Psychotherapy Outcome Research with Children and Adolescents The State of the Art

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1. Introduction

After decades of sowing, weeding, harvesting, and winnowing, workers in the field of child and adolescent treatment research have produced a bumper crop. There are now scores of structured interventions for diverse forms of psychological dysfunction across a broad age spectrum. Researchbased treatments exist for a substantial range of clinically significant problems and disorders. Although a majority of the more than 230 named therapies for youths have not been tested empirically (see Kazdin, 1988; Kazdin & Weisz, 1996), dozens of such therapies have been subjected to empirical scrutiny, with beneficial effects demonstrated in more than 300 studies. In this chapter, we describe the context of child and adolescent treatment and treatment research, summarize findings of that research, and offer a constructive critique. Finally, we suggest a number of issues that need to be addressed, and approaches that need to be taken, to advance the field. Throughout this chapter, we use the term children to encompass both children and adolescents, except where a distinction needs to be drawn between the two age groups.

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2. Prevalence of Child Psychopathology and Use of Psychotherapy

Although disturbed children may differ markedly from one another in patterns of dysfunction, substantial numbers suffer from some kind of significant behavioral, emotional, or mental health problem. Several epidemiological studies in the late 1980s (summarized by Costello, 1989), taken together, suggested that more than 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), and many had multiple disorders; preliminary findings suggest that prevalence rates will be considerably higher for the most recent edition of the diagnostic manual (DSM-IV). Not evident in these rates of formal diagnosis are the many children who do not qualify for diagnosis but have very significant problems and may well need help. Of course, not all disturbed children receive psychotherapy. But the most recent estimates available in the United States indicate that about 2.5 million American children do receive treatment each year (Office of Technology Assessment, 1986). The annual cost is estimated at more than \$1.5 billion (Institute of Medicine, 1989). The dates cited for these statistics reveal a need for more recent data, particularly given the marked changes seen in the U.S. mental health care delivery system (e.g., managed care) in the mid-1990s.

3. Distinctive Features of Child Treatment

Psychotherapy with children bears notable similarities to work with adults, but some important differences warrant attention here—differences that are relevant to our interpretation of the treatment research literature. First, unlike adults, children rarely perceive themselves as "disturbed" or as needing therapy. Thus, most treatment referrals, up until late adolescence, tend to be made by parents, teachers, or other adults, who contract for the therapy, pay the bill, and identify some or all of the goals the therapist is to pursue. The child may or may not participate in identifying target problems or setting treatment goals, or may participate but with less ultimate influence than the adults involved. In a sense, in child therapy, the child is often "the patient," whereas the parent or other adult is "the client." With therapy commissioned by adults, and its goals heavily influenced by adults, it is clear that children may sometimes enter the process with little motivation for treatment or personal change, or at least with different objectives than those shared by the adults involved.

Child therapy also differs from adult therapy in the sources of information used by the therapist to shape the goals and directions of treatment. Given developmental limitations 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 & Weisz, 1996); and levels of agreement among different adult informants reporting on the same child tend to be low (Achenbach, McConaughy, & Howell, 1987). Even where there is no blatant bias or intentional distortion, adult reports of child behavior and adult identification of reasons for referral are both apt to reflect the values, practices, and social ideals of their cultural reference group¹ (see Weisz, McCarty, Eastman, Chaiyasit, & Suwanlert, 1997; Weisz et al., 1988; Weisz & Weiss, 1991).

A third notable difference between adult and child treatment relates to environmental selection. To a much greater extent than adults, children are captives of their externally engineered environments. Thus, the "pathology" the child therapist treats may reside as much in a disturbed environment from which the child cannot escape as in the child's personality. This fact may limit the impact of interventions that focus on the child as solo or primary participant, and it may argue for involvement of others from the child's social context, but of course, 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. This being the case, it cannot simply be assumed that if therapy is effective with adults it is also effective with children; rather, a separate body of treatment outcome research is required. We turn now to that body of research, investigating whether psychological treatment of children is beneficial.

4. Evidence on the Effects of Child Treatment

Evidence on the effects of child treatment comes in several forms. The most widely recognized of these is the clinical trial, an outcome study

¹The picture can grow complex when these values, practices, and social ideals are not shared by others who are involved in the process of therapy (e.g., a therapist and teacher whose culture differs from that of the child and family).

comparing posttreatment adjustment in a group of children who received a candidate intervention to 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 (to follow) and thus constitute most of the evidence discussed in this chapter. However, other approaches to outcome assessment should be noted here. In circumstances where all the children with a particular condition must receive an active treatment, multiple baseline designs, ABAB (sometimes called "reversal") designs, and simultaneous/alternating treatment designs are useful. Such approaches are often used in treatment research with attention-deficit-hyperactivity disordered (ADHD) youth (see, e.g., Pelham et al., 1993), in studies where an entire classroom needs to receive an intervention (see, e.g., Wurtele & Drabman, 1984), and in 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 outcome data that, unfortunately, still await an enterprising reviewer. For now, though, we will focus on the clinical trials research, which has been reviewed rather thoroughly in the form of several meta-analyses, as described here.

4.1. Meta-Analysis: Description, Interpretation, Cautionary Notes

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 technique uses effect size (ES) as the unit of analysis. ES is an index of the size and direction of treatment effects. For most clinical trials, it is the posttreatment mean on some outcome measure for the treated group minus the mean for the control group, with the difference divided by the standard deviation (SD) of the outcome measure. Figure 1 is a guide to interpreting ES values. As the figure indicates, ES values may be positive, indicating treatment benefit; zero, indicating no effect; or negative, indicating a detrimental effect.² 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 0.90 indicates that the average treated child scored better after treatment than 82% of the control group.

²For clarity, we are describing the situation in which positive scores on an outcome measure reflect good adjustment. In the cases where the opposite is true (e.g., where the outcome measure is a symptom count), calculations are typically done in such a way that a positive effect size continues to imply more improvement in the treatment than the control group.

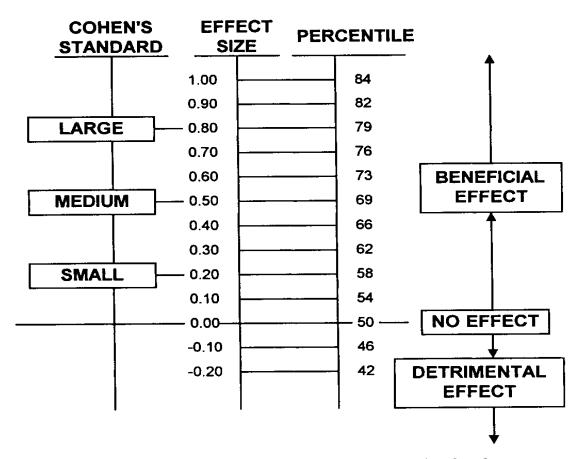


FIGURE 1. An aid to interpreting effect size (ES) statistics. Each ES value corresponds to a specific percentile standing of the average treated child, after treatment, across outcome measures, relative to the untreated group. Reprinted with permission from Weisz, Weiss, Donenberg, Han, and Weiss (1995).

As an aid to interpretation. Cohen's (1988) 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 various outcome measures used, a metaanalyst may compute a single mean ES for each study (or each treatment group) in the collection to be 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 (e.g., in the type of therapy employed, the target problem being treated, or the age or gender of the children involved). The results of such comparisons can suggest promising hypotheses—for example, about direct causes, moderators, and mediators of treatment outcome. Thus, meta-analyses can be useful both descriptively, in summarizing the knowledge base and trends therein, and heuristically, in generating questions and predictions for further study.

Like any technique, however, meta-analysis has limitations, some

warranting attention here. First, the output of meta-analyses must necessarily reflect limitations of the input. As an example, ES means in the child treatment area reflect a limited range of methods, because there are many more studies of behavioral (including cognitive-behavioral) than nonbehavioral treatments. Another limitation is the inevitable confounding among independent variables (e.g., certain target problems tend to be treated with certain methods); such confounding can be addressed partly via eliminating and interaction tests (see, e.g., Weisz, Weiss, Han, Granger, & Morton, 1995c), but the problem can never be completely solved, and this complicates interpretation of findings. More broadly, every metaanalysis requires scores of decisions (e.g., how inclusive to be across studies varying in methodological rigor, which outcome measures to accept, whether to use raw ES or adjust for sample size), any of which may influence the obtained ES values and group means (see relevant findings in a methodological meta-analysis by Weiss & Weisz, 1990). Because no two investigative teams could possibly make all these decisions exactly alike, conclusions of different meta-analyses may differ in part because of differences in meta-analytic method, not just because of substantive differences in study findings. For this reason, convergent findings across separate meta-analyses are particularly useful. With these cautionary notes in place, we now consider findings of meta-analyses in the child area.

4.2. Findings from Meta-Analyses of Child Psychotherapy Research

We know of four published, broad-based child psychotherapy meta-analyses, that is, meta-analyses involving diverse collections of studies, with few limits imposed on the kinds of treated problems or types of intervention that are included. Together, these four meta-analyses encompass more than 300 separate treatment outcome studies. In the first of the four, Casey and Berman (1985) included outcome studies published between 1952 and 1982, involving treatment of children aged 12 and younger. The mean ES was 0.71 for those studies that included treatment—control comparisons; in percentile terms (see our discussion of Figure 1), the average treated child scored better after treatment than 76% of control group children, averaging across outcome measures. In a second meta-analysis, Weisz, Weisz, Alicke, and Klotz (1987) reviewed outcome studies published between 1952 and 1983, involving children aged 4–18. The mean ES was 0.79, indicating that, after treatment, the average treated child was at the 79th percentile of control group peers, across outcome measures.

The third broad-based meta-analysis was carried out by Kazdin, Bass, Ayers, and Rodgers (1990a). It included studies published between 1970 and 1988, with children aged 4–18. For the subset of studies that compared

treatment and no-treatment control groups, the mean ES was 0.88; this indicated that the average treated child scored higher on outcome measures, after treatment, than 81% of the no-treatment comparison group. For studies in the Kazdin et al. collection that involved comparison of treatment groups to active control groups, mean ES was 0.77; the average treated child was functioning better, posttreatment, than 78% of the control group. The fourth broad-based meta-analysis was conducted by Weisz et al. (1995c); it included studies published between 1967 and 1993, involving children aged 2–18. The mean ES was 0.71; this indicated that, after treatment, the average treated child was functioning better than 76% of comparison children in the control groups. (For more detailed descriptions of the procedures and findings of both broad-based and more narrowly focused meta-analyses, see Weisz & Weiss, 1993.)

These four broad-based meta-analyses present a uniformly positive picture. Their mean ES values ranged from 0.71 to 0.84 (0.84 is the estimated overall mean for Kazdin et al., 1990), hovering near Cohen's (1988) threshold of 0.80 for a "large" effect. (Note, however, that recent analyses [in Weisz et al., 1995c] suggests that true population ES means, adjusting for heterogeneity of variance, may be closer to the "medium" level.) Figure 2 shows findings from the four child meta-analyses presented together with the findings of two 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 suggests, mean effects found in child meta-analyses fall within the range of effects found in these two adult meta-analyses. Thus, the evidence suggests that empirically tested child and adolescent treatments may approximate the effects of empirically tested adult treatments.

4.3. Findings of Focused Meta-Analyses

Complementing the broad-based analyses just described, some metaanalysts have addressed rather specific questions by focusing on select subsets of treatment outcome studies. Meta-analyses focused specifically on cognitive-behavioral therapy have found substantial positive effects across a range of target problems (Durlak, Fuhrman, & Lampman, 1991) and on impulsivity considered alone (Baer & Nietzel, 1991). And Dush, Hirt, and Schroeder (1989) found significant positive effects associated with the specific cognitive-behavioral technique of self-statement modification. Two teams (Hazelrigg, Cooper, & Borduin, 1987; Shadish et al., 1993) have found respectable mean effects of family therapy, somewhat higher for measures of individual family members' behavior than for

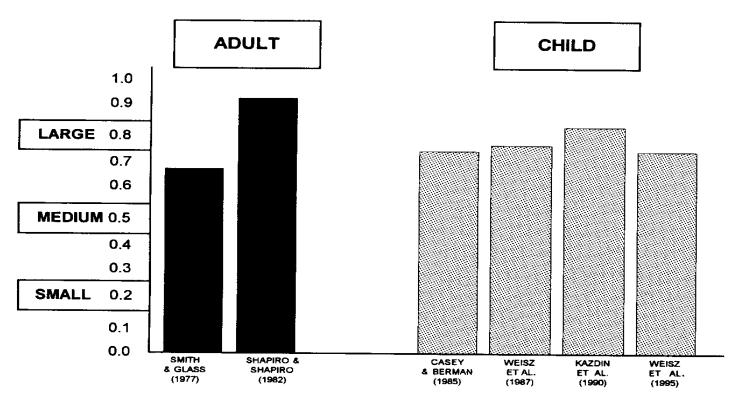


FIGURE 2. Mean effect sizes found in the predominantly adult meta-analysis by Smith and Glass (1977), in the exclusively adult meta-analysis by Shapiro and Shapiro (1982), and in four broad-based meta-analyses of psychotherapy outcome studies with children and adolescents. Reprinted with permission from Weisz, Donenberg, Han, and Weiss (1995).

family interaction measures. Moderate positive effects have been found for interventions used to prepare children for medical and dental procedures (Saile, Burgmeier, & Schmidt, 1988), and for psychotherapeutic interventions administered in school settings (Prout & DeMartino, 1986). Finally, illustrating the range of questions to which meta-analysis may be relevant, Russell, Greenwald, and Shirk (1991) used a sample of treatment studies to test whether child language proficiency improved with psychotherapy; it did, particularly with therapies that emphasized spontaneous verbal interaction.

4.4. A Sampler of Additional Meta-Analytic Findings: Outcome as a Function of Therapy, Therapist, and Child Factors

A potpourri of other meta-analytic findings illustrates both the descriptive summarizing, debate-provoking, and hypothesis-generating/research-provoking potential of the technique. In the two meta-analyses from our lab (Weisz et al., 1987; Weisz et al., 1995c), we found that studies involving behavioral treatments (e.g., behavioral contracting, modeling, cognitive-behavioral therapy) generated 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=.06; Kazdin et al. [1990a] did not address the question.) By contrast, meta-analyses have generally not found that treatment outcomes 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 treatment outcome and age has varied across meta-analyses. However, the meta-analysis involving the most recent collection of studies (Weisz et al., 1995c) found that mean ES was larger for adolescents than for children. Notably, this main effect was qualified by an age x gender interaction (shown in Figure 3): Mean ES for samples of predominantly or exclusively adolescent girls was twice as large as mean ES for adolescent boys and for children of both genders. One possible interpretation might be that adolescent girls are more likely to be treated for internalizing problems than are younger children or adolescent boys; however, we found no reliable difference in mean ES for internalizing versus externalizing problems, and in any event, the age x gender interaction shown in Figure 3 was not qualified by type of treated problem (internalizing vs. externalizing), type of treatment (behavioral vs. non-behavioral), or level of therapist training (professional vs. clinical trainee

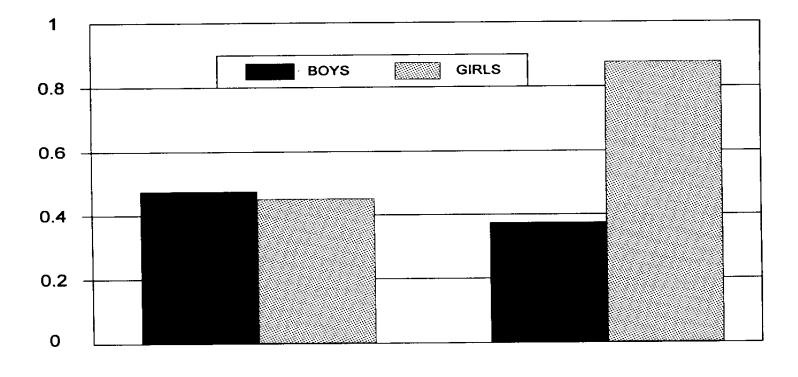


FIGURE 3. Mean effect size for samples of predominantly male and female children (11 years of age and younger) and adolescents (12 years of age and older). Reprinted with permission from Weisz, Weiss, Han, Granger, and Morton (1995).

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vs. paraprofessional). Perhaps there is something about the treatments encompassed in these studies in the 1995 meta-analysis that fits the characteristics and needs of adolescent girls particularly well. If so, we are left to speculate about what that elusive quality may be.

Two additional findings illustrate two additional ways meta-analytic data can be used. First, meta-analysis can be used to assess the holding power of intervention effects. We have found in both our meta-analyses (Weisz et al., 1987; Weisz et al., 1995c) that treatment effects measured immediately after treatment are quite similar to effects measured at follow-up assessments, which average about 6 months after treatment termination. This suggests that treatment benefits tend to be durable, at least within typical follow-up time frames.

A second finding (from Weisz et al., 1995c) concerns the specificity of treatment effects. Obviously, children differ markedly from one another in problem profile, and the various therapies differ from one another in the problems they are designed to address, but do these individual differences actually influence treatment outcome? Some (e.g., Frank, 1973) have argued that psychotherapy has general, "nonspecific" effects (e.g., helping people through such unfocused means as promoting a feeling of being understood, or inducing an expectancy of relief). In an alternative view, therapies help in specific ways, and thus have their most pronounced influence on the specific problems they are designed to address.

influence on the specific problems they are designed to address.

In Weisz et al. (1995c), we addressed this controversy by testing whether effect sizes were larger for the specific problem domains targeted by a treatment than for other, more incidental domains. As an example, we asked whether a treatment designed to reduce anxiety produced bigger changes in anxiety levels than in related but more peripheral problems such as depression. Across multiple comparisons like these, our analyses showed that ES means were about twice as large for the specific problems addressed in treatment as for related problems that were not specifically targeted. This suggests that the tested child psychotherapies are not merely producing global or nonspecific good feelings that influence diverse outcomes equally; instead, the treatments appear to have rather precise, focused effects consistent with the specific changes they were designed to bring about.³

³An alternative perspective on these findings warrants consideration as well. If one focuses on the "nonspecific factor" of *client expectancy*, it might be argued that the findings cut in the other direction; that is, because the domains targeted in treatment may be the most reactive for the client, those outcome domains would be expected to change more than nontargeted domains, given the impact of client expectancy. In summary, the findings support the notion that outcomes are target-problem-specific, but the precise mechanism driving this specificity may continue to be a matter of debate in the field.

To summarize the evidence, meta-analyses of child psychotherapy outcome studies point to positive, durable, and problem-specific 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, significant limitations in conceptualization, sampling, study design, and outcome assessment methodology make research in this area less useful and less edifying than it might otherwise be. We turn our attention now to some of the limitations of child treatment outcome research, and we offer suggestions for future research that we believe could help advance the field.

5. Representativeness of Outcome Research vis-à-vis Clinical Practice

One significant limitation of child psychotherapy outcome research to date is that much of it has been conducted with nonreferred children and under conditions that may have rather limited external validity for clinical practice. Most of the 300-plus studies in the meta-analyses reviewed earlier (especially the recent and behavioral studies) involved samples, treatments, and/or treatment conditions that are not very representative of what typically happens in most clinical practice with referred children. In many of the studies, for example, (1) children were recruited for treatment and were not actual clinic cases; (2) homogeneous samples were selected, with therapy addressing only one focal problem (e.g., a specific phobia) or a narrow range; (3) therapists received extensive pretherapy training and between-session supervision in the specific intervention techniques they would use; and/or (4) the therapy involved more or less exclusive adherence to those specific techniques. In addition, (5) therapy was frequently highly structured, guided by a manual, and/or monitored for adherence to a treatment plan.

These features of the experimental studies tend to coalesce around an abstract category that we (Weisz, Weiss, & Donenberg, 1992) have called research therapy, as distinguished from conventional clinic therapy. Table 1 summarizes some illustrative differences between the two therapy genres. The two are best construed as two poles of a multidimensional continuum; certainly no single feature listed in the table under Research Therapy is present in all laboratory outcome studies, nor is any single feature listed under Clinic Therapy present in all clinic-based treatment. Moreover, we do not intend to imply that either pole is somehow "better" than the other; rather, the two poles reflect characteristics that are driven in part by the rather different objectives and requirements of outcome research and

Table 1
Some Characteristics Frequently Associated with Child Psychotherapy in Outcome Research (Research Therapy) and in Clinics (Clinic Therapy)

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

clinic treatment, respectively. However, differences between child therapy in outcome studies and child therapy in clinics are common enough and substantial enough that it is fair to ask whether the positive outcomes generated in the research therapy studies, and summarized in the previous meta-analyses, are representative of the outcomes achieved in actual clinical practice with children.

5.1. Evidence on the Effects of Child Treatment in Clinical Practice

We sought to find out what outcomes are achieved in clinical practice with children, but we found it difficult to locate much relevant evidence. We conducted a search (described in Weisz, Donenberg, Han, & Weiss, 1995b) for published outcome studies that focused on what might fairly be called "clinic therapy." The search aimed for studies that involved (1) treatment of clinic-referred (i.e., not "analog" or recruited) youngsters; (2) treatment in service-oriented clinics or clinical agencies, not in research settings (e.g., not public schools or university labs); (3) therapy carried out by practicing clinicians (as opposed to trained research assistants); and (4) therapy that was part of the regular service provided by the clinic, not a treatment program designed specifically for research. For inclusion, we required that the studies involve direct comparison between youngsters who received treatment and a control group who received no treatment or a placebo condition.

Clinic studies that met the criteria outlined here proved to be very

rare. We had done one study that met the criteria (Weisz & Weiss, 1989), but we found only eight others (spanning a period of 50 years) that seemed to fit; most of these had been published many years earlier. The studies all compared treatment and control groups, but via several different methodologies (for details, see Weisz, Donenberg, Han, & Kauneckis, 1995a). To facilitate comparison of findings from these nine studies with the meta-analytic findings, we computed an ES or ES estimate for each of the nine studies (for studies that did not report the statistics needed for standard ES calculation, we used estimation procedures described by Smith et al., 1980, and Glass, McGaw, & Smith, 1981). As shown in Figure 4, ES values 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). This certainly points to outcomes of clinic therapy that were less positive than the outcomes of research therapy, at least for the pool of studies we have identified.

These findings are complemented by recent evidence on "system of care" or "continuum of care" programs for children, that is, efforts to provide an array of conventional mental health services to children, often with the services organized and coordinated by a case manager (see, e.g.,

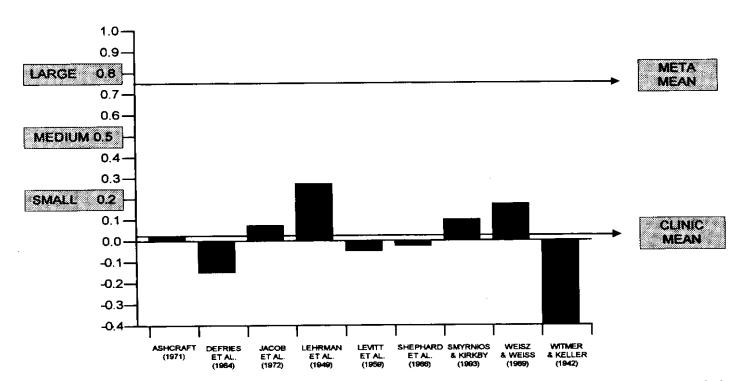


FIGURE 4. Estimated effect sizes for nine studies of clinic-based psychotherapy with children and adolescents. Horizontal arrows show mean effect size for four broad-based meta-analyses of laboratory outcome studies (top), and averaging across the nine clinic-based studies (bottom). Reprinted with permission from Weisz, Weiss, Donenberg, Han, and Weiss (1995).

Stroul & Friedman, 1986). In one of the most recent and ambitious of these efforts, the Fort Bragg Project (see Bickman, 1996; Bickman et al., 1995), the U.S. Army spent \$80 million to provide an organized continuum of mental health care for children in the Ft. Bragg (North Carolina) catchment area, and to test its cost effectiveness relative to the more typical fragmented services in a matched comparison site. The Fort Bragg program apparently did produce well-integrated services. It was judged by the American Psychological Association's section on Child Clinical Psychology and the 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 better access to treatment and higher levels of client satisfaction; the program also cost a good deal more than services in the comparison site. Unfortunately, clinical and functional outcomes were no better among Fort Bragg children than among children in the comparison site. Fort Bragg children received more mental health intervention at greater cost, but their outcomes were not improved by the increased intensity and cost.

Rather similar findings have emerged from other studies designed to modify, link, or otherwise improve delivery of conventional clinical services (see, e.g., Evans et al., 1994; Lehman, Postrado, Toth, McNary, & Goldman, 1994). Certainly, a number of alternative interpretations of these null findings may be plausible, but one interpretation that must be considered is this: The various treatments that are linked and coordinated within these continua of care may simply not be very effective, individually or in combination (see Weisz, Han, & Valeri, 1997). Because there is no indication that the individual interventions employed in these various continua of care have been tested empirically and shown to be effective, it is possible that the various interventions are simply not very helpful to children. By extension, it is also possible that a broad array of relatively ineffective services will not produce much true benefit, regardless of the extent to which they are multiplied and organized into continua or systems of care, and regardless of whether they are coordinated by case managers.

To summarize findings on representative clinical interventions with children, (1) the limited evidence on conventional clinical treatments provides little support for their effectiveness, and (2) the modest number of available studies on effects of integrating conventional interventions into

systems or continua of care also shows little evidence of treatment benefit. These conclusions may certainly be reversed or otherwise modified by future research findings. But the findings to date offer little support for the effectiveness of conventional clinical intervention for young people.

5.2. Directions for Future Research

The research findings on community- and clinic-based interventions suggest a number of useful directions for future research. First, we certainly need a richer base of information than is currently available on outcomes of treatment under representative clinical conditions. Research on this question is difficult but certainly not impossible to carry out, as the nine studies shown in Figure 4 demonstrate (for a discussion of the pros and cons of various methods, see Weisz & Weiss, 1993). Our base of information on psychotherapy effects in public clinics is obviously quite thin, but the situation is even worse for other treatment contexts. For example, as best we can determine, there is currently no methodologically sound investigation of treatment effects in such now-common treatment configurations as group and individual private practice and health maintenance organizations (HMOs). We need evidence on the child outcomes generated by these forms of practice if we are to know how outcomes across the range of today's clinic therapies compare to the outcomes of laboratory interventions. Moreover, without such information, we will lack the kind of baseline data needed to assess the impact of significant changes in clinical practice conditions—for example, such changes as the implementation of empirically validated treatments (to follow) or even the introduction of managed care.

If further research on conventional clinical treatment continues to show rather poor effects, we will also need research to identify factors that account for the difference between the strong positive effects of therapy in lab studies and the weak effects in clinical settings. We have made two attempts to address this issue (Weisz et al., 1995a; Weisz et al., 1995b). In both, we used our meta-analytic data sets to assess which, if any, of the factors that distinguish research therapy from clinic therapy (e.g., of those shown in Table 1) might account for substantial variance in treatment outcome. In our most recent effort, using our most compete sample (Weisz et al., 1995b), we examined eight potentially relevant factors and we found two that were significantly related to treatment outcome: (1) Behavioral treatments generated better outcomes than nonbehavioral treatments, and (2) analog cases had better outcomes than clinic-referred children. The first finding suggests the possibility that effects of clinic treatment might be

enhanced if more behavioral treatments were used in those settings; recent evidence does indicate that behavioral treatments are not the first choice of most practitioners (see Kazdin, Siegel, & Bass, 1990b), and this suggests that such therapies may not be used as frequently as nonbehavioral approaches. The second finding suggests that even the lab-tested treatment methods may be less successful in treating truly clinic-referred children than in treating the less disturbed children who are so often the subjects in lab studies. This, in turn, suggests that one reason clinical practice outcomes may be less positive than research therapy outcomes is simply that the clients referred to clinics are more difficult to treat.

A third useful direction for future research is relevant to the current emphasis on moving empirically supported treatments into clinical practice and clinical training programs (Chambless et al., 1996; Task Force, 1995). At first blush, it would seem that the array of findings presented earlier points to a clear need to emphasize empirically supported treatments in clinical practice. The logic is simple: (1) Evidence from clinical trials research with children, as summarized in meta-analyses, shows that the treatments represented in this literature generally produce positive effects; (2) research on conventional treatments in clinical settings has shown little evidence of positive effects; thus, (3) to generate beneficial effects in clinical settings, we should identify those treatments that have been supported in clinical trials and export them to clinics. This logic may prove to be sound in the long term; however, it may be a mistake to assume that the empirically supported treatments are ready for immediate export. The problem is that the subjects and treatment conditions involved in

The problem is that 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 entirely clear how workable or effective the supported treatments will be in practicing clinics. Some of the relevant differences are those noted earlier, in our discussion of Table 1. For example, consider the samples frequently employed in clinical trials research. We cannot be certain that treatments supported in clinical trials studies with subclinical samples recruited from schools will be equally effective with seriously disturbed children referred to clinics. Indeed, in a recent analysis (Weisz et al., 1995b, p.695), we found that mean ES in even the clinical trials research was significantly lower for studies using clinic-referred children than for those using analog samples. 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 applied to exclude children who have additional unwanted problems. We cannot be sure that treatments supported with such samples will be equally effective with the heterogeneous groups of multiproblem children frequently seen in everyday clinical practice.

What these concerns suggest is that before manualized treatments from the empirical literature are implemented in our clinics and clinical training programs, we may need a new genre of treatment outcome research. This research would involve taking empirically supported treatments out of the laboratories where they were developed and experimenting with them in the crucible of clinical practice. The idea would be to find out what modifications are needed to make the treatments effective with the clientele, and under 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 clinical practice, and test their effects, before we can know (1) what changes will be needed to make these treatments work with seriously disturbed children, and (2) what steps must be taken for the treatments to operate within the policy and personnel parameters of most clinics.

6. Assessment of Therapy Process in Clinical Practice

To the extent that we begin to focus outcome research on treatment by practitioners in clinical settings with referred children, we are apt to need a much richer armamentarium than is now available to assess the processes that may account for outcome. When treatment works well, we need to know what therapy processes were involved, so we can repeat them and build on them; and when treatment fails, we need to know what to *stop* doing. This is especially important—but especially difficult methodologically—in research on nonmanualized treatments in conventional clinical practice. By contrast, structured interventions frequently involve detailed accounts of the treatment techniques used by therapists, but even those treatment studies that involve structured, manual-driven interventions rarely include efforts to determine what particular aspects of therapy were the "active ingredients" of treatment.

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 posttreatment 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 influence treatment outcome (Kazdin & Weisz, in press; Kendall & Morris,

1991). Kazdin et al. (1990a) reported that one-fourth of their sample of 223 outcome studies varied some technique components across groups, and only 2% evaluated outcome in relation to treatment processes, such as the therapeutic relationship; this suggests that there is room for growth in research on what therapist, client, and relationship factors over the course of the therapy process actually influence change. There are at least four ways of construing such research.

6.1. Treatment Components

Wherever well-replicated effects indicate that a treatment program is effective, a logical next step is to test the effects of various program components, in combinations that make sense logically and theoretically. At least two variations on this theme are well recognized in the field. A dismantling approach involves breaking a program down into technique 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. (1990a) 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 et al. sample of studies involved comparison of two or more treatments, not necessarily with a no-treatment or active control group. So, the data suggest that research involving "unpacking" specific treatment components is underway in the child area, but that much work remains to be done.

6.2. Therapist Behavior during Treatment

A second dimension of therapy process that deserves scrutiny 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, with a similar sample of delinquent children, Truax and Wittmer (1973) found evidence that directness by the therapist may have positive effects in confronting defense mechanisms in psychodynamic 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 treat-

ment, 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, this is perhaps the most relevant to the task of therapist training. Many directors of training programs for clinical psychologists and child psychiatry fellows would, no doubt, agree that we have a great deal to learn about this task.

6.3. Child and Family Behavior during Treatment

A third aspect of the treatment 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 Gorin (1993) and Braswell, Kendall, Braith, Carey, and Vye (1985) indicating that positive treatment outcomes are associated with clients' active on-task participation in therapy. Braswell et al. sampled therapist and child behavior from several sessions of cognitive-behavioral, behavioral, and attention-control treatment of impulsivity and attentional problems. Across groups, measures of child involvement, as indexed by child requests for information, clarification, or elaboration of the task at hand, were significantly related to positive outcome. Therapists' attempts to foster child involvement through eliciting feedback, encouraging children's performance, and correcting mistakes, were also related to outcome. Self-disclosure and non-task-related verbalization (i.e., off-task involvement) were not related to outcome.

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—before the entire intervention program has ended—whether the treatment is working or not, and thus whether adjustments are needed.

6.4. The Therapeutic Relationship

The fourth dimension is perhaps the most elusive but possibly also the most important. The therapeutic relationship, or working alliance, has been construed as involving two interrelated parts: (1) the client's positive emotional connection to the therapist and (2) 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, & Aurerbach, 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). But only a few studies have examined the therapeutic relationship in the context of child treatment.

Researchers in the child area 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 Truax et al. (1973) reporting positive associations between their measures of the therapeutic relationship and outcome in child psychodynamic psychotherapy, and both Kendall (1994) and Motta and Lynch (1990) 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 has been operationalized and assessed, and in the types of therapy to which these varied assessments have been applied. Table 2 summarizes some of the variations across studies.

Early assessment of the therapeutic relationship focused on evaluating therapist-generated conditions of empathy, warmth, and genuineness by coding therapist behavior *in vivo*, as observed live or on therapy tapes. Little attention was given to the child client's perception of these or other therapist behaviors, or to direct assessment of the reciprocal therapeutic relationship. The majority of these studies also focused on a single type of treatment (nondirective play therapy), involved small numbers of therapists and children, and did not evaluate the association between the

TABLE 2
anist Studies of Child Psychotherapy Process

Assessment of Therap	Assessment of Therapeutic Relationship/I herapist Style in Various Studies of Unital Esycholiterupy Floress	Style in Various Si	uates of Unita Fsych	unerupy rivess
Study	Category	Method	Respondents/ coding targets	Type of treatment
Kendall (1994)	Relationship	Questionnaire	Child Parent Family members	Cognitive-behavioral
Motta & Lynch (1990)	Relationship	Questionnaire		Behavioral
Pinsoff & Catherall (1986)	Relationship	Questionnaire		Family
Shirk & Saiz (1992)	Relationship	Questionnaire	Therapist, child	Psychodynamic-eclectic
Smith-Acuna et al. (1991)	Affect, warmth, and	Questionnaire	Therapist, child	Psychodynamic
Mook (1982) Moustakas & Schalock (1955)	Empathy and respect "Being there" empathy "Reing there" empathy	Coding system Coding system Coding system	Therapist Therapist Therapist	Rogerian-psychodynamic Nondirective play Nondirective play
Siegel (1972) Truax et al. (1973) Wright et al. (1972)	Warmth, genuineness	Coding system	Therapist	Nondirective play
	Warmth, genuineness	Coding system	Therapist	Psychodynamic-eclectic
	Warmth, genuineness	Coding system	Therapist	Psychodynamic-eclectic

therapeutic relationship and treatment outcome (Truax et al., 1973, is an exception to this generalization). More recent research has taken a different approach emphasizing the development and application of questionnaires designed to assess the perception of the therapeutic relationship by key players in the treatment process. However, various investigators have differed in their choices of the key players on which to focus (i.e., child vs. parent vs. therapist), the length and comprehensiveness of their scales (e.g., 7 items for Shirk & Saiz [1992] vs. 32 items for one subscale of the Smith-Acuna, Durlak, & Kaspar [1991] scale), and typical item content (e.g., "How important were the therapist's personal qualities such as warmth, sincerity, genuineness, or ability to relate, in the treatment?" [Motta & Lynch, 1990] vs. "I wish my therapist would leave me alone" [Shirk & Saiz, 1992]).

To untangle the different effects of the therapeutic relationship reported across studies, our 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: (1) 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 (2) the need to encompass not only the child-therapist dyad, but also various family members whose relationship to therapist and child may be critical to the success of treatment. It is clear that studying this elusive entity known as the therapeutic relationship will be a challenging task, but the rewards of success may be very significant.

7. Ethnicity and Culture of Treated Children and Their Families

Another issue that has remained relatively unaddressed in research on child treatments is that of ethnicity and culture. In most child outcome studies, the samples are probably predominantly Caucasian, but authors have frequently failed to specify sample composition. In the Kazdin et al. (1990a) 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 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 therapy modality requires attention, and that family and group interventions may be more appropriate than individual treatment for many minority youth. Such interventions, Tharp suggests, may also generate information on cultural issues relevant to the child, family, and community—information the therapist can use in adjusting and focusing the treatment.

The published literature on culture and psychotherapy is rich in recommendations for how to treat specific ethnic groups but relatively poor in controlled empirical assessment. Most of the recommendations appear to be 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 suggests trends that bear further study. We identified this evidence through the following search procedures: (1)We reviewed the Method section of all the articles included in our two broad-based meta-analyses of child treatment outcome studies (Weisz et al., 1987; Weisz et al., 1995c); (2) we carried out a Psychinfo search using the keywords therapy, treatment, child(ren), adolescent(s), minority, ethnic, black(s), African American(s), Hispanic(s), Latino(s), and Asian(s): and (3) we searched reference trails from the studies identified, and from several review papers on the subject of ethnicity and child treatment. Through this process, we identified 19 treatment outcome studies in which the majority of the sample were ethnic minority children or families. The studies are briefly characterized in Table 3. Here we consider a few of the findings of these studies, and we note four key questions about treatment outcome and culture that need attention in future studies.

7.1. Effectiveness of Treatments with Ethnic Minority Children

As shown in Table 3, treated children in the 19 studies with large minority samples tended to improve more than children in control conditions, although the extent of improvement appears to vary somewhat with problem type. As summarized in Table 4, treatment showed a significant beneficial effect in 79% of the group comparisons with externalizing problems, 75% with internalizing problems, and only 43% with other problems (e.g., social skills, family functioning). The magnitude of improvement is

TABLE 3 Outcomes of Controlled Treatment Studies with Predominantly Minority Samples of Children and Adolescents

	Mean	Percentage		Culturally adjusted	Improvement on externalizing	Improvement on internalizing	Improvement on other
Study	Modality	ethnic minority	Control group	component?	problems?	problems?	problems?
Block (1978)	Rational-emotive education	100% black and Hispanic	No treatment	No	Yes		
Costantino, Malgady, & Rogler (1986)	Cuento therapy. A modeling therapy utilizing folktales with moral lescons	100% Puerto Rican	No treatment and art/play therapy	Hispanic, bilingual therapists. Cuento (folk- tales) rooted	No (vs. no treatment) Yes (vs. art/ play therapy)	Yes	No (self- concept of competence)
Dirbow	Comitive.	70% Har Joeld %07	A Hondion (m)	Rican culture	>		;
Huesmann, & Eron (1987)	behavior therapy	70% black and Hispanic	Attention/ play condition	0	Yes	1	No (prosocial behavior)
Fling & Black (1984/1985)	Relaxation training with covert rehearsal	55% with "Spanish surnames"	Waiting list	N _o	No	ı	No (self-esteem, tension, academic
Forman (1980)	Cognitive restructuring/ Response cost treatment	89% black	Attention only	$ m N_{o}$	Yes/yes	1	
Guerra & Slaby (1990)	Cognitive mediation training	60% ethnic minorities (mostly black and Hispanic)	Attention only and no treatment	No	Yes	I	Yes (social problem-solving skills)
Hayes, Cunningham, & Robinson (1977)	Child behavior management/ Role playing with modeling treatment	100% black	No treatment	50% of counselors black	1	Yes/no	Yes/No (motivation toward school, self- esteem)

Yes (rearrests, recidivism, incarceration rate, family cohesion)	Yes (warmth, affection and aggressive verbalizations in family interactions)	Yes (hostile judgements) No (prosocial behavior and academic performance)	• 1	İ	(continued)	\\
N _o	Yes	1	I	Yes	1	
Yes	Yes	Yes	Yes	l	Yes	
33% of therapists black	No	Both interventionists black	All therapists black. Made unspecified adaptations for cultural differences	Modeling film depicted black males per- forming tasks	No	
"Usual" treatment through youth services	"Usual" treatment through youth services	Attention only and no treatment	Discussion groups	Attention only	No treatment	
66% black	65% black	100% black	100% black	100% black	53% black	
Multisystemic therapy	Multisystemic therapy	Attributional intervention	Assertive training	Modeling with participation treatment	Cognitive behavior treatment	
Henggeler, Melton & Smith (1992)	Henggeler et al. (1986)	Hudley & Graham (1993)	Huey & Rank (1984)	Lewis (1974)	Lockman, Burch, Curry, & Lampron (1984)	

TABLE 3 (Continued)

•							
	:	Percentage		Culturally adjusted	on on externalizing	on on internalizing	Improvement on other
	Modality	ethnic minority	Control group	component?	problems?	problems?	problems?
algady, Rogler, & Costantino	Hero/Heroine therapy. A modeling	100% Puerto Rican	Attention only	All therapists Puerto Rican. Folktales		Yes	Yes (Puerto Rican identity)
	therapy using folktales with moral lessons.			rooted in Puerto Rican culture			ζ.
Niles (1986)	Problem solving of moral dilemmas treatment	"Primarily" black and Hispanic	No treatment and noninter- active values clarification	No	No	1	Yes (moral maturity)
Ä		1 1 1 707 7	condition	,			
(1985)	Adlerian counseling	64% black	Attention only	o N	I	1	No (total problems) Yes (insight ratings)
herer, Brondino, Henggeler,	Multisystemic therapy	78% black	"Usual" services through youth services	50% of therapists black. Active efforts to	Yes	Yes	Yes (parental monitoring)
·sz				ensure racially mixed treat- ment teams			
Strayhorn & Weidman (1989)	Child behavior management	64% Black, 6% other nonwhite	Minimal attention only	All interventionists black	Yes	Yes	Yes (parenting behavior)
Szcapocznik et al. (1989)	Structural family therapy/ psychodynamic play therapy	100% Hispanic (80% Cuban, 20% other Hispanic)	Recreational activities only	community All therapists bilingual, Hispanic	I	1	No/no (total behavior); yes/no (family

Table 4
Percentage of Studies Showing Improvement in Externalizing,
Internalizing, and Other Problems, by Presence or Absence
of a Culturally Adjusted Treatment Component

	Culturally adjusted component	No culturally adjusted component	Total
Number of studies	10	9	19
Proportion reporting improvement in externalizing problems	5/6 = 83% (1 mixed outcome)	6/8 = 75%	11/14 = 79%
Proportion reporting improvement in internalizing problems	5/7 = 71% (1 mixed outcome)	1/1 = 100%	6/8 = 75%
Proportion reporting improvement in other problems	4/8 = 50% (3 mixed outcomes)	2/6 = 33% (2 mixed outcomes)	6/14 = 43%

difficult to compare to that seen in meta-analyses cited earlier because of numerous study-to-study differences in specific treated problems, types of treatment, and so on. Direct within-study 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. In general, our initial look at the question does *not* suggest that structured treatments are *in*effective with samples that include large proportions of minority youth.

7.2. Differential Effectiveness of Various Treatments with Different Ethnic Groups

Another potentially important question is whether outcome is influenced by treatment type *x* ethnic group interactions. However, we find little research bearing on the question. In our sample of 19 outcome studies, only one 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) and 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 had improved substantially following SFT and had actually worsened following IPCT. 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. (1989) did not include comparison groups of non-Hispanic youth treated with SFT and IPCT. So, as best we can determine, our field still awaits a fully developed test of interactions between ethnicity and treatment type.

7.3. Impact of Matching Therapist and Client on Ethnicity

Are outcomes enhanced when therapist and treated child are matched for ethnicity? No definite answer emerges from the studies we have found. 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 (e.g., by comparing matched and unmatched therapist-child pairs). Hayes, Cunningham, and Robinson (1977) did report that counselor race (African American vs. Caucasian) did not appear to influence target outcomes of test anxiety and poor school motivation among African-American children, but they did not report substantiating analyses. In general, the nine studies in which some form of matching was reported appear to show only slightly better success rates than the remaining 10 studies. Rates of significant improvement in the matching versus nonmatching studies were 83% versus 75% for externalizing problems and 50% versus 33% for other problems (only one "unadjusted" study included any internalizing problem outcome measure, so we do not report the comparison here, but see Table 4 for data). Again, we must note that such global comparison across studies lacks the precision of the direct, within-study tests that are most needed to address the "matching" question. Moreover, in most of the studies, ethnicity matching is confounded with other efforts to adjust treatments to fit minority youth, and this brings us to a related issue.

7.4. Impact of Adapting Therapies to Fit Ethnic Minority Children

Perhaps the most overarching issue related to ethnicity and child treatment is that of whether standard therapies may be administered in standard ways to minority youth, or whether outcomes are improved by adapting the therapies to relevant group characteristics. Relevant to this question, we found that 10 of the 19 studies involved some sort of treatment adaptation designed to fit cultural characteristics of the minority sample. The adaptations ranged from narrowly focused changes, such as depicting minority figures in modeling tasks, to such pervasive change as redesigning entire programs for a particular 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 slightly higher for externalizing problems (83% vs. 75%) and for problems in the "other" category (50% vs. 33%). For reasons noted here, such comparisons are suggestive at best. Much to be preferred are direct comparisons of adapted and unadapted methods within the same study, but such comparisons are difficult to find. One study, by Costantino, Malgady, and Rogler (1986) did find that maladjusted Puerto Rican children in a culturally adapted modeling program involving Cuento or Folklore Therapy were less aggressive 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 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). In future research, wherever culturelinked 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 versus outcomes for minority children receiving the standard program. Without such comparisons, clear conclusions may continue to elude us.

To summarize, the state of affairs regarding culture and child psychotherapy is this: We have intriguing hypotheses and important questions that need attention, but thus far we lack the numerous direct comparisons needed to test the hypotheses and answer the questions. With concern about culture and mental health in our society growing steadily, the situation is likely to improve in the years ahead. As the volume of relevant research increases, we hope the agenda will include the four themes we have identified here.

8. Sensitivity of Child Treatments to Social and Family Contexts

Most treatment research with children can be faulted not only for relative inattention to ethnicity and culture but also for a failure to link treatments closely to the contexts in which children live their lives. Most of us would agree that children do not develop as solitary beings in a sterile environment, but rather as active participants in complex physical and social systems. Yet most treatment research with children involves interactions with a single therapist, or sometimes with a small group of un-

familiar 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, and limited application of treatment-related gains to life in those settings. This may limit the capacity of the therapist to fit interventions precisely to the conditions and context of the individual child's problems. In some cases, the problem may tilt treatment development in the direction of "one-size-fits-all" or "cookie-cutter" therapies. In other cases, therapists may try to adjust aspects of their work to fit the child's situation but lack the information needed to do so precisely and effectively.

Some of our most valued theorists and researchers (e.g., Bronfenbrenner, 1979, 1986; Masten, Best, & Garmezy, 1991) have emphasized the context-boundedness of development and discussed implications for child adaptation and dysfunction. Others (e.g., Cicchetti & Toth, 1997; 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, because, as we noted earlier, children have so little freedom to select their own contexts.

The pervasive power of environmental forces in the lives of children suggests an important message for treatment planners and treatment outcome researchers: 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 even 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. Noting a few of these may help illustrate what is possible in future child psychotherapy research, and why such steps may have value.

As one example, 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 the intervention, and to reduce family conflict by teaching parents the kinds of communication and problem-solving skills their adolescents are learning. In a related approach, Barrett, Dadds, and Rapee (1996) have added a Family Management program to a standard child anxiety treatment (from Kendall, 1994), with the intent of helping parents and children to work as a team in managing anxiety and rewarding successful coping. In another program, addressing a variety of child problems, Szapocznik and colleagues (e.g., Szapocznik et al., 1989) treat Hispanic boys by means of structural family therapy. Webster-Stratton and colleagues (e.g., Webster-Stratton, Kolpacoff, & Hollinsworth, 1988) have developed a self-administered videotape therapy for families with conduct-problem children. And Henggeler and colleagues (e.g., Henggeler & Borduin, 1990; Henggeler et al., 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 groups, and neighborhood. Each of the intervention approaches cited here has shown positive effects relative to control groups. Although Lewinsohn and colleagues did not find that adding parent training alone to their adolescent intervention led to greater reductions in depression than their basic program, Barrett et al. (1996) found that adding a family component led to several significant improvements over and above the basic individual child treatment program for anxiety. As these examples suggest, there are numerous ways environment can be included in treatment, and without the loss of basic structure and even manualization.

Treatment researchers who move in the directions illustrated by these research teams will certainly find that their work has grown more complex. This may well be true at every level of the process, from treatment planning to outcome assessment. On the other hand, such efforts may be essential if we are ever to gauge the impact of making treatments fit the contexts in which children are developing. In our view, there is a real need to learn 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 child's social systems.

9. Enriching Research Design in Treatment-Outcome Research

Beyond the substantive issues discussed earlier, there are many ways that child treatment outcome research can be strengthened at the level of research design. Some of the elements are implicit within suggestions

Table 5 Steps toward Enriched Child Treatment Outcome Research

- 1. Explication and tests of conceptual basis for treatment
 - · Hypothesized causal, maintaining, and exacerbating factors
 - Hypothesized mechanisms by which treatment addresses these factors
 - Tests of the hypothesized mechanisms vis-à-vis outcome
- 2. Tests of other potential mediators of treatment-outcome relation
 - Comprehension of the "lessons" of treatment
 - Therapy "process" factors (e.g., therapeutic bond, alliance, etc.)
 - Out-of-therapy processes (e.g., parent and/or peer support)
- 3. Tests of potential outcome moderators
 - Child demographic factors (e.g., age, gender, ethnictiy)
 - Context factors (e.g., family composition, school support)
 - Clinical/personality factors (e.g., comorbid conditions, motivation)
- 4. Expanded outcome assessment
 - Broader range of measures (e.g., child symptoms, functioning, satisfaction with treatment, environmental change, use of systems)
 - · Extended duration of assessment
 - Tests for bonus and incidental effects (e.g., on comorbid conditions)
- 5. Tests of varied models of treatment delivery
 - Blunderbuss MaxTreat vs. Rifle models with disaggregated components
 - Booster sessions, checkups (sessions added as assessment shows a need)
 - Deputizing therapists to extend treatment (e.g., parents, sibs, teachers)

noted earlier, but here we offer a more comprehensive list, summarized briefly in Table 5.

9.1. Explication and Tests of the Conceptual Basis for the Treatment

First, treatment outcome research could be enriched by a systematic effort by investigators to explain the conceptualization that guides their treatment and then provide corresponding tests. In many cases, this would include explication of the investigator's view as to causal processes that contribute to the target problem, with attention to risk factors, primary causes, maintaining factors, and exacerbating conditions. Clarification is needed as to which of these elements is addressed via the treatment program and in what way the elements of the treatment connect to the hypothesized causal processes. In cases where the treatment is not construed as addressing causes—and we do not assume here that all effective treatments must necessarily address original causes—it is important, nonetheless, to specify the hypothesized mechanism by which the treatment is seen as operating and having its effects.

Of course, all this specification of the conceptual basis for treatments is needed so that tests of the treatment models can be carried out. Such tests may affirm the hypothesized connection between processes linked to dysfunction and specified elements of the treatment, and such affirmation may fuel the further development and refinement of treatment. Or such tests may disconfirm hypothesized connections and thus suggest the need for restructured models, and perhaps restructured treatments. An example of the kind of surprise that may await researchers can be seen in the Durlak et al. (1991) meta-analysis of cognitive-behavioral treatments (CBT) for children. In contrast to the CBT model, which explicitly links behavior change to cognitive change, Durlak et al. reported that averaging across multiple studies, behavior change was not significantly related to changes in cognition.

9.2. Tests of Other Potential Mediators of the Treatment-Outcome Relation

The kinds of analyses just described are essentially tests of potential mediators of the relation between treatment and outcome. There are other mediational tests that certainly warrant consideration by researchers. We have already stressed the need for therapy process research testing such potential mediators of change as therapeutic bond. In addition, there is much about the child's comprehension of and participation in treatment activities that may play a role in shaping outcome, but this dimension is rarely addressed in outcome research. For example, one rarely sees tests designed to determine which of the key lessons or skills taught in therapy were actually assimilated by the children, and to what degree such assimilation relates to treatment outcome. Beyond such intrachild processes, critical mediators may be found in events within the child's social surround. For example, for some children, the degree to which parents or teachers are a part of the treatment program and respond by actively engaging the child in treatment-related activities may be a critical factor mediating child outcomes. We know little about these and numerous other mediational possibilities at present, because mediators of any kind are rarely tested in the extant literature.

9.3. Tests of Potential Outcome Moderators

Earlier, we noted the importance of testing such potential demographic moderators of treatment outcome as child age, gender, and ethnicity. Even when such factors are noted in sample descriptions, their significance for outcome is very rarely assessed. Children's clinical charac-

teristics, such as their level or subtype of the target diagnosis, or their pattern of comorbidities, may also moderate outcome of some treatments. Beyond these individual child "person" factors, moderators may well be found in characteristics of the child's physical and social environment. Factors such as family income, degree of crowding, and family composition (e.g., single-parent vs. two-parent), for instance, may all relate to the family's ability to support the treatment process. The general objective of all this moderator research is to identify those youth who are most and least likely to profit from a particular form of treatment. Findings on this question can facilitate diversification of treatment forms and increasingly precise matching of treatment forms to types of children.

9.4. Expanded Range of Outcome Assessment

Child outcome research could profit from several kinds of expansion within the domain of outcome assessment. First, the range of outcomes measured has tended to be rather restricted, with emphasis placed on symptom or problem assessment. Recently, Hoagwood, Jensen, Petti, and Burns (1996) have called for assessment of not only symptoms (e.g., impulsivity, anxiety) but also the child's role functioning in usual life contexts (e.g., grades in school, participation in peer activities), consumer responses to treatment (e.g., child's and parents' satisfaction, perceived improvement), changes in the child's environment that were targeted in treatment (e.g., parental discipline practices, classroom disruptions), and system-related outcomes (e.g., the child's use of mental health services after the treatment program ends). Appropriate broadening, even at the "symptom" level, could also include the use of structured diagnostic interviews, thus to generate the information needed to assess the clinical significance of treatment-related change.

We also encourage expansion in the duration of outcome assessment. In our meta-analyses (Weisz et al., 1987; Weisz et al., 1995c), only about one-third of the studies we found included any assessment other than immediate posttreatment. And for that one-third, the average follow-up lag time was only 6 months. Consequently, we know relatively little to date about the long-term holding power of the effects generated by most treatments, and thus little about whether and/or when there may be a need for treatment enhancement, booster sessions, and the like, to maintain gains.

One other kind of expansion should be noted here. For those studies that include children with comorbid diagnoses over and above the condition targeted in treatment, outcome assessment might well be profitably directed to those comorbid conditions. It is useful to know, for example, that treatments targeting anxiety may also have beneficial effects on depression (see, e.g., Barrett et al., 1996; Kendall, 1994). Such knowledge can improve our efficiency in allocating treatments to conditions, in addition to helping us expand our models of treatment and outcome.

9.5. Tests of Varied Models of Treatment Delivery

Finally, we suspect that there could be considerable payoff from experimentation with various models of treatment delivery. Along one dimension, treatment approaches may range from the Blunderbuss model in which all promising techniques are packed into one treatment program, in the hope of generating maximum bang for the buck—to the Rifle model—precise fitting of a few well-chosen techniques to very specific problems. Along another dimension, data from an expanded duration of outcome assessment (see above) could go hand-in-hand with efforts to extend treatment benefit over time. Such efforts might include regularly scheduled booster sessions, brief refresher courses on the basics of a previously learned treatment package. An alternative might be the "yearly checkup" model, patterned after the "yearly physical," in which assessment is conducted and areas of slippage are addressed by retraining in the relevant components of a treatment program. Finally, there is room for tinkering with our venerable models holding that treatment must be provided by qualified experts. Our meta-analytic findings (in both Weisz et al., 1987, and Weisz et al., 1995c) point to effects (particularly for externalizing problems) that are as positive for parents and teachers trained in specific therapy techniques as for fully trained professionals in mental health careers (see also Christensen & Jacobson, 1993). This suggests that muchneeded person power and outreach may be gained by deputizing and training those who live their daily lives in close proximity to our child clients, thus to ensure that our treatment programs can be extended into the settings where the children live their lives.

10. Conclusion

There is much to admire about child psychotherapy outcome research to date, including a rich and extensive body of evidence supporting the efficacy of a substantial number of treatment programs. However, there are also significant limitations in the extant research. These give rise to numerous suggestions for reconceptualization, refinement, study of treatment components and processes, tests of client factors that may moderate treatment impact, experimentation with treatment delivery models, and approaches to outcome assessment. The suggestions are offered with ap-

preciation for all that has been accomplished thus far, and with optimism about all that can be done in the future to enhance the lives of children and their families.

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