental disorders, Third Edition (DSM-III)*; American Psychiatric Association, 1980); preliminary findings point to higher prevalence rates for the most recent edition of the diagnostic manual (*DSM-IV*). Of course, these rates of formal diagnosis overlook the many children who have very significant problems that fall short of full diagnosability, but may well need help, nonetheless.

Each year, many troubled children receive intervention in the form of child psychotherapy, but precise figures on the extent and cost are difficult to find. Figures for the late 1980s indicated that about 2.5 million American children received treatment each year (Office of Technology Assessment, 1986), and that the annual cost was more than \$1.5 billion (Institute of Medicine, 1989). These figures are apt to be underestimates, given the likelihood that much child treatment is either not formally labeled "psychotherapy" (e.g., counseling in school) or not formally reported to government agencies (e.g., private practice paid out of pocket). Of course, much has changed since the 1980s, with some forces (e.g., the rise of managed care, general reductions in duration of inpatient stays) discouraging growth, but other forces (e.g., increased public awareness, legislated entitlements for handicapped children) encouraging growth, so updated statistics on use and costs are clearly needed.

5.04.4 TYPES OF TREATMENT AND PROBLEMS TARGETED IN TREATMENT

The most common types of treatment used with children, and the most common child conditions addressed in treatment, are described in other chapters of this volume, but a few facts germane to outcome assessment warrant emphasis here. As Kazdin (1988) noted, there are more than 230 named psychotherapies, but most of these have not been subjected to controlled tests of outcome. In general, outcome research with children has focused on a distinct subset of the treatments that bears little apparent relation to frequency of use in clinical practice. Among the psychological interventions (i.e., excluding pharmacological therapies), psychodynamic and family therapies are among the most widely practiced by clinicians but among the least studied by outcome researchers. By contrast, behavioral and

cognitive-behavioral interventions are emphasized in outcome research to a degree that far exceeds their use in clinical practice.

There is somewhat closer correspondence between practice patterns and the outcome research with respect to problems targeted in treatment, but the correspondence is less than perfect. Most of the types of child problems encompassed in Chapters 13–27, this volume have been the focus of both clinical attention and some outcome research, although much of the research has addressed specific problems or clusters of problems rather than full-blown diagnostic categories; this may have been appropriate, given periodic changes in the taxonomy, but late 1990s trends incline toward formal diagnostic assessment of children in clinical trials. Of the diagnostic categories noted in this volume, the problems associated with conduct disorder (and oppositional defiant disorder), attention deficit hyperactivity disorder (ADHD), anxiety disorders (including particularly specific phobias), and possibly somatoform disorder (especially chronic headache) have been emphasized in clinical trials research, whereas other problems frequently treated by practitioners are less evident in clinical trials research.

5.04.5 WHO CARES ABOUT OUTCOMES OF CHILD TREATMENT?

Stakeholders with an interest in the outcome of child treatment are numerous. The treated child's need for help, not to mention his or her investment of time and energy in the process of treatment, arguably makes the child the major stakeholder. Add parents and other family members who seek relief for the child, and also frequently for the family. Teachers' interests, as well, may include both concern for the child and for the classroom of which the child is a part. Those who finance the child's treatment (e.g., family members, government agencies, insurance carriers) have a clear stake. And finally, the therapists, clinic staff, administrators, and others in the "provider" community have a clear interest in the outcomes of the care in which they invest their careers. All these parties to the process of treatment have a clear stake in the question, "How effective is child psychotherapy?"

5.04.6 APPROACHES TO ASSESSING TREATMENT EFFECTS

This question can be answered via several different methods, a few of which need to be

noted here. The most widely recognized is the clinical trial, an outcome study in which the post-treatment adjustment of a group of children who received a candidate intervention is compared with that of one or more control groups who did not. It is these clinical trials studies that are most frequently pooled in reviews and meta-analyses (see below), and that thus constitute most of the evidence discussed in this chapter. However, in circumstances where all the children in a target group must receive an active treatment, multiple baseline designs, ABAB (sometimes called "reversal") designs, and simultaneous/alternating treatment designs are useful. Such approaches characterize much of the treatment research with ADHD youngsters (see, e.g., Pelham et al., 1993), for example, and they are frequently used in cases where an entire classroom is the target of an intervention (e.g., Wurtele & Drabman, 1984). These non-clinical trials designs can also be applied to cases (sometimes involving rare conditions) where only one or two children will be treated (e.g., McGrath, Dorsett, Calhoun, & Drabman, 1988; Tarnowski, Rosen, McGrath, & Drabman, 1987). These alternative outcome assessment designs have generated a rich body of data on treatment effects, data that await an enterprising reviewer. For now, though, the focus is on the clinical trials research, which has been reviewed rather thoroughly in the form of several meta-analyses, as described below.

5.04.7 POOLING OUTCOME STUDIES VIA META-ANALYSIS: METHODS AND ISSUES

Research findings on psychotherapy effects can be pooled via a technique called meta-analysis (see Mann, 1990; Smith, Glass, & Miller, 1980; but see also critiques, e.g., by Wilson, 1985). The building block of meta-analyses is the effect size (ES) statistic. The ES is an index of the size and direction of treatment effects. For typical clinical trials studies, ES is the difference between the post-treatment mean on an outcome measure for the treated group vs. the corresponding control group mean, with the difference divided by the SD of the outcome measure. Figure 1 is a guide to interpreting ES values. As the figure indicates, positive ES values indicate treatment benefit, and negative values indicate a harmful effect. Each ES value corresponds to a percentile standing of the average treated child on the outcome measure(s) if that child were placed in the control group after treatment; for example, an ES of 0.9 indicates that the average treated child scored better after treatment than 82% of the control

group. As an aid to interpretation, Cohen's (1992) guidelines suggest that an ES of 0.20 may be considered a "small" effect, 0.50 a "medium" effect, and 0.80 a "large" effect. By averaging across the outcome measures used, a meta-analyst may compute a single mean ES for each study (or each treatment group) in the collection being reviewed. This permits computation of an overall mean ES for the entire collection of studies; it also permits comparison of mean ES across studies differing in potentially important ways: for example, in the type of therapy employed, the target problem being treated, or the age or gender of the children involved.

Methods have been proposed for assessing the quality of studies considered for inclusion in meta-analyses (see, e.g., Chalmers et al., 1981), but most meta-analysts in the psychotherapy research area have aimed for rather broad, representative collections of outcome studies, accepting a range of methods, provided that certain basic standards of experimental design are satisfied. Weiss and Weisz (1990) carried out a meta-analysis to assess the extent to which methodological variations in child outcome studies might be associated with differences in ES. Findings indicated that nine commonly noted internal and external validity factors (e.g., whether subjects were randomly assigned to groups, whether subjects were analog cases or clinical cases who would have been treated independently of the study) together accounted for 7% of the variance in ES, over a sample of 105 outcome studies. They also found no evidence that inclusion of methodologically weaker studies in meta-analyses has led to overestimates of ES; on the contrary, increased experimental rigor in the studies they sampled was generally associated with *larger* ES. Thus, it is possible that the most inclusive meta-analyses may tend to underestimate the true effect of therapy, compared to meta-analyses that apply strict methodological criteria to candidate studies.

Meta-analysts must make myriad decisions as they carry out their work, and many of these decisions have an impact on the ultimate ES values that will emerge. For example, decisions must be made about whether to (i) compute ES by dividing the treatment-control group difference by standard deviation (SD) of the control group or of the pooled control plus treatment groups; (ii) compute an average ES across all outcome measures within a study or keep these separate for overall ES calculation; (iii) combine ES computation across various treatment conditions, compute separate ES values for each treatment group in a study, or use some amalgam of these two approaches; and (iv) weight all studies equally or adjust ES according

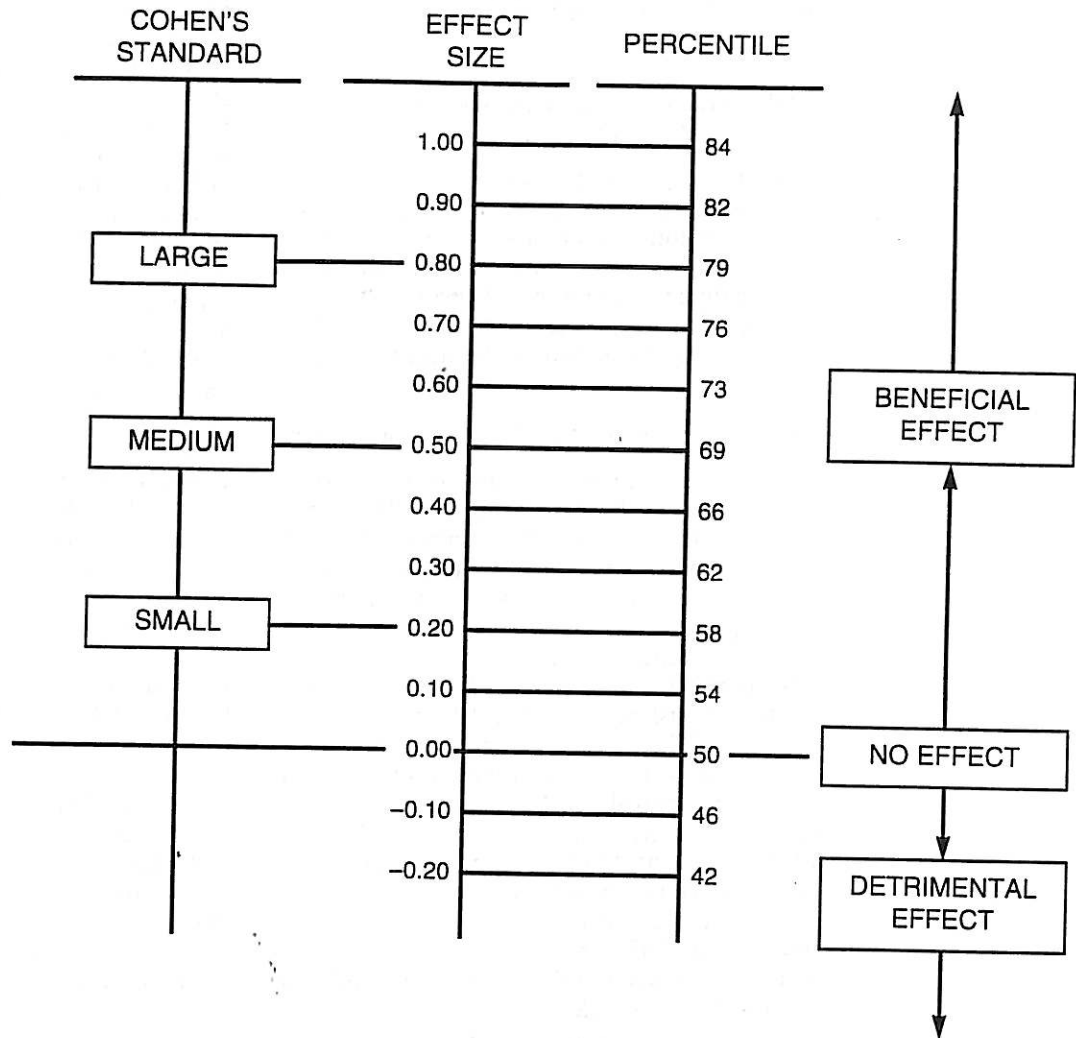


Figure 1 An aid to interpreting effect size (ES) statistics. ("Bridging the gap between laboratory and clinic in child and adolescent psychotherapy," by J. R. Weisz, G. R. Donenberg, S. S. Han, and B. Weiss, 1995, *Journal of Consulting and Clinical Psychology*, 63, pp. 688-701. Copyright 1995 by the American Psychological Association. Reprinted with permission.)

weight all studies equally or adjust ES according to sample size, ES variance, or some other leveling factor (for discussion of these and other decision-making issues, see Weisz & Weiss, 1993; Weisz, Weiss, Han, Granger, & Morton, 1995). Because scores of such decisions are made in any meta-analysis, it is essentially impossible that any two teams working independently will conduct their work in exactly the same way.

This fact, of course, highlights the need for caution in comparing findings across different meta-analyses, and thus in reading the results reported below. Differences in ES means across different meta-analyses may be influenced in part by differences in the ways the respective

meta-analysts compiled studies, pooled them, computed ES, or averaged ES within or across studies. To assist the reader in interpreting the meta-analytic findings reported below, the four issues noted in the preceding paragraph have been addressed in the following way: For each meta-analysis, only *exceptions* to the most common approach to each issue are noted. That is, unless otherwise noted, the meta-analysis being described involved the following modal procedures for child meta-analysis: (i) ES was calculated by dividing the treatment-control group difference by SD of the pooled control plus treatment groups; (ii) within each study, ES values are averaged across all outcome measures; (iii) within each study,

separate ES means are maintained for each treatment vs. control group comparison; and (iv) ES values reported are unadjusted.

5.04.8 FINDINGS FROM META-ANALYSES

This section considers some of the findings of meta-analytic reviews, first covering overall effect sizes found in broad-based analyses, then noting findings of specially focused analyses, and finally identifying some heuristically useful findings on therapy, therapist, and child factors related to the magnitude of treatment effect.

5.04.8.1 Findings of Broad-based Meta-analyses

To date, there have been at least four broad-based child psychotherapy meta-analyses: that is, meta-analyses imposing minimal limits on treated problems or types of intervention to be included. In all, these four meta-analyses encompass more than 300 separate treatment outcome studies. In the earliest of these, Casey and Berman (1985) surveyed those outcome studies published between 1952 and 1983 that involved children aged 12 and younger. Mean ES was 0.71 for those studies that included treatment-control comparisons; in percentile terms, the average treated child scored better after treatment than 76% of control group children, averaging across outcome measures. In a second meta-analysis, Weisz, Weiss, Alicke, and Klotz (1987) reviewed outcome studies published between 1952 and 1983, with children aged 4-18. Mean ES (computed using control group SD) was 0.79; after treatment, the average treated child was at the 79th percentile of control group peers.

In a third broad-based meta-analysis, Kazdin, Bass, Ayers, and Rodgers (1990) included studies published between 1970 and 1988, with youngsters aged 4-18. Kazdin et al. included multiple types of studies, but for the subset that compared treatment groups and no-treatment control groups, mean ES was 0.88; the average treated child scored higher after treatment than 81% of the no-treatment comparison group. For studies comparing treatment groups to active control groups, mean ES was 0.77, indicating that the average treated child was functioning better, post-treatment, than 78% of the control group.

In the fourth broad-based meta-analysis, Weisz, Weiss, et al. (1995) included studies published between 1967 and 1993, involving children aged 2-18. ES values were calculated using control group SD (for rationale, see Weisz, Weiss, et al., p. 455), and using the

conservative procedure of collapsing across treatment groups up to the level of analysis; for example, except for analyses comparing different types of therapy, ES values were averaged across treatment groups within a study. An overall mean ES of 0.71 indicated that, after treatment, the average treated child scored higher on the outcome measures than 76% of control group children. When ES values were weighted by the inverse of their variance, the overall ES mean dropped to 0.54. (For more detailed descriptions of the procedures and findings of these broad-based meta-analyses, see Weisz & Weiss, 1993.)

The findings of these four broad-based meta-analyses show rather consistent beneficial treatment effects; ES values ranged from 0.71 to 0.84 (0.84 is an estimated overall mean for the treatment-control comparison studies in Kazdin et al., 1990), near Cohen's (1988) "large effect" index of 0.80. (Note, though, that the Weisz, Weiss, et al. (1995) finding noted in the preceding paragraph suggest that true population ES means, adjusting for heterogeneity of variance, may be closer to "medium" effects.) For comparative purposes, Figure 2 shows findings of the four child meta-analyses together with findings of two of frequently cited meta-analyses with older groups, that is, Smith and Glass's (1977) meta-analysis of primarily adult psychotherapy outcome studies, and Shapiro and Shapiro's (1982) meta-analysis of exclusively adult outcome studies. As the figure indicates, effects found in the child meta-analyses fall roughly within the range of effects found in these two adult meta-analyses.

5.04.8.2 Findings of Specially Focused Meta-analyses

Beyond the findings of these broad-based meta-analyses, there is a good deal to be learned from focused meta-analyses addressing rather specific questions about child treatment effects. Three such projects have dealt with cognitive-behavioral therapy in particular. For example, Baer and Nietzel (1991), reviewing 36 outcome studies, found quite positive treatment effects for cognitive and/or cognitive-behavioral treatments addressing child impulsivity. Mean ES was 0.90, calculated with control group ES, pooling only across similar outcome measures, and without weighting; the mean dropped to 0.77 when ES was weighted by study sample size. Dush, Hirt, and Schroeder (1989) focused on 48 child outcome studies using the cognitive-behavioral technique of self-statement modification; pooling outcome measures to produce one ES mean per study, Dush et al. found a

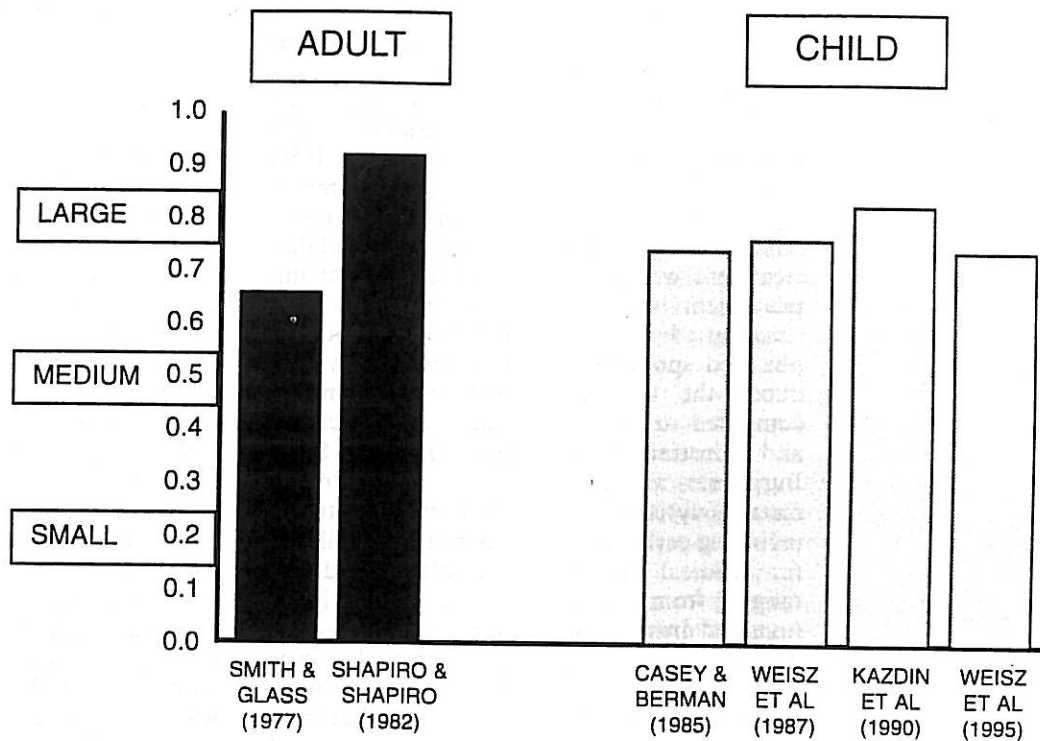


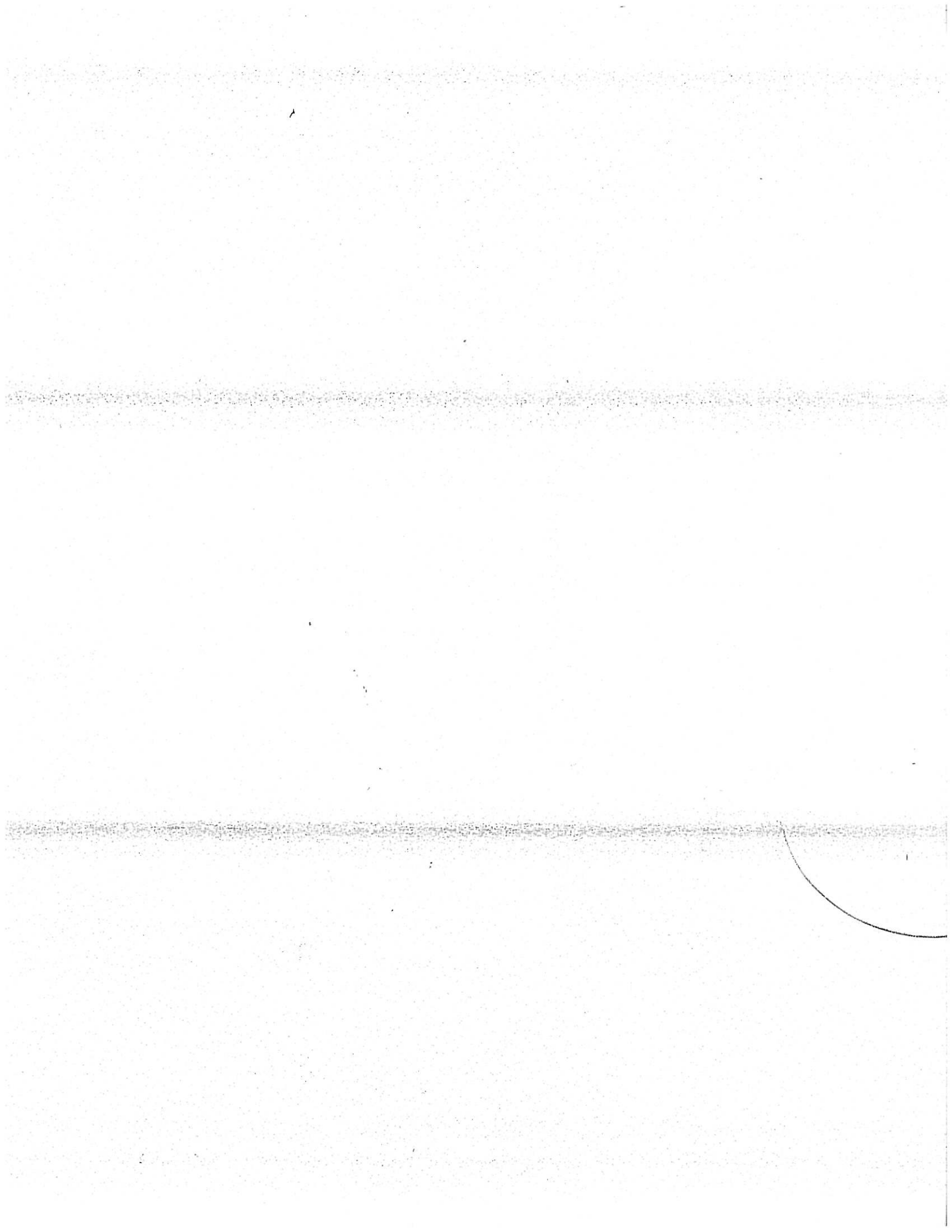
Figure 2 Mean effect sizes found in meta-analyses of psychotherapy outcome studies with adults and children. ("Bridging the gap between laboratory and clinic in child and adolescent psychotherapy," by J. R. Weisz, G. R. Donenberg, S. S. Han, & B. Weiss, 1995, *Journal of Consulting and Clinical Psychology*, 63, pp. 688-701. Copyright 1995 by the American Psychological Association. Reprinted with permission.)

mean ES of 0.47. Durlak, Fuhrman, and Lampman (1991) surveyed 64 studies of cognitive-behavioral treatment with children, applied across a range of target problems. With ES values pooled within studies to produce a single mean ES per study, and weighting by study sample size, Durlak et al. found a mean ES of 0.56, averaging across all age levels. However, as these authors had hypothesized, the mean was considerably higher for older children (0.92 for ages 11-13) than for younger groups (0.57 for ages 5-7, 0.55 for ages 7-11), suggesting that these cognitively oriented treatments may be a better fit to more cognitively mature youth. In a worrisome finding, Durlak et al. noted a negligible correlation (-0.22) between cognitive changes and behavioral changes, thus raising an important question about a key assumption underlying cognitive-behavioral therapy, namely the notion that the technique brings about behavioral change by inducing cognitive change.

Family therapy has been the subject of two meta-analyses. Hazelrigg, Cooper, and Borduin (1987) reviewed 20 family therapy outcome studies, averaging across multiple effects within studies to produce a single mean ES per study. For the seven studies that met their methodological criteria and included outcome measures

of family interaction, the mean ES, weighted by study sample size, was 0.45; for the six methodologically appropriate studies that included behavior ratings of individual children in the family, the weighted mean ES was 0.50. Thus, although the number of relevant family therapy studies was small, Hazelrigg's meta-analysis pointed to beneficial effects. In another meta-analysis, Shadish et al. (1993) surveyed 101 studies involving family therapy (plus another 62 studies of marital therapy). Aggregating multiple ES values within studies to the study level, and weighting studies by the inverse of their sampling variance, Shadish et al. found a mean ES of 0.47 for the 44 family therapy studies that included treatment-control group comparisons. For comparison with the Hazelrigg et al. findings, Shadish also computed weighted ES means separately, for measures of family interaction and for ratings of individual family members' behavior; the family interaction ES was 0.31 (vs. 0.45 in Hazelrigg et al.), and the behavior rating ES was 0.66 (vs. 0.50 in Hazelrigg et al.).

Three additional meta-analyses illustrate the range of questions that can be addressed via this method of synthesis. Prout and DeMartino's (1986) meta-analysis, focused on psychotherapy in school settings, based ES computation on SD



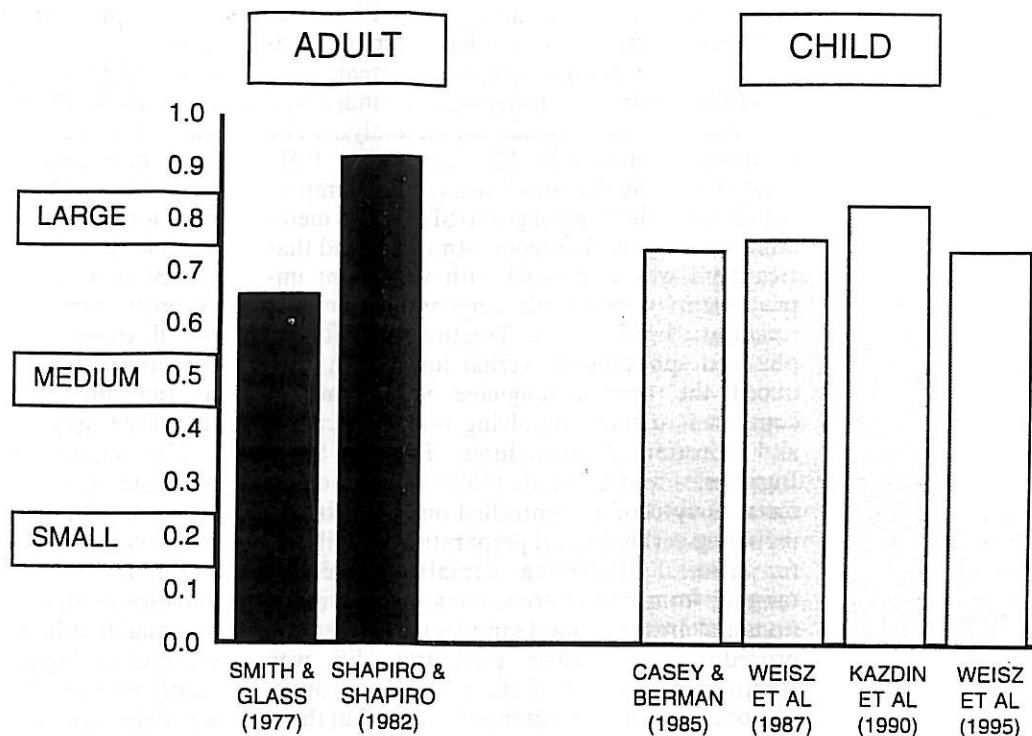


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Three additional meta-analyses illustrate the range of questions that can be addressed via this method of synthesis. Prout and DeMartino's (1986) meta-analysis, focused on psychotherapy in school settings, based ES computation on SD

of the control groups, and pooled ES values only across groups of similar outcome measures; thus, 33 studies, involving 52 treatment-control comparisons, generated 119 individual ES values that were included in the analysis. The resulting (unadjusted) ES mean was 0.58. Russell, Greenwald, and Shirk (1991), computing ES using the control group SD in their meta-analysis of 18 child outcome studies, found that treatment was associated with significant improvement in children's language proficiency (unadjusted ES = 0.39). Treatments that emphasized spontaneous verbal interaction produced the biggest language improvements, compared to those involving more structured and constrained procedures. Finally, Saile, Burgmeier, and Schmidt (1988) carried out a meta-analysis of 75 controlled outcome studies involving psychological preparation of children for medical (including dental) procedures, ranging from minor procedures such as injections and drawing blood samples to such serious procedures as lumbar punctures. ES was computed using SD of study control groups. The overall mean ES was modest, 0.44, but there was considerable variation across types of intervention; for example, mean ES was only 0.22 for procedures in the "minor" category (e.g., injections) but 1.50 for procedures classified as "major" (e.g., cardiac catheterization). This report by Saile et al. (1988), like the article by Prout and DeMartino (1986), reminds us that a good deal of psychotherapy with children takes place in settings outside a therapist's office, and that evidence is needed on outcomes in these less traditional settings just as for office-based treatment.

5.04.8.3 Therapy, Therapist, and Child Factors Related to the Magnitude of Treatment Effects

In addition to overall mean ES values, meta-analyses can yield estimates of the impact of various therapy, therapist, and client factors on treatment outcome. Such estimates need to be interpreted with caution because of the confounding among factors (e.g., treatments and treated problems) that is common in meta-analyses. Some of the confounding can be addressed via statistical control and testing of interaction effects (see, e.g., Weisz et al., 1987; Weisz, Weiss, et al., 1995), although this is only a partial solution. In the two meta-analyses from the author's lab (Weisz et al., 1987; Weisz, Weiss, et al., 1995), studies involving behavioral treatments (e.g., behavioral contracting, modeling, cognitive-behavioral therapy) were found to produce larger effects than studies using

nonbehavioral treatments (e.g., insight-oriented therapy, client-centered counseling). The Casey-Berman (1985) meta-analyses showed the same effect, at $p = 0.06$; Kazdin et al. (1990) did not make this comparison; general superiority of behavioral methods was also reported in Prout and DeMartino's (1986) meta-analysis of school-based treatment studies, and in meta-analyses not specific to children, by Nicholson and Berman (1983) and Shadish et al. (1993). By contrast meta-analyses have generally not found treatment outcomes to differ reliably for different types of treated problems (e.g., internalizing vs. externalizing; for one exception, see Casey & Berman, 1985, pp. 392-393).

The relation between age and treatment outcome has varied across meta-analyses. However, the meta-analysis involving the most recent collection of studies (Weisz, Weiss, et al., 1995) found mean ES to be larger for adolescents than for children. This main effect was qualified by the age and gender interaction depicted in Figure 3; for samples of predominantly or exclusively adolescent girls, mean ES was twice as large as for adolescent boys and for children of both genders. Of course, adolescent girls may be more likely to be treated for internalizing problems than are younger children or adolescent boys; but we found no reliable difference in mean ES for internalizing vs. externalizing problems, nor was the age and gender interaction in Figure 3 qualified by type of treated problem (internalizing vs. externalizing), type of treatment (behavioral vs. nonbehavioral), or level of therapist training (professional vs. clinical trainee vs. paraprofessional). Perhaps there is something about the 1990s generation of treatments reflected in this 1995 meta-analytic collection of studies that fits the characteristics and needs of adolescent girls particularly well, but one is left to speculate about what that elusive quality may be.

Three additional findings illustrate other potentially useful contributions of meta-analytic data. First, meta-analysis can be used to assess the holding power of intervention effects. Findings in both the meta-analyses (Weisz et al., 1987; Weisz, Weiss, et al., 1995) indicated that treatment effects assessed immediately after treatment are quite similar to effects measured at follow-up assessments, which average about six months after treatment termination. This suggests that treatment benefits tend to be durable, at least within typical follow-up time frames (for similar conclusions derived from different kinds of outcome studies, see Durlak et al. (1991); Nicholson & Berman (1983); Shadish et al. (1993)). Second, individually administered treatments have tended to show larger effects than group treatments, although not always

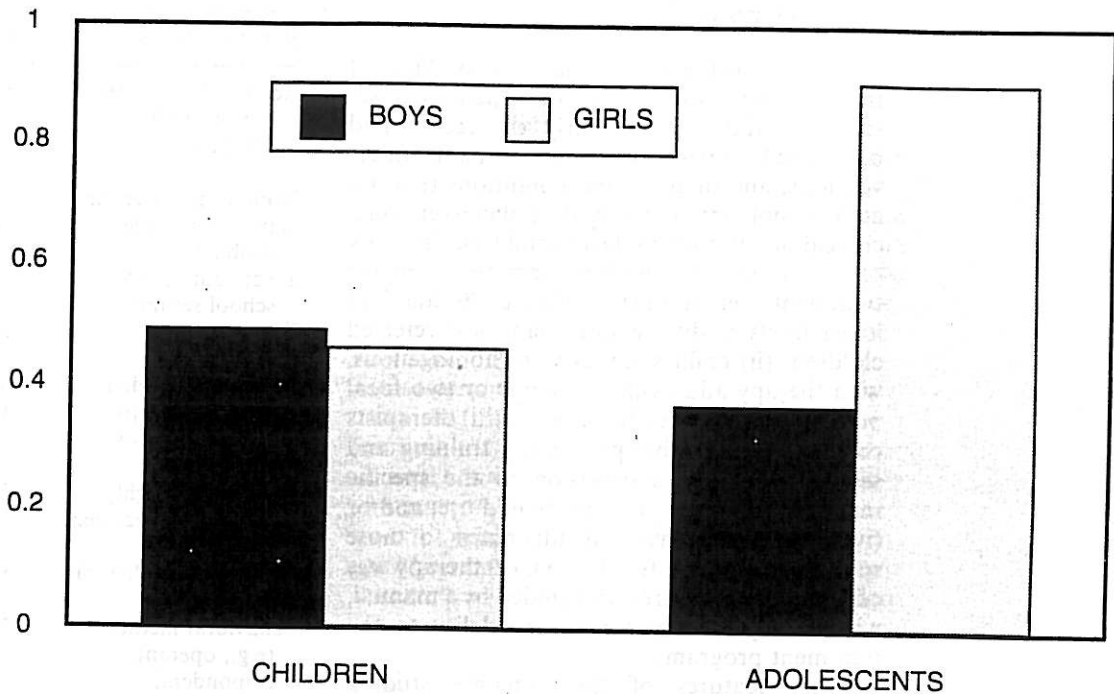


Figure 3 Mean effect size for samples of predominantly male and female children (11 years of age and younger) and adolescents (12 years and older). ("Effects of psychotherapy with children and adolescents revisited: A meta-analysis of treatment outcome studies," by J. R. Weisz, B. Weiss, S. S. Han, D. A. Granger, and T. Morton, 1995, *Psychological Bulletin*, 117, pp. 450-468. Copyright 1995 by the American Psychological Association. Reprinted with permission.)

significantly so (see Casey & Berman, 1985; Russell et al., 1991; Weisz et al., 1987; Weisz, Weiss, et al., 1995), and there is at least one exception in the area of cognitive-behavioral treatments for impulsivity (Baer & Nietzel, 1991).

A third finding (from Weisz, Weiss, et al., 1995) concerns the specificity of treatment effects. Obviously, children differ markedly from one another in the particular problems they manifest, and various therapies differ in the problems they are designed to address, but do these individual differences actually influence treatment outcome? Some (e.g., Frank, 1973) have proposed that psychotherapy has "non-specific" effects, for example, helping people with diverse problems through such general means as promoting a feeling of being understood or encouraging an expectancy of relief. An alternative view is that therapies help in specific ways, having their strongest influence on the specific problems they are designed to address.

This controversy was addressed in Weisz, Weiss, et al. (1995) with a test of whether effects were larger for the specific problem domains targeted by a treatment than for other, more

incidental domains. For example, we asked whether a treatment for anxiety produced bigger changes in anxiety than in related but more peripheral problems such as depression. Across multiple comparisons like these, we found that ES means were about twice as large for the specific problems addressed in treatment as for related problems that were not specifically addressed. This suggests that these psychotherapies were not merely producing global or nonspecific good feelings that influence diverse outcomes equally; instead, the treatments appeared to have rather precise, focused effects consistent with the particular objectives of the therapy.

In sum, evidence from broad-based meta-analyses of child psychotherapy outcome studies points to positive, problem-specific, and durable effects of mental health interventions for a variety of child problems. Clearly, child psychotherapy research is generating a number of encouraging findings. On the other hand, several conceptual and methodological issues require a good deal of attention in the future. Attention is now focused on some of these issues, and related suggestions for future research.

5.04.9 EXTERNAL VALIDITY AND RESEARCH THERAPY VS. CLINIC THERAPY

One issue is that of external validity. Most of the 300-plus studies in the meta-analyses reviewed above (particularly the recent and behavioral studies) involved participants, interventions, and/or treatment conditions that are actually not very representative of conventional clinical practice with referred children. In many of the studies, (i) children were recruited for treatment, were not actual clinic cases, and had lower levels of dysfunction than most referred children; (ii) child samples were homogenous, with therapy addressing only one or two focal problems (e.g., a specific phobia); (iii) therapists received considerable pretherapy training and session-by-session supervision in the specific intervention techniques they would use; and/or (iv) the therapy involved adherence to those specific techniques. In addition, (v) therapy was often highly structured and guided by a manual, with therapists monitored for fidelity to the treatment program.

These features of the outcome studies, although they are useful experimentally, tend to coalesce around an abstract category that the author and his colleagues (e.g., Weisz, Weiss, & Donenberg, 1992) have called research therapy, which we distinguish from conventional clinic therapy. Table 1 summarizes some illustrative differences between the two therapy genres. The two are best thought of as two poles of a multidimensional continuum; certainly no single feature shown in the table under Research therapy is present in all clinical trials studies, and few of the individual features listed under Clinic therapy are true of all clinic-based treatment. However, differences between child therapy in clinics and child therapy in clinical trials outcome studies are common enough for it to be reasonable to ask whether the positive outcomes generated in the research therapy studies, and summarized in the meta-analyses above, are representative of the outcomes achieved in actual clinical practice with children.

5.04.9.1 Evidence on the Effects of Clinic Therapy

To address this question, the author and colleagues carried out a search (described in Weisz, Donenberg, Han, & Weiss, 1995) for published outcome studies that focused on what might fairly be called clinic therapy. Studies were sought that involved (i) treatment of clinic-referred (i.e., not "analog" or recruited) youngsters, (ii) treatment in service-

Table 1 Some common characteristics of research therapy and clinic therapy.

<i>Research therapy</i>	<i>Clinic therapy</i>
Recruited cases (less severe, study volunteers)	Clinic-referred cases (more severe, some coerced into treatment)
Homogeneous groups	Heterogeneous groups
Narrow or single-problem focus	Broad, multiproblem focus
Treatment in lab, school settings	Treatment in clinic, hospital settings
Researchers as therapists	Professional career therapists
Very small caseloads	Very large caseloads
Heavy pretherapy preparation for therapists	Little/light pretherapy preparation for therapists
Preplanned, highly-structured treatment (manualized)	Flexible, adjustable treatment (no treatment manual)
Monitoring of therapist behavior	Little monitoring of therapist behavior
Behavioral methods (e.g., operant, respondent, modeling, CBT)	Nonbehavioral methods (e.g., psychodynamic, eclectic)

Source: Weisz, Donenberg, Han, & Weiss (1995). ("Bridging the gap between laboratory and clinic in child and adolescent psychotherapy," by J. R. Weisz, G. R. Donenberg, S. S. Han, & B. Weiss, 1995, *Journal of Consulting and Clinical Psychology*, 63, pp. 688-701. Copyright 1995 by the American Psychological Association. Reprinted with permission.)

oriented clinics or clinical agencies, not in research settings (e.g., not university labs or public schools), (iii) therapy carried out by practicing clinicians (as opposed to trained research assistants), and (iv) therapy that was part of the usual service provided by the clinic, not a special treatment program designed specifically for research. It was required that the studies involve direct comparison between youngsters who received treatment and a control group receiving no treatment or a placebo intervention.

One of the first lessons learned was this: clinic studies that meet the criteria outlined above are very rare. The author and colleagues had carried out one such study (Weisz & Weiss, 1989), but found only eight others that fit the criteria (Ashcroft, 1971; De Fries, Jenkins, & Williams, 1964; Jacob, Magnussen, & Kemler, 1972; Lehrman, Sirluck, Black, & Glick, 1949; Levitt, Beiser, & Robertson, 1959; Shepherd, Oppenheim, & Mitchell, 1966; Smyrniotis & Kirkby, 1993; Witmer & Keller, 1942), and these spanned 50 years, most having been published many years earlier. Although the studies all

compared treatment and control groups, they used several different methodologies (for details, see Weisz, Donenberg, Han, & Kauneckis, 1995). To facilitate comparison of these nine studies with the meta-analytic findings reviewed above, an ES or ES estimate was computed for each of the nine studies (using, where necessary, estimation procedures described by Smith et al., 1980, and Glass, McGaw, & Smith, 1981). As shown in Figure 4, ES ranged from -0.40 to $+0.29$, with mean ES for the nine clinic studies (0.01) falling well below the mean ES of the four broad-based meta-analyses discussed earlier (0.77). Although these nine clinic studies provide only a very limited sample of clinical treatment, the disappointing findings certainly raise the possibility that outcomes of conventional clinical therapy may be less positive than the outcomes of research therapy.

It is useful to consider these findings in the light of evidence on "continuum of care" or "system of care" programs for children, that is, efforts to link multiple conventional mental health services for children with the services frequently organized and coordinated by individual child case managers (see, e.g., Stroul & Friedman, 1986). In one of the most recent (1995) and most ambitious of these efforts (see, Bickman, 1996; Bickman et al., 1995), the US Army spent \$80 million to provide a continuum-of-care program for children of military personnel at Fort Bragg, NC, and to test the program's cost-effectiveness relative to more typical fragmented services in a matched comparison site. Considerable evidence indicates that the Fort Bragg program did produce a rich array of well-integrated mental health services (see details in Bickman et al., 1995). Indeed, the program was judged by the APA's section on Child Clinical Psychology and Division of Child, Youth, and Family Services Joint Task Force to be

the most comprehensive program to date, integrating many of the approaches demonstrated by other service programs . . . integrated and flexibly constructed, yet comprehensive, [with] services available to be adapted to meet the needs of children and their families, rather than a simplistic application of a single approach. (Roberts, 1994, p. 215)

There is good evidence (see Bickman et al., 1995) that the program produced improved access to treatment, but it also cost more than services in the comparison site: \$7777 per treated child vs. \$4904. Unfortunately, despite the increased access to care and despite the increased costs, the Fort Bragg program produced clinical outcomes that were no better

than those in the matched comparison site. Fort Bragg children received more mental health intervention, at greater cost, but their mental health outcomes were not improved by the increase.

Similar null findings have emerged from other studies designed to alter, link, or improve delivery of conventional clinical services (see, e.g., Evans et al., 1994; Lehman, Postrado, Roth, McNary, & Goldman, 1994). A number of alternative interpretations of such findings may be plausible, but one possible interpretation is that the various treatments that are linked and coordinated in these continua of care are simply not very effective, individually or in combination. In fact, Bickman and colleagues (Bickman, 1996; Bickman et al., 1995) appear to favor such an interpretation, after having tested the major rival interpretations they could identify. Put simply, there is no indication that the individual interventions employed in these various continua of care have been shown to be effective in clinical trials (or approximations thereto); thus, it is possible that the various interventions are simply not very helpful to children. An array of ineffective services may not produce much true benefit regardless of the extent to which they are multiplied, coordinated, or organized into continua of care.

So, the evidence reviewed on representative clinical interventions with children points to two conclusions: Evidence on conventional clinical treatments provides little support for their effectiveness; evidence on effects of integrating conventional interventions into systems of care also shows little evidence of treatment benefit.

5.04.9.2 Research Challenges

The findings on clinic- and community-based interventions suggest useful directions for future research. First, it is clear that we need more information on outcomes of treatment under representative clinical conditions. Research in this genre—known as "effectiveness" studies, as opposed to controlled "efficacy" studies—is difficult but certainly not impossible, as the nine studies cited in Figure 4 demonstrate (for a discussion of the pros and cons of various relevant methods, see Weisz & Weiss, 1993). The base of information on psychotherapy effects in public clinics is quite thin, but the situation is even worse for other treatment contexts. As best as can be determined there is, up to 1997, no methodologically sound treatment-control study of outcomes in such now-common treatment configurations as individual and group private practice and health

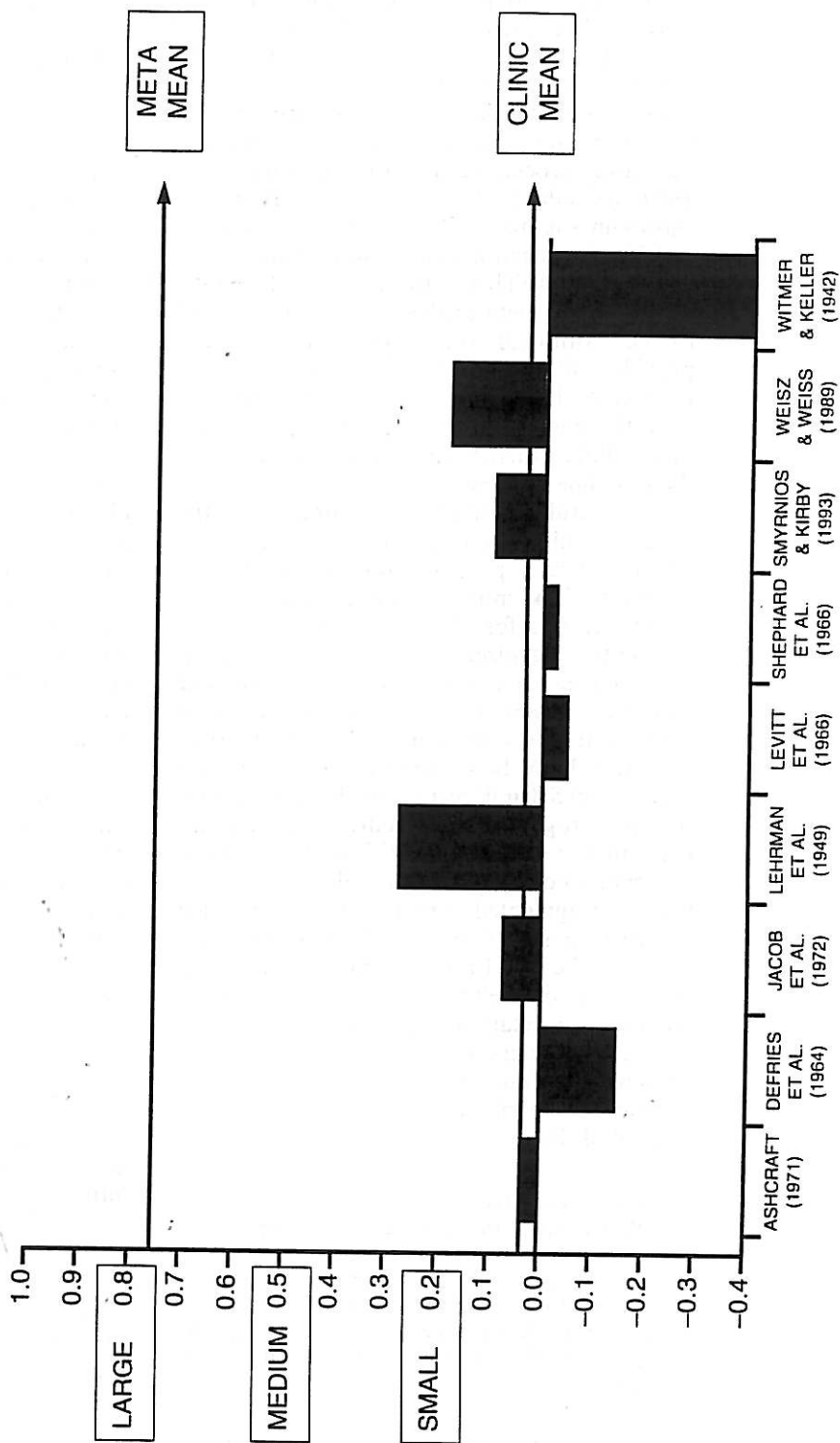


Figure 4 Estimated effect sizes for nine studies of clinic-based psychotherapy with children and adolescents. Horizontal arrows show mean effect size for four broad-based meta-analyses of laboratory outcome studies (top), and averaging across the nine clinic-based studies (bottom). ("Bridging the gap between laboratory and clinic in child and adolescent psychotherapy," by J. R. Weisz, G. R. Donenberg, S. S. Han, and B. Weiss, 1995, *Journal of Consulting and Clinical Psychology*, 63, pp. 688-701. Copyright 1995 by the American Psychological Association. Reprinted with permission.)

maintenance organized (HMOs). Evidence is needed on outcomes in these forms of practice to ascertain how practice effects in the 1990s compare to outcomes of laboratory interventions. Moreover, without such information, there is a lack of baseline data for tracking the impact of potentially critical changes in service patterns, such as the introduction of managed care, or implementation of empirically validated treatments (discussed below).

Second, assuming that further research continues to show poor effects of conventional clinical treatment, it is necessary to identify factors that explain why therapy in clinical trials experiments produces strong positive effects and therapy in clinics does not. The author and colleague have made two attempts to address this issue (Weisz, Donenberg, Han, & Kauneckis, 1995; Weisz, Donenberg, Han, & Weiss, 1995). In both, they used meta-analytic data sets to investigate which, if any, of the factors that distinguish research therapy from clinic therapy (e.g., of those shown in Table 1) might account for significant variance in outcome. In a 1995 effort, using the most complete sample (Weisz, Donenberg, Han, & Weiss, 1995), we examined eight potentially relevant factors (from the list shown in Table 1), and two were found that were significantly related to treatment outcome: First, behavioral treatments were associated with better outcomes than nonbehavioral treatments, and second, analog cases showed better outcomes than clinic-referred children. The first finding suggests the possibility that clinic-based treatment might be more effective if more behavioral treatments were used; nonbehavioral interventions are widely used in clinical practice, and it appears that behavioral therapies are not the first choice of most practitioners (see Kazdin, Siegel, & Bass, 1990). The second finding suggests that even lab-tested treatment methods may be less successful with truly clinic-referred children than with the less disturbed children who are so often the subjects in lab studies. This issue is discussed in the next section.

5.04.10 EXPORTABILITY OF EMPIRICALLY SUPPORTED TREATMENTS

At first, the array of findings presented above might appear to argue for incorporation of empirically supported treatments into clinical practice. The logic would be this: (i) evidence from clinical trials research with children shows positive effects of numerous treatments; (ii) evidence on conventional treatments in clinical

settings shows generally modest-to-negligible effects; thus, (iii) to generate beneficial effects in clinical settings, one should identify those treatments that have been supported in clinical trials and export them to clinics. This logic may be appealing to many who support the efforts of the APA Task Forces (adult and child, see Task Force, 1995) on empirically validated treatments, and the logic may prove to be valid in the long term. However, it may be a mistake to assume that the empirically supported treatments are ready for export. The subjects and treatment conditions involved in tests of the empirically supported treatments tend to differ so much from everyday clinic cases and conditions that it is not clear how workable or effective the supported treatments will be in clinical settings. At the very least, the differences mean that treatment developers cannot simply drop their manuals at the clinic doorstep and assume that beneficial treatment effects will follow.

Table 1 offers several reasons for concern. As one example, the fact that empirically supported treatments have most often been supported with recruited or analog samples rather than referred children may be important. Indeed, in the analysis described above (Weisz, Donenberg, Han, & Weiss, 1995, p. 695) mean ES in even the clinical trials research was found to be significantly lower for studies using clinic-referred children than for those using analog samples. This raises a question as to whether treatments supported in clinical trials with subclinical samples recruited from schools would be equally effective with seriously disturbed children referred to clinics. As a second example, clinical trials studies frequently focus on homogeneous groups, selected for the presence of one or two target problems, and with exclusionary criteria eliminating children who have additional unwanted problems. One cannot be sure that treatments supported with such samples will be equally effective with the heterogeneous groups of multiproblem children frequently seen in clinical practice. As a third example from Table 1, the simple fact that most empirically supported treatments are behavioral (including cognitive-behavioral) may make them difficult to implement in clinics where most of the therapists are strongly psychodynamic, or are unfamiliar with, or even hostile toward, the behavioral perspective.

Beyond the issues suggested by Table 1, numerous practical problems arise. A simple example concerns the number of sessions needed to produce beneficial effects. The author's research in child mental health clinics (Weisz & Weiss, 1989; Weisz, 1996), has found that the average outpatient receives 5-10

sessions. By contrast, most of the manuals used to guide empirically supported treatments require more than a dozen sessions, and these are typically devoted to a single focal problem. Given the specificity of most manuals, children referred for three or four major problems may well be candidates for three or four manuals, each requiring more than 12 sessions. In an era of managed care in the private sector and modest capitated budgets in the public sector, strict session limits are apt to be the rule rather than the exception. Thus, it is fair to ask whether the kinds of manualized treatments that now prevail in the empirical literature can be made to work in clinics with prevailing session limits.

Before manualized treatments derived from the empirical literature are implemented in clinics and clinical training programs, a new genre of treatment outcome research may be needed that involves taking empirically supported treatments out of the laboratories where they were developed and studying them in the crucible of clinical practice. The purpose would be to find out what modifications are needed to make the treatments effective with the clientele, and the real-life constraints, of clinical practice. Several investigators have taken steps in this direction, for example, by treating truly disturbed children in university-based lab clinics (see, e.g., Kendall, 1994; Lovaas, 1987). However, more extensive attempts may be needed to incorporate lab-tested treatments into actual clinical practice, and test their effects, before it can be known just how exportable the experimentally derived treatments are, and what changes will be needed to make them work with seriously disturbed children.

5.04.11 CHILD PSYCHOTHERAPY AND DEVELOPMENTAL PSYCHOLOGY

A third issue that needs attention is the relative isolation of child psychotherapy research from the base of theory and evidence on human development. Despite clear overlap in their populations of interest, and despite their shared emphasis on the study of change, research on developmental psychology and on child psychotherapy have remained surprisingly separate, insular enterprises. Saile et al. (1988) have expressed a similar concern regarding treatments designed to prepare children for medical procedures. In introductions to journal articles on the various child treatments, it is surprisingly unusual to see either theories or empirical findings of developmental psychology cited as a basis for the treatment program. The Results sections of treatment outcome articles are frequently notable for relative inattention to

developmental factors (even age!) that may relate to treatment effects.

One cause of this state of affairs may be the very success these relatively adevelopmental treatment efforts have had in producing positive effects. Such success may foster confidence that one is on the right track, and may thus undermine motivation to seek input from other subdisciplines. But treatment effects, although positive in most studies, might well be improved through closer ties to the study of development. Treatment benefit might well be enhanced to the extent that treatments fit developmental characteristics of the treated individuals; a knowledge of relevant developmental literature should enhance treatment planners' capacity to produce a good fit, and thus to test this notion.

In addition to treatment planning, developmental concerns may be relevant to outcome assessment. Because outcome research provides much of the feedback needed to guide the development and refinement of treatment procedures, outcome researchers may need to consider ways to attune such research to developmental questions, so as to stimulate clinical-developmental cross-pollination. Accordingly, this section addresses developmental issues that bear on both child treatment planning and outcome assessment.

5.04.11.1 Age

Most outcome researchers report the age range and mean for their samples, but few assess the potential moderating effect of age. Indeed, the Kazdin et al. (1990) survey of 223 child treatment outcome studies showed that only 7% examined any child, family, and therapist variables in relation to outcome. Age is one of the most easily accessible child characteristics, and within-study assessment of its moderating effects could be useful heuristically, generating promising developmental hypotheses. Broad-based meta-analyses like those described earlier can address the general relation between sample age and outcome, across studies; but this pooled approach lacks the precision and control of within-study analyses, or even more narrowly focused meta-analyses, such as Durlak et al.'s (1991) meta-analysis of cognitive-behavioral therapy outcome studies, discussed earlier. The Durlak et al. findings suggest the potential importance of testing for a moderating role of age in each individual outcome study. On the other hand, it must also be noted that the age variable is, at best, a rough summary index of multiple, diverse developmental factors—cognitive, social, and contextual—each warranting attention in its own right.

5.04.11.2 Cognitions About the Therapy Process and the Role of the Therapist

Adult clients frequently begin treatment with some understanding of the nature and purpose of psychotherapy and its purpose, and some sense of the therapist's role. Children, by contrast, may have little awareness of what therapy is, what a therapist does, or what their relationship with the therapist should be. The concepts children at various developmental levels apply to the process, the therapist, and the relationship, are apt to reflect their cognitive developmental level, in interaction with their previous relevant experience, which will differ markedly from one child to another. Our field needs basic inquiry into children's cognitions about these concepts, each of which could well influence their response to treatment and their ultimate treatment outcome.

5.04.11.3 Ability to "Decenter"

Piaget (e.g., 1929, 1962) wrote extensively about the development of "decentration," the ability to detach from one's own point of view and perceive objects or events from an alternate perspective. Early work on this theme dealt with visual perception, but the notion was eventually extended to social contexts and the ability to recognize the perspective of others on activities, events, and even oneself. A limited ability to decenter may set limits on the impact of treatments (e.g., cognitive-behavioral, psychodynamic) that involve role-playing or other efforts to help children see events, conditions, and even themselves from the perspective of others. Accordingly, research on this cognitive ability as it relates to child therapy could shed new light on how children respond to various perspective-taking intervention techniques.

5.04.11.4 Language Ability

Developmental variations in ability to encode and decode language may set limits on the success of therapy, particularly when it relies heavily on verbal interaction. Low level encoding skills may limit a child's ability to convey thoughts and feelings to the therapist, and thus limit the therapist's ability to tailor interventions to the child's inner state. As a simple example, both cognitive-behavioral and psychodynamic treatments for anxiety may require young clients to describe their anxious state in terms of both physiological arousal (e.g., "I feel tense, and I have a knot in my stomach") and psychological state (e.g., "It feels like everyone is staring at me; if I make a mistake, they'll think

I'm stupid"). Children who cannot generate such descriptions may not be able to help their therapist understand their anxious states fully enough to design appropriate interventions.

Limited ability to decode therapist comments may also be a problem, limiting how helpful those comments actually can be. Highly scripted, manual-driven therapies that are language-laden may fall outside the range of young clients' capabilities, thus limiting the impact of treatment. Assessment of children's language skills would facilitate detection of such problems.

Finally, considerable research, dating to the work of Piaget (1955/1923) and Vygotsky (1962/1934), points to developmental differences in the ability to use "private speech" or "inner speech" to inhibit or guide behavior (see also Kohlberg, Yaeger, & Hjertholm, 1968; and Zivin, 1979). Piaget and Vygotsky made different predictions about the developmental course of this phenomenon, and subsequent evidence has been equivocal and dependent on the specific type of inner speech involved (see, e.g., Meichenbaum & Goodman, 1979). However, it seems clear that developmental differences in the use of language to guide behavior may well foster differences in responsiveness to those therapies that stress language as a means of self-control. In cognitive-behavioral therapy, for example, children are taught to use "self-talk" to make themselves less impulsive, less anxious, less depressed, less aggressive, and/or more prosocial. Use of self-talk in these ways assumes a well-developed connection between language and action, an assumption that may need to be tested in child outcome research.

5.04.11.5 Comprehension of Concepts or "Lessons" of the Treatment Program

One cognitive phenomenon that cries out for attention in child psychotherapy research is the child's understanding of the conceptual content and central principles of the therapy program. Many child therapies are, in part, educational programs. For example, some treatment programs for depression are designed to teach children the basic components of depression, plus strategies for alleviating depressed mood; and some programs for anxiety try to teach the building blocks of anxiety (e.g., fear, physiological arousal, habitual avoidance, relief that rewards the avoidance), plus specific techniques for promoting exposure to the feared situation. Are there developmental differences in children's acquisition of these concepts and skills, and might such differences influence treatment outcome? For most child therapies, there is too

little relevant evidence to provide an empirically respectable answer. Indeed, one of the most striking limitations of research in this field is the infrequency with which outcome researchers test which "lessons" of their treatment were actually learned. Beyond the value of such information for assessing goodness-of-fit between a treatment program to children at different developmental levels, the information would facilitate assessment of the extent to which grasping the various concepts and lessons is associated with clinical improvement.

5.04.11.6 Abstract Reasoning

Certain kinds of abstract thinking, including hypothetico-deductive reasoning, are consolidated in formal operations, typically in adolescence (Piaget, 1970). Yet some treatment programs for preadolescent children appear to require considerable abstract reasoning. For example, some social skills training programs ask children to generate hypothetical stressful social situations, think of various ways they might respond, envision ways that others might respond to their response, and imagine various possible outcomes of the hypothetical interactions that might ensue. As another example, some therapies for depression require movement from concrete instances to abstract categories when they try to teach children to recognize categories of depressogenic thinking such as overgeneralization and catastrophizing (see examples in Cicchetti, Rogosch, & Toth, in press). Developmentally sensitive investigators could help guide treatment developers, by assessing the extent to which children at various developmental levels can master such seemingly abstract reasoning.

5.04.11.7 Organization and the Orthogenetic Principle

The developmental theorist Heinz Werner (1957) proposed an *orthogenetic principle*, the notion that

wherever development occurs it proceeds from a state of relative globality and lack of differentiation to a state of increasing differentiation, articulation, and hierarchic integration. (p. 126)

This principle overlaps partly with Piaget's (1970) concept of organization, the notion that the developing system integrates cognitive building blocks into an operating structure. In Piaget's view (supported by evidence), even memories of past experience can be reorganized to integrate such experience with newly developed cognitive structures. One implication of these two principles for child treatment re-

searchers is that some of the skills and information taught in a treatment program may be integrated into the developing child's cognitive system over the course of later development, not necessarily within the time frame of the typical child outcome study.

The implications of this notion could be profound. Perhaps, instead of construing child treatment as a direct induction of change, treatment programs should be seen as perturbations planted in the fertile soil of the individual's developing system and destined to interact with that system over time to produce structural changes in the ways the individual processes and responds to experience. Because the nature and timing of this interactive, unfolding process might be strongly influenced by the natural pace of development, our thinking about the objectives and the timing of outcome assessment might also need to be re-examined. Instead of focusing on proximal outcomes induced by their treatment programs alone and seen at the end of those 8–24 week programs, treatment researchers might focus on therapeutic-developmental exchanges, some effects of which might not be measurable until months or even years after treatment termination. Extending outcome research beyond the traditional follow-up periods (which are now rarely longer than six to nine months) might permit detection of slow-blooming changes or "sleeper effects," as the child's developing system integrates the lessons of therapy with other developmental inputs. Of course, extending follow-up assessments would also help researchers detect a falling off of treatment benefit over time, when that occurs.

5.04.11.8 Looking to the Future

This brief sampling of developmental issues suggests that there is much work to be done. Breaking down the traditional insularity of child psychotherapy research and developmental research, though difficult, may be useful to both enterprises. Benefits for those who study child psychotherapy may include richer and more fully informed models of child dysfunction, readiness for treatment, and intervention-to-child fit, and an expanded picture of how outcome assessment may be conducted and employed in the process of treatment development.

5.04.12 RELATION BETWEEN PROCESS AND OUTCOME

A fourth issue that needs attention is the relation between therapy process and outcome.

In Chapter 3, this volume, Stephen Shirk and Robert Russell describe the state of process research in the child area; the present chapter considers a few basic notions relevant to outcome assessment. The most general point concerns the importance of assessing process in relation to outcome. In the absence of process information, broadly construed, information about treatment outcomes is of limited value. When treatment works well, we need to know what processes were involved, so we can repeat them; and when treatment falls, we need to know what to stop doing. Relatively few child outcome studies provide clear measures of the "active ingredients" of their treatments. The typical clinical trial in the child area provides a rather global comparison of a control group to a treatment program involving multiple techniques. Significant global group differences at post-treatment and follow-up are indeed important elements of treatment validation, and for cost-effectiveness probably the most useful first step in treatment development. However, the lack of specificity regarding which elements of the treatment are producing which aspects of client change has led to calls for a more fine-grained analysis of the processes of child psychotherapy that mediate and/or moderate treatment outcome (Kendall & Morris, 1991; Kazdin, 1989), and other aspects of the therapeutic process deserve attention as well. Kazdin et al. (1990) reported that a fourth of their sample of 223 outcome studies varied some therapy components across groups, and only 2% evaluated outcome in relation to treatment processes; this suggests that there is room for growth in research on what factors over the course of the therapy process actually influence change. There are at least four ways of construing such research, each potentially useful.

5.04.12.1 Components of Treatment

In cases where well-replicated effects show a composite treatment program to be effective, a logical next step is to test the effects of various components of the program, in combinations that make sense theoretically and logically. At least two variations on this theme are well-recognized in the field. A dismantling approach involves breaking a program down into components and varying these across groups; an additive approach involves progressive addition of new components, or combining two or more treatments into one. In the Kazdin et al. (1990) analysis of 223 child treatment outcome studies, 26% involved the first approach, to some extent, and 19% involved the second approach. If these numbers seem surprisingly large, it

should be borne in mind that 60% of the Kazdin and co-workers' sample of studies involved comparison of two or more treatments, not necessarily with a no treatment or active control group. Nonetheless, the data suggests that research involving "unpacking" specific treatment components is underway in the child area.

5.04.12.2 Therapist Behavior

A second aspect of therapy process that deserves attention is the behavior and style of the therapist, independent of the specific components of an outline or manual. For example, a good deal of research has focused on therapist directness in communication with clients. In a series of studies, Patterson and his colleagues have noted that therapists' direct instructions to parents of antisocial children to change their parenting style are frequently met with noncompliance in session and resistance to change outside sessions (e.g., Patterson & Chamberlain, 1994; Patterson & Forgatch, 1985). On the other hand, Truax and Wittmer (1973) found evidence that directness by the therapist may have positive effects in confronting defense mechanisms in child therapy. As the findings of these two investigative teams suggest, any one aspect of therapist style or behavior may have differential effects depending on the content and objectives of the treatment; and, of course, therapist style may well interact with client style and personality to shape the ultimate effects. Despite the complexity of the task, and the infinite array of therapist style and behavior dimensions that might be addressed, research on this theme may be well worth the investment of time and intellectual resources it will require. Of all the research discussed in this chapter, it is among the most relevant to the task of training future therapists.

5.04.12.3 Child and Family Behavior

A third dimension of process that requires attention is the behavior of treated children and their families over the course of therapy. Research on this theme is illustrated by the work of Braswell, Kendall, Braith, Carey, and Vye (1985) and Gorin (1993) indicating that positive treatment outcomes are associated with clients' active participation in therapy. Causality is difficult to nail down in such research, and it is certainly possible that such client behavior as active participation may be either a cause of the ultimate treatment benefit, a signal that the treatment is resonating with the client and producing change, or both. But, causality aside, the identification of child and family

behavior during therapy that can predict ultimate outcome can, in principle, provide a much-needed tool for therapists: a means of determining whether the treatment is working or not, and thus whether adjustments are needed, before the entire intervention program has ended.

5.04.12.4 Therapeutic Relationship

The therapeutic relationship, or working alliance, has been construed as involving two interrelated parts: the client's positive emotional connection to the therapist, and a shared conceptualization between the client and therapist of the tasks and goals of therapy (Bordin, 1979). In the adult literature, development of a therapeutic relationship has emerged as a particularly significant process correlate of positive outcome in several studies (Horowitz, Marmar, Weiss, DeWitt, & Rosenbaum, 1984; Luborsky, Crits-Christoph, Mintz, & Auerbach, 1988). Shirk and Saiz (1992) have argued that this process variable may be an even more significant contributor to outcome for children due to the "involuntary client" status of many children at the beginning of therapy, the nonverbal nature of many forms of client-centered and play therapy for children, and the social deficits that are hypothesized to be central in the development and maintenance of many serious child problems (e.g., aggression).

Child process researchers have studied the therapeutic relationship in play therapy (Howe & Silvern, 1981; Truax, Altmann, Wright, & Mitchell, 1973), family therapy (Friedlander, Wildman, Heatherington, & Skowron, 1994; Pinsoff & Catherall, 1986), individual psychodynamic therapy (Shirk & Saiz, 1992), cognitive-behavioral treatment (Kendall, 1994), child behavior therapy (Motta & Lynch, 1990; Motta & Tobin, 1992), and parent training (Webster-Stratton & Herbert, 1993). However, unlike the consistently positive findings in the adult process literature relating the working alliance to therapeutic success, evidence from child psychotherapy has been mixed, with Shirk & Saiz (1992) reporting positive associations between their measures of the therapeutic relationship and outcome in child psychodynamic psychotherapy, and both Kendall (1994) and Motta (Motta & Lynch, 1990; Motta & Tobin, 1992) finding no significant association between relationship quality and outcome with cognitive-behavioral treatment for anxiety and behavioral therapy for learning and disruptive behavior problems, respectively. The lack of agreement across studies is difficult to interpret, given the study-to-study differences in the way therapeutic

relationship is assessed. The field needs a well-validated set of measures for assessing the relationship. Developing such measures for child therapy will be a challenging task. Among the difficulties confronted, two are particularly notable: (i) the complexity of the relationship concepts involved relative to the limited verbal and conceptual facility of many of the children who will be the targets of the assessment; and (ii) the need to encompass not only the child-therapist dyad, but also the parents and possibly additional family members, whose relationship to therapist and child may be critical to the success of treatment.

5.04.13 CHILD AND FAMILY ETHNICITY AND CULTURE

A fifth issue is that of culture and ethnicity in relation to child treatments. In the great majority of child outcome studies, the samples appear to be predominantly Caucasian, although authors have frequently failed to be explicit about sample composition. In the Kazdin et al. (1990) survey of 223 child outcome studies, 80% failed to identify the ethnic composition of their sample. While mere reporting of the relevant numbers is rare, actual tests of ethnicity as a moderator of outcome are even rarer. Some have suggested that treatments tested primarily with mainstream samples may not necessarily be optimal for troubled members of ethnic minority groups (Gibbs & Huang, 1989; Rogler, Malgady, Costantino, & Blumenthal, 1987; Spurlock, 1985; Sue, 1977; Tharp, 1991). The treatments may not, for example, take into account the language, values, customs, child-rearing traditions, expectancies for child and parent behavior, and distinctive stressors and resources associated with different cultural groups. In the treatment setting, such cultural factors may lead to miscommunication and misunderstanding between the therapist and the client and family, thus increasing the likelihood of premature termination and poor treatment outcome (Ho, 1992; Sue & Zane, 1987). Tharp (1991) has also suggested that even the therapy modality requires attention, and that family and group interventions may be more appropriate than individual treatment for many minority youth, and more likely, as well, to generate information for the therapist on cultural issues relevant to the child, family, and community.

The literature on culture and psychotherapy is rich in recommendations for how to treat specific ethnic groups, but poor in controlled empirical assessment on these issues, with most recommendations based on anecdotal and

experiential reports (see Gibbs & Huang, 1989; Ho, 1992). The array of hypotheses now available should provide fertile ground for experimentation in the future. For the present, though, a modest base of evidence is available to suggest trends that bear further study. Weisz, Huey, and Weersing (1996) identified 19 treatment outcome studies (most found in the meta-analytic collections from Weisz et al., 1987 and Weisz, Weiss, et al., 1995) in which the majority of the sample were ethnic minority children or families. A few of the findings of these studies are considered below, and four key questions are raised about treatment outcome and culture that need attention in future research.

5.04.13.1 How Effective are Tested Treatments with Ethnic Minority Children?

In general, children in the 19 studies improved significantly more than children in control conditions. Treatment showed a significant beneficial effect on externalizing problems in 79% of the group comparisons, and for internalizing problems the figure was 86%. On other outcomes, such as self-esteem, social skills, and family functioning, 46% of the comparisons showed significant treatment benefit. These figures appear somewhat more modest than the general trends seen in meta-analyses that apparently included predominantly Caucasian majority samples, but such a comparison is problematic because of numerous study-to-study differences in treated problems, types of treatment, and so forth. Direct comparison is far superior, but only one such comparison was identified in the 19 studies; Henggeler, Melton, and Smith (1992) found that African-American and Caucasian delinquents responded equally well to multisystemic treatment.

5.04.13.2 Is there Evidence of Treatment Type and Ethnic Group Interaction?

In a word, no. But this may be only because no complete test of such an interaction has been carried out. In the author's sample of 19 minority youth outcome studies, one study involved an initial step toward such a test. Szapocznik and colleagues (Szapocznik et al., 1989; Szapocznik, Kurtines, Santisteban, & Rio, 1990) tested the efficacy of structural family therapy (SFT) against individual psychodynamic child therapy (IPCT) with Hispanic families of boys with behavioral and emotional problems. Following treatment, SFT-treated children had fewer behavior

problems than IPCT children, but neither group differed significantly from children in a recreational control condition. At follow up, family functioning improved substantially following SFT relative to IPCT; indeed, with IPCT, family functioning actually worsened over time. The findings seem consistent with Tharp's (1991) contention that family-based therapies are more appropriate than individual treatment for minority children. However, Szapocznik et al. did not include comparison groups of non-Hispanic youth treated with SFT and IPCT. Thus, it appears that the field still awaits a full test of treatment type and ethnicity interaction.

5.04.13.3 Outcomes of Therapist-Client Matching for Ethnicity or Language

Although nine of the 19 studies in the collection involved some attempt at ethnicity and/or language match, none provided a direct test of the impact of the match, for example, by comparing matched and unmatched therapist-child pairs. Hayes, Cunningham, and Robinson (1977) reported that counselor race (African-American vs. Caucasian) did not appear to influence treatment outcomes with test anxiety and poor school motivation among African-American children, but they did not present substantiating analyses. In general, those studies in which some form of matching was carried out did not seem to show notably better success rates than the remainder of the 19. Again, such global comparison across studies lacks the precision of the direct, within-study tests that are most needed to address the "matching" question.

5.04.13.4 Outcomes of Adapting Therapies Specifically for Ethnic Minority Children

Ten of the 19 studies involved some sort of adaptation of the treatment program to cultural characteristics of the minority sample. The adaptations ranged from narrowly focused changes such as depicting minority figures in modeling tasks to such extensive change as essentially designing entire programs for a particular ethnic minority group. The fact that only one of the "unadapted" studies focused on internalizing problems ruled out comparisons on that dimension; however, the percentage of comparisons showing significant positive treatment effects was somewhat higher for externalizing problems (83% vs. 75%) and for problems in the "other" category (57% vs. 33%).

Direct comparisons of adapted and unadapted methods within the same study are difficult to find. A study by Constantino, Malgady, and Rogler (1986) did find that maladjusted Puerto Rican children in a culturally adapted modeling program involving cuento or folklore therapy showed less aggressive behavior following treatment than those in an art/play therapy control condition (APT). However, since APT subjects were even more aggressive than those in the no-therapy (NT) condition, the findings may reflect the ineffectiveness of APT as much as the superiority of cuento therapy. A more robust test of any culture-specific treatment approach would entail comparison with another empirically supported approach (e.g., social skills training for aggression). Where culture-calibrated changes have been made to a standard treatment program, it will be important to carry out direct comparison of outcomes for minority children receiving the altered program vs. outcome for minority children receiving the standard program.

Generalizing across the various themes and questions reviewed above, the state of affairs regarding culture and child psychotherapy can be summarized succinctly: there are intriguing hypotheses and important questions that need attention, but the numerous direct comparisons needed to test the hypotheses and answer the questions are lacking. With concern about culture and mental health growing steadily, it seems likely that the next generation of research will include increased attention to these matters.

5.04.14 CONTEXT SENSITIVITY OF TREATMENTS

A sixth issue arises because the interventions involved in most treatment research are rather removed from the contexts in which children live their lives. Most researchers would agree that children do not develop as solitary beings in a sterile environment, but rather as active participants in complex, multifaceted physical and social systems. Yet most treatment outcome research with children involves interactions with a single therapist, or sometimes with a small group of unfamiliar children, in the sterile environment of the therapist's office or therapy room. Pretherapy assessment and treatment planning typically involve very limited sampling of the child's life circumstances and behavior at home, at school, or with familiar peers. This may limit the capacity of the therapist to fit interventions precisely to conditions and context of the individual child's problems. In the worst cases, the problem may tilt treatment

development in the direction of "one-size-fits-all" or "cookie-cutter" therapies.

Numerous theorists and researchers (e.g., Bronfenbrenner, 1979, 1986; Masten, Best, & Garmezy, 1991) have emphasized the context boundedness of development, and discussed implications for adaptation and dysfunction. Others (e.g., Cicchetti & Toth, in press; Mash & Dozois, 1996) have noted the diverse ways in which the child's contexts and ecological systems can influence the development and expression of dysfunctional behavior and emotional states. Still others (e.g., Forehand, Lautenschlager, Faust, & Graziano, 1986; Kazdin, 1989) have noted that even what parents report (e.g., to assessors and therapists) regarding deviance and dysfunction in their children can be influenced by such diverse factors as parental psychopathology, marital discord, stress in the home, and even an intent to conceal harmful parental practices (e.g., abuse or neglect). Finally, it seems self-evident that the impact of psychotherapy with children may vary depending on the extent to which significant others in the child's contexts (e.g., parents, teachers) are involved and supportive of the process. The power of all the influences noted in this paragraph may be felt disproportionately in childhood, in part because children have such limited ability to select the contexts in which their development unfolds.

The message for treatment planners and treatment outcome researchers is that contextual factors and key individuals in the child's social environment (e.g., parents, teachers, siblings, peers) may need to figure significantly in pretreatment assessment, in treatment planning, in treatment delivery, and in outcome assessment. In general, these steps have only been taken in very limited and tentative ways in child psychotherapy research to date. There are some exceptions to this generalization, however, and noting a few of these may help illustrate what is possible in future child psychotherapy research.

In one approach, Lewinsohn and colleagues (see Lewinsohn, Clarke, Hops, & Andrews, 1990; Lewinsohn, Rohde, Clarke, Hops, & Seeley, 1994; Rohde, Lewinsohn, & Seeley, 1994) have created a parent counterpart to their Adolescent Coping with Depression group intervention. The objective is to promote parental understanding and acceptance of what is being taught to the adolescents, and to reduce family conflict by teaching parents some of the same communication and problem-solving skills their adolescents are learning. In another approach, such investigators as Szapocznik and colleagues (e.g., Szapocznik et al., 1989) treat problem behavior in Hispanic boys by means of

structural family therapy. Webster-Stratton and colleagues (e.g., Webster-Stratton, Kolpac-off, & Hollinsworth, 1988) have developed a self-administered videotape therapy for families with conduct-problem children. Henggeler and colleagues (e.g., Henggeler, Melton, & Smith, 1992; Borduin et al., 1995), in perhaps the most context-sensitive approach yet developed, send therapists into the settings where juvenile offenders live their lives, working with them to develop treatments tailored to the strengths and limitations of their family, school, peer group, and neighborhood. Each of the intervention approaches cited here has shown positive effects relative to control groups, although Lewinsohn and colleagues have not yet found that adding parent training alone to their adolescent intervention improves benefits over and above treatment of adolescents only. Perhaps procedures that delve more deeply into the child's social systems are required to produce benefits greater than those of individually administered interventions.

Moving in the directions illustrated by these research teams certainly will complicate the work of treatment development and outcome assessment. On the other hand, such efforts seem essential if we are to assess the benefits of context-sensitive treatment. We need to find out what can be gained if we push beyond a narrow focus on child characteristics and toward a broader focus on potentiating and inhibiting forces in the social systems within which the child is growing up.

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