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Classroom-based cognitive–behavioral intervention to prevent aggression: Efficacy and social validity

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Abstract

Classroom teachers need effective, efficient strategies to prevent and/or ameliorate destructive student behaviors and increase socially appropriate ones. During the past two decades, researchers have found that cognitive strategies can decrease student disruption/aggression and strengthen pro-social behavior. Following preliminary pilot work, we conducted a study to determine whether a classwide, social problem-solving curriculum affected measures of knowledge and behavior for 165 4th and 5th grade students at risk for behavior problems. We found significant positive treatment effects on knowledge of problem-solving concepts and teacher ratings of aggression. Outcomes differed across teachers/classrooms, and there was no evidence that booster lessons affected treatment efficacy. Teacher ratings of social validity were generally positive. We discuss issues about classroom-based prevention research and future research directions.

Keywords: At risk populations; Cognitive–behavioral intervention; Externalization; Aggressive behavior problems; Elementary school students; Prevention

The proactive assurance of safe and productive school environments is a critical objective for education policy makers. Implementing preventive interventions may be

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particularly challenging in schools with a high proportion of children at risk for academic failure and conduct problems (Bierman, Greenberg, & CPPRG, 1996). The pressure to improve student academic performance and standardized test scores creates significant demands that compete with social programs for instructional time. Moreover, school administrators and classroom teachers need access to evidenced-based practices to avoid adopting prevention programs that are intuitively appealing but unsubstantiated by empirical research (see e.g., Vaughn & Dammann, 2001).

Cullinan (2002) describes universal prevention as the application of interventions to a broadly defined group (e.g., classroom) to reduce risk and maintain student health and safety. Selective prevention involves activities designed for groups of students who may share characteristics that put them at risk for developing mental disorders or a school diagnosis of emotional or behavioral disorders (EBD). Thus, classroom-based interventions can act as both universal and selective prevention. Walker, Colvin, and Ramsey (1995) maintain that universally implemented (e.g., classwide) interventions are especially effective for students who are "on the margins," or beginning to behave in ways that compromise their future school success, noting that such interventions allow children with or at risk for EBD to learn effective coping strategies with support from socially appropriate peers.

One approach to the prevention of behavior disorders is the classwide application of a cognitive–behavioral intervention (CBI). A research-based approach to teaching students positive coping strategies (e.g., Kendall & Braswell, 1985; Lochman, Whidby, & FitzGerald, 2000; Robinson, Smith, Miller, & Brownell, 1999), CBIs incorporate behavior therapy techniques such as modeling, feedback, and reinforcement, and cognitive mediation techniques such as "think-alouds" to build what Kendall (1993) called a new coping template. The underlying assumptions are that overt behavior is mediated by cognitive events and that people can learn to influence cognitive events to change their own behavior. Literature reviews and meta-analyses (Abikoff, 1991; Dush, Hirt, & Schroeder, 1989; Robinson et al., 1999; Smith, Lochman, & Daunic, 2005) have substantiated CBI's usefulness for the prevention and remediation of specific behavioral deficits and the maintenance of appropriate behavior for mainstream students. Teaching students cognitive strategies has been found to decrease hyperactivity/impulsivity and disruption/aggression, strengthen pro-social behavior, increase social cognition, and improve peer relations (cf. Ager & Cole, 1991; CPPRG, 2002a,b; Dodge, 1986; Lochman, Coie, Underwood, & Terry, 1993; Robinson, Smith, & Miller, 2002; Smith, Siegel, O'Connor, & Thomas, 1994).

In addition to efficacy, researchers are necessarily concerned with intervention efficiency and sustainability. Although the degree of exposure needed to achieve and maintain a desired behavioral effect has been difficult to specify because of the variability in intervention packages, longer treatments generally tend to result in better outcomes (e.g., Heinicke, 1988; Waltman & Zimpfer, 1988; Whalen, Henker, & Hinshaw, 1985). For example, Lochman (1985) manipulated duration of exposure to an anger coping program and found that students who received one lesson per week for 18 as opposed to 12 weeks achieved greater gains. More recently, Larson and Lochman (2002) noted that booster sessions designed to supplement and reinforce initial instructional content helped sustain student learning and improvements in pro-social behavior.