

A Comparison of Eclectic Treatment With
Webster-Stratton's Parents and Children Series
in a Children's Mental Health Center:
A Randomized Controlled Trial

TED K. TAYLOR

Oregon Research Institute

FRED SCHMIDT

Lakehead Regional Family Centre

DEBRA PEPLER

York University

CHRISTINE HODGINS

Lakehead Regional Family Centre

Few studies have evaluated the effectiveness of empirically supported therapy in applied settings, or typical service in such settings. In this study, parents seeking help at a children's mental health center for managing their 3- to 8-year-old children's behaviors were randomly assigned to one of three conditions: Webster-Stratton's Parents and Children Series (PACS) parenting groups (46 families), the eclectic approach to treatment typically offered at the center (46 families), or a wait-list control group (18 families). After 15 weeks, mothers in both treatments reported fewer child behavior problems than mothers on the wait list. Mothers in the PACS program reported fewer behavior problems and greater satisfaction with treatment than mothers in the eclectic treatment. These findings support the effectiveness of the PACS program, relative to typical service, for parents seeking help managing their children's behavior.

Portions of this paper were presented at the meeting of the American Psychological Association, Toronto, August 1996. This study was made possible by a grant from the Ontario Mental Health Foundation, as well as support by grant DAO9678 from the National Institute on Drug Abuse. The authors would like to thank the staff at the Lakehead Regional Family Centre for cooperating with this research project, and for offering the treatments evaluated in this study. We are also grateful to the families who agreed to participate in the study. Finally, we would also like to thank Dr. Carolyn Webster-Stratton for guiding us through learning the collaborative process involved in offering the Parents and Children Series groups.

Correspondence concerning this article should be addressed to Ted K. Taylor, Oregon Research Institute, 1715 Franklin Blvd., Eugene OR 97403-1983. Electronic mail may be sent via Internet to tedt@ori.org.

Behavioral family interventions have been recognized as among the most effective strategies for treating disruptive behavior problems in children, including oppositional defiant disorder and conduct disorder (Kazdin, 1995) and attention-deficit hyperactivity disorder (Barkley, 1986; Pisterman et al., 1989). Behavioral family interventions have also been identified as among the best strategies for the prevention of child abuse (Wolfe, Reppucci, & Hart, 1995) and for treating parents who have physically abused their children (Becker et al., 1995). Together, these findings suggest that behavioral family interventions are appropriate for a range of families with problems managing their children's behavior.

Several variations of behavioral family interventions exist, usually drawing from the pioneering theoretical work of Patterson (Patterson & Gullion, 1971) and Hanf (Hanf & Kling, 1973). Behavioral family interventions have been offered in different formats, including coaching parents from behind a one-way mirror through a "bug-in-the-ear" as they interact with their children (Forehand & McMahon, 1981) and assisting parents directly in their homes (Tremblay et al., 1991). However, a recent study found that parents are more likely to participate in group-based parenting services than family-based services in clinic offices (Cunningham, Bremner, & Boyle, 1995).

The most carefully evaluated group-based parenting program is the Parents and Children Series (PACS) developed by Webster-Stratton (1981a, 1992a, 1992b; Webster-Stratton & Herbert, 1994). The PACS program consists of approximately 250 unrehearsed vignettes, each lasting 1 to 2 minutes. Over the course of the program, parents are introduced to a range of topics, including how to play with young children, using praise and rewards effectively, setting appropriate limits, ignoring attention-seeking behavior, using time-out, establishing logical consequences, and focusing on preventive strategies. For each topic, a number of vignettes illustrate either effective or less effective ways for parents to deal with their children. This mixture of effective and ineffective strategies helps parents realize that they can make mistakes at times while being effective at other times, and that it is okay. After each vignette, the therapist leads a group discussion, encourages parents' ideas and problem-solving, and facilitates role-playing and rehearsal. Watching the videos takes about 20 minutes of each session. In each session, parents also receive standard handouts and homework assignments, and are expected to practice the new skills over the next week. The next session begins by discussing their experiences with the homework.

The PACS program has been shown to be more efficacious than parenting groups with similar content that do not rely upon videotape models (Webster-Stratton, Kolpacoff, & Hollinsworth, 1988). The program was as effective as one-on-one behavioral parent training with a therapist using the bug-in-the-ear approach, and it required one-fifth the therapist time to serve the same number of clients (Webster-Stratton, 1984). A series of randomized controlled trials by the program developer has demonstrated improvements in children's and parents' behavior as indicated by parent ratings and indepen-

dent observations (Webster-Stratton, 1981b, 1984, 1985; Webster-Stratton et al., 1988). Treatment effects were maintained for periods of 1 year (Webster-Stratton, 1982, 1984, 1985; Webster-Stratton, Hollinsworth, & Kolpacoff, 1989) and 3 years (Webster-Stratton, 1990). Additionally, parents have consistently reported high satisfaction (Webster-Stratton, 1989); dropout rates from the program have typically been less than 10% (Webster-Stratton, 1984; Webster-Stratton et al., 1988). This contrasts with an average dropout rate of 28% in a review of 45 published studies (Forehand, Middlebrook, Rogers, & Steffe, 1983).

The Need for Effectiveness Trials

A limitation of existing evaluations of Webster-Stratton's program is that they were all efficacy trials (Weisz, Donenberg, Han, & Weiss, 1995). The program was offered in a university laboratory, rather than a clinic, and treatment was delivered to a homogeneous group (i.e., all families with children having conduct problems) seeking help from a university research clinic. The therapy was offered by the program developer or by assistants under her direct supervision, all of whom had small therapy caseloads of other clients experiencing similar problems. It is possible that these factors account for some of the success of the PACS program, and that similar results would not be obtained in an applied setting (Weisz et al., 1995). In that case, it could be argued that empirically supported therapy is irrelevant to applied settings because few of the unique factors that contribute to success in a research setting are likely to be replicated outside the research setting.

The PACS program has several features that, while different than typical clinic therapy, hold potential for success in applied settings. These include special pretherapy training of therapists and a preplanned, highly structured therapy with a behaviorally oriented treatment manual. If these factors are responsible for the success of the program, then the success of PACS should replicate in applied settings.

The Need to Evaluate Typical Clinical Services

Not only is there little evidence that empirically supported therapies can be transported successfully to a typical applied setting, there is even less evidence that services usually offered in typical applied settings are effective. Almost no empirical evidence has been collected in properly controlled scientific studies to show whether typical clinic treatment is effective. For example, Weisz et al. (1995), in their recent exhaustive review of child therapy outcome studies, identified more than 200 controlled studies demonstrating that university-based treatment works. Yet they identified only 9 clinic-based controlled psychotherapy studies with children and adolescents. The average effect size of these 9 studies was zero. If this trend holds up, they suggest we may be faced with the following dilemma: "The good news is that child psychotherapy works; the bad news is, not in real life" (Weisz & Weiss, 1993, p. 96).

The discouraging evidence currently available on clinic therapy cannot be

used to conclude that typical clinic therapy is not effective. Only two of the nine published clinical studies reviewed by Weisz et al. (1995) were completed in the past 25 years, and only one of these two was a randomized controlled trial. Given the dearth of adequate studies, the existing evidence can hardly be considered representative of the range of clinic therapy available in applied settings. The best that can be said is that we do not know whether traditional child clinic therapy is effective. It is important to evaluate this question.

Not all researchers take the pessimistic view of typical clinic therapy implied by the review of Weisz and his colleagues (1995). Seligman (1995) recently argued that treatment in the field may be superior to research therapy. Seligman argues that clinic therapy can be far more self-correcting than research therapy. That is, if one technique is not working, another technique, or even another kind of treatment, can be tried. To evaluate this hypothesis, researchers must compare empirically supported therapy to typical clinic therapy.

Objectives of the Present Study

The present study was designed to achieve four major objectives. The first was to evaluate the effectiveness of the PACS program in an independent setting. Participants were heterogeneous clients treated by clinicians with large and diverse caseloads. It was hypothesized that the PACS program would be more effective than no treatment in reducing children's behavior problems.

The second objective was to evaluate the effectiveness of typical clinic therapy. An eclectic/ecological approach to treatment was evaluated at an accredited children's mental health center in Ontario, Canada. This therapy was not limited in the duration or number of sessions, not required to follow a therapy manual, and generally not behavioral in orientation. It was hypothesized that the typical eclectic treatment would be more effective than no treatment in reducing children's behavior problems.

The third objective was to compare the relative effectiveness of the two treatments for children with conduct problems. Based on prior research supporting the PACS program, it was hypothesized that the PACS program would be more effective than the eclectic treatment in improving children's behavior problems.

The final objective was to compare the impact of PACS and eclectic treatment on related problems of parent depression and anger, marital conflict, and social support. It was hypothesized that, because the eclectic treatment could be individually tailored to fit the family, it would result in greater improvements than the PACS program in these areas.

Method

Participants

Participants were 108 families who contacted the Lakehead Regional Family Centre (LRFC) for assistance related to conduct problems of a child between 3 and 8 years of age (mean age = 5.6), or difficulties parenting a

child of this age. LRFC is the only community-based children's mental health center in Thunder Bay, Ontario, a city of about 120,000 people of primarily Northern European descent. Those who agreed to participate in the study were randomly assigned to either an 11-to-14 week PACS group (46 families), the eclectic treatment offered at the center (46 families), or a wait-list control group (18 families). No fees were charged for service.

A boy was the identified child in 31 of the 46 families participating in PACS, 37 of 46 participating in the eclectic treatment, and 12 of the 18 families assigned to the wait list. The Eyberg Child Behavior Inventory (ECBI) problem and intensity mean scores at pretreatment were 19.0 and 144.5, respectively, for the families assigned to PACS, 19.2 and 148.3 for families assigned to eclectic treatment, and 16.5 and 137.4 for families assigned to the wait list. The clinical cut-off scores are 12 and 127. The ECBI intensity score of 144.5 for those receiving groups was significantly lower than the average ECBI intensity score of 159 reported by Webster-Stratton et al. (1988) for those receiving the same treatment (Welch test, $F(1, 63) = 4.26, p < .05$ two-tailed). This suggests that, on average, the children in the present study had somewhat less severe problems than those in Webster-Stratton et al.'s study. Although all cases were by definition "clinical" in that they were seeking help from the center, it is useful to identify the number of children who met statistical clinical cut-off scores. On the problem score, 39 (85%) of the children assigned to PACS, 39 (85%) of the children assigned to eclectic treatment, and 14 (78%) of the children assigned to wait list exceeded the clinical cut-off score of 12.

Study parents included 69 married or common-law couples, 38 single mothers, and 1 single father. The mean ages of the mothers and fathers were 33 and 37, respectively. All parents reported that English was the language most often spoken at home, and 100% of fathers and 92% of mothers reported being born in Canada. Eleven percent of the couples and 50% of the single parents lived in subsidized housing. The median family income was \$30,000 (Canadian). About 15% of the couples and 57% of the single parents reported incomes below \$15,000 (the poverty line), while 44% of the couples and 3% of the single parents reported incomes above \$50,000. In interviews, 14% of the families reported alcohol or drug abuse in the immediate family. Forty-eight percent of the mothers and 36% of the fathers reported that they were abused as children. Forty-eight percent of the mothers reported some depression, at or above a score of 10 on the Beck Depression Inventory (Beck, 1972). No significant differences were found between the two treatment groups and the control group at pretest on family income, percentage of single-parent families, measures of behavior problems in children, or mothers' self-report of depression.

Measures

Eyberg Child Behavior Inventory (ECBI). The ECBI (Eyberg & Ross, 1978; Eyberg & Pincus, in press) is a 36-item behavioral inventory of conduct

problems for children aged 2 to 16 years. It consists of two scales: (a) the intensity score reflects how often the problem behaviors occur; (b) the problem score reflects the number of behaviors that are a problem for the parent. The developer reports reliability coefficients from .86 (test-retest) to .98 (internal consistency). Webster-Stratton (personal communication, August 1993) reports that this measure is more sensitive to treatment effects than the Child Behavior Checklist.

Child Behavior Checklist (CBCL). This widely used checklist consists of 118 items, each rated on a 0- to 2-point scale (Achenbach, 1991a). The items constitute multiple behavior problem scales. In this study, the Total Problems score was used because it reflects a wide range of behavior problems. According to the manual, 1-week test-retest reliability for the Total Problems score is .93.

Parent Daily Telephone Report (PDR). In a process developed at the Oregon Social Learning Center (Chamberlain & Reid, 1987), mothers were asked by telephone to report on the occurrence or nonoccurrence of a number of specific negative behaviors during the previous 24 hours. Each parent was called 7 times in each assessment phase (pretest and post-test). Chamberlain and Reid report test-retest reliability of the PDR from .62 to .82. The PDR also correlates strongly with concurrent home observation data of the child's behavior (Webster-Stratton et al., 1988).

Achenbach Teacher Report Form (TRF). This checklist consists of 118 items, each rated on a 0- to 2-point scale (Achenbach, 1991b). The manual reports test-retest reliability of .92 for the Total Problems score. This score was used because it reflects a wide range of behavior problems.

Matson Evaluation of Social Skills With Youngsters (MESSY). This checklist consists of 64 items, each rated on a 1- to 5-point scale (Matson, 1990). The items constitute two subscales: appropriate and inappropriate social behaviors. Each of the 64 items has a test-retest reliability of .50 or greater. The inter-item coefficient alpha of the entire scale is .93.

Beck Depression Inventory (BDI). The BDI (Beck, 1972) is a widely used self-report measure of general depression. It has a Spearman-Brown reliability coefficient of .93 and has been shown to correlate significantly with clinician ratings of depression and with objective behavioral measures of depression.

Dyadic Adjustment Scale (DAS). The DAS (Spanier, 1976) provides an overall score that reflects four aspects of relationships: dyadic satisfaction, dyadic cohesion, dyadic consensus, and affectional expression. External validity and reliability have been shown to be high (Spanier & Thompson, 1982).

Support Scale. This 20-item questionnaire, developed by Procidano and Heller (1983), assesses parents' perceptions of support from family and friends. It is correlated inversely with symptoms of distress, psychopathology, and low social competence. An alpha of .92 indicates good reliability.

Brief Anger-Aggression Questionnaire (BAAQ). The BAAQ (Maiuro, Vitaliano, & Cahn, 1987) is a 6-item self-report questionnaire to screen for

overt anger and aggression. This measure was originally designed to assess anger in men who are prone to, or have the potential to, be violent. This measure has adequate test-retest reliability ($r = .84$) and adequate internal consistency ($r = .82$). Maiuro et al. (1987) report that a score of 9 or greater indicates a fair likelihood of problems with anger and best discriminates between assaultive and nonassaultive groups of men.

Therapy Attitude Inventory. This 10-item satisfaction scale was developed by Eyberg (1993) to assess parental satisfaction with treatment of young conduct-problem children. Following treatment, parents report their perception of the impact of treatment in a number of areas, including confidence about disciplining, learning strategies for teaching children new skills, and overall satisfaction with treatment. It has been found to have adequate internal consistency.

Procedure

Participants in the study were families who were referred to a children's mental health center in Thunder Bay, Canada, over a 16-month period and who would have received services regardless of the research project. By definition, the population was a clinical sample. Referrals were made by the families themselves, or by school, medical, or social service professionals. No public advertising was used, although physicians and school principals were encouraged via a letter in the middle of the study to refer appropriate families. Only a few of the families were aware of the study prior to contacting the center.

The initial screening for potential research participants occurred in a brief telephone intake interview. All parents of children between the ages of 3 and 8 who were concerned about managing behavior problems of their child were identified as potential research participants. These families were then telephoned by a research assistant who reviewed the referral concerns with the parents. If, at this time, it became apparent that child management problems were not a primary reason for referral, the family was excluded from consideration for the study. The research assistant also excluded a small number of families for whom child management problems were a primary concern, but the parents had separated or divorced in the 3 months prior to the referral, or the child had been sexually abused in the past and had received no counseling for this incident. For families who met the inclusion criteria for the study, the research project was described briefly, and parents were asked if the research assistant could visit their homes to further explain the project. Most of the families with appropriate referral problems who declined to participate in the study ($n = 51$) did so at the telephone screening.

For families who agreed to the home visit, the research assistant visited and explained the project in detail. Parents were informed that, if they agreed to participate in the project, there was a nearly one-in-seven chance that they would be assigned to the waiting list, and they would have to wait longer for treatment than if they did not participate. However, if they were not selected

for the wait list, they would likely receive treatment several weeks sooner than if they were not in the study. Parents were informed that, if selected for treatment, they would be randomly assigned either to typical treatment, or one of the Parents and Children Series parenting groups. They were also informed that they would receive \$30 to complete posttest questionnaires and \$50 to complete the same questionnaires 1 year after beginning treatment.

After obtaining informed consent for the study, the research assistant collected information that was identified as central to the study, including demographic information (age of the child, parents' marital status, income, etc.), as well as the ECBI and the BDI. All remaining questionnaires were left to be completed by parents and mailed back. A single reminder phone call was made to families who did not complete the questionnaires within a week. To minimize intrusiveness, unreturned questionnaires were coded as missing data. A second research assistant collected the telephone-administered PDR over 7 days. If the child was in school, questionnaires were sent to the child's teacher with a request to return them within 2 weeks. If they were not returned, one reminder phone call was made to encourage the teacher to complete the forms. If the teacher did not, the information was treated as missing data.

Assignment to treatment conditions. When enough participants were recruited for one cohort (typically 17), they were first coded as either potential wait list (55) or no possibility of wait list (55). Families who were potential wait list candidates were randomly assigned to either of the two treatments or to the wait-list control group, while families who had no possibility of wait list were randomly assigned between the two treatments. This procedure was preplanned to allow urgent families, and families who had already waited a long time for treatment, to remain in the study. It also allowed two families to serve as wait-list subjects to then be randomly assigned to treatment, since both sets of data were not included in the same analyses. For statistical analyses, comparisons with the wait-list control group included only the potential wait-list families. For comparisons between the two treatments, all participants assigned to one of the two treatments were used (and not participants assigned to the wait-list control). While this strategy was somewhat unusual, it allowed urgent cases to be retained for comparing the two treatments, yet ensured that no assumptions of the analyses were violated. The alternative—to exclude all urgent cases from the study—would have resulted in a more serious problem: limiting the generalizability of all findings to only nonurgent cases.

Parents and Children Series treatment. The parents assigned to the PACS treatment (Webster-Stratton, 1992a) were seen in groups, with 7 families per group. Prior to the group, the parent(s) in each family met with one of the group leaders individually for about 1½ hours to discuss the child's behavior difficulties, and to learn more about the groups. Groups met for 2¼ hours weekly for 11 to 14 weeks.

Although parents were encouraged to provide their own child care, the

agency arranged child care either at the center or at the family's home when necessary. Also, parents were expected to travel to the agency themselves, but transportation was arranged for clients with obvious transportation problems.

Between group meetings, therapists made telephone calls to families who missed sessions or who seemed to be having problems in the group. Occasional visits to the home or to the school were made if necessary. Although posttest assessment was done immediately after the treatment program, parents could request additional individual sessions with one of the group leaders after the posttreatment assessment.

Eclectic treatment. Families assigned to eclectic treatment met with their therapists on an individual basis and negotiated the frequency and intensity of the service. Therapists arranged to see the parents, the family, or the child, or a combination of these. Although typically offered between 8:30 a.m. and 4:30 p.m. at the center, service was sometimes offered after hours, as well as in the family's home or in the community. Additionally, as part of their service, some children and parents attended other therapeutic groups at the center, such as a group discussing the impact of separation and divorce on children. Therapeutic approaches and theories used in the eclectic approach included ecological, solution-focused, cognitive-behavioral, family systems, and popular press parenting approaches.

Therapists. Seven therapists participated in leading the seven parenting groups, with two therapists co-leading each group. All were full-time therapists in the children's mental health center. The first six groups were co-led by one of two Ph.D. psychologists (the first and second authors of this paper) and one of several other therapists in the center. Each of the co-leaders had a bachelor's or master's degree in psychology or social work. The seventh group was led by two clinicians with master's degrees in psychology and social work. All groups had one male and one female therapist. None of these therapists offered study clients the eclectic approach to treatment.

The 11 therapists involved in the eclectic treatment each had a minimum of 2 years experience in children's mental health. The majority of the therapists had either bachelor's or master's degrees in social work or a related field, and those who did not had 8 or more years of applied experience in children's mental health in lieu of formal education. Although not equivalent to the educational level of the therapists who led the groups, therapists in the eclectic treatment group are representative of individuals in children's mental health in the field. None of these therapists received formal training in or led any of the Parents and Children Series groups either before or during the study. Although several therapists read some of the written materials, including Webster-Stratton's book for parents, *The Incredible Years* (1992b), none of the control therapists used any of the materials of the PACS program in their treatment.

Treatment integrity. To ensure the treatment integrity of the PACS program, the therapists offering Webster-Stratton's program underwent rigorous training prior to the study. The therapists led between one and five groups

during the year before the study, and attended a biweekly 1½-hour meeting of group leaders prior to the study, and a weekly 1½-hour meeting of group leaders during the study. Therapists also read and discussed current research related to family interactions on which the program is based (Patterson, 1982; Patterson, Reid, & Dishion, 1992). Additionally, all but one of the therapists leading the PACS groups in the study attended a 4-day workshop led by Webster-Stratton. The remaining therapist joined the study in progress, after having co-led one of the PACS groups outside of the study and having attended weekly meetings of group leaders for several months. Therapists followed the treatment manual when leading the groups, including showing all videotape vignettes and giving out all written materials. Webster-Stratton reviewed three videotapes of group sessions held prior to the study and one videotape from the first group in the study to help ensure sessions were conducted as closely as possible to the original program. Finally, both psychologists became certified leaders of the program during the course of the study.

Treatment integrity for the eclectic treatment was, by definition, impossible to assess. To ensure the generalizability of results, the eclectic treatment was offered by 11 experienced therapists working at the center, all of whom were required to adhere to the usual policies and procedures at the center, an accredited children's mental health center. As policy requires, therapists wrote initial assessments and treatment plans, which were reviewed and approved by their program managers. These therapists received the usual training, supervision, and consultation opportunities at the center. Therapists participated in weekly multidisciplinary meetings to discuss cases with social workers, psychologists, and psychiatrists. Therapists could request psychological or psychiatric assessments and consultation on any cases. Therapists were permitted to use any techniques within their competencies; however, they were prohibited from using any of Webster-Stratton's PACS program components.

Posttest assessment. After 4 months of treatment, posttest questionnaires were mailed to parents. About 1 week later, a research assistant called to make an appointment to visit the family's home and pick up the questionnaires. Research assistants who collected posttest assessment measures were not informed of treatment assignment, although on occasion families revealed which treatment they received. If parents had not completed the questionnaires by the time of the visit, the research assistant stayed until they were completed, often supervising the children during this time. Families were given a check for \$30 for completing the questionnaires. Questionnaires were also sent to teachers. As at pretest, one reminder phone call was made if teachers did not return the questionnaires within 2 weeks. Any questionnaires not returned at this time were considered missing.

Participation in therapy. There were no significant differences between the treatments in the number of families who failed to show up for initial treatment. Eight families who agreed to participate in the study and underwent

the initial assessment failed to attend a single appointment with their therapist in the eclectic treatment, and 5 families assigned to the PACS treatment failed to attend a single session of the parenting group. Posttest data were collected on these individuals, if possible.

Of the families participating in the eclectic treatment, the average amount of treatment over the course of the 17 weeks of the study was 8 hours, with a range from 1 to 40 ($SD = 8$). Of the families participating in the PACS group, the average number of sessions attended was 10, with a range from 1 to all 14 sessions. Only 6 families in the PACS group attended 5 sessions or fewer.

Results

Analyses

Treatment effects were evaluated by mother reports of behavior problems (ECBI, CBCL), parent daily reports (PDR) of the child's behavior, and mothers' satisfaction with treatment (TAD). Fathers also completed the written questionnaires, but there were too few to provide sufficient power for analyses, and these are not reported. Teachers' reports of child behavior problems (TRF) and social skills (MESSY) were also collected.

The design of the study did not allow for all comparisons to be done simultaneously in a single analysis because the wait-list control group was comparable only to a subsample of each of the two treatments. For this reason, each hypothesis was tested separately, using only those participants relevant to the hypothesis. Thus, the wait-list control group and the possible wait-list participants randomly assigned to the PACS program were used to test the hypothesis that the PACS program was more effective than no treatment using a 1-tailed test of significance. The wait-list control group and the possible wait-list participants who were randomly assigned to the eclectic treatment were used to test the hypothesis that the eclectic treatment was more effective than no treatment. Participants were included in these analyses if posttreatment data were available and there was an intention to treat, regardless of whether the family attended any treatment sessions. (Two cases for PACS and two cases for eclectic attended no treatment sessions). This strategy avoided introducing a systematic bias, because there was no way for unmotivated individuals who were assigned to the wait list to drop out of the wait-list control.

The hypothesis that the two treatments differed in effectiveness was tested using all participants assigned to either treatment, but not those assigned to the wait list. Participants were included in this analysis if posttreatment data were collected, and if the family attended at least one session of the eclectic treatment or at least one group session. This ensured that comparisons involved only those participants whom the therapist had actually contacted and had an opportunity to engage.

In evaluating the effects on each measure, pretest scores were used as co-

variates (except for consumer satisfaction, for which there was no pretest data). For the small number of participants with missing pretest data on a given measure, the mean pretest score was substituted (a statistically conservative strategy).

Appropriate levels of significance were chosen based upon a priori hypotheses and considerations for limiting experiment-wise error. As noted previously, for each major comparison (PACS vs. waitlist, eclectic vs. waitlist, PACS vs. eclectic), it was anticipated a priori that the two ECBI scores, the problem and intensity scores, would be the most sensitive to change. Given that there was an a priori hypothesis for the two scores, a $p < .05$ (2-tailed) level of significance was considered reasonable protection against Type II error for each of the hypotheses. For all remaining measures, a more conservative $p < .01$ (2-tailed) level of significance was selected. In our results, the level of significance is reported for any result that achieved a $p < .10$ (2-tailed; i.e., $p < .05$, 1-tailed) as approaching significance, allowing the reader to evaluate the results directly.

Comparisons of PACS to Wait-list Control

The analyses of covariance (ANCOVAs) revealed that mothers in the PACS treatment reported significantly fewer problems on both the ECBI intensity score, $F(2, 29) = 8.11, p < .008$, and the ECBI problem score than the waitlist control group, $F(2, 27) = 6.92, p < .014$ (see Table 1). No significant differences were found on the remaining measures.

Comparison of Eclectic Treatment to Wait-list Control

For comparisons between the eclectic treatment and the waitlist, ANCOVAs revealed significant differences on mothers' ECBI problem score, $F(2, 29) = 4.54, p < .05$. No differences were found on the other measures.

Comparison of PACS to Eclectic Treatment

The ANCOVAs revealed that the mothers in the PACS groups reported significantly fewer problems on the ECBI problem score than mothers in the eclectic treatment, $F(2, 65) = 5.26, p < .025$ (see Table 2). No significant differences were found on the remaining measures of child functioning.

With respect to consumer satisfaction, an analysis of variance (ANOVA) with all participants assigned to one of the two treatments revealed a significant effect on the mothers' TAI scores, $F(1, 61) = 8.17, p < .006$, in favor of the PACS groups. Examples of individual items help clarify how parents found the PACS group more satisfying. For mothers who participated in PACS, 38% reported they felt "much more confident" in their ability to discipline their child, and 84% of these mothers reported they felt at least "somewhat more confident." In contrast, none of the mothers in the eclectic treatment reported that they felt "much more confident" in their ability to discipline their child, and 63% reported feeling either "somewhat more confident" or "much more confident." Additionally, whereas 64% of the

TABLE 1
POSSIBLE WAIT-LIST PARTICIPANTS BEFORE AND AFTER TREATMENT

Report Measure	PACS Groups						Eclectic Treatment						Wait List						F	
	Pre			Post			Pre			Post			Pre			Post			PACS vs. Wait List	Eclectic vs. Wait List
	n	M	SD	n	M	SD	n	M	SD	n	M	SD	n	M	SD	n	M	SD		
ECBI Problem	15	19.3	8.3	12.4	7.1	17	19.1	7.3	13.3	7.5	17	16.5	6.4	16.5	7.2	6.91***	4.54***			
ECBI Intensity	15	139.3	36.4	115.2	27.3	17	150.1	31.9	129.6	22.7	17	137.4	21.6	132.4	20.2	8.11***	n.s.			
CBCL Total Problem	16	54.4	35.0	37.7	20.5	15	62.8	25.3	48.1	15.5	17	59.4	25	51.6	23.8	4.70**	n.s.			
PDR	15	10.4	5.1	6.2	3.3	15	12.2	5.0	9.6	4.5	14	9.4	4.4	6.3	3.9	n.s.	n.s.			
TRF (teacher)	13	36.8	25.7	38.1	48.6	9	54.8	24.5	48.6	29.2	13	39.9	28.0	48.5	39.2	n.s.	n.s.			
MESSY (teacher)																				
Appropriate	13	59.6	18.2	62.2	15.4	11	62.2	8.1	70.6	9.1	13	60.7	19.4	60.8	19.3	n.s.	4.39**			
Inappropriate	13	79.7	33.7	84.5	42.8	11	111.0	39.5	99.3	36.4	13	101.4	40.8	108.3	42.5	n.s.	6.13**			
Mother's BDI	15	12.7	12.4	10.9	9.1	17	9.2	6.0	10.1	7.9	17	17.6	13.3	13.5	10.2	n.s.	n.s.			
Mother's BAAQ	14	10.5	4.2	7.6	3.8	15	7.5	3.6	5.8	2.9	14	9.6	3.1	9.1	2.7	3.67*	5.6***			
Mother's SS	14	14.6	5.6	16.5	4.6	15	15.9	4.5	16.8	3.4	12	14.2	4.2	16.1	3.5	n.s.	n.s.			
Mother's DAS	7	111.7	11.8	102.0	22.7	10	106.9	22.7	95.0	25.5	10	107.6	18.4	102.8	19.4	n.s.	n.s.			

Note: ECBI = Eyberg Child Behavior Inventory; CBCL = Child Behavior Checklist (raw scores); PDR = Parent Daily Reports; TRF = Teacher Report Form; BDI = Beck Depression Inventory.
* $p < .10$. ** $p < .05$ (level of significance for ECBI scores). *** $p < .025$. **** $p < .01$ (level of significance for all other scores).

TABLE 2
ALL TREATMENT PARTICIPANTS: PRE- AND POSTTEST RESULTS

Report Measure	PACS Groups					Eclectic Treatment					F PACS vs. Eclectic
	n	Pre		Post		n	Pre		Post		
		M	SD	M	SD		M	SD	M	SD	
ECBI Problem	38	19.0	8.0	12.2	7.0	32	19.2	7.2	15.8	7.6	5.26***
ECBI Intensity	38	144.5	31.6	120.1	31.5	32	148.3	32.1	130.8	23.0	n.s.
CBCL Total Problem	40	69.3	27.0	41.7	21.0	32	56.5	20.2	45.8	18.4	n.s.
PDR	38	10.3	5.0	6.8	4.1	31	11.1	4.9	8.9	4.1	4.08**
TRF	33	44.1	26.0	44.4	28.6	24	54.0	31.6	42.4	30.5	n.s.
MESSY											
Appropriate	32	53.6	16.1	59.8	13.5	20	56.92	11.6	66.6	10.3	n.s.
Inappropriate	32	89.8	31.4	90.6	31.1	20	98.5	34.6	90.0	38.7	n.s.

Note: ECBI = Eyberg Child Behavior Inventory; CBCL = Child Behavior Checklist (raw scores); PDR = Parent Daily Reports; TRF = Teacher Report Form; MESSY = Matson Evaluation of Social Skills for Youth.

* $p < .10$. ** $p < .05$ (level of significance for ECBI scores). *** $p < .025$. **** $p < .01$ (level of significance for all other scores).

mothers who participated in PACS reported they learned "several useful techniques" or "very many useful techniques" for teaching their child new skills, only 17% of parents participating in the eclectic treatment reported similar learning. Finally, more than 80% of the mothers who participated in PACS rated service to improve their child's behavior as "good" or "very good," but less than 50% of mothers who received the eclectic treatment gave similar ratings of the service. Using a cross-tabs analysis, each of the differences on these items was significant at $p < .01$.

With respect to measures of adult functioning, no differences were found between the two treatments on mothers' reports of depression, anger, social support, and marital satisfaction (see Table 3). This was contrary to the hypothesis that the eclectic treatment would be more effective in bringing about changes in these areas because of the ability of therapists to tailor treatment to the family.

In terms of clinical significance of the effects, 41% of the mothers in the PACS program continued to report problems on the ECBI problem score in the clinical range, while 74% of the mothers in the eclectic treatment continued to do so.

Discussion

Results of this study indicate that the PACS program can be successfully implemented in an applied setting. Not only was it effective in reducing mothers' reports of child behavior problems, but there was also evidence that it was more effective in doing so and more satisfying to mothers than the

TABLE 3
PRE- AND POSTTEST RESULTS ON MEASURES OF ADULT FUNCTIONING
FOR ALL FAMILIES RECEIVING TREATMENT

Report Measure	n	PACS Groups				Eclectic Treatment				F PACS vs. Eclectic	
		Pre		Post		Pre		Post			
		M	SD	M	SD	M	SD	M	SD		
Mothers' BDI	39	10.2	9.4	8.3	7.3	31	9.9	7.2	9.6	7.2	n.s.
Mothers' BAAQ	40	9.2	3.8	7.0	3.3	31	7.6	3.3	6.8	3.4	n.s.
Mothers' SS	40	15.9	4.1	15.6	4.4	32	15.2	5.1	15.5	4.4	n.s.
Mothers' DAS	21	111.8	17.6	106.3	19.8	18	106.7	18.8	99.6	20.9	n.s.

Note: BDI = Beck Depression Inventory; BAAQ = Brief Anger and Aggression Questionnaire; SS = Social Support; DAS = Dyadic Adjustment Scale.

* $p < .10$. ** $p < .05$. *** $p < .025$. **** $p < .01$.

eclectic treatment offered at the center. It appears that with self-study, training, practice, consultation with Dr. Webster-Stratton, and ongoing peer support for group leaders, experienced therapists in an applied setting can successfully implement the program.

The results also indicate that eclectic, nonmanualized treatment as it is typically offered in children's health centers can be effective. After treatment, mothers receiving eclectic treatment reported fewer child behavior problems than wait-list mothers, although they reported more problems than mothers in the PACS program. Further studies are needed to determine whether other centers are similarly effective, and whether these results can be generalized to children's mental health as a whole. This study failed to support the hypothesis that eclectic treatment results in other mental health benefits for parents, or that it is more effective than the manualized PACS program in achieving such benefits.

This replication of the PACS program was achieved with considerable attention to the clinical integrity of the program. The training procedures used are not typical, even for the setting at which this study was done. Whether similar effects would be achieved in applied settings without similar efforts to ensure treatment integrity is unclear. The success of the PACS program suggests that, even if such effort is not common in clinic settings, it may nonetheless be worthwhile.

Although we believe that extensive training contributed significantly to results achieved in this study, clearly the PACS program itself was also central. The program carefully targets the specific parent-child interactions that research suggests are most important for influencing disruptive behavior in young children. The written materials, videotapes, and audiotapes ensured that parents were exposed to the ideas in a variety of ways.

This study offers one of the first direct comparisons of typical service in a children's mental health setting with an empirically validated intervention

developed in a research setting. In finding that the manualized treatment was more effective than the typical therapy, at least short-term, this study failed to support Seligman's (1995) hypothesis that clinic therapy is more effective than empirically supported therapy because it can be "self-correcting." However, manualized treatment is intended as a theoretical guide, not a verbatim script. The PACS program, as one example of an empirically supported intervention, offers participants a range of principles and strategies for a variety of situations. Parents are encouraged to adapt these ideas to their own situations. The PACS groups included a strong focus on parents' personal development, coping skills, and self-control. Thus, in contrast to Seligman, we believe that effective self-correcting mechanisms can be incorporated into empirically supported manualized therapy. The difference is that, within empirically supported therapy, these will be organized by a consistent theoretical model and based on empirical evidence.

Although empirically supported therapy and clinic therapy both have self-correcting mechanisms, a number of strategies are likely to be more common in empirically supported therapy. For example, in the PACS program, parents watched videotapes of parents and children interacting, and received books, audiotapes, and handouts describing various principles and strategies. The parents also received weekly handouts describing activities to do at home between sessions. They had many opportunities to role-play the strategies covered in the therapy sessions. Although clients receiving typical clinic therapy may have some opportunities to role-play and may receive written materials, they are unlikely to receive many handouts or materials as well integrated. It may be that these strategies contribute significantly to the effectiveness of empirically supported therapy.

There are several limitations of this study. One limitation is that the sample was small, especially when comparing treatment to the wait-list control, so only large treatment effects were detectable. A second limitation was that direct observations were not included in the assessment. Such measures are not only more objective, but also are generally more sensitive to measuring treatment changes than parent reports (e.g., Webster-Stratton et al., 1988). Future comparison studies would benefit by incorporating such measures.

This study was also limited by missing data. Questionnaires were collected from 86% of participants who originally signed up for the study, and incomplete surveys resulted in further missing data for particular scales.

Another limitation of these findings is that all outcomes were short-term. It is not clear whether the same patterns will persist long-term. Although Webster-Stratton has demonstrated long-term improvements in home behavior (Webster-Stratton, 1990; Webster-Stratton et al., 1989), it remains to be seen whether that finding will be replicated in this effectiveness study sample. Nevertheless, this study adds to the small but growing evidence that empirically supported therapy developed in a research setting can be successfully implemented in an applied setting.

One important limitation concerns outcomes. Although the PACS program

was effective in reducing mothers' reports of behavior problems, no similar effects were observed on teacher reports in contrast to Webster-Stratton's findings (Webster-Stratton et al., 1988). There are several possible explanations for this. First, the power to detect effects in this study was weak, especially since not all teachers completed the forms at both pretest and posttest. Second, in the implementation of the program, less emphasis may have been placed in the groups on collaborating with the school and applying the strategies learned to behavior problems at school than in Webster-Stratton's work. Whatever the reason, our results are consistent with Webster-Stratton's (1996) long-term finding that children with behavior problems both at home and school will often continue to exhibit more problems than their peers at school, suggesting the importance of targeting these problems more specifically.

Another significant limitation of this study was the limited information available about the eclectic treatment. Therapists were not required to follow a manual or a common theoretical orientation in their treatment. However, this is typical of therapy in the field. To increase confidence in findings of studies involving typical clinic therapy, more research needs to be done in different settings under various conditions.

The current state of child psychotherapy research calls for a greater degree of collaboration between researchers and clinicians. One approach is the evaluation of real-world therapy in properly controlled studies (Seligman, 1995; Weisz et al., 1995). Another involves identifying strategies for implementing empirically supported therapy in applied settings. We have argued that extensive training, experience, clinical feedback, and ongoing clinical support may be essential for success. Further research is needed to identify the critical components of successful empirically supported therapy, to guide its implementation in applied settings. A third approach focuses on ways to assist the scientific community to disseminate its findings with clinicians and policymakers, and for encouraging applied settings to be influenced by these findings, and adopt empirically supported treatments. Such strategies will likely be most effective if they build upon existing knowledge concerning the diffusion of innovations (Rogers, 1995).

As great as the benefits of improved collaboration are the dangers of therapists and researchers failing to collaborate. In these times of fiscal constraint, with pressure for both accountability and cost-efficiency, Bickman (1996, p. 699) suggests that "researchers need to move outside their comfortable laboratory settings to study services in community settings," arguing that "the need is urgent now." It could be argued that the very survival of both groups is potentially at stake (Hibbs & Jensen, 1996). If applied researchers fail to make their research relevant and accessible to therapists, then there is little reason to continue to finance such research. In contrast, if therapists and agencies ignore empirically supported treatments, and fail to collect data demonstrating the effectiveness of their approaches, they risk the real possibility that governments, health maintenance organizations, and other third-party payers will refuse to fund them. At the very least, they face the possi-

bility that funding sources will dictate the type of service they can offer, and for how long. Indeed, this is already occurring.

As therapists and researchers, we need to work together to ensure that all children have access to empirically supported treatments for psychological problems that they experience. We need to work together to provide effective treatments that transfer from the laboratory to the clinic, and to encourage clinics to adopt these into their usual practice. This is the challenge for the next generation of research-clinic collaborations.

References

- Achenbach, T. M. (1991a). *Manual for the Child Behavior Checklist/4-18 and 1991 Profile*. Burlington, VT: University of Vermont.
- Achenbach, T. M. (1991b). *Manual for the teachers report form and 1991 profile*. Burlington, VT: University of Vermont, Department of Psychiatry.
- Beck, A. T. (1972). *Depression: Causes and treatment*. Philadelphia, PA: University of Pennsylvania Press.
- Barkley, R. A. (1986). What is the role of group parent training in the treatment of ADD children? *Journal of Children in Contemporary Society*, 19, 143-151.
- Becker, J. V., Alpert, J. L., BigFoot, D. S., Bonner, B. L., Geddie, L. F., Henggeler, S., Kaufman, K. L., & Walker, C. E. (1995). Empirical research on child abuse treatment: Report by the child abuse and neglect treatment working group, American Psychological Association. *Journal of Clinical Child Psychology*, 24(Suppl.), 23-46.
- Bickman, L. (1996). A continuum of care. *American Psychologist*, 51, 689-701.
- Chamberlain, P., & Reid, J. B. (1987). Parent observations and report of child symptoms. *Behavioral Assessment*, 9, 97-109.
- Cunningham, C. E., Bremner, R., & Boyle, M. (1995). Large group community-based parenting programs for families of preschoolers at risk for disruptive behavior disorders: Utilization, cost effectiveness, and outcome. *Journal of Child Psychology and Psychiatry*, 36, 1141-1159.
- Eyberg, S. (1993). Consumer satisfaction measures for assessing parent training programs. In L. Vandecreek, S. Knapp, & T. L. Jackson (Eds.), *Innovations in clinical practice: A source book*. Sarasota, FL: Professional Resource Press.
- Eyberg, S. M., & Pincus, D. (in press). *Eyberg Child Behavior Inventory and Sutter-Eyberg Student Behavior Inventory-Revised: Professional Manual*. Odessa, FL: Psychological Assessment Resources, Inc.
- Eyberg, S., & Ross, A. (1978). Assessment of child behavior problems: The validation of a new inventory. *Journal of Clinical Child Psychology*, 16, 113-116.
- Forehand, R., & McMahon, R. J. (1981). *Helping the noncompliant child: A clinician's guide to parent training*. New York: Guilford Press.
- Forehand, R., Middlebrook, J., Rogers, T., & Steffe, M. (1983). Dropping out of parent training. *Behavioral Research and Therapy*, 21, 663-668.
- Hanf, C., & Kling, J. (1973). *Facilitating parent-child interaction: A two-stage training model*. Unpublished manuscript, University of Oregon Medical School.
- Hibbs, E. D., & Jensen, P. S. (1996). Analyzing the research: What this book is about. In E. D. Hibbs & P. S. Jensen (Eds.), *Psychosocial treatments for child and adolescent disorders: Empirically based strategies for clinical practice* (pp. 3-8). Washington, DC: American Psychological Association.
- Kazdin, A. E. (1995). *Conduct disorders in childhood and adolescence* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Maiuro, R. D., Vitaliano, P. P., & Cahn, T. S. (1987). A brief measure for the assessment of anger and aggression. *Journal of Interpersonal Violence*, 2, 166-178.
- Matson, J. L. (1990). *Matson Evaluation of Social Skills with Youngsters: Manual*. Worthington, OH: International Diagnostic Systems.
- Patterson, G. (1982). *Coercive family process*. Eugene, OR: Castalia Publishing.
- Patterson, G. R., & Gullion, M. E. (1971). *Living with children*. Champaign, IL: Research Press.
- Patterson, G. R., Reid, J. B., & Dishion, T. J. (1992). *Antisocial boys: A social interactional approach, Volume 4*. Eugene, OR: Castalia Publishing.
- Pisterman, S., McGrath, P., Firestone, P., Goodman, J. T., Webster, I., & Mallory, R. (1989). Outcome of parent-mediated treatment of preschoolers with attention deficit disorder with hyperactivity. *Journal of Consulting and Clinical Psychology*, 57, 628-635.
- Procidano, M. E., & Heller, K. (1983). Measures of perceived social support from friends and from family: Three validation studies. *American Journal of Community Psychology*, 1, 1024.
- Rogers, E. M. (1995). *Diffusion of innovations* (4th ed.). New York: The Free Press.
- Seligman, M. E. P. (1995). The effectiveness of psychotherapy: The Consumer Reports study. *American Psychologist*, 50, 965-974.
- Spanier, G. B. (1976). Measuring dyadic adjustment: New scale for assessing marital quality. *Journal of Marriage and the Family*, 38, 15-28.
- Spanier, G. B., & Thompson, L. (1982). A confirmatory analysis of the dyadic adjustment scale. *Journal of Marriage and the Family*, 44, 731-737.
- Tremblay, R. E., McCord, J., Boileau, H., Charlebois, P., Gagnon, C., Le Blanc, M., & Larivée, S. (1991). Can disruptive boys be helped to become competent? *Psychiatry*, 54, 148-161.
- Webster-Stratton, C. (1981a). Videotaping modeling: A method of parenting education. *Journal of Clinical Child Psychology*, 10, 93-97.
- Webster-Stratton, C. (1981b). Modification of mothers' behaviors and attitudes through videotape modeling group discussion. *Behavior Therapy*, 12, 634-642.
- Webster-Stratton, C. (1982). Long-term effects of a videotape modeling parent education program: Comparison of immediate and 1-year follow-up results. *Behavior Therapy*, 13, 712-714.
- Webster-Stratton, C. (1984). Randomized trial of two parent-training programs for families with conduct-disordered children. *Journal of Consulting and Clinical Psychology*, 52, 666-678.
- Webster-Stratton, C. (1985). The effects of father involvement in parent training for conduct problem children. *Journal of Child Psychology and Psychiatry*, 26, 801-810.
- Webster-Stratton, C. (1989). Systematic comparison of consumer satisfaction of three cost-effective parent training programs for conduct problem children. *Behavior Therapy*, 20, 103-115.
- Webster-Stratton, C. (1990). Long-term follow-up of families with young conduct problem children: From preschool to grade school. *Journal of Clinical Child Psychology*, 19, 144-149.
- Webster-Stratton, C. (1992a). *The parents and children videotape series: Programs 1-10*. Seattle, WA: Seth Enterprises. (To order: 1411 8th Ave. W., Seattle, WA 98119.)
- Webster-Stratton, C. (1992b). *The incredible years: A trouble-shooting guide for parents of children aged 3-8*. Toronto, Canada: Umbrella Press.
- Webster-Stratton, C. (1996). Early intervention with videotape modeling: Programs for families with children with oppositional defiant disorder or conduct disorder. In E. D. Hibbs & P. S. Jensen (Eds.), *Psychosocial treatments for child and adolescent disorders. Empirically based strategies for clinical practice* (pp. 435-474). Washington, DC: American Psychological Association.

- Webster-Stratton, C., & Herbert, M. (1994). *Troubled families, problem children. Working with parents: A collaborative process*. New York: John Wiley & Sons.
- Webster-Stratton, C., Hollinsworth, T., & Kolpacoff, M. (1989). The long-term effectiveness and clinical significance of three cost-effective training programs for families with conduct-problem children. *Journal of Consulting and Clinical Psychology, 57*, 550-553.
- Webster-Stratton, C., Kolpacoff, M., & Hollinsworth, T. (1988). Self-administered videotape therapy for families with conduct-problem children: Comparison with two cost-effective treatments and a control group. *Journal of Consulting and Clinical Psychology, 56*, 558-566.
- Weisz, J. R., Donenberg, G. R., Han, S. S., & Weiss, B. (1995). Bridging the gap between laboratory and clinic in child and adolescent psychotherapy. *Journal of Consulting and Clinical Psychology, 63*, 688-701.
- Weisz, J. R., & Weiss, B. (1993). *Effects of psychotherapy with children and adolescents*. London: Sage.
- Wolfe, D. A., Reppucci, N. D., & Hart, S. (1995). Child abuse prevention: Knowledge and priorities. *Journal of Clinical Child Psychology, 24*(Suppl.), 5-22.

RECEIVED: February 4, 1997

ACCEPTED: March 6, 1998

Cognitive Behavioral Interventions for Sexually Abused Children Exhibiting PTSD Symptomatology

STEPHANIE P. FARRELL

ANTHONY A. HAINS

The University of Wisconsin-Milwaukee

W. HOBART DAVIES

Children's Hospital of Wisconsin

This investigation examined the effectiveness of a cognitive behavioral intervention with 4 sexually abused children exhibiting posttraumatic stress disorder (PTSD), using a multiple baseline design. Participants ranged in age from 8 to 10 years. Intervention effectiveness was measured with pre-, post-, and 3-month follow-up assessments of PTSD symptomatology and affective (depression and anxiety) measures. In addition, these instruments were administered during baseline and prior to each treatment session. The intervention focused on the training of relaxation skills, positive self-talk, and cognitive restructuring. All 4 participants reported decreases in their PTSD symptomatology. The 3 participants who had elevated levels of depression and anxiety during baseline showed decreases with treatment. The results of this study suggest that cognitive behavioral techniques can be an effective approach for working with this population.

Between 156,000 and 300,000 children are identified as sexual abuse victims each year (Beutler, Williams, & Zetzer, 1994). These children display an increased incidence of depressive symptomatology (Lipovsky, Saunders, & Murphy, 1989), elevated anxiety (Gomes-Schwartz, Horowitz, & Cardarelli, 1990), sexualized behaviors, nightmares, social withdrawal, sleep difficulties, anger or acting out, school difficulties (Adams-Tucker, 1982; Friedrich, Beilke, & Urquiza, 1987; Kolko, Moser, & Weldy, 1988), and physiological symptoms such as headaches, stomachaches, and vulnerability to disease (Kimerling & Calhoun, 1994).

This study was conducted in partial fulfillment of a master's degree conducted under the direction of the second author.

Correspondence should be addressed to Anthony A. Hains, Department of Educational Psychology, PO Box 413, University of Wisconsin-Milwaukee, Milwaukee, WI 53201.