



AOTA Evidence Briefs

Children With Behavioral and Psychosocial Needs

**A product of the American Occupational Therapy Association's Evidence-Based Literature Review Project*

PSYCH #2

A self-determination program for preschool-age children at risk for emotional or behavioral disorders may maintain or improve their mental health

Serna, L., Nielsen, E., Lambros, K., & Forness, S. (2000). Primary prevention with children at risk for emotional or behavioral disorders: Data on a universal intervention for Head Start classrooms. *Behavioral Disorders, 26*(1), 70–84.

Level: IA1a

Randomized controlled trial, 20 or more participants per condition, high internal validity, high external validity.

Why research this topic?

Early detection and primary prevention are critically important in successfully serving children who are at high risk for developing emotional and behavioral disorders. The purpose of primary prevention is to delay the onset of disorders or to prevent the development of disorders at all. A program that has shown promise in primary prevention is *Learning With a Purpose: A Life Long Learning Approach to Self-Determination*.

What did the researchers do?

Serna, Nielsen, Lambros, and Forness (2000), the first three affiliated with the University of New Mexico (Albuquerque) and the fourth with the University of California, Los Angeles, conducted a study to ascertain whether Head Start children participating in the *Learning With a Purpose* program would perform better on mental-health-related outcome measures than Head Start children receiving standard mental health services.

The participants in the study were 84 children drawn from five randomly selected Head Start classrooms in the Albuquerque area. Forty-seven were boys, and 37, girls. Their average age was 4.5 years. Their ethnic group affiliations were Hispanic, 71.4%; black, 11.9%; white, 9.5%; and Native American, 7.1%. The experimental group consisted of 53 children from three classrooms; the **control group** (see *Glossary*) consisted of 31 children from two classrooms.

The intervention employed a classroom-wide curriculum consisting of social-emotional stories as the teaching format for developing adaptive social and behavioral skills....Adaptive skill domains for this study include[d] (a) following directions, (b) sharing, and (c) problem solving....Stories containing animal characters, embellished with songs and puppets, are used to teach specific skills in these three domains. Role-playing activities, storybooks, and puppet games and shows are used as learning tools for each story. Each story introduces a major character (usually an animal), identifies a problem, outlines the skill steps needed to solve the problem, and solves the problem using a particular skill. This interactive practice takes place until each child performs the skill(s) to mastery (pp. 71–72).

The intervention took place twice a week for 12 weeks. Each session was about 3 hours long.

A component for parents introduced them to what their children were learning and taught them skills in communicating with community agencies, solving problems, and supporting their children.

The control group “received no additional curriculum or services” (p. 73).

The researchers were interested in the following outcome areas: *social skill development* [as measured by the Social Skills Scale (completed by parents) and the Problem Behavior Scale (completed by teachers and parents) of the Social Skills Rating System]; *critical events* [events “having high intensity and salience but relatively low frequency” (p. 75), such as setting a fire or assaulting a classmate], *adaptive behavior*, *maladaptive behavior*, *aggressive behavior*, and *social interaction* (all as measured by corresponding scales of the Early Screening Project); *communication*, *daily living skills*, and *socialization* (all as measured by the Vineland Screener); *aggression* and *hyperactivity* (both as measured by the IOWA Conners); and *overall severity of psychological disturbance* (as measured by the Children’s Global Assessment Scale). Measures were taken before and after the intervention.

What did the researchers find?

Teachers rated the experimental group **significantly** (see *Glossary*) higher after the intervention than before, on adaptive behavior, social interaction, daily living skills, and hyperactivity.

Also, after the intervention they rated the experimental group significantly higher than they rated the control group on social interaction and hyperactivity.

Parents rated the control group significantly higher after the intervention than before, on social skills.

What do the findings mean?

For therapists and other providers, the findings suggest that a self-determination program for children at risk for emotional or behavioral disorders can maintain or improve their mental health.

What are the study’s limitations?

The study has several limitations. First, the sample size (five classrooms) was relatively small. Second, the researchers did not determine how faithfully the program was followed across the three experimental classrooms. Third, the intervention itself was preliminary, requiring adaptation of content and delivery for preschool children.

GLOSSARY

control group—A group that received special attention similar to that which the treatment group received, but did not receive the treatment.

significance (or significant)—A statistical term that refers to the probability that the results obtained in the study are not due to chance, but to some other factor (e.g., the treatment of interest). A significant result is likely to be generalizable to populations outside the study.

Significance should not be confused with *clinical effect*. A study can be statistically significant without having a very large clinical effect on the sample. For example, a study that examines the effect of a treatment on a client’s ability to walk may report that the participants in the treatment group were able to walk significantly longer distances than those in the control group. However, after reading the study one may find that the treatment group was able to walk, on average, 6 feet, whereas the control group was able to walk, on average, 5 feet. Although the outcome may be statistically significant, a clinician may not feel that a 1-foot increase will make his or her client functional.

This work is based on the evidence-based literature review completed by Ming-Hui Kuo, MS, OTR.

For more information about the Evidence-Based Literature Review Project, contact the Practice Department at the American Occupational Therapy Association, 301-652-6611, ext. 2040.



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