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## ABSTRACT

This paper describes the preliminary results of a study of In Control, an anger management curriculum offered in the middle school of a therapeutic day school for children with severe emotional and behavioral disorders. Twenty students received the program, while 26 did not. Measures were number of anger logs students completed; institutional reports of severe occurrences of aggressive student behavior; classroom observation data; scores on Aggression, Attention, Social Scales of the Achenbach Teacher Report Form; scores on an anger management knowledge quiz; and monthly teacher and interdisciplinary team ratings of student anger management. During the program, results show significantly more prosocial behavior exhibited by the program than nonprogram students with teachers during structured classroom activity and with peers during unstructured time. At 3-month follow-up, students in the program completed significantly more anger logs and exhibited significantly fewer aggressive incidents than did the nonprogram students. Preliminary findings suggest that students in the program have reduced aggressive behavior, use the anger log as a coping behavior, and increase prosocial behavior with teachers and peers. (JDM)

Running head: ANGER MANAGEMENT CURRICULUM

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In Control: Anger Management and the Development of Prosocial Behavior

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### Abstract

This poster session described the preliminary results of a study of In Control, an anger management curriculum offered in the middle school of a therapeutic day school for children with severe emotional and behavioral disorders. Of 46 middle school students with emotional and behavioral disorders, 20 students received the program, while 26 did not. Measures were number of anger logs students completed, institutional reports of severe occurrences of aggressive student behavior, classroom observation data, scores on Aggression, Attention, Social Scales of the Achenbach Teacher Report Form, scores on an anger management knowledge quiz, monthly teacher and interdisciplinary team ratings of student anger management. During the program, results show significantly more prosocial behavior exhibited by the program than nonprogram students with teachers during structured classroom activity and with peers during unstructured time. At 3-month follow-up, students in the program completed significantly more anger logs and exhibited significantly fewer aggressive incidents than did the nonprogram students. Preliminary findings suggest that students in the program reduce aggressive behavior, use the anger log as a coping behavior, and increase prosocial behavior with teachers and peers.

### In Control: Anger Management and the Development of Prosocial Behavior

Since Novaco's (1975) conceptualized the anger arousal process within a cognitive-behavioral model, researchers have explored the effectiveness of teaching children and adolescents cognitive and behavioral techniques for managing their angry feelings. (Feindler, 1991; Feindler, 1995; Feindler & Ecton, 1986; Goldstein & Glick, 1987). This study examined the impact of a curriculum-based, cognitive-behavioral anger management program on the ability of middle school students with emotional and behavioral disorders to manage their anger and develop related prosocial behaviors at school. The students attended a therapeutic day school.

### Method

#### Participants

The 46 participants were assigned to a program or nonprogram group. Seventy-four percent of the students were male and 26% were female. The age of the students ranged from 12-16 years and the mean age was thirteen years. Sixty-two percent of the students were White, 28% were African American, and 10% were identified members of "Other" racial or ethnic groups. Thirty-seven percent of the students participated in the school's subsidized lunch program. The majority of the students (77%) received prescribed psychiatric medications, such as antidepressants, antipsychotics, stimulants, and mood stabilizers. Thirty-seven percent of the students were diagnosed with a single behavior disorder, while 7% were diagnosed with a single mood disorder. Twenty-two percent were reported to have multiple behavior disorders, while 20% had a single behavior disorder

combined with a mood disorder, 13% had a single behavior disorder combined with a psychotic disorder, and 2% had a single behavior disorder combined with a motoric disorder.

### Setting

All participants attended the middle school of an out-of-district therapeutic day school for students with serious emotional and behavioral problems. Many of the students were referred to this special school because of their aggressive and disruptive behavior.

### Research Design

Twenty of the 46 middle school students, all of the students in three of the five classrooms, were assigned to the ten-week In Control program. The program was implemented in the three classrooms where the teachers first volunteered to participate. The remaining 26 students from the other two classrooms were assigned to the nonprogram group.

### Curriculum

In Control: A Skill-Building Program for Teaching Young Adolescents to Manage Anger (Kellner, 2001) is a curriculum of ten weekly 30-minute sessions for the whole class. The program was designed to teach students to utilize cognitive-behavioral techniques to manage anger and to develop derivative prosocial behavior within the context of the school setting. The students are taught to identify their anger triggers and settings as well as the degree of anger arousal; to use physiological, cognitive and behavioral techniques to calm down;

and to use an anger log to record their angry reactions. Role-play is used to facilitate skill acquisition.

### Booster Sessions

After the completion of the 10-week program, all twenty students in the three program classrooms received three monthly booster sessions.

### Measures and Procedures

#### Anger Log Completion

The average number of anger logs completed by each middle school student in each experimental group per month during each study phase was calculated. The anger log was originally modified by Kellner and Tutin (1995) from the Hassle Log developed by Feindler and Ecton (1986) to fit the learning needs of these students. The current version appears in the In Control curriculum (Kellner, 2001). Included on an anger log sheet are spaces for students to indicate: 1) the cause of an instance of anger (“trigger”), 2) an appraisal of the degree of their anger from “not angry” to “burning mad,” 3) how they dealt with their anger, 4) how they will deal with a similar “trigger” the next time they are angered, 5) an appraisal of whether the outcome of their method of managing their anger worked prosocially in their favor, and 6) an overall evaluation of how they handled themselves from “poorly” to “great.”

#### Incident Reports

The school is mandated by law to document and report severe occurrences of students’ potentially or actually harmful behavior. All instances of aggressive behavior that involved middle school students were noted by their date and by the

students involved. The average number of aggressive behaviors per month and per student was calculated for each experimental group and for each phase of the study.

#### Classroom Observation Data

The observation system developed by Neckerman, Asher and Pavlidis (1994) was modified by adding anger management behaviors to the classification system.

#### Achenbach Teacher Report Form – Aggression, Attention, Social Scales

The aggression, attention, and social scales of the Achenbach Teacher Report Form (Achenbach, 1991) was given to teachers to complete for each student. The scale consists of twenty-five items in which the teacher is asked to rate how true each item is about the student now or within the past two months. Ratings are given on a scale of 0-2, from “not true.” This measure was chosen based upon its good reliability (test – retest  $r = .91$ ,  $p < .0001$ , teacher inter-agreement  $r = .68$ ,  $p < .05$ ) and validity. The Teacher Report Form has been shown to be effective in discriminating between demographically-matched referred and non-referred students and to have clinical cut-off levels that are effective in discriminating between referred and non-referred students (Achenbach, 1991).

#### Knowledge Quiz

This ten item, multiple choice, fill in and true/false quiz was designed by the program developer to assess a student’s knowledge of and ability to apply concepts taught as part of the anger management program (Kellner, 2001). The

quiz asks questions such as, “Anger is a normal human feeling,” true or false, and, “Name two positive ways of handling angry feelings.” The quiz was administered to students as a pre-program and follow-up measure and was graded on a percentage of correct answers. Group means were calculated for each experimental group.

#### Monthly Teacher and Interdisciplinary Team Rating

These scales, designed for the study, were used to assess the teachers’ impressions of each student’s anger management performance during each month as well as the Interdisciplinary Team’s (teacher, social worker, and speech clinician) impressions of each student during each semester. The teachers and, respectively, interdisciplinary team members, answered the question, “How well has this student handled his/her anger over this past month?” and then, respectively, rated each student on a scale of 0-3, 0 being “not at all” and 3 being “very well.” Group means per month were calculated for each experimental group for each study phase of the study.

Table 1 shows the measures by the phases of the study.

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Insert Table 1 about here

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#### Preliminary Results

Data was obtained over the course of the 10-month school year, prior to the intervention, during the program, and during a three-month follow-up. For all



dependent measures, data were analyzed using one-tailed t-tests to compare the program and nonprogram groups.

#### Anger Logs

At follow-up, students in the program group completed significantly more anger logs than those in the non-program group ( $p < .042$ ). This replicates the results of an earlier study (Kellner, Colletti, & Bry, 2001).

#### Incident Reports

At follow-up, students in the program group exhibited significantly fewer aggressive incidents than students in the non-program group ( $p < .045$ ).

#### Classroom Observation Data

Overall, during the program, students in the program group exhibited significantly more prosocial behavior than the non-program group ( $p < .012$ ). They also demonstrated more positive, neutral, verbal and nonverbal behavior toward their teachers during class time ( $p < .006$ ) during the program. Finally, during the program, data highlighted a one-tailed trend showing students in the program group exhibited less negative verbal and nonverbal behavior toward peers in less structured situations. (e.g., during lunch time).

#### Achenbach Teacher Report Form, Aggression, Attention and Social Scale

At follow-up, there were no significant differences found between the program and non-program group participants.

#### Knowledge Quiz

At follow-up, there were no significant differences found between the program and non-program group participants.

### Monthly Teacher and Interdisciplinary Team Reports

At follow-up, there were no significant differences found between the program and non-program group participants.

### Discussion

According to these preliminary findings, the In Control anger management program appeared to be useful in helping students to reduce aggressive behavior with teachers during class time and, to a lesser extent, with peers in less structured situations. In general, students in the program were able to increase prosocial responses with both teachers and peers. In addition, these programs students learned to use the anger log as a coping behavior.

Direct observation proved a valuable complement to the use of a standardized instrument and institutional archival data in establishing intervention effectiveness.

Results suggest that the In Control anger management program can teach children with emotional and behavioral disorders prosocial anger management strategies as well as to use socially appropriate behavior when interacting with teachers and peers. The results also indicate that an effective anger management program should have a dual focus on teaching students strategies to cope with aggressive impulses as well as to generate prosocial skills.

### Limitations

Several limitations appear to emerge from conducting this study in its “natural” school setting. The small sample size of these five classrooms reduced the statistical power of the study. Moreover, the participating classrooms were

not randomly selected. Classroom observation was not carried out at preprogram or after program phases. Nor was the study controlled for the effect of medication on performance. Finally, the results from the Monthly Teacher Report, Interdisciplinary Team Report and Knowledge Quiz were limited by their not being standardized instruments.

## References

- Achenbach, T. M. (1991). *Manual for the Teacher's Report Form and 1991 Profile*. Burlington: University of Vermont Department of Psychiatry.
- Feindler, E. L. (1991). Cognitive strategies in anger-control interventions for children and adolescents. In P. C. Kendall (Ed.), *Child and adolescent therapy: Cognitive behavioral procedures* (pp. 56-97). New York: Guilford Press.
- Feindler, E. L. (1995). Ideal treatment package for children and adolescents with anger disorders. In H. Kassinove (Ed.), *Anger disorders: Definition, diagnosis and treatment* (pp. 173-195). Washington, DC: Taylor and Francis.
- Feindler, E. L., & Ecton, R. B. (1986). *Adolescent anger control: Cognitive-behavioral techniques*. New York: Pergamon press.
- Goldstein, A. P., & Glick, B. (1987). *Aggression replacement training: A comprehensive intervention for aggressive youth*. Champaign, IL: Research Press.
- Kellner, M. H., (2001). *In Control: A Skill-Building Program for Teaching Young Adolescents to Manage Anger*. Champaign, IL: Research Press.
- Kellner, M.H., Coletti, L., & Bry, B. H. (1999). *The effects of a classroom-based anger management program and booster sessions on early adolescents with emotional/behavioral disorders*. Manuscript submitted for publication.

Neckerman, H. J., Asher, K., & Pavlidis, K. (1994). *Social Interaction Observation System*. Seattle, Wash.: Harborview Injury Prevention and Research Center.

Novaco, R. W. (1975). *Anger control: The development and evaluation of an experimental treatment*. Lexington, MA: D.C. Heath & Co.

Table 1

## Measures by Phases of Study

Measure	Preprogram	During Program	After Program
Knowledge Quiz	X		X
Achenbach Scale: Aggression, Attention, Social	X		X
Monthly Teacher Rating Scale	X		X
Biannual Interdisciplinary Team Rating	X		X
Anger Logs	X	X	X
Incident Reports	X	X	X
Classroom Observations		X	



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