DOCUMENT RESUME

ED 076 230 PS 006 435

AUTHOR	Shure, Myrna B.; Spivack, George
TITLE	A Preventive Mental Health Program for Four-Year-Old Head Start Children.
INSTITUTION	Hahnemann Medical Coll. and Hospital, Philadelphia, Pa.
PUB DATE	Mar 73
NOTE	10p.; Paper presented at the Biennial meeting of the Society for Research in Child Development (Philadelphia, March 29-April, 1973)
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	*Behavior Change; Concept Formation; *Concept Teaching; *Individual Development; Interpersonal Problems; *Preschool Children; Preschool Education; Problem Solving; Program Descriptions; *Social Adjustment; Technical Reports
IDENTIFIERS	*Project Head Start

ABSTRACT

Based on background research showing that both impulsive and inhibited children are deficient to better-adjusted classmates in ability to conceptualize alternative solutions to real-life problems and potential consequences to a given act, a study was conducted to aid the child in thinking for himself of ways to solve his own interpersonal problems and in implementing his decisions in behavior. Teaching focused on certain specific elements of language and cognition needed to solve problems and on ways to use these skills in solving real interpersonal problems. Ss were 113 black children, equally balanced for sex and IQ. Sequenced games and dialogues were used to teach three levels of language and thinking related to behavioral adjustment. Findings suggest that: (1) while all training youngsters gained in their ability to conceptualize both solutions and consequences, aberrant children who needed the program the most benefitted the most; and (2) training was equally beneficial to children initially displaying either impulsive or overly inhibited behaviors. The finding considered most important is the direct link established between change in the trained problem-solving thinking skills and improvements in behavioral adjustment. (KM)

DOCUMENT RESUME

ED 076 230 PS 006 435

AUTHOR Shure, Myrna B.; Spivack, George
TITLE A Preventive Mental Health Program for Four-Year-Old Head Start Children.
INSTITUTION Hahnemann Medical Coll. and Hospital, Philadelphia, Pa.
PUB DATE Mar 73
NOTE 10p.; Paper presented at the biennial meeting of the Society for Research in Child Development (Philadelphia, March 29-April, 1973)

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS *Behavior Change; Concept Formation; *Concept Teaching; *Individual Development; Interpersonal Problems; *Preschool Children; Preschool Education; Problem Solving; Program Descriptions; *Social Adjustment; Technical Reports
IDENTIFIERS *Project Head Start

ABSTRACT

Based on background research showing that both impulsive and inhibited children are deficient to better-adjusted classmates in ability to conceptualize alternative solutions to real-life problems and potential consequences to a given act, a study was conducted to aid the child in thinking for himself of ways to solve his own interpersonal problems and in implementing his decisions in behavior. Teaching focused on certain specific elements of language and cognition needed to solve problems and on ways to use these skills in solving real interpersonal problems. Ss were 113 black children, equally balanced for sex and IQ. Sequenced games and dialogues were used to teach three levels of language and thinking related to behavioral adjustment. Findings suggest that: (1) while all training youngsters gained in their ability to conceptualize both solutions and consequences, aberrant children who needed the program the most benefitted the most; and (2) training was equally beneficial to children initially displaying either impulsive or overly inhibited behaviors. The finding considered most important is the direct link established between change in the trained problem-solving thinking skills and improvements in behavioral adjustment. (KM)

A Preventive Mental Health Program for Four-Year-Old Head Start Children

Paper presented at the Society for Research in Child Development, Philadelphia, 1973

Myrna B. Shure and George Spivack

Hahnemann Medical College

What would an adult say to a preschool child who hits another child, or grabs a toy, or cries. "Kevin, I know you feel angry at Paul, but I can't let you hit him", or "Paul doesn't like to be hit." They might explain why the behavior is unacceptable, "You can't hit Paul, because you might hurt him." For the more inhibited child a teacher might suggest "Tanya would like to play too," or "Maybe she could be the baby," or "Help pack the suitcase."

We believe these techniques have serious limitations if one's goal is to help the child develop more effective ways of handling personal and interpersonal problems. Instead of doing the thinking <u>for</u> the child, we believe that if the child could think for himself, specifically, of ways to solve his own interpersonal problems, that he would be better able to cope and manifest this in changes in overt behavioral adjustment.

In order to achieve this level of overt functioning, the child must first have mastery of certain specific elements of language and cognition needed to solve problems, and he must be taught how to use these skills in solving real interpersonal problems.

The study presented today is the third and most comprehensive in a series of training programs carried out with four-year-old "inner city" youngsters here in Philadelphia. The program is based on our background research that shows both impulsive and inhibited children deficient to their better adjusted classmates in ability to conceptualize 1) alternative solutions to real-life problems and 2) potential consequences to a given act.

The children were trained by their teachers who met with us weekly to learn and discuss the program. First I will describe the program, then the research design and results.

Program Content and Rationale

The underlying approach throughout this program is to teach children how to think, not what to think. The aim established early was to help the child develop a problem-solving thinking "style" that would guide him in coping with typical everyday problems.

Sequenced games and dialogues taught three levels of language and thinking that our research finds related to behavioral adjustment prior to training. The first level consists of games and dialogues to teach the concepts and, or, and not; same-different; happy-sad-mad; some-all; and if-then. While many of the children may understand these concepts, their constant repetition in the early games helped to establish their use within the framework of interpersonal relations. Unlike language programs per se, these words were not taught as an end in themselves, but rather, to set the stage for their role in problem-solving thinking.

Understanding the negation becomes very important in problem-solving if for example, he is to appreciate why not to do something in the very act of deciding in favor of something else.

I'm going to show you some excerpts from the program.

[Slide 1]

In teaching two very important word concepts "same and different" the children performed various movements with their bodies. Here the children are all doing the same thing as in the picture. Sometimes a teacher would lead and

[Slide 2]

sometimes, a child. Then they would think of something different to do, such as stamp their foot. This game not only required the children to think about the words "same" and "different", but required they notice what other people were doing.

After having mastered the word concepts we could then focus on the next level of the program, that of pre-problem-solving thinking skills.

With an understanding of words that designate feeling, i.e., happy, sad, mad, it was possible to teach that different people feel differently, that feelings change and that there are ways to find things out--by listening, by watching, and by asking. That everybody does not choose the same thing is an important concept as young children frequently assume that others would choose what they like, leading to several possible faulty conclusions in interpersonal relations.

[Slide 3]

Here a child was first asked what he would choose. He chose "playing in the park." Then he was asked what Donald might choose. Usually a child would state the same thing he chose. Here the children learned that "Donald" in fact chose being "sick-in-bed" because "Mommy brings me presents."

[Slide 4]

This picture was used as a review game. First the children were asked "How does this girl feel?". Second, "How can you tell?" Third the children were asked why she might have fallen off her bike. Though the children couldn't read they enjoyed "filling up the whole board" with lots of different reasons. This question was followed by "Who can think of a different reason?" Finally, the teacher asked for "lots of different ways to help her feel happy."

The concepts of causality -- "why-because" and of "might" and "maybe" became important throughout the pre-problem-solving lessons. These words could help to evaluate solutions in light of potential consequences to an act (i.e., "If I hit him, he might hit me back") and to recognize that the effect of an act on another is never a certainty.

After having mastered the word concepts and pre-problem-solving thinking skills, they were now ready for the games and dialogues that teach interpersonal problem-solving thinking, that is, solutions and consequences to an act.

[Slide 5]

This child wanted to hold the puppet and is actually carrying out "his" idea of "changing" as a means to solve his problem of getting to hold the puppet.

[Slide 6]

This is one of the lessons where the children were asked "What might happen next?" after each solution was given. Here the problem is that the child at the bottom of the slide won't get off and the child at the top wants to slide down. The children were asked "How can the girl at the top get the boy at the bottom to get off the slide?" On the left are their ideas and on the right their thoughts about "What might happen next?" after each idea. Again, the children enjoyed "filling up the whole board" with <u>different</u> ideas.

The total length of the program was 12 weeks.

Dialogues using the "style" of the training program were used throughout the day, always with the goal of guiding the child to make his <u>own</u> decision and evaluate his <u>own</u> ideas.

Billy wanted a turn on the bike, and Michael kept riding it. Later in the program the concept of fairness was taught as one element in decision-making and the following dialogue took place.

<u>Teacher</u>: Michael, is it <u>fair</u> for you to play so long with the bike and for Billy <u>not</u> to have any turn with it?

<u>Michael</u>: No.

Teacher: How might Billy feel if you do not let him play?

Michael: Sad.

Teacher: What might happen if you do not let him play?

Michael: He won't be my friend.

Teacher: What can you do to make him feel happy so he will be your friend? Remember, Billy wants to ride on the bike.

Michael: (turned to Billy) Let's ride together.

Teacher: Michael, how can you find out if Billy likes that idea?

Michael: Billy, you want to ride with me?

Billy: Yep! (and they went riding off together).

Although their final solution ended up in Michael's continuing to ride the bike, Billy was satisfied with "riding together". Instead of ending up in dissatisfaction or frustration, the children felt warmly toward each other, and good about their own decision.

Design

One-hundred-thirteen black children from ten classrooms ($\bar{X}$ age, 4.3), equally balanced for sex and IQ, received training. A comparable group of 106 Ss from ten different classrooms served as controls.

Analyses revealed no pretest differences between the training and control group in any of the cognitive measures or in percentage

of Ss classified as adjusted, impulsive, or inhibited, as rated by their teachers and independently by their aides on a modified version of the Devereux Child Behavior Rating Scale.

Results

The results are presented with the purpose of the training program in mind: to determine whether training cognitive interpersonal problem-solving skills could improve the classroom behavior and social adaptability of impulsive and overly inhibited, fearful or withdrawn four-year-old Head Start (Get Set) children.

The first question to be answered is whether a program designed to enhance the cognitive interpersonal problem-solving skills of these youngsters did, in fact, increase such skills.

The training program was found to significantly enhance ability to conceptualize solutions to a given interpersonal problem ($p < .001$) and potential consequences to a given act ($p < .001$).

[Slide 7]

This slide shows the increase in mean number of alternative solutions given as measured by our Preschool Interpersonal Problem-Solving, or PIPS test.* Each of the three training behavior adjustment groups gained in the number of alternative solutions given to hypothetical, but typical real-life problems significantly more than their corresponding controls, demonstrating the cognitive effect of training for youngsters whether they began the program as adjusted, as impulsive, or as inhibited.

---

* See reference

Given that youngsters within each of the three initial behavior adjustment groups improved significantly above their control group, it was of interest to ask, who received the most benefit from training? Planned comparisions were used to examine differential effects among trained youngsters as a function of how well adjusted they were at pretest. While the inhibited gained slightly more than the impulsives, the difference in gain between these two groups of trained children was not significant. Pooling the two aberrant groups it was then asked whether aberrant youngsters improved more than the adjusted and the resultant F was significant.

[Slide 8]

Though the absolute differences were less dramatic than for PIPS, the same statistical results occurred for the number of potential consequences to a given act in a problem-situation.

These findings suggest that 1) while all training youngsters gained in their ability to conceptualize both solutions and consequences, aberrant children who needed the program the most benefitted the most, and 2) training was equally beneficial to children initially displaying either impulsive or overly inhibited behaviors.

With respect to behavior adjustment the training was clearly successful in improving the behavior of both impulsive and inhibited youngsters when compared to those in the control group. Of the 44 training youngsters who were judged impulsive in the fall, 22 or 50 percent were classified as adjusted at posttest. Such was true of only eight of 39 or 21 percent of the impulsive

youngsters in the control group, a difference significant at the .01 level (X^2=6.56, df=1). Of the inhibited youngsters, 21 of 28, or 75 percent in the training group were rated adjusted at posttest as compared to only six of 17, or 35 percent of the controls (X^2=5.39, df=1, $p < .01$).

What the behavioral change means is that youngsters beginning the program as impulsive become more able to wait for what they want, and less nagging and demanding. They become better able to share and take turns, and less easily upset in the face of frustration.

Youngsters who started out inhibited, timid, fearful, or shy became more socially outgoing, better liked by their peers, and more aware of others. Tanya, who was never invited into the doll corner approached the group and gleefully offered, "If you need a fireman, I'm right here." One child shouted, "The house is on fire", and Tanya was in business. The teacher did not need to 'help".

Probably the most important finding of this research project was the direct link established between change in the trained problem-solving thinking skills and improvements in behavioral adjustment. The 43 training Ss rated as either "impulsive" or as "inhibited" (pre) and "adjusted" (post) increased in the number of solutions given and to a lesser extent, consequences more than did the 29 Ss who remained aberrant ($t=6.78$, df=70, $p < .005$; $t=1.61$, df=70, $p=.06$, one-tailed respectively). These findings support the contention that change

in the mediating cognitive skills generated change in behavioral adjustment. In light of Dr. Bronfenbrenner's summary the other day of intervention programs to date, that the predominant goal has been to raise IQ, I want to emphasize that our goal was to enhance cognitive real-life problem-solving skills as a mediator to behavioral adjustment. We found that while IQ showed a low but significant correlation to PIPS and Consequences before training, a significant portion of their relationship to behavior adjustment was independent of IQ. The effect of training was independent of both initial IQ and change in IQ, concluding that children with both low and high IQ were able to benefit.

Concluding Statement

If educators and clinicians have assumed that emotional relief would pave the way for clear thinking in a problem situation, this research has given support to the reverse idea, that ability to think through and solve problems might pave the way for emotional relief and behavioral adjustment.

That the data have suggested the program may maximally affect those youngsters most in need of such intervention highlights both the potential therapeutic as well as preventive significance of the procedures. A cognitively based program can well be included in the series of present-day preventive mental health programs.

Reference

Shure, M. B., Spivack, G., & Jaeger, M. Problem-solving thinking and adjustment among disadvantaged preschool children. Child Development, 1971, 42, 1791-1803.