

Hoagwood, K. E., Olin, S. S., Kerker, B. D., Kratochwill, T. R., Crowe, M., & Saka, N. (2007). Empirically based school interventions targeted at academic and mental health functioning. *Journal of Emotional and Behavioral Disorders*, 15(2), 66-92.

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In this article, the authors review the published research on school interventions and call attention to the dearth of research on interventions that target both mental health and academic outcomes. A literature review of 64 articles targeting the effectiveness of school-based interventions that met methodological criteria revealed only 24 articles that examined outcomes for both mental health and academic programs. Of these 24 interventions, 15 revealed a positive impact on both mental health and academic outcomes (see Table 1).

Despite studies of school context and its effect on both learning and mental health, the numerous reviews of evidence-based or empirically validated school-based mental health practices have largely ignored academic functioning as an outcome of interest. In fact, the evidence-based practice "movement" in mental health as applied to schools has operated in relative isolation from both educational research and from the key policy and practice issues that drive school ecology. (p. 67)

The Medline, PsychINFO, and ERIC search engines were used to identify over 2,000 peer-reviewed articles published between 1990-2006 about the effectiveness of school-based mental health interventions. Of these, 64 studies used a prospective, longitudinal design, had random assignment or a quasi-experimental design, and were conducted in public schools. A little over one-third (37.5%; $n = 24$) of the 64 studies reported on the outcomes of interventions that targeted both mental health and academic outcomes, and 40 articles reported on mental health outcomes only. Of the 24 programs identified, 15 interventions showed statistically significant, positive effects for both mental health and academic outcomes (although some effects were quite modest). These 24 interventions are the focus of the current article.

Most studies of mental health outcomes included self-, peer-, teacher- or parent-reported measures of social competence, aggression or problem behaviors, while academic outcomes included academic scores and school attendance. Most interventions were for kindergarten and elementary students, had a preventative model, and focused on prosocial, aggressive, and anti-social behaviors. This interest in young children's positive mental health and academic outcomes is consistent with findings by the Conduct Problems Prevention Research Group (see Table 1, and Data Trends nos. 23, 39 & 126), which suggests that children at high-risk for conduct problems can be identified during these early school years. Some studies sought to understand the dose-outcome relationships of the interventions, and suggest that more (and longer) longitudinal research needs to be done in order to capture various levels of risk factors that may change throughout a child's academic career.

Further, the authors identify a need for multi-tiered intervention approaches in schools, "where varying levels of service intensity are available over time and in different grades for students, especially during transitional periods" (p. 88). It is unfortunate that most of the interventions reviewed did not produce lasting effects. The authors report that results were largely modest, and did not hold over time. However, because the majority of studies focused on a narrow band of academic outcomes (e.g., grades and attendance), this finding is not surprising.

Continued...

DATA TRENDS

Summaries of research on mental health services for children and adolescents and their families

No. 145 (continued)

In conclusion, although mental health services are offered in nearly all schools across the country, many of them do not target both academic and mental health outcomes. This is a major research and programmatic gap that may be bridged by in-school interventions that target both types of outcomes.

Name of Intervention	Citation
Children of Divorce Intervention Program	Pedro-Carroll, J. L., Sutton, S. E., & Wyman, P. A. (1999). A two-year follow-up evaluation of a preventive intervention for young children of divorce. <i>School Psychology Review, 28</i> , 467-476.
Classroom Centered & Family-School Partnership	Ialongo, N. S., Werthamer, L. W., Kellam, S. G., Brown, C. H., Wang, S., & Lin, Y. (1999). Proximal impact of two first-grade preventive interventions on the early risk behaviors for later substance abuse, depression and antisocial behavior. <i>American Journal of Community Psychology, 27</i> , 599-641.
Comprehensive School-Based Program	Nelson, J. R., Martella, R. M., & Marchand-Martella, N. (2002). Maximizing student learning: The effects of a comprehensive school-based program for preventing problem behaviors. <i>Journal of Emotional and Behavioral Disorders, 10</i> , 136-148.
Fast Track	Conduct Problems Prevention Research Group (CPPRG). (1999). Initial impact of the Fast Track prevention trial for conduct problems: I. The high-risk sample. <i>Journal of Consulting and Clinical Psychology, 67</i> , 631-647. Conduct Problems Prevention Research Group (CPPRG). (2002). Evaluation of the first 3 years of the Fast Track Prevention Trial with children at high risk for adolescent conduct problems. <i>Journal of Abnormal Child Psychology, 30</i> , 19-35. Conduct Problems Prevention Research Group (CPPRG). (2004). The effects of the Fast Track Program on serious problem outcomes at the end of elementary school. <i>Journal of Clinical Child and Adolescent Psychology, 33</i> , 650-661.
First Step to Success	Walker, H. M., Kavanaugh, K., Stiller, B., Golly, A., Severson, H. H., & Feil, E. G. (1998). First step to success: An early intervention approach for preventing school antisocial behavior. <i>Journal of Emotional and Behavioral Disorders, 6</i> , 66-80.
Good Behavior Game and Mastery Learning	Dolan, L. J., Kellam, S. G., Brown, C. H., Werthamer-Larsson, L., Rebok, G. W., Mayer, L. S., et al. (1993). The short-term impact of two classroom-based prevention interventions on aggressive and shy behaviors and poor achievement. <i>Journal of Applied Developmental Psychology, 14</i> , 317-345. Kellam, S., Rebok, G., Ialongo, N., & Mayer, L. (1994). The course and malleability of aggressive behavior from early first grade into middle school: Results of a developmentally epidemiologically based preventive trial. <i>Journal of Child Psychology and Psychiatry, and Allied Disciplines, 35</i> , 259-281.
Improving Social Awareness—Social Problem Solving Project	Elias, M. J., Gara, M. A., Schuyler, T. F., Branden-Muller, L. R., & Sayette, M. A. (1991). The promotion of social competence: Longitudinal study of a preventive school-based program. <i>The American Journal of Orthopsychiatry, 61</i> , 409-417.
Montreal Longitudinal Exper. Study	Tremblay, R. E., Pagani-Kurtz, L., Masse, L. C., Vitaro, F., & Pihl, R. O. (1995). A bimodal preventive intervention for disruptive kindergarten boys: Its impact through mid-adolescence. <i>Journal of Consulting and Clinical Psychology, 63</i> , 560-568.
No name of intervention provided	Gottfredson, D. C., Gottfredson, G. D., & Hybl, L. G. (1993). Managing adolescent behavior: A multiyear, multischool study. <i>American Educational Research Journal, 30</i> , 179-215.
Positive Action Program	Flay, B. R., Allred, C. G., & Ordway, N. (2001). Effects of the Positive Action Program on achievement and discipline: Two matched-control comparisons. <i>Prevention Science, 2</i> , 71-89.
Raising Healthy Children	Catalano, R. F., Mazza, J. J., & Harachi, T. W. (2003). Raising healthy children through enhancing social development in elementary school: Results after 1.5 years. <i>Journal of School Psychology, 41</i> , 143-164.
Reaching New Heights	Klein, S. M. (2004). <i>Reaching new heights: A primary prevention program for gifted middle school students</i> . Unpublished dissertation. Department of Psychology, Graduate College of Bowling Green State University.
Seattle Social Development Project	Hawkins, J. D., Catalano, R. F., & Kosterman, R. (1999). Preventing adolescent health-risk behaviors by strengthening protection during childhood. <i>Archives of Pediatrics and Adolescent Medicine, 153</i> , 226-234.
Social Moral Reasoning Development Program	Arbuthnot, J. (1992). Sociomoral reasoning in behavior-disordered adolescents: Cognitive and behavioral change. In J. McCord & R. Tremblay (Eds.), <i>Preventing antisocial behavior</i> (pp. 283-310). New York: Guilford Press.
Social Problem Solving Curriculum	Gottfredson, G. D., Jones, E. M., & Gore, T. W. (2002). Implementation and evaluation of a cognitive-behavioral intervention to prevent problem behavior in a disorganized school. <i>Prevention Science, 3</i> , 43-56.