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One Family at a Time: A Prevention Program for At-Risk Parents

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The purpose of this study was to examine the effectiveness of a psychoeducational parenting program with at-risk parents of young children. At-risk was defined as excessive parental use of verbal and corporal punishment combined with low-income status. All families were seen for 10 weeks, either individually or in very small groups. Results showed that compared with the control group, parents participating in the program significantly decreased their levels of verbal and corporal punishment, anger, stress, and reported child behavior problems; results were maintained at follow-up. Implications for counselors are provided.

Maccoby and Martin (1983) suggested that parents and children influence each other in a reciprocal manner. For example, as children's challenging behaviors increase in frequency and intensity, some parents may reciprocate with harsher discipline to reestablish parent control. Unfortunately, such negative feedback loops, characterized by harsh and inconsistent discipline, tend to increase child behavior problems rather than decrease them (Reid & Patterson, 1991). If continued over the long term, these negative parenting practices can contribute to poor child behavior outcomes. For example, Brenner and Fox (1998) found that increased child behavior problems were best predicted by parents' use of verbal and corporal punishment. Likewise, children disciplined more harshly have been found to be at greater risk for developing mental health problems (Deater-Deckard & Dodge, 1997; Reid & Patterson, 1991), such as antisocial behavior (Takeucki, Williams, & Adair, 1991) and conduct disorder (Velez, Johnson, & Cohen, 1989).

Negative parenting practices are determined by multiple factors (Belsky, 1990). Fox, Platz, and Bentley (1995) found that younger, single, less-educated, and lower income mothers tended to use relatively high levels of verbal and corporal punishment when parenting their young children. More specifically, poverty has been shown to contribute to harsh and inconsistent parenting, a lack of nurturing and warmth, and a greater potential for child abuse (Dodge, Pettit, & Bates, 1994). One explanation for the relationship between poverty and parenting is that the stress of living in poverty may negatively influence a mother's or father's ability to spend the additional time and energy necessary to positively interact with their child (McLeod & Shanahan, 1993). Regardless, poverty is a risk factor for both negative parenting practices and poor child outcomes.

The goal of many psychoeducational parenting programs has been to break the cycle of negative parent–child interactions leading to behavior problems, by teaching parents alternatives to harsh punishment as well as specific skills to positively nurture their children. Cognitive-behavioral methods have emerged as the most effective interventions for working with behavior problems in children (Rogers-Wiese, 1992). Problems such as child noncompliance (Rotto & Kratochwill, 1994), conduct disorder (Webster-Stratton, 1994), behavioral and emotional problems (Strayhorn & Weidman, 1991), and difficult temperaments (Sheeber & Johnson, 1994) have been successfully changed using programs that address parenting practices. Unfortunately, many of these programs have been offered in office or university-based settings and have focused on predominately White, middle-class families whose children had already developed significant behavior problems. Despite research suggesting the connection between harsh parenting practices, poverty, and child behavior problems, relatively little attention has been devoted to bringing these programs, effective with other populations, to low-income families. One exception was a recent study by Webster-Stratton (1998). Families of Head Start children participated in an empirically supported psychoeducational parenting program aimed at preventing conduct disorders in children. Compared with a control group, parents participating in this program significantly improved their parenting and also increased their involvement in their child's educational process. Results were maintained over a 1-year period.

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The STAR Parenting Program is another example of a psychoeducational parenting program that has been shown to be effective with a diverse group of parents. Developed by Fox and Fox (1992), the program integrates cognitive-behavioral, developmental, and social-learning theories to help parents of young children thoughtfully respond rather than emotionally react to their young children's challenging behavior. When confronted with a young child's challenging behaviors, parents are taught to use the program's STAR acronym: S—stop themselves from immediately reacting, T—think about their feelings to regain emotional control, A—ask themselves if their expectations are reasonable for their children, and R—respond in a developmentally appropriate and thoughtful manner. Early research on the effectiveness of this program centered around its application to primarily middle-income parents and found that after participation in this program, parents reported reductions in anxiety, increases in positive self-descriptions, lower expectations for their children, and an increase in positive parenting strategies (Fox, Anderson, Fox, & Rodriguez, 1991; Fox, Fox, & Anderson, 1991; Peters, Platz, & Fox, 1989). Similar results were found in comparison with a control group (Nicholson, Janz, & Fox, 1998). In a study by Brenner, Nicholson, and Fox (1999), over 100 parents participated in the psychoeducational parenting program offered through community agencies in an urban, midwestern city. Participants represented a diverse range of ethnicities, income levels, education, and ages. Similar to previous studies, results indicated that after participation in the 10-session program, parents reported a decrease in their levels of verbal and corporal punishment, an increase in their positive nurturing behavior, and a decrease in child behavior problems.

With the increasing rates of child abuse, this psychoeducational parenting program began to be applied with low-income populations that tended to be more at-risk for using harsh parenting strategies. In a study conducted by Nicholson, Brenner, and Fox (1999), a group of 143 low-income parents participated in the 10-session parenting program. This study reported a statistically significant decrease in levels of verbal and corporal punishment and in child behavior problems. Despite the apparent success of this program, the authors reported a drop-out rate of almost 50%. Factors such as newly legislated parental work requirements (i.e., welfare reform), personal and family crises, transportation, and other personal and family issues made it very difficult for those families most in need to complete the program. This dramatic shift in levels of participation indicated that for many parents this program may not have met some of the participants' individual needs.

In response to the challenges of working with this multistressed, low-income population, adaptations were made to this psychoeducational parenting program to better meet the needs of the families involved. Parents struggling with the increased stress of welfare reform, single-parenthood, and minimal access to resources and supports may benefit more from programs that can be offered in ways that are respectful of their unique circumstances and that are modified to promote success in reaching their goals. Parents with a limited educational background and inconsistent schedules may not be successful in integrating aspects of group-formatted parenting sessions into their interactions with their children but may benefit from the increased support and education provided in individualized services. To meet these additional challenges, a standardized version of a parent education program was developed and delivered to parents in a smaller group (maximum 4) format. The purpose of the present study is to examine the effectiveness of this revised format with at-risk, low-income parents of young children. Dore and Lee (1999), in a review of parenting education research, called for increased attention to the methodological rigor with which parenting research is conducted. To address this concern, the effectiveness of this program was examined with the use of a wait-list control group.

METHOD

Participants and Design

A total of 26 parents of children (ages 1 to 5 years), from a large, urban, midwestern city participated in the study. Families were recruited to participate through advertised parent orientation meetings, school open houses, developmental screening days, newsletters, teacher referrals, self-referral, and through previous participants' referral. All participants completed an approved consent form before any screening or other assessment instruments were administered; participation was voluntary. Of the participants, 23 were mothers, 2 were grandmothers, and 1 was a father; 3 of the mothers participated with their husbands. For these couples, only the mothers' responses to the study's evaluation instruments were used. The average age of the caregivers was 30.79 years (SD = 11.97). Fourteen of the participants were African American (54%), 6 were Hispanic (23%), 4 were White (15%) and the remaining parents were not represented by these categories. Seven parents had not completed high school (27%), 8 were high school graduates (30%), and 11 parents completed some post-high-school education (42%). Sixteen parents were single (62%) and 10 were married (38%). Parents had an average of 2.57 children (range: 1 to 6), with an average of 1.77 children under the age of 5 years. All parents participating in the study were of low-income status as defined by the qualification for the free or reduced lunch program at school; 53% of the families made less than $20,000 annually. To aid in the facilitation of the parenting program and completion of the evaluation instruments, participants were asked to select one child between the ages of 1 and 5 years old to serve as the focus child for the program; 14 boys (54%) and 12 girls (46%) were selected. Children who had psychiatric diagnoses (e.g., autism) or who were receiving special education services in the schools were not included in the study. In addition, none of the children were receiving any concurrent treatment other than routine care for health problems (e.g., ear infections).

To qualify for the study, families needed to have one child between the ages of 1 and 5 years and report frequent use of verbal or corporal punishment. All families participating in

the program were initially screened using the Parent Behavior Checklist (PBC; Fox, 1994). The Discipline subscale, consisting of 30 items rated on a 4-point scale, measures frequency of parental use of verbal and physical punishment. Parents with elevated T-scores on the PBC Discipline subscale were eligible for the study and were randomly assigned to either an experimental (n = 13) or wait-list control group (n = 13). At-risk status was defined as a combination of low socioeconomic status (SES) and excessive use of verbal and corporal punishment.

Psychoeducational Parenting Program

The psychoeducational program consisted of the STAR Parenting Program, specifically designed to meet the needs of parents of 1- to 5-year-old children (Fox & Fox, 1992). This psychoeducational parenting program has a preventive, educational philosophy that builds on existing family strengths. The program is divided into four major segments.

The first segment of the program addresses how young children influence their parents' thoughts and feelings (e.g., "When my child talks back to me, I feel angry and worry that my child is becoming disrespectful") and how these internal events may lead to parent reactions (e.g., yelling for the talking back). With cognitive-behavioral theory (Meichenbaum, 1993) as the basis, parents are taught to gradually adopt a more thoughtful parenting style by teaching parents cognitive-behavioral and anger management strategies. Using a familiar stop-and-go traffic light with an imbedded STAR acronym, parents are taught to *Stop* (red light) and *Think* (yellow light) about their present thoughts and feelings before responding to their children's behaviors. The goal is to gradually lengthen the parent's response time in order to allow the parent sufficient time to consider their present thoughts and feelings and how they might alter them (e.g., count to10, take deep breaths), if necessary, before responding. Parents are given a brightly colored card displaying the STAR strategy to place somewhere in their home to remind them to use the new strategy with their child. Home practice is also assigned to encourage parents to use this cognitive strategy and report back on its effectiveness during the next session.

The second segment of the curriculum focuses on the parents' developmental expectations for their children. The literature supports the notion that a mismatch between parental expectations and the child's developmental capabilities may result in child behavior problems (Rickard, Graziano, & Forehand, 1984). Parents are presented with basic information about child development, which is then connected to the STAR cognitive strategy with the addition of the letter A for *Ask* (yellow light). Parents are taught to Ask themselves about the fairness of their expectations while continuing to Stop and Think about their own thoughts and feelings. If they find that their expectations are not developmentally appropriate, parents are encouraged to alter their expectations before they respond to their child. Home practice encourages parents to monitor their developmental expectations. Their success with this added strategy is reviewed in the next session.

The third and fourth segments of the curriculum emphasize how the parent will *Respond* (green light) to the child. Both positive parenting and discipline strategies are addressed. Positive parenting strengthens child compliance (Wahler & Meginnis, 1997), reduces misbehavior (Russell & Russell, 1996), and increases self-esteem (Nystul, 1984) in young children. To build on existing family strengths, this segment begins by having parents share their own nurturing strategies, which encourage their children's development and transmit their family values and culture (e.g., reading, cooking, telling stories, playtime). Existing nurturing skills are then augmented with specific nurturing strategies such as giving good instructions and effective positive reinforcement (Forehand & McMahon, 1981). Parents are encouraged to positively respond to their child's good behavior through the use of rewards and positive attention. Home practice emphasizes the continued use of the STAR acronym with special attention to nurturing.

Finally, the fourth segment specifically addresses discipline. Behavioral strategies have been shown to be effective in working to modify young children's problematic behavior (Newby, Fischer, & Roman, 1991). Parents are taught general guidelines and strategies for setting limits on their child's behavior, such as redirection, ignoring, natural consequences (Hamner & Turner, 1996), and time-out (Forehand & McMahon, 1981). Parents learn age-appropriate techniques to help address their child's challenging behavior, such as the use of redirection for younger children and natural consequences for older children. Specific directions are offered to facilitate the use of these skills most effectively within the unique environments of each of the families (e.g., how to use time-out appropriately in a small apartment with other siblings present). Home practice encourages parents to implement these new techniques, integrating all of the program's segments with the use of the STAR acronym.

The STAR Program was delivered to parents in 10 weekly 1½-hour sessions facilitated with parents in small groups (maximum 4). A standardized protocol was developed, which outlined specific content to be covered in each of the 10 sessions. The development of this protocol provided enough structure to guide facilitators through program delivery, while allowing enough flexibility to tailor the program to the unique needs of each family. Weekly goals designed to assist the family in applying the STAR program to their interactions with their children were assigned. To help reinforce information provided in the sessions, parents received four 1-hour audiocassettes and workbooks for in-home applications of the parenting concepts. All materials were written at a third-grade reading level, and session content was adapted to meet the unique needs of the parents involved.

Facilitator Training

A STAR Leader's Training program, led by the third author, trained facilitators to deliver the parenting program. Fa-

cilitators included one doctoral-level and five master's-level professionals with between 3 and 20 years experience working with families in low-income circumstances. Facilitators met weekly for 2-hour sessions as part of a 20-hour training program, which included a review of the program content and underlying theory, practice training exercises, and discussion regarding adapting the program to the specific needs of these low-income families. Facilitators received a STAR Parenting Leader's Guide to aid in the implementation of the program (Fox & Fox, 1992). The facilitators met monthly, after the training program, to discuss problems that arose in implementing the program, to brainstorm about alternative adaptations of specific techniques to families, and to provide support and supervision. Research has supported the effectiveness of this training program (Fox & Parroni-Hennick, 1996).

Instruments

Parents completed a number of instruments measuring both parenting behaviors and child behavior problems. All measures were used at pretest, posttest, and follow-up. During each assessment session, both the parent and the child were to allow the facilitator the opportunity to observe and assess the nature of the parent–child interaction. A family information form was completed to obtain basic demographic information.

PBC (Fox, 1994). The PBC is a 100-item, self-report measure of parenting behaviors for parents of young children ages 1 to 5 years. The PBC measures parenting behaviors on three subscales: (a) Discipline measures parental responses to children's challenging behaviors (e.g., "When my child has a temper tantrum, I spank him/ her"), (b) Nurturing measures specific positive parent behaviors that promote a child's psychological growth (e.g., "I praise my child for learning new things"), and (c) Expectations measures parents' developmental expectations (e.g., "My child should be old enough to share toys"). More effective parenting strategies are associated with lower scores on Discipline, higher scores on Nurturing, and midrange scores on Expectations. All items are rated using a 4-point frequency scale, and they are written at a third-grade reading level. Internal consistencies for each subscale are as follows: Discipline = .92, Nurturing = .91, and Expectations = .97. Test–retest reliabilities, determined through two administrations of the PBC separated by at least 1 week, were as follows: Discipline = .87, Nurturing = .81, and Expectations = .98 (Peters & Fox, 1993). The PBC has been shown to discriminate between differently aged children (Fox & Bentley, 1992) and is not subject to social desirability (Peters & Fox, 1993). All scores are converted into uniform T-scores based on a representative sample of 1,056 mothers from a large urban city (Fox, 1994), to allow for comparison across parents of differently aged children.

Parenting Stress Index-Short Form (PSI-SF; Abidin, 1995). The PSI-SF is a 36-item self-report measure of the amount of stress experienced by parents of young children. The PSI-SF measures parenting stress on three subscales: (a) Parent Distress measures the amount of distress a parent is experiencing in his or her role as a parent or as a function of personal factors that are related to parenting, (b) Parent–Child Dysfunctional Interaction measures the parent's perception that his or her child does not meet the parent's expectations and the interactions with his or her child are not satisfying, and (c) Difficult Child measures the basic behavioral characteristics of children that make them either easy or difficult to manage. Items are rated on a 5-point scale, ranging from *strongly agree* (1) to *strongly disagree* (5). High scores on any of these subscales are indicative of an increased level of parental stress. Test–retest and alpha reliabilities for the PSI-SF total score are .84 and .91, respectively.

Brief Anger-Aggression Questionnaire (BAAQ; Maiuro, Vitaliano, & Cahn, 1987). The BAAQ is a six-item, self-report measure of anger-related feelings and behaviors (e.g., "I get mad enough to hit, throw, or kick things"). Items are rated on a 5-point scale from *extremely unlikely* (0) to *very likely* (4). Higher scores are indicative of a greater degree of anger and aggressive behavior by the parent. A cutoff score of 9 indicates a fair likelihood of loss of anger control. The BAAQ demonstrates good internal consistency (r = .82) and test–retest reliability (r = .84).

Behavior Screening Questionnaire (BSQ; Richman & Graham, 1971). The revised version of the BSQ was used to identify emotional and behavioral problems in preschool children. Twelve behaviors typical of young children (e.g., temper tantrums, toileting, eating) are presented and rated by parents on a 4-point scale ranging from *always/almost always* (4) to *never/almost never* (1). Interrater reliabilities for the BSQ have been reported between .77 and .94. Higher scores on this scale are indicative of more behavior problems in young children.

Eyberg Child Behavior Inventory (ECBI; Eyberg & Ross, 1978). This 36-item instrument measures both the intensity and the frequency of externalizing behavior problems in young children. For each of the behaviors presented, parents are asked to rate on a 7-point scale the frequency with which each behavior occurs and then indicate whether this behavior is currently a problem for them by responding with a yes or no. Two scores are derived: (a) the Intensity score is the sum from the 7-point scaled questions and (b) the Problem score is the total number of behaviors parents indicated were currently a problem (total yes responses). Higher scores are indicative of a greater frequency and intensity of problem behaviors. This scale has been shown to reliably discriminate children with conduct problems. Test–retest and alpha reliabilities for the ECBI are .86 and .98, respectively. The child's day care or Head Start teacher also completed the Sutter-Eyberg Student Behavior Inventory (Sutter & Eyberg, 1984), the teacher version of the ECBI. Test–retest reliabilities were .90 for the intensity score and .89 for the problem score, while the coefficient alpha for the problem and intensity scores were .96 and .98, respectively.

Pediatric Symptom Checklist (PSC; Murphy & Jellinek, 1988). This 24-item instrument measures, on a 3-point scale,

problem behaviors typical of young children. In the current study, each child's teacher also completed a school version of this measure. Reliability coefficients have been reported in the upper .80s to lower .90s along with solid validity data including minority samples (Pagano et al., 1996).

Interview Observational Report. During the pretest, posttest, and follow-up assessments, the parent and the focus child were present. Using an Interview Observational Report, developed for this study, the facilitator separately rated the parent and the child using a 10-point frequency scale (10 = *observed often* to 1 = *did not observe*) in four behavioral areas: verbal positive—parent comments positively on child's activity, child asks parents questions; verbal negative—parent responds negatively to child, child whines or sasses; physical positive—parent holds child, child hugs parent or plays with toys; and physical negative—parent handles child roughly, child throws toys. Positive and negative summary scores were computed for both parent and child.

In addition, the facilitator completed an overall rating of parent–child functioning based on their review of the evaluation data and the observed interaction. Using a scale of 0 to 100, parent–child dyads were rated as demonstrating *no impairment* in the relationship to *severe impairment*. This measure is similar in format to the Children's Global Assessment Scale (Shaffer et al., 1983), used to describe a child's functioning. Descriptive anchors were included to describe regular intervals on this qualitative/quantitative measure.

Program dosage measures. To obtain an empirical measure of the amount and quality of program received by each participant, a number of measures were completed. At each session, parents were assigned a simple goal for the week (e.g., practice stopping and thinking before you manage your child's behavior). Parents were asked to complete a series of five questions at each session measuring the degree to which they had met their goals during the week on a scale from 1 *(not very much)* to 10 *(a lot)*. A total score was computed for each session (coefficient alpha's ranged from .71 to .95). Also, during each session, the facilitator was asked to rate the degree to which they thought the parent had met the assigned goal on a scale from 1 to 10. Parent attendance rates and length of participation also were documented.

Procedure

All participants were initially screened using the PBC and the Family Information Form. Parents eligible for the program (a T-score of 55 or higher on the Discipline subscale; low-income status) were then randomly assigned to either an experimental or wait-list control group. Parents not eligible for the program were referred for other ongoing parenting groups. Those parents assigned to the experimental group completed the previously described evaluation measures at pretest, participated in the 10-session psychoeducational parenting program, and completed the evaluation measures at posttest and then again at 1-month follow-up. Parents assigned to the wait-list control group completed the initial pretest measures and were placed on the waiting list for approximately 6 to 8 weeks. Prior to participating in the program, the control group parents again completed the pretest evaluation, received the 10-session psychoeducational parenting program, and completed posttest and 1-month follow-up evaluations. Parents completing the program through follow-up received a monetary incentive ($50 gift certificate). Missed sessions were rescheduled to ensure that each parent consistently received the entire psychoeducational parenting program.

RESULTS

Initial analyses indicated that there were no differences between the experimental and the control groups at pretest on parent age, focus child's gender or age, marital status, race, parent education, SES, or any of the dependent measures. A series of repeated measures multivariate analyses of variance (MANOVAs) were performed to evaluate the differences between experimental and control groups between pretest (Time 1) and posttest (Time 2) conditions. In a repeated measures analysis with an experimental and wait-list control group design, it is the interaction between the time of measurement and the experimental condition that is of interest, that is, whether the difference between the pretest and the posttest means of the experimental group are significantly greater or less than the difference for the wait-list control group. Table 1 shows the means and standard deviations of each dependent measure for the experimental and the wait-list control groups at pretest and posttest.

A MANOVA yielded a significant Group × Time interaction effect for the PBC ($\lambda = .67$, Exact $F = 14.61$, $p < .001$). Univariate F tests indicated that the experimental group showed significant reductions in Discipline, $F(1, 23) = 41.62$, $p < .001$, with no significant changes in Nurturing, $F(1, 23) = 1.95$, $p = .18$, or Expectations, $F(1, 23) = .29$, $p = .59$. A significant Group × Time interaction effect was found on the Parenting Stress Index ($\lambda = .31$, Exact $F = 3.33$, $p < .05$). Univariate F tests indicated that the experimental group showed significant reductions on the Parent–Child Dysfunctional Interaction subscale, $F(1, 24) = 8.73$, $p < .01$, and no significant changes on the Parent Distress subscale, $F(1, 24) = 2.84$, $p = .10$, or on the Difficult Child subscale, $F(1, 24) = 3.26$, $p = .08$. The BAAQ also showed a significant interaction effect, Exact $F = 4.50$, $p < .05$; parents in the experimental group significantly reduced their level of anger after participation in the program.

Child behavior problems also significantly decreased after participation in the program. A MANOVA combining the BSQ and the PSC found a significant Group × Time interaction effect ($\lambda = .49$, Exact $F = 11.09$, $p < .001$). Univariate F tests indicated that the experimental group showed significant decreases in the BSQ, $F(1, 24) = 23.14$, $p < .001$, and the PSC, $F(1, 24) = 5.91$, $p < .05$. There was a "trend" toward a significant interaction effect for the ECBI ($\lambda = .20$, Exact $F = 2.87$, $p = .08$), and the teacher-completed forms of the Sutter-Eyberg Student Behavior Inventory or the PSC ($\lambda = .29$, Exact $F = 2.77$, $p = .07$).

TABLE 1

Means and Standard Deviations for Each Dependent Variable By Experimental and Control Groups

	Experimental				Wait-List Control			
	Time 1		Time 2		Time 1		Time 2	
Measure	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
PBC subscales								
Nurturing	47.67	10.70	51.17	8.26	43.46	7.22	42.31	6.32
Discipline	61.08	3.78	46.00*	9.08	61.38	3.64	61.23	3.34
Expectations	44.42	12.54	46.83	11.82	42.77	11.11	46.31	10.01
PSI-SF subscales								
Parent Distress	32.92	8.79	30.00	8.42	30.69	5.95	30.15	7.22
Parent–Child Dysfunctional Interaction	24.31	7.11	21.15*	6.73	22.92	6.64	22.92	6.07
Difficult Child	35.46	10.56	33.15	10.34	37.00	5.67	37.08	5.87
Brief Anger-Aggression Questionnaire	11.08	3.28	8.46*	3.10	10.15	2.64	10.15	3.47
Behavior Screening Questionnaire	27.46	5.77	22.38*	4.87	24.85	2.94	25.85	3.74
Pediatric Symptom Checklist–Parent Form	59.31	10.31	55.31*	12.55	58.46	6.15	60.46	7.72
Eyberg Child Behavior Inventory subscales								
Problem score	18.77	6.33	15.62	10.39	19.62	5.84	18.92	6.80
Intensity score	122.92	37.11	102.54	45.76	116.85	23.17	119.85	26.84
Sutter-Eyberg Behavior Inventory								
Problem score	12.45	11.10	10.91	10.19	16.31	9.35	14.00	8.81
Intensity score	77.36	43.52	69.54	35.67	96.85	33.15	97.46	34.46
Pediatric Symptom Checklist–Teacher Form	50.91	13.49	47.09	10.52	52.77	9.20	53.46	8.88

Note. PBC = Parent Behavior Checklist. PSI-SF = Parenting Stress Index-Short Form.
*significant interaction effect $p < .05$.

To evaluate the follow-up effectiveness of the program, a series of MANOVAs were computed to determine changes over time. For these analyses, the experimental and wait-list control groups were combined. Table 2 shows the means and standard deviations of each dependent measure at pretest, posttest, and follow-up for the combined groups.

A repeated measures MANOVA indicated significant changes over time on the PBC ($\lambda = .80$, Exact $F = 12.81$, $p < .001$). Univariate F tests indicated that the parents who completed the program showed reductions in Discipline between pretest and posttest, $F(1, 24) = 72.77$, $p < .001$, and maintained these reductions between posttest and follow-up, $F(1, 24) = .09$, $p = 77$. There were no significant changes on the Expectations subscale between pretest and posttest, $F(1, 24) = 2.20$, $p = .15$; or between posttest and follow-up, $F(1, 24) = 1.26$, $p = .27$. There were also no significant changes on the Nurturing subscale between pretest and posttest, $F(1, 24) = 3.14$, $p = .10$; or between posttest and follow-up, $F(1, 24) = .15$, $p = .70$. A repeated measures MANOVA indicated significant changes over time on the PSI-SF ($\lambda = .68$, Exact $F = 7.27$, $p < .001$). Univariate F tests indicated that the Parent Distress subscale did not decrease significantly between pretest and posttest, $F(1, 25) = 3.09$, p = .09, although it did significantly decrease between posttest and follow-up, $F(1, 25) = 9.50$, $p < .01$. In addition, the Parent–Child Dysfunctional Interaction subscale decreased significantly between pretest and posttest, $F(1, 25) = 7.35$, $p < .05$, and continued to decrease between posttest and follow-up, $F(1, 25) = 6.34$, $p < .05$. Finally, the Difficult Child subscale decreased significantly between pretest and posttest, $F(1, 25) = 14.25$, $p = .001$, as well as between posttest and follow-up, $F(1, 25) = 8.43$, $p < .01$. A repeated measures MANOVA indicated significant changes over time on the Brief Anger-Aggression Questionnaire (Exact $F = 13.55$, $p < .001$). Univariate F tests indicated that parents significantly reduced their level of anger between pretest and posttest, $F(1, 25) = 17.88$, $p < .001$, and maintained these reductions between posttest and follow-up, $F(1, 25) = 2.66$, $p = .12$.

A repeated measures MANOVA indicated significant changes over time on the PSC and the BSQ ($\lambda = .68$, Exact $F = 12.11$, $p < .001$). Univariate F tests indicated that child behavior problems decreased significantly on the BSQ between pretest and posttest, $F(1, 25) = 49.78$, $p < .001$, and maintained these changes between posttest and follow-up, $F(1, 25) = .15$, $p = .70$. On the PSC, univariate F tests indicated significant decreases between pretest and posttest $F(1, 25) = 25.27$, $p < .001$, and these changes were maintained between posttest and follow-up, $F(1, 25) = .17$, $p = .69$. A repeated measures MANOVA indicated significant

TABLE 2

Means and Standard Deviations for Each Dependent Variable at Pretest, Posttest, and Follow-Up

	Pretest		Posttest		Follow-Up	
Measure	***M***	***SD***	***M***	***SD***	***M***	***SD***
PBC subscales						
Nurturing	44.88	8.94	48.00	7.78	47.52	9.47
Discipline	61.16	3.48	47.68*	8.07	47.20	9.15
Expectations	45.40	11.09	47.24	9.24	48.32	9.09
PSI-SF subscales						
Parent Distress	31.54	8.01	29.69	7.84	25.81*	7.99
Parent–Child Dysfunctional Interaction	23.61	6.52	21.77*	6.36	19.58*	5.49
Difficult Child	36.27	8.41	31.46*	10.21	28.46*	10.21
Brief Anger-Aggression Questionnaire	10.60	3.50	7.90*	4.18	7.00	4.60
Behavior Screening Questionnaire	26.65	4.83	20.88*	4.56	20.54	4.72
Pediatric Symptom Checklist–Parent Form	59.88	8.94	53.65*	10.50	52.15	9.86
Eyberg Child Behavior Inventory subscales						
Problem score	19.19	5.98	14.54*	9.92	13.88	9.59
Intensity score	121.38	31.77	97.27*	40.74	90.35	30.55
Sutter-Eyberg Behavior Inventory						
Problem score	11.73	9.44	9.33	7.94	10.13	9.50
Intensity score	80.80	40.08	67.47	30.66	76.80	35.74
Pediatric Symptom Checklist–Teacher Form	50.53	11.17	46.60	8.97	47.07	9.28

Note. See Table 1 *Note.*
*significant change $p < .05$.

changes over time on the ECBI ($\lambda = .65$, Exact $F = 10.25$, $p < .001$). Univariate F tests indicated significant decreases between pretest and posttest on the Problem Score, $F(1, 25) = 9.27$, $p < .01$, and this change was maintained between posttest and follow-up, $F(1, 25) = .21$, $p = .65$. The Intensity subscale also decreased significantly between pretest and posttest, $F(1, 25) = 17.15$, $p < .001$, and was maintained between posttest and follow-up, $F(1, 25) = 1.93$, $p = .18$. A repeated measures MANOVA was performed to evaluate change over time on the teacher forms of the Sutter-Eyberg Child Behavior Inventory and the PSC. There were no significant overall decreases in their perception of child's behavior ($\lambda = .32$, Exact $F = 1.30$, $p = .33$).

In addition to these primary analyses, a secondary analysis was performed to evaluate the program dosage effects. Parents' responses to weekly questions regarding the degree to which they met their goals were computed, resulting in a total score for each session. These parent scores were then correlated with the facilitator's weekly rating of the parents. These ratings resulted in significant correlations, ranging from .62 to .83, for each session (all $ps < .01$). Finally, to determine if the parents' rating of their goals changed over time, a MANOVA was computed using each session's total score as the dependent variables. Table 3 shows the means, standard deviations, reliability coefficients, and correlations for this measure at each session. Averaged F tests indicated that there was a significant increase in the parent's ability to achieve their goals over time ($\lambda = .89$, Aver. $F = 15.24$, $p < .01$).

During the pretest, posttest, and follow-up assessments, the parent and the focus child were present. Using an Interview Observational Report, the facilitator separately rated the parent and child using a 10-point frequency scale on positive and negative behaviors. Table 4 shows the means and standard deviations of the Interview Observational Report scores across time. A repeated measures MANOVA indicated significant changes over time on these observational measures ($\lambda = .79$, Exact $F = 8.43$, $p < .001$). Univariate F tests indicated significant increases in parent positive behaviors (physical positive and verbal positive) between pretest and posttest, $F(1, 25) = 13.6$, $p < .001$, and between posttest and follow-up, $F(1, 25) = 12.5$, $p < .01$. Univariate F tests indicated significant decreases in parent negative behavior (physical negative and verbal negative) between pretest and posttest, $F(1, 25) = 7.5$, $p < .01$, and between posttest and follow-up, $F(1, 25) = 40.7$, $p < .01$. Univariate F tests indicated significant increases in child positive behavior between pretest and posttest, $F(1, 25) = 21.6$, $p < .001$, and between posttest and follow-up, $F(1, 25) = 8.6$, $p < .01$. Univariate F tests indicated significant decreases in child negative behavior between pretest and posttest, $F(1, 25) = 4.2$, $p < .05$, and between posttest and follow-up, $F(1, 25) = 26.5$, $p < .001$.

A repeated measures MANOVA indicated significant change over time on the measure assessing global family functioning ($\lambda = .78$, Exact $F = 41.38$, $p < .001$). Univariate F tests indicated that families improved their level of functioning, $F(1, 25) = 83.2$, $p < .001$, from pretest ($M = 54.23$, $SD = 14.47$), to posttest ($M = 78.46$, SD

TABLE 3

Mean Scores and Standard Deviations for the Parent Self-Report, and Facilitator Rating Scale, With Reliability and Correlation Coefficients

	Session Number								
Item	3	4	5	6	7	8	9	10	Follow-Up
Parent total (1–5)									
M	23.7	25.0	24.9	27.9	34.9	32.5	35.0	34.4	35.5
SD	6.30	6.90	8.40	7.30	5.80	8.80	7.70	8.20	7.20
Facilitator rating									
M	4.85	5.00	4.67	5.38	6.57	6.11	6.58	6.60	6.16
SD	1.60	2.07	2.18	1.86	1.96	2.51	2.46	2.42	2.34
Parent/parent educator correlation	.74	.83	.76	.57	.75	.83	.69	.75	.62
Internal reliability	.72	.71	.86	.87	.82	.95	.94	.93	.88

*All correlations are significant at the .01 level.

= 12.79), and remained stable at follow-up, $M = 79.62$, $SD = 13.99$; $F(1, 25) = .43$, $p > .05$.

DISCUSSION

The purpose of this study was to evaluate the effectiveness of a psychoeducational parenting program with at-risk parents from a low-income population. Compared with a wait-list control group, parents participating in this psychoeducational program showed significant decreases in their use of verbal and corporal punishment, in their levels of stress and anger, and their perception of child behavior problems. After combining groups and studying the effects of the program across time, parents showed significant reductions in verbal and corporal punishment, stress, anger, and child behavior problems and either maintained these changes at 1-month follow-up or continued to show decreases in levels of stress. Further analyses indicate that parents' ability to apply the program to their interactions with their children significantly increased with time and was consistent with facilitators' assessment of parental functioning. Observational data further support the improvements parents reported in their interactions with their children. Parents were observed to increase their level of positive interactions and decrease their level of observed negative interactions. Children also made observable changes by increasing their positive behaviors and decreasing their negative behaviors. Using a measure of global functioning, we determined that families tended to improve in the quality of their interaction after participation in the program.

These findings are noteworthy for a number of reasons. Parents participating in this program showed reductions in their reliance on harsh punishment and also reported reductions in their child's behavior problems. These findings are congruent with the research from Loeber and Dishion (1983), who found that inconsistent and harsh discipline practices, poor monitoring of a child's behavior, and minimal positive parental involvement were indicative of behavior problems in children. As parents learned to become more patient in their interactions with their young children, while incorporating alternative discipline techniques, they experienced an improvement in their child's behaviors. Perhaps by decreasing parents' use of verbal and corporal punishment, potential behavior problems were reduced early on, minimizing the risk of developing more severe behavior problems in the future. As part of the psychoeducational program, parents were taught a number of proven behavior management techniques such as looking ahead, giving good instructions, positive reinforcement, redirection, planned ignoring, and time-out. Rogers-Wiese (1992) suggested that these types of behavioral-management techniques are effective approaches for dealing with ineffective parent–child interactions and for improving overall family

TABLE 4

Mean Scores and Standard Deviations for the Interview Observational Report at Pretest, Posttest, and Follow-Up

Interview Observational Report	Pretest		Posttest		Follow-Up	
	M	*SD*	*M*	*SD*	*M*	*SD*
Parent						
Positive	7.65	3.52	9.46	3.57	12.15	3.76
Negative	3.27	1.73	2.27	1.12	0.85	1.05
Child						
Positive	9.88	3.14	11.77	2.80	13.58	2.74
Negative	4.69	2.38	3.85	2.29	1.77	2.33

relationships. Parents were also taught specific cognitive-behavioral strategies for developing control over their anger and increasing their patient responses with their children, the effects of which were apparent in the reductions of reported parental anger and aggression.

Webster-Stratton (1994) believed that as parents learn and consistently apply nurturing strategies and improve their communication skills, they begin to foster prosocial child behavior that helps to strengthen the parent–child relationship. Support for this hypothesis was found in the present study through the reduction in negative parent–child interactions as measured by the PSI-SF (Abidin, 1995). Maccoby and Martin (1983) theorized that children and parents respond in a reciprocal fashion. Therefore, as parents reported a decrease in their negative interactions with their children, they were also reporting less verbal and corporal punishment, and increased patience. Reciprocally, children displayed fewer behavior problems.

This psychoeducational program was enhanced by the close, weekly contact between facilitators and parents. By scheduling families individually, facilitators were able to accommodate parents' changing schedules and reschedule appointments. This flexibility reduced the drop-out rate from 50%, common to large parenting education programs (Nicholson et al., 1999), to 10% for the present study. In this way, parents most in need of parenting education were able to complete the program, as well as reduce their levels of corporal and verbal punishment with their young children. Also, the standardized format provided sufficient structure for the facilitators, while allowing for enough flexibility to adapt the program to the participant's needs. Facilitators were able to spend additional time, when necessary, helping parents to understand difficult concepts or to make complex changes in their interactions with their children.

Nevertheless, there were many challenges to working with this population. Thompson, Grow, Ruma, Daly, and Burke (1993) found that one of the difficulties with providing programs to low-income populations is their limited access to services. They found that offering services at different times and in different locations with many make-up sessions was imperative to the success of their program. This was also true in the current study. Consequently, the facilitators made weekly phone calls to parents or left written reminders on a weekly basis to encourage continued involvement in the program. Because of the small group format, the curriculum was frequently adapted to meet the unique needs of the parents involved. Written homework was de-emphasized, while concrete, behavioral goals were developed to encourage parents to incorporate the parenting material into their interactions with their children in a meaningful way.

There were some limitations to the current study as well. Due to the intense, individualized focus of the psychoeducational program, a small sample was used. This small sample size necessarily limits the generalizability of the effectiveness of this psychoeducational program to the general population. However, there is significant data available to support the effectiveness of the STAR Program with other samples of low-income parents (Nicholson et al., 1999). Recruitment of participants able to find adequate time and make a commitment was an additional challenge. Teachers were relied on as independent observers and asked to complete child assessment forms for the families participating in the psychoeducational program. Results indicate no significant differences for the teacher's report of child behavior problems compared with a control group, or across time. However, fewer than half of the teacher reports were returned. It is clear that although the time to complete the forms was minimal (20 minutes), additional collaboration was necessary to motivate teacher involvement in the process.

IMPLICATIONS FOR COUNSELORS

This research suggests that at-risk parenting behavior can be successfully reduced through the use of a psychoeducational parenting program individualized for parents of young children. This approach allowed parents and families the opportunity to work with a facilitator in developing parenting strategies that best meet their needs and that will be successful in their unique environments. Although group-based parenting programs may be effective in other instances, low-income families may have difficulty integrating "classroom" material into their daily interactions with their children. In working with these families, it became increasingly important to collaborate with the parent to determine specific weekly goals.

Applications of this approach to working with parents in clinical practice may be beneficial for counselors for many reasons. First, the concepts and strategies used in this psychoeducational parenting program are not complex, yet are well grounded in established theory. Consequently, counselors will find the material familiar and integrated in a logical manner for efficient use with families of young children. Second, the standardized format provides structure for each session but does allow sufficient flexibility for counselors to exercise their own clinical judgment with each family. Recently, the findings and experience from this study and related studies were incorporated into a newly revised facilitator's manual (Fox & Nicholson, 2002). Third, this parenting program provides parents with skills for dealing with behavior problems early on and therefore may help prevent future problems with their children. Finally, counselors may find that using this individual approach offers parents in difficult circumstances more comprehensive services and better outcomes than referral to other large group-based programs.

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