

## An Evaluation of a Parenting Class Curriculum for Parents of Young Children: *Parenting the Strong-Willed Child*

Nicola A. Connors · Mark C. Edwards · April S. Grant

Published online: 5 December 2006

© Springer Science+Business Media, LLC 2006

**Abstract** Young children with high levels of acting out behaviors present a challenge for families, caregivers, and the childcare system. The *Parenting the Strong-Willed Child (PSWC)* parenting class curriculum program is a 6-week, group based parent education program designed for parents of children with noncompliance problems (ages 2–8). The *PSWC* program was offered at no cost to parents enrolled in 8 Head Start centers, and parents were invited to participate in a program evaluation study. Seventy-one families enrolled in the study and completed at least one *PSWC* session. From pre- to post-test, parents reported significant improvements in both the frequency and intensity of child behavior problems. Parents also reported significant reductions in parenting stress, as well as improvements in their parenting behaviors, including a reduction in the use of lax discipline techniques and emotional reactivity in the context of discipline encounters. All improvements were sustained six months later. These preliminary results are encouraging, and point to the need for a more rigorous, controlled evaluation of the *PSWC* parenting class curriculum.

**Keywords** Behavior problems · Parent education · Child intervention · Parenting

Young children who present with high levels of acting out behaviors present a challenge for families, caregivers, and the childcare system. These children may display a variety of behaviors, including tantrums, defiance, noncompliance, aggression, and destruction of property. Studies suggest that anywhere from 7 to 20% of children meet the diagnostic criteria for oppositional defiant disorder or conduct disorder. In low-income welfare families these rates may be as high as 35% (Webster-Stratton & Hammond, 1998). Among preschool

---

N. Connors (✉)

University of Arkansas for Medical Sciences, Partners for Inclusive Communities, 2001 Pershing Cir,  
Suite 300, North Little Rock, AR 72114, USA  
e-mail: connersnicolaa@uams.edu

M. Edwards · A. S. Grant

Department of Pediatrics, College of Medicine, University of Arkansas for Medical Sciences, Little  
Rock, AR, USA

children, studies indicate that as many as 13% of children are described by their parents as difficult to control (Campbell, 1995).

A critical issue with preschool-age children is that without intervention, conduct problems may progress to a more serious behavioral disorder in later childhood. While many children 'outgrow' their problems, there is evidence that many preschool children with conduct problems, especially those with persistent, multi-faceted, and severe problems, will continue to have some degree of problems as adolescents and adults. Longitudinal studies, some beginning with children as young as 2 or 3, suggest that approximately 50% of young children with disruptive behavior problems will continue to have some form of difficulties into school age or adolescence (Campbell, 1995; Lavigne et al., 1998; Richman, Stevenson, & Graham, 1982).

Research has long shown that therapeutic parent management training (PMT) programs evaluated with clinical populations can produce meaningful changes in child behavior, as well as perceptions of parents toward their acting-out child (Karoly & Rosenthal, 1977). PMT programs are some of the most frequently and rigorously studied of the interventions for conduct-disordered children (Alvarado, Kendall, Beesley, & Lee-Cavaness, 2000; Chambless et al., 1996). *Helping the Noncompliant Child* (McMahon & Forehand, 2003) is a PMT program that has been identified by the Office of Juvenile Justice and Delinquency Prevention and the Center for Substance Abuse Prevention (Alvarado et al., 2000), as a program with the highest quality of evaluation. In numerous controlled studies conducted by the developers and independent investigators, HNC was shown to be effective in producing both short and long term improvements in child behavior (see McMahon & Forehand, 2003 for a review of research supportive of HNC). PMT programs, as well as HNC, were designed to be implemented by a trained clinician with individual families with children with identified conduct problems disordered child (indicated population).

Several parent education programs have adapted the principles and procedures of PMT programs for use with groups of families with children at-risk for conduct problems (selected population). Parent education programs can be implemented by a trained paraprofessional and have the promise of preventing the development of conduct disorders in children with risk-factors. An abbreviated version of *The Incredible Years* was evaluated as a group intervention in a setting with children at-risk for conduct problems (Webster-Stratton, Reid, & Hammond, 2001). The parent education component to this program consisted of 8–9 weekly meetings (2 hr each session). This program was evaluated to have positive benefits on parent-child interactions and child behavior. Additional Research is needed to evaluate the effectiveness of parent education programs adapted from PMT therapeutic interventions with young children at-risk for behavior problems.

The *Parenting the Strong-Willed Child* parenting class curriculum (Long & Forehand, 2002a, 2002b) is a 6-week, group based parent education program designed for parents of children with noncompliance problems (ages 2–8). This parenting class curriculum uses the book *Parenting the Strong Willed Child*, which was written for parents, as its guide. The PSWC program is based on the principles and procedures of the *Helping the Noncompliant Child* individual therapeutic program. The program teaches parents a series of skills designed to disrupt coercive interactions by increasing positive attention for good behavior, ignoring minor inappropriate child behavior, providing clear instructions to the child, and providing appropriate consequences for compliance and noncompliance. The PSWC program was developed to address the shortage of parent education programs for use with children at-risk for the development of behavior problems. The developers have conducted two uncontrolled pilot evaluations of the parenting class curriculum. The first evaluation (Long & Forehand, 2000) involved 24 parents who participated in the six-week program.

The second evaluation (Long & Forehand, 2002a, 2002b) involved 54 parents who participated in the program. Both evaluations found significant decreases in parent reports of child problem behavior using a modified version of the Eyberg Child Behavior Inventory and high parent satisfaction with the program. However, no independent evaluation has been conducted.

Head Start, the federally sponsored preschool program for low-income children, provides an excellent context for implementing parent training programs and other prevention and early intervention programs (Webster-Stratton & Hammond, 1998). Head Start provides an avenue to reach low-income children and parents, which is important because many of the family and child risk factors related to behavior problems are present at elevated rates in low-income families. In a recent study focused on Head Start families, Webster-Stratton and Hammond (1998) reported that 35% of the families had three or more major family risk factors (e.g. depression, psychiatric illness, single parenthood), and that more than 40% of Head Start mothers displayed high rates of harsh or physically negative discipline, which is also a major risk factor for child behavior problems. Because Head Start uses a comprehensive approach to foster healthy child development, parent education is an important component of the program. However, implementing empirically validated parent education programs can be challenging for Head Start staff that may lack the necessary training or resources. Leaders in the field have called for a stronger emphasis on the use of validated approaches to help parents and teachers address the behavioral needs of Head Start children (Yoshikawa & Zigler, 2000).

The purpose of our study was to assess immediate and short-term effects of the Parenting the Strong Willed Child program on child behavior, parenting practices, and parenting stress in a population of families enrolled in Head Start. It was hypothesized that parents who completed the program would report significant improvements in child behavior, parenting practices, and parenting stress. In addition, it was hypothesized that parents would report high satisfaction with the program.

## Method

### Participants

A total of 71 parents were enrolled in the PSWC program over a two year period. As seen in Table 1, among the 71 parents that enrolled in the study, most were married (69.6%), and nearly all had completed high school (86.4%). Half of the parents were Caucasian (50.7%), while 40.8% were African-American, 4.2% were Hispanic, and the remaining 4.2% were a mix of other ethnic groups. Less than half of the parents who attended (42.4%) were employed themselves, though the employment status of the other parent is unknown. On average, the 'target child' for the class was 4.8 years old. Of those that enrolled, 63 completed the class, with completion status defined as attending at least 4 of 6 classes and making up the missed material (89% retention).

### Procedures

From 2002 to 2004, the PSWC parenting class program was marketed to all families (about 200 each year) with children enrolled in one of 8 Head Start centers in a southern state. The classes were marketed by a full-time parent educator who utilized a variety of strategies to recruit families, including mailings, flyers, announcements at monthly Head Start parent

**Table 1** Sample description ( $N = 71$ )

Gender	
Male	52.1%
Female	47.9%
Race	
African American	40.8%
White	50.7%
American Indian	1.4%
Hispanic	4.2%
Other	2.8%
Marital status	
Married	69.6%
Single	24.6%
Divorced	5.8%
Not enrolled in school	81.8%
Full or part time student	18.2%
Years of education	
Less than high school	13.6%
High School or GED	37.9%
Some college	48.5%
Employment	
Full-time	21.2%
Part-time	21.2%
Unemployed	48.5%
Other	9.1%
Monthly income	
≤ \$800	48.1%
\$1000–\$1500	17.3%
\$1550–1950	9.6%
\$2000–2500	19.2%
> \$2500	5.8%
Average age of child (age of child at start of class)	4.8 years ( $SD = 1.2$ )
Parenting Stress Index	
Child domain mean score at intake	105.5 ( $SD = 28.2$ )
Percent above cutoff on Child domain (score > 115)	37.1%
Parent domain mean score at intake	115.1 ( $SD = 28.6$ )
Percent above cutoff on parent domain (score > 147)	11.9%
Total Stress Domain Mean Score at Intake	220.6 ( $SD = 52.1$ )
Percent above cutoff on total stress (score > 257)	25.4%
Eyberg child behavior inventory	
Mean score intensity scale	115.2 ( $SD = 6.4$ )
Percent above intensity clinical cutoff (score > 131)	32.9%
Mean score problem scale	11.4 ( $SD = 8.0$ )
Percent above problem clinical cutoff (score > 14)	36.4%

meetings, referrals from Head Start staff, and personal invitation. The parent educator also utilized behavioral screening data obtained from teacher and parents to identify families for recruitment. Once identified, parents were recruited by the parent educator for the PSWC class, and were invited to participate in the evaluation study. There was no cost for participation. In order the address time and resource constraints, the classes were offered at different times, child care was provided, and families received weekly and graduation incentives. To assist with transportation costs, each family received a \$10 gift card for each class attended.

In addition, in order to address retention, a \$30 gift card was provided to each family that successfully completed the program.

The evaluation of the PSWC parenting class program was part of a larger service project. The evaluation used a one-group, repeated measures design, with a pre-test, post-test, and 6 month follow-up. An experimental design would have provided a more rigorous evaluation of the PSWC program; however, the service orientation of the project and budget constraints precluded this. Informed consent was obtained prior to the first assessment. The pre-test took place prior to the start of the first parent training session and the post-test took place after the last session, six weeks later. Intake data was collected from 71 parents, post-test data from 64 parents. A follow-up visit was planned with the families approximately 6 months after the end of parent training. Eight families were not time eligible for the 6 month follow-up visit at the time the study ended. Because of budget constraints, a part-time research assistant made efforts to locate families primarily by phone, and was unable to engage in extensive tracking efforts to locate families that could not be reached by phone. Assessments were completed with 42 of the 63 eligible families (66.6%). The pre- and post-tests took place at the Head Start Center, while the follow-up assessments took place at whatever location was most convenient for the families (usually the Head Start center or the home). A trained research assistant handed out the assessment packets, gave instructions, and was available to answer questions and assist parents. Most parents completed the paper and pencil questionnaires on their own; although the research assistant read the questionnaires to two parents with low literacy levels. Subjects were provided with a \$10 gift card as an incentive for completing each assessment. Data were collected on parents' personal background, parenting practices, parenting stress, child's behavior, and satisfaction with the parent training sessions.

## Measures

Data were collected on parents' personal background, parenting practices, parenting stress, child's behavior, and satisfaction with the parent training sessions:

### *Eyberg child behavior inventory (ECBI)*

The ECBI is a rating scale that assesses the current frequency and severity of disruptive behaviors, as well as the extent to which parents find the behavior to be a problem. The ECBI consists of 36 short statements of common behavior problems, and results in two scales: Intensity Scale and Problem Scale. The Professional Manual provides normative data and information on the psychometric strength of both instruments. The ECBI has demonstrated high internal consistency and significant test-retest reliability, as well as convergent and discriminant validity (Eyberg & Pincus, 1999). In the present study, the intensity domain yielded a coefficient alpha of .95 and the problem domain an alpha of .91.

### *The parenting scale*

This 30-item rating scale is designed to measure discipline practices in parents of young children. In addition to a total score, three scale scores can be computed (laxness, overreactivity, and verbosity). The Lax Discipline scale measures the extent to which the parents notice, but do not address misbehavior in their children. The Over-reactivity scale measures emotional reactivity (raising voice, being upset) in the context of discipline encounters. The Verbosity

scale assesses the extent to which parents respond to behavior problems with coaxing, begging, or inappropriately lengthy explanations. All scales have been shown to have acceptable internal consistency (with alpha coefficients ranging from .63–.84) and test-retest reliability levels (.79–.83) (Arnold, O’Leary, Wolff, & Acker, 1993). In the present study, the lax scale yielded a coefficient alpha of .85; the overreactivity scale yielded a coefficient alpha of .84, and the verbosity scale an alpha of .35. As a result, the verbosity scale was dropped from further analyses.

### *Parenting stress index*

The PSI is used to gauge the stress a person is currently functioning under as it relates to parenting. The PSI generates several subscale scores as well as a Child Domain, Parent Domain, and Total Stress scores. The PSI was normed on a large and diverse sample, and has been used extensively in studies of at-risk families. Acceptable reliability and validity information is reported in the manual (Abidin, 1995). In the present study, the child domain yielded an alpha coefficient of .94, the parent domain an alpha coefficient of .94, and the total scale an alpha coefficient of .96.

### *Parent training satisfaction survey*

This brief 4 item questionnaire was developed for this project to assess the degree to which parents are satisfied with the quality of information presented, usefulness of information presented, and their overall satisfaction with the class. The survey is administered on the last day of class. Items are rated on a 10 point scale.

### Intervention

The *Parenting the Strong-Willed Child* parenting class curriculum is a group-based parent education program based on the principles and procedures of the Helping the Noncompliant Child (McMahon & Forehand, 2003) program, which is a more intensive therapeutic program targeting individual families with young children with conduct disorders. The PSWC parenting class curriculum consists of six two-hour weekly sessions. The format of each class included didactic instruction, discussion, and role playing. Each class consists of discussion and modeling of a child management skill and a parenting topic (see Table 2). Parents are taught five child management skills designed to disrupt coercive interactions by increasing positive attention for good behavior, ignoring minor inappropriate child behavior, providing clear instructions to the child, and providing appropriate consequences for compliance and noncompliance. Parents are encouraged to practice the skills in the home through weekly homework assignments.

The PSWC parenting class curriculum has a training manual (Long & Forehand, 2002a, 2002b) and a book for parents (Forehand & Long, 2002). The parent educator attended a one-day training workshop conducted by the developers. Fidelity of the intervention was maintained through use of the training manual for each class and monthly supervision with the developer.

### Analysis approach

Paired t-tests were used to examine the change in mean scores from the pre-test to the post-test, and estimated an effect size to assess the magnitude of the change. Second, to assess

**Table 2** Parenting the strong willed child parenting class curriculum: skills and topics by session

Session	Topics
1	Understanding strong-willed behavior problems Does my child have ADHD? Skill 1: Attending
2	Skill 2: Rewards Creating a more positive home
3	Skill 3: Ignoring Improving communication skills Helping your child solve problems with peers
4	Skill 4: Giving directions Developing more patience
5	Skill 5: Time-out Building positive self-esteem
6	Integrating parenting/behavior change skills Addressing specific behavior problems

how well the initial changes were sustained, we used paired t-tests to assess the change from the post-test to the 6 month follow-up (though not all families were eligible for follow-up at the time the study ended). For the second analysis, we hope to find that were *no* differences (that is, that the initial improvement was sustained). Finally, we used the recommended cut-off scores on the Eyberg to determine whether the percentage of children with clinically elevated problems was reduced over time.

## Results

### Child behavior

As shown in Table 2, from pre- to post-test, parents reported significant improvement in their children's behavior problems as reported on the Eyberg Child Behavior Inventory, both in terms of the number of problems,  $t(54) = 3.03, p = .004$ , and the intensity of those problems,  $t(59) = 4.96, p < .001$ . The effect size values for the change in both the problem ( $d = .52$ ) and intensity ( $d = .42$ ) scales from the pre- to post-test suggest a 'medium' sized effect (Cohen, 1988). Those results were sustained six months later, as there was no significant change in scores from the post-test to the six-month follow-up. Among children with a behavior problem score in the 'clinical problems' range at the pre-test, 75% (15/20) moved below the clinical range by the time of the post-test,  $\chi^2(1, N = 54) = 7.5, p = .006$ .

### Parenting behavior

From pre- to post-test parents reported improvements in their own parenting behaviors, reporting significantly less use of lax or permissive strategies,  $t(60) = 4.8, p < .001$ , and less emotional reactivity in the context of discipline encounters,  $t(60) = 4.0, p < .001$ . The effect size values suggest a 'medium' size effect for change in scores on the Lax Discipline scale ( $d = .46$ ), and a 'medium' to 'large' size effect ( $d = .67$ ) for the Over-reactivity scale (Cohen, 1988). These results were sustained six months later, as there were no significant changes in scores for the post-test to the six-month follow-up assessment.

**Table 3** Mean scores on parent and child outcome measures

	Short term change ( <i>N</i> = 61)		Six -month change ( <i>N</i> = 40)	
	Pre-Test	Post-Test	Post-Test	6 Month Follow-up
Eyberg problem scale	11.9 ( <i>SD</i> = 7.9)	8.6** ( <i>SD</i> = 8.1)	8.0 ( <i>SD</i> = 8.0)	6.6 ( <i>SD</i> = 6.5)
Eyberg intensity scale	115.7 ( <i>SD</i> = 34.1)	99.2** ( <i>SD</i> = 29.5)	99.7 ( <i>SD</i> = 24.9)	99.0 ( <i>SD</i> = 28.7)
Parenting scale—over-reactivity	28.6 ( <i>SD</i> = 11.1)	23.8** ( <i>SD</i> = 9.6)	25.0 ( <i>SD</i> = 9.2)	25.8 ( <i>SD</i> = 8.1)
Parenting Scale—lax	31.8 ( <i>SD</i> = 11.6)	24.5** ( <i>SD</i> = 10.3)	24.8 ( <i>SD</i> = 10.0)	25.3 ( <i>SD</i> = 9.3)
Parenting Stress—total score	221.0 ( <i>SD</i> = 51.0)	212.4 ( <i>SD</i> = 45.5)	212.5 ( <i>SD</i> = 47.2)	208.3 ( <i>SD</i> = 48.0)

\* $p < .05$ ; \*\* $p < .01$ .

### Parenting stress

As seen in Table 3, there was a marginally significant trend toward improvement in total parenting stress from pre-test to post-test,  $t(60) = 1.9$ ,  $p = .06$ . The effect size value for the change in total stress ( $d = .18$ ) suggests the effect was ‘small’ (Cohen, 1988). For total stress, the change in scores from the post-test to the six-month follow-up was non-significant. There were no significant changes in scores on the Child Domain or Parent Domain.

### Satisfaction with training

Parents seemed very satisfied with the classes, rating the overall quality of the classes as either ‘good’ (48.3%) or excellent (51.7%). Similarly they ranked the usefulness of the classes as either good (38%) or excellent (58.6%). Over half of parents (62.1%) rated information given in classes as being excellent while all others ranked information as good.

## Discussion

The results of our study provide preliminary support for the short-term effectiveness of the PSWC parenting class curriculum in improving child behavior and parenting practices. Parents who completed the program showed moderate improvement in self-reported child behavior. Parents also reported at least moderate improvement in parenting practices (i.e., less reactive and less lax). Only small improvements were seen in self-reported parenting stress. Improvements were sustained up to six months following intervention. In addition, support was shown for the social validity of the PSWC parenting class curriculum, with reports of high satisfaction with the program.

The results of our study should be considered preliminary due to limitations in the study design. Although the parents self-reported improvements, the absence of an appropriate comparison group precludes attributing those improvements to the PSWC program. Such factors as time and measurement bias are potential threats to the internal validity of the study. In addition, the attrition at the six-month follow-up assessment was higher than optimal. However, the results of this study do suggest that the PSWC parenting class curriculum shows promise as a program to prevent the development of conduct problems in children at-risk for behavior problems. The relatively brief length of the PSWC parenting class

curriculum has the potential to increase accessibility for preventative interventions due to the ease of implementation and dissemination relative to programs of longer duration or clinical intervention. This study showed that parents from a selected population can be highly satisfied with the PSWC parenting class curriculum.

With the relatively high rate of behavior problems in the preschool population, there is a need for effective prevention programs that can be widely disseminated. However, community-based implementation of effectiveness-based programs presents many challenges. Dedicated resources are needed to effectively implement such programs, including resources to develop and implement a social marketing plan to recruit families into the program and inclusion of strategies to address the time and resource constraints that present barriers to parental attendance. This study demonstrated that with appropriate marketing efforts and incentives, parents of at-risk children can be recruited and retained in a multi-session parent education class at a reasonable rate.

Additional research using an experimental design and additional measures of outcome not dependent on parental report are needed to validate the PSWC parenting class curriculum. In addition, future studies will need to include a sample size sufficient to investigate child or family characteristics associated retention and improved outcomes. Furthermore, the PSWC parenting class curriculum is a behavioral, skills oriented program, similar to The Incredible Years program. Future research should compare such behavioral programs with other programs which focus on cognitive variables.

## References

- Abidin, R. R. (1995). *Parenting stress index: Professional manual*. Odessa, FL: Psychological Assessment Resources.
- Alvarado, R., Kendall, K., Beesley, S., & Lee-Cavaness, C. (2000). *Strengthening America's families: Model family programs for substance abuse and delinquency prevention*. Salt Lake City: University of Utah.
- Arnold, D. S., O'Leary, S. G., Wolff, L. S., & Acker, M. M. (1993). The Parenting Scale: A measure of dysfunctional parenting in discipline situations. *Psychological Assessment*, 5, 137–144.
- Campbell, S. B. (1995). Behavior problems in preschool children: A review of recent research. *Journal of Child Psychology & Psychiatry & Allied Disciplines*, 36, 113–149.
- Chambless, D. L., Sanderson, W. C., Shoham, V., Bennett Johnson, S., Pope, K. S., Crits-Christoph, P., et al. (1996). An update on empirically validated therapies. *Clinical Psychologist*, 49, 5–18.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Academic Press.
- Eyberg, S. M., & Pincus, D. (1999). *Eyberg child behavior inventory: Professional manual*. Odessa, FL: Psychological Assessment Resources, Inc.
- Forehand, R., & Long, N. (2002). *Parenting the strong-willed child* (2nd ed.). New York: McGraw-Hill.
- Karoly, P., & Rosenthal, M. (1977). Training parents in behavior modification: effects on perceptions of family interaction and deviant child behavior. *Behavior Therapy*, 8, 406–410.
- Lavigne, J. V., Arend, R., Rosenbaum, D., Binns, H. J., Christoffel, K. K., & Gibbons, R. D. (1998). Psychiatric disorders with onset in the preschool years: I. Stability of diagnoses. *Journal of the American Academy of Child & Adolescent Psychiatry*, 37, 1246–1254.
- Long, N., & Forehand, R. (2000). Modifications of a parental training program for implementation beyond the clinical setting. In N. N. Singh, J. P. Leung, & A. N. Singh (Eds.), *International perspectives on child and adolescent mental health* (pp. 293–310). New York: Elsevier.
- Long, N., & Forehand, R. (2002a). *Parenting the strong-willed child: Leader's guide for the six week parenting class, Version 2.0*. Unpublished manual available from Dr. Nicholas Long, Department of Pediatrics, UAMS/ACH, 800 Marshall St., Little Rock, AR 72202 or at LongNicholas@uams.edu.
- Long, N., & Forehand, R. (2002b, June). *Evaluation of a parenting class for parents of young strong-willed children*. Paper presented at the Paper Presented at the Third International Conference on Child and Adolescent Mental Health, Brisbane, Australia.
- McMahon, R. J., & Forehand, R. (2003). *Helping the noncompliant child: A clinician's guide to effective parent training* (2nd ed.). New York: Guilford.

- Richman, N., Stevenson, J., & Graham, P. J. (1982). *Preschool to school: A behavioural study*. London: Academic Press.
- Webster-Stratton, C., & Hammond, M. (1998). Conduct problems and level of social competence in Head Start children: Prevalence, pervasiveness and associated risk factors. *Clinical Child and Family Psychology Review*, *1*, 101–124.
- Webster-Stratton, C., Reid, M. J., & Hammond, M. (2001). Preventing conduct problems, promoting social competence: A parent and teacher training partnership in Head Start. *Journal of Clinical Child Psychology*, *30*, 283–302.
- Yoshikawa, H., & Zigler, E. (2000). Mental health in Head Start: New directions for the twenty-first century. *Early Education & Development*, *11*, 247–264.

Copyright of *Journal of Child & Family Studies* is the property of Springer Science & Business Media B.V. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.