ABSTRACT
        This study examines the potential of adult-guided
sociodramatic play for improving children's interpersonal
problem-solving skills. Nineteen females and 21 males from 3 separate
kindergarten classrooms participated in the study. Within each of the
three classrooms, children were randomly assigned to experimental and
control groups. For both groups, the experimenter acted both from
outside the play group by giving suggestions, classifications, and so
on, and from within the play setting by participating as a co-player.
In the experimental group only, the investigator included additional
behavior intended to stimulate children's problem-solving skills.
Pretest and posttest scores were obtained for each child in both
groups on the Preschool Interpersonal Problem Solving Test (PIPS),
and adult play and problem-solving behavior were recorded on a scale
developed by the author. Results indicated that adult intervention in
children's sociodramatic play can increase generation of strategies
for solving interpersonal problems. (Author/MP)

Sociodramatic Play: A Tool for Improving Children's Interpersonal Problem

Solving Skills

Sociodramatic play was used as a context to stimulate kindergarten children's

generation of strategies for interpersonal problems. The same technique was

used in both experimental and control groups to improve sociodramatic play

behavior. In the experimental group only, interpersonal problem solving stimuli

were presented within the play setting. The Preschool Interpersonal Problem

Solving Test (PIPS) was used to assess children's interpersonal problem solving.

Sociodramatic play was verified by use of a scale adapted from Smilansky (1968)

and Rosen (1974). Adult play and problem solving behavior were recorded on a

scale developed by the author. Results indicate that adult intervention in

children's sociodramatic play can increase their generation of strategies for

solving interpersonal problems. Specific attention is given to experimental

training techniques.

****

Janice H. Patterson
Coordinator of Instructional Computing
Wisconsin Center for Education Research
University of Wisconsin-Madison
1025 West Johnson Street
Madison, Wisconsin 53706

608/263-4200

Sociodramatic Play: A Tool for
Improving Children's Interpersonal
Problem Solving Skills*

Recent attention to children's interpersonal problem solving skills has
focused on how children gain understanding of their social world. Scholars
interested in socialization presume that the way in which children think about
others has an effect on their interpersonal relationships (Shantz, 1975). Many
research studies ask for a verbal response from children about how they think
another child feels or what he or she plans to do in a particular situation
(Borke, 1973). The other person may be a hypothetical person, a known but
absent person, or a stranger who is present.

Cues given children in these situations are different from those in real
life situations, where children receive cues such as facial expression, voice
inflection, body language, and size of person involved. Furthermore, real life
interactions usually allow children to draw on previous experiences to give them
indications of how certain individuals will usually respond. Despite these
differences between research and real life one common element in both is that
the environment has an effect on how children respond to a stimulus. Children,
as well as adults, attend to and rely upon situation cues in their interpretation
and understanding of individuals behavior (Flapan, 1968).

For young children, sociodrama, or "pretend play" is a large part of their
daily play activity (Rosen, 1974; Smilasky, 1968, 1971). In playing with other
children in an imaginary setting, they gain clearer understanding of how other's
feelings and perspectives may differ from their own. Sociodramatic play provides
opportunities for children to consider the demands of other children and respond
in a variety of ways; by changing roles and assigning various functions to
inanimate objects, they become aware of different ways of viewing the world.
Sociodramatic play is an adaptive system which, because of its unique role in
integrating personal experience, prepares children for varied demands and solving
real life problems (Suttonsmith, 1975). The importance of sociodramatic play
and its potential for improving interpersonal skills has been addressed by such
scholars as Burns & Brainerd (1979), Bruner (1972), Dansky (1980), Erickson (1963),
Piaget (1962), and Sylva, Bruner & Genova (1976).

This paper describes an adult guided sociodramatic play activity that was
used with small groups of children to improve their interpersonal problem solving
skills. If students can successfully transfer learning from a play situation to
one where they must verbally respond to an interpersonal problem, then a potential
educational benefit of sociodramatic play for improving social problem solving
skills would be established.

Subjects. Forty children in public school kindergarten classrooms partici-
pated in this study. The sample of middle class children was drawn from a
midwestern community and included 19 females and 21 males from three separate
kindergarten classrooms. Within each of the three classes, children were
randomly assigned to experimental and control groups. The experimental group
totaled 22 children and was subdivided into six small groups; two of the groups
had three children and four groups each had four children. The control group
was divided into four small groups. Due to class scheduling conflicts, it was
necessary for groups size to be three, four, five, and six members respectively.

Procedure. For both the experimental and control groups, there were six thirty minute sessions, spanning a two week period. A specific set of guidelines directed the experimenter's sociodramatic play behavior in both groups and is similar to that developed by Freyburg (1973) and Smilansky (1968). That is, the experimenter acted both from outside the play group by giving suggestions, clarifying, etc., and from within the play setting by participating as a co-player. More specifically, adult play behavior included: (1) reminding children of previous play settings, (2) describing children's play behavior, (3) probing for children to identify a role they had assumed in the play setting, (4) suggesting roles for children to play, (5) stimulating children to expand appropriate role playing behavior, (6) creating conditions for interaction between players, (7) praising children for play behavior, (8) using play props, and (9) assuming a make-believe role.

In the experimental group only, the experimenter included additional behavior intended to stimulate children's problem solving skills. Since spontaneity is valued as a crucial aspect of children's natural play behavior, no preliminary effort was made to structure or design activities. As part of the experimental condition, the experimenter (1) described an interpersonal problem, (2) created interpersonal problems for children to solve, (3) repeated children's suggested solutions, (4) asked for solutions to interpersonal problems, (5) praised children for problem solving behavior and (6) verbally offered solutions to problems.

The following hypothetical situation (based on pilot data) illustrates the differences in adult interaction between the experimental and control group settings as well as provides a more specific description on the training process.

Situation: Two children are playing castle. The first child assumes the role of "Queen," complete with costume clothes, while the second child assumes the role of "Royal Cook" and busies herself with kitchen tools. An argument soon develops because the "Queen" who decides she would like to cook begins taking all the dishes from the "Royal Cook." The "Cook" pushes the "Queen," saying, "Those are my dishes. You put them back." Adult response to this situation depends upon the group, as the following indicates.

Experimental group: The adult assumes a make-believe role as the Queen's Mother and says, "You and the cook seem to be arguing. Is there a problem here?" The children usually respond by identifying the problem. The Queen's Mother (i.e., the adult experimenter) poses this question: "Queen, what can you do so that you can get a chance to use the dishes?" If the child responds, "Hit her," then the adult prods for another possible strategy: "Okay, but if that doesn't work, is there anything else you can do?" At that point, the adult, still participating as a player, continues encouragement of the play episode as well as generation of ways of solving other problems in the play setting.

Control group: The adult willingly assumes a make-believe role in the play setting. She makes verbal statements relative to the episode: "Hello, Royal Cook, what are you fixing? Queen, have you seen my royal jewels?" However, she makes no effort (other than preventing children from hurting each other) to resolve or direct the children in resolving the interpersonal conflict.

Analysis. The measurement design for this study was in three parts. First, pre- and posttest scores were obtained for each child in both groups on the Pre-School Interpersonal Problem Solving (PIPS) Test (Shure & Spivack, 1974). The PIPS is designed to measure students' ability to generate various strategies for solving interpersonal problems. The test is divided into two parts: Peer problems and authority problems. In the section on peer problem solving, a hypothetical situation is presented in which one child has something another child wants. In the second part on authority problems, a situation is created in which the child, having done something that could make "Mother" angry, is asked to think of ways to avoid her anger. A more complete description of the testing procedure, validity and reliability measures, scoring system, and correlations with teacher ratings

are reported elsewhere (See Shure, Spivack, & Jaeger, 1971; Spivack & Shure, 1974; and Spivack, Platt & Shure, 1976).

The second and third aspects of the data collection process required video-taping each of the six sessions for both the experimental and control groups. A three minute segment from each of the six sessions of each subgroup within the large experimental and control groups was randomly selected for coding. These data were then evaluated in two ways. Small group play behavior was coded on the Play Observation Scale to verify the presence or absence of sociodramatic play (See Table I) This measure was adapted from the work of Smilansky (1968) and Rosen (1974). Five elements of sociodramatic play were coded: imitative role play, make-believe with objects, make-believe about actions and situations, inter-action, and verbal communication.

The experimenter's behavior was also coded, using these same randomly selected video tape segments, according to the play behavior and problem solving behavior depicted in Table 2. This coding was to assess salient differences in the experi-menter's behavior between the two groups. The first section of this scale focuses on adult <u>play</u> behavior as described in earlier sections of this paper. The second part of the instrument is designed to assess adult <u>problem-solving</u> behavior, intended for the experimental group only.

Results. The statistical procedure known as analysis of covariance (ANCOVA) was used to compare the group means on the <u>Preschool Interpersonal Problem Solving Test</u>. Although children in the control group scored slightly higher on the PIPS pretest, the difference between groups was not statistically significant. The results of the ANCOVA on the posttest scores favor the experimental group ($F_{1, 37} = 6.55$, p .015). Interestingly, the experimental groups advantage stems mainly from their better performance on the section dealing with interpersonal problems with peers (experimental group $\overline{X} = 6.55$, SD = 1.82; control group $\overline{X} = 5.00$, SD = 2.28) as opposed to authority figures. The PIPS scores give clear evidence that children can be trained to generate an increased number of solutions to inter-personal problems.

Data collected from the Play Observation Scale revealed that the experimental and control groups were quite similar (as intended). The comparability of socio-dramatic play experiences in the two groups is evident in Table I. An indication of the high level of sociodramatic play was the finding that 83 percent of the experimental group segments and 90 percent of the control group segments contained all five elements of sociodramatic play. Given the results from the previous measure the occurrence of adult play behavior reported in Table 2 is hardly surprising. That is, there was no statistical difference between the groups.

In addition to the enrichment of sociodramatic play, the experimenter included interpersonal problem solving stimuli in sessions with the experimental group. Results of these sessions are also presented in Table 2 and provide evidence that modeling and stimulation for interpersonal problem solving were provided for the experimental group only.

Discussion. The sociodramatic play techniques described here suggest an effective context for adult interaction with young children to stimulate their solving interpersonal problems. Previous studies have supported the contention that adults acting in specific ways can enrich children's play skills. Other researchers have provided training programs to improve interpersonal problem solving skills. This study has combined elements of each to tap children's naturally occurring activities and adult expertise in guiding children to successful problem solving. Techniques such as the one used here may prove useful in teaching and assessment of interpersonal problem solving skills and have the added benefit of being enjoyable.

Table 1

Occurrence of Sociodramatic Play

Sociodramatic Play Characteristics	Segments Containing Sociodramatic Play Characteristics				
	Experimental Group		Control Group		
	Number of Segments (out of 23)	Percent	Number of Segments (out of 10)	Percent	p
Imitative role play Children (1 or more) assume a make-believe role and express it in imitative action and verbalization.	21	91	9	90	.46
Make-believe with objects. Movements or verbal declarations substitute for real objects.	19	83	10	90	.22
Make-believe with actions and situations Verbal descriptions substitute for actions and situations.	21	91	9	90	.46
Interaction At least two players interact in the play episode.	21	91	10	100	.48

Table 1 (cont.)

Sociodramatic Play Characteristics	Segments Containing Sociodramatic Play Characteristics					
	Experimental Group		Control Group			
	Number of Segments (out of 23)	Percent	Number of Segments (out of 10)	Percent		p+
Verbal communication Verbal interaction occurs about the play episode.	20	87	10	100		.32
All elements above occurring concurrently in the same segment The technical definition of sociodramatic play requires that all five of the elements be present in a given play episode.	19	83	9	100		.37

+ p calculated using The Fisher Exact Probability Test (nonparametric test for proportions)

* $p < .05$

Table 2

Occurrence of Adult Play Behavior

	Adult Play Behavior	Segments in Which the Behavior Occurred				r+
		Experimental Group		Control Group		
		Number of Segments (out of 23)	Percent	Number of Segments (out of 10)	Percent	
Setting the Stage	Reminds children of previous play settings	3	13	2	20	.34
	Describes children's play behavior	4	17	4	40	.27
	Probes for children to identify role s/he has assumed in play setting	7	30	4	40	.13
	Suggests roles for children to play	5	22	2	20	.35

Table 2 (cont.)

	Adult Play Behavior	Segments in Which the Behavior Occurred				p+
		Experimental Group		Control Group		
		Number of Segments (out of 23)	Percent	Number of Segments (out of 10)	Percent	
Encouraging Play	Stimulates (e.g., questioning, suggesting) children to expand appropriate role-playing behavior	17	74	7	70	.32
	Creates conditions for interaction between players	11	48	6	60	.24
	Shows physical affection to children in play setting	3	13	2	20	.46
	Praises children for play behavior	4	17	3	30	.25
Participating in Play	Uses play props	22	96	9	90	.44
	Assumes a make-believe role	20	87	10	100	.32

+ p calculated using The Fisher Exact Probability Test (nonparametric test for proportions)

* $p < .05$

10

11

Table 3

Occurrence of Adult Problem Solving Behavior

	Adult Problem Solving Behavior	Experimental Group		Control Group		p^+
		Number of Segments (out of 23)	Percent	Number of Segments (out of 10)	Percent	
Setting the Stage	Describes the interpersonal problem	15	65	0	0	.0004*
	Creates interpersonal problems for children to solve	17	74	0	0	.00007*
Encouraging Alternative Thinking	Repeats children's suggested solutions	10	43	0	0	.014*
	Asks for solutions to interpersonal problems	17	74	0	0	.00007*
	Praises children for problem solving behavior	10	43	0	0	.014*
Participating in Problem Solving	Verbally offers solutions to problem	11	48	0	0	.006*

+ p calculated using The Fisher Exact Probability Test
  (nonparametric test for proportions)

* p < .05

REFERENCES

Borke, H. The development of empathy in Chinese and American children between three and six years of age: A cross-cultural study. Developmental Psychology, 1973, 9, 102-108.

Bruner, J. S. Nature and uses of immaturity. American Psychologist, 27, 8, August 1972.

Bruner, J. S., Jolly, A., Sylva, K. (Eds.) Play--its role in development and evolution. New York: Basic Books, Inc., 1976.

Burns, J. S. and Brainerd, C. J. Effects of constructive and dramatic play on perspective taking in very young children. Developmental Psychology, 1979, 15, 5, 512-521.

Dansky, J. L. Make-believe: A mediator of the relationship between play and associative fluency. Child Development, 1980, 51, 2, 576-579.

Erikson, E. H. Childhood and society (2nd Edition). New York: W. W. Norton & Co., 1963.

Flapan, D. Children's understanding of social interaction. New York: Teachers College Press, 1968.

Freyburg, J. T. Increasing the imaginative play of urban disadvantaged kindergarten children through systematic training. In J. L. Singer (Ed.), The child's world of make-believe. New York: Academic Press, 1973, 129-154.

Piaget, J. Play, dreams and imitation in childhood. New York: W. W. Norton & Co., Inc., 1962.

Rosen, C. E. The effects of sociodramatic play on problem-solving behavior among culturally disadvantaged preschool children. Child Development, 1974, 45, 920-927.

Shantz, C. U. The development of social cognition. In E. M. Hetherington (Ed.), Review of child development research (Vol. 5). Chicago: University of Chicago Press, 1975.

Shure, M. B. & Spivack, G. Preschool Interpersonal Problem-Solving (PIPS) Test: Manual. Philadelphia: Department of Mental Health Sciences, Hahnemann Community Mental Health/Mental Retardation Center, 1974.

Smilansky, S. The effects of sociodramatic play on disadvantaged preschool children. New York: Wiley, 1968.

Smilansky, S. Can adults facilitate play in children?: Theoretical and practical considerations. In N. Curry & S. Arnaud (Eds.), Play: The child strives toward self-realization. Washington, D.C.: National Association for the Education of Young Children, 1971.

Spivack, G., Platt, J. & Shure, M. The problem-solving approach to adjustment.
    San Francisco: Jossey-Bass, 1976.

Suttonsmith, F. The useless made useful: Play as variability training.. School
    Review, February, 1975, 83, 2, 197-214.

Sylva, K., Bruner, J. S., and Genova, P. The relationship between play and
    problem solving in children three to five years old. In J. Bruner, A.
    Jolly & K. Sylva (Eds.), Play--Its role in development and evolution.
    New York: Basic Books, Inc., 1976.