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ABSTRACT

A total of 103 children 2 through 6 years of age were interviewed and 73 of their parents and 60 preschool teachers completed a questionnaire about their perceptions of play. Most parents defined play as something for fun or amusement, while teachers saw it both as fun and as an opportunity for cognitive and social development. Both parents and teachers said they promoted play by providing a variety of materials and parents also said they played with their children. The majority of teachers did not view play as an integral part of the curriculum, but instead described a learn/play dichotomy. Parents did not support the idea of a large amount of time in preschool being spent in play. Children's favorite play activities according to children and their parents and teachers were outdoor play, dramatic play, blocks, and art activities. (Author/RH)

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Children's, Teachers' and Parents' Perceptions of Play

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## Perceptions of Play

### Abstract

Children two through six years of age were interviewed and their parents and preschool teachers completed a questionnaire about their perceptions of play. Most parents defined play as something for fun or amusement, while teachers saw it both as fun and as an opportunity for cognitive and social development. Both parents and teachers said they promoted play by providing a variety of materials and parents also said they played with their children. The majority of teachers did not view play as an integral part of the curriculum, but instead described a learn/play dichotomy. Parents did not support a large amount of time in preschool being spent in play. Children's favorite play activities according to children and their parents and teachers were outdoor play, dramatic play, blocks, and art activities.

Children's, Teachers' and Parents Perceptions of Play

Thousands of years ago Greek philosophers Plato (427-347 B.C.) and Aristotle (384-322 B.C.) recognized the importance of play in the overall development of the individual. Other early educators such as John Amos Comenius (1592-1670), Jean-Jacques Rousseau (1712-1778), and Johann Pestalozzi (1746-1827) stressed the importance of play as well.

Frederich Froebel, often considered the father of the kindergarten, described the importance of play in the development of children in the following statement:

Play is the purest most spiritual activity of man at this stage, and at the same time, typical of human life as a whole - of the inner hidden natural life in man and all things. It gives, therefore, joy, freedom, contentment, inner and outer rest, peace with the world (Harris, 1906).

Most early childhood educators recognize the importance of play, but there has been some disagreement about the definition of play and the specific benefits derived from play. To illustrate the variety of definitions, Mitchell and Mason (1948) provide the following collection:

Spencer (1873): "Superfluous actions taking place instinctively in the absence of real actions ... Activity performed for the immediate gratification derived, without

regard for ulterior benefits. "

Schiller (1875): "The aimless expenditure of exuberant energy."

Froebel (1887): "The natural unfolding of the germinal leaves of childhood."

Groos (1898): "Instinctive practice, without serious intent, of activities that will later be essential to life."

Patrick (1916): "A person's need for relaxation as a relief from mental fatigue."

Gurlick (1920): "What we do because we want to."

Dewey (1922): "Activities not consciously performed for the sake of any result beyond themselves."

There are numerous references in the literature to play as the basis of young children's learning (Cheyne and Rubin, 1983; Piaget, 1962; Tway, 1983). Play has been linked to creative thinking, problem solving, ability to cope with tensions and anxieties, acquiring new understanding, ability to use tools, and development of language (Christie and Johnson, 1983). Play has also been found to be a way to motivate children to explore new materials and ideas and to remain on task longer (Iverson, 1982).

The purpose of this study was to survey teachers', parents', and children's ideas about play and to determine if their perceptions and practices do in fact reflect what the literature says about play.

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### Method

#### Subjects

The sample consisted of 103 preschool children, 73 parents, and 60 teachers of preschool children. The sample was drawn from private and public preschools and child care centers of a variety of socioeconomic and cultural backgrounds in Dade County, Florida. The children's ages ranged from two to six years.

#### Procedure

Three questionnaires were developed to gather data about play from preschool children and their teachers and parents. All three questionnaires were open-ended, with answers being supplied by the respondents. Teachers and parents were asked to define play and tell what they did to promote or encourage play. Teachers were questioned about how they included play in the curriculum and what kinds of things interfered with play. Parents were asked what percentage of time they thought children should play in school and why. The children's questions included "What do you think of when I say the word play?" and "What do you do when you are not playing?" Teachers, parents and children were all asked about children's favorite play activities and materials.

The questionnaires were distributed to parents and teachers by students enrolled in early childhood education courses at the University of Miami and collected two weeks later. The same

students interviewed each of the 103 preschool children, using the children's questionnaire. The children's responses were recorded by the interviewers. Answers from all three groups of responses were tabulated and categorized by the researchers.

Results

Both parents' and teachers' definitions of play included enjoyment, fun, or some type of amusement; social development; a learning or cognitive activity; physical activity and use of muscles; creativity and imagination; non-structured activity; preparation for future roles, and child's work. As can be seen in Table 1, the largest category of parent responses was play as fun or amusement, whereas teachers defined play not only as fun but also as an opportunity for cognitive and social development.

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Insert Table 1 about here

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All of the teachers said they included play in the curriculum, but their descriptions of how they included it varied widely from "the entire curriculum is play" to "only if we get all our work finished." Only 20% of the teachers indicated that play was an integral part of their school day, with such responses as, play is built into the curriculum, it is used to introduce and reinforce concepts, lessons are taught using play,

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and play is part of all daily routine activities.

Another 10% of teachers said that play was inherent in learning centers or interest areas, indicating that there was considerable use of play in their classrooms.

Specific play activities, such as games, dramatic play, music, songs, and rhythms were listed by 26% of the teachers as the way they included play in the curriculum. Their answers indicated they considered these play activities separate from the curriculum.

The largest group of teachers (44%) mentioned only a very specific amount of time for play and often called it free play or indoor or outdoor play. Some mentioned free play periods of a given duration, such as 20 minutes once or twice a day or a free choice time of 30 minutes a day. A few teachers used play only as a reward after work was finished. One teacher said it was very difficult to fit play into the curriculum and that it was included only if all the work was completed.

Teachers definitions of play were compared with how they said they included play in the curriculum (See Table 2). Sixty per cent of the teachers included learning in their definition of play, listing cognitive development, social development, creativity and imagination, preparation for future roles, or child's work. The other 40% defined it as unstructured activity, exercise, or fun. On the question about how play was included in

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the curriculum, 51% said they integrated play into the curriculum, while 49% treated play as separate. A 2 x 2 Chi-square test of independence, using the correction for continuity, was computed on the data in Table 2 to determine the relationship between teachers' definitions of play and whether play was an integral part of their curriculum. Chi-square was not significant, ( $\chi^2 = .653$ ,  $df=1$ ,  $N=60$ ), indicating a lack of relationship between the two variables. A low Phi value ( $\phi = .104$ ) was consistent with the low Chi-square, indicating negligible correlation between definitions of play and integration of play into the curriculum.

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Insert Table 2 about here

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In response to the question, "What do you do to promote play?", both parents and teachers listed provision of a variety of materials and equipment and participation in children's play. Teachers also listed providing time and opportunities, and providing space. Parents' responses included having friends over and turning off or limiting TV. Some parents said it wasn't necessary to do anything. (See Table 3).

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Insert Table 3 about here

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When teachers were asked what kinds of things interfered with children's play, the most frequently mentioned factors were related to adult interference, such as overprotective parents, adult criticism, and parental attitudes about play being a waste of time. Another major category was behavior and discipline problems of the children, including social and emotional problems and social attitudes and behaviors. Other factors mentioned frequently were limited equipment or supplies, rigid schedules, inadequate space, and health problems of children. A few teachers mentioned such factors as television and bad weather.

The responses from parents about what percent of time in preschool they thought should be spent in play supported the teachers' practices of limiting play. The percent of time ranged from 5% to 95%, with most of the responses at 30, 40 or 50%.

In order to see if the ages of their children influenced the percent of time they thought should be spent in play, parents' responses were grouped according to the ages of their children. As can be seen by Table 4 there was not a lot of difference among parents of 2 to 5 year olds. Even parents of two year olds thought only 53% of their children's time in preschool should be spent in play. The percentage of time parents thought six year olds should spend in play was considerably lower than the others, which is understandable in light of the even greater emphasis on academics at this age.

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Insert Table 4 about here

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Reasons given by parents as to why they advocated a given percent of time for play fell into three general categories. One reason was children don't need much playtime; they need to do other things. The emphasis here was on academics. The second type of reason was children need play as a break from work, emphasizing the work/play dichotomy. The third category emphasized the positive aspects of play. Play was seen as having inherent value as a learning activity. These three types of reasons were equally distributed among the parents.

Children two through six years of age were asked, "What do you think of when I say the word, play?" The largest number of responses (31%) included something to do with outdoor play, such as running, riding bikes, swinging, and sliding. Another large category of responses (27%) was playing with specific items, such as Barbie and other dolls, transformers, and cars. Other responses included organized games, playing with people, dramatic play, and art activities. Some children responded that when they thought about play, they thought of having fun, being happy, and doing things they liked.

The children were also asked what they did when they were not playing. The most frequent responses were watching

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television (54%) or sleeping (21%). Other responses included eating, coloring, and nothing.

Teachers, parents, and children were all asked a similar question relating to favorite play activities and materials. Activities related to dramatic play were consistently mentioned by all three groups. Other responses included blocks, art activities, outdoor play, and organized games. Only parents frequently mentioned books and dolls as children's favorite play materials. (See Table 5).

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Insert Table 5 about here

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### Discussion

Many of the parents and teachers surveyed in this study did not regard play as important for young children. The lack of credence for play was evident in the parents' definitions of play and in their lack of interest in having their children spend preschool time in play, as well as in teachers' perceptions that adults were a major factor in limiting children's play. In addition, only 20% of teachers said play was an integral part of their curriculum. The rest viewed play and learning as separate entities. These parents and teachers of children two to six years of age did not view play as the way children learn. In spite of

what Piagetian theory says about how preoperational children learn through active involvement and interaction with their environment, which is facilitated through play, parents and teachers seemed to be separating play and learning into a dichotomy; children were either playing or they were learning.

Although, Almy, Monighan, Scales, & Van Horn (1984) indicate that there are still many unanswered questions about what children learn from play or how play affects their later development, research has yielded some positive findings about the relationship between play and learning. Dramatic play and make-believe play (which was named as one of children's favorite play activities in this study by parents, teachers, and children) has been found to contribute to the child's later ability to deal with abstract symbols (Fein, 1981; Pellegrini, 1980), with hypothetical reasoning (Fagen, 1976), with problem solving (Sylva, Bruner, and Genova, 1976), and to the understanding of logical transformations (Golomb & Cornelius, 1977; Saltz, Dixon, & Johnson, 1977). In addition, researchers Nicolich (1977) and Fein (1979) found there is a relationship between symbolic play and early language levels. Other researchers (Becher & Wolfgang, 1977; Rubin & Maioni, 1975; Goodson & Greenfield, 1975) found there was a correlation, not only with symbolic play and language development, but also with cognitive development. There also appears to be a continuity between symbolic skills in processes

involved in play and those required for reading and writing (Pelligrini, 1980).

Parents and teachers said they promoted children's play by providing materials, equipment, and supplies. McLoyd (1983) found that providing new materials and equipment along with removing toys and materials no longer in use or of interest to the children will indeed help to promote the continuation of interest in dramatic play. Several of the parents also said they played with their children in order to promote play. Research, such as Smilansky (1968), reinforces this practice. She not only found that intervention during the sociodramatic play episode increased play but also made the following suggestions for play intervention: enter into play as a participant; enter into play as an outside observer by asking questions and/or making suggestions, and continue to structure the environment.

More than half the preschool children said they watched television when they were not playing, supporting the current concern about the amount of time children spend watching television. The Television Bureau of Advertising (1984) reports that the average television is on for about 7 hours each day. When children are watching television they are not looking at books, communicating with friends, developing large and fine motor skills, solving problems, and asking questions, which have been found to be very important skills for future learning. Fein

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(1981) and Singer & Singer (1976) found that children who watch a great deal of television play less imaginatively than those who watch less. The available research suggests that parents should limit the amount of time their children watch television instead of being concerned that they spend too much time playing.

Outdoor play and dramatic play were by far children's favorite play activities. Teachers listed blocks, dramatic play, art activities and outdoor play as children's favorite activities, while parents said children liked outdoor play, art, and dramatic play. It appears from this study that the activities that children like most are not those that require expensive toys such as motorized trucks, dolls that walk or talk, or other electronic gadgetry. Television advertising tries to persuade children that they need toys with special effects and gimmicks, but the novelty of these expensive toys soon wears off. Materials such as blocks, sand and water, crayons and scissors, dolls, wheel toys, and dress up clothes can be used creatively by children in many ways and have lasting play value. It is important that early childhood educators provide information to parents about what kinds of toys and materials have good play value so they are able to help children resist advertising pressure.

There is also a need to communicate to parents, (and, in some cases, to teachers as well), the importance of including play as an integral part of the preschool curriculum. We know

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that play does facilitate certain types of learning. It provides children with opportunities for social development, learning language, gaining independence, solving problems, developing large and fine motor skills, assuming responsibility, experimenting and discovering, and developing imaginative and creative minds. Considering the lack of interest in play in the preschool setting, as described in this study, one has to be concerned about the emphasis on academic skills and the effect it might have on the total development of children.

REFERENCES

- Almy, M., Monighan, P., Scales, B., & Van Horn, J. (1984). Recent research on play: The teacher's perspective. In L. Katz (Ed.), Current topics in early childhood education. New York: Ablex.
- Becher, R. & Wolfgang, C. (1977). An exploration of the relationship between symbolic representation in dramatic play and art in the cognitive and reading readiness levels of kindergarten children. Psychology in the Schools, 14, 377-381.
- Cheyne, J., & Rubin, K. (1983). Playful precursors of problem solving in preschoolers. Developmental Psychology, 19, 577-84.
- Christie, J., & Johnson, E. (1983). The role of play in a social-intellectual development. Review of Educational Research, 53(1), 93-115.
- Fagen, R. (1976). Modeling: How and why it works. In J. Bruner, A. Jolly, & k. Sylva (Eds.), Play: Its role in development and evolution. New York: Basic Books.
- Fein, G. (1979). Echoes from the nursery: Piaget, Vygotsky, and the relationship between language and play. In E. Winner & H. Gardner (Eds.), Fact, fiction and fantasy in childhood San Francisco: Jossey Bass.
- Fein, G. (1981). Pretend play in childhood: An integrative review. Child development, 52, 1095-1118.
- Golumb, C. & Cornelius, C. (1977). Symbolic play and cognitive significance. Developmental Psychology, 13, 246-252.
- Goodson, B. & Greenfield, P. (1975). The search for structural principles in children's manipulative play: A parallel with linguistic development. Child Development, 46, 734-746.
- Harris, W.T. (Ed.)(1906). The mottoes and commentaries of Frederich Froebel's mother play. New York: Appleton.
- Iverson, B. (1982). Play, creativity, and school today. Phi Delta Kappan, 63(10), 693-94.
- McLoyd, V. (1983). The effects of the structure of play objects on the pretend play of low-income preschool children. Child Development, 54, 626-35.

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- Mitchell, E., & Mason, B. (1948). The theory of play. New York: Barnes.
- Nicholic, L. (1977). Beyond sensorimotor intelligence: Assessment of symbolic maturity. Merrill-Palmer Quarterly, 23, 89-99.
- Piaget, J. (1962). Play, dreams and imitations in childhood. New York: Norton.
- Pelligrini, A. (1980). The relationship between kindergartener's play and achievement in prereading, language, and writing. Psychology in the Schools, 17, 530-535.
- Rubin, K. & Maioni, T. (1975). Play preference and its relationship to egocentrism, popularity, and classification skills in preschoolers. Merrill-Palmer Quarterly, 25, 171-179.
- Saltz, E., Dixon, D., & Johnson, J. (1977). Training disadvantaged preschoolers on various fantasy activities: Effects on cognitive functioning and impulse control. Child Development, 48, 367-380.
- Smilansky, S. (1968). The effects of sociodramatic play on disadvantaged preschool children. New York: Wiley.
- Sylva, K., Bruner, J., & Genove, S. (1976). The role of play in the problem-solving of children 3-5 years old. In J. Bruner, A. Jolly, & S. Sylva (Eds.), Play: Its role in development and evolution. New York: Basic Books.
- Television Bureau of Advertising. (1984). January 1984 Report. 477 Madison Avenue, New York, New York, 10022.
- Tway, E. (1983). When will my child write? Childhood Education, 59(5), 332-35.

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Table 1

Teachers' and Parents' Definitions of Play

Definitions	Teachers	Parents
Enjoyment, fun, amusement	20%	31%
Social development	20%	8%
Cognitive development	18%	14%
Physical activity	12%	8%
Creativity and imagination	10%	25%
Non-structured activity	8%	6%
Preparation for future roles	8%	5%
Child's work	4%	3%

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Table 2

Relationship Between Teachers' Definitions of Play  
and Integration of Play into the Curriculum

	Play defined as some type of learning	Play as fun, exercise, or free activity
Play integrated into the curriculum	13	5
Play as separate times or activities	22	20

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Table 3

How Teachers and Parents Promote Children's Play

	Teachers	Parents
Provide materials and equipment	46%	48%
Participate in and encourage play	12%	35%
Provide time and opportunities	27%	-
Provide space	15%	
Not necessary to do anything	-	9%
Have friends over	-	5%
Turn off TV	-	3%

Table 4  
Average Percent of Preschool Time Parents Thought Should  
Be Spent in Play

Age of child	Percent of time for play
Six years old	30%
Five years old	49%
Four years old	42%
Three years old	49%
Two years old	53%

Table 5

Children's Favorite Play Activities and Materials  
As Reported by Teachers, Parents, and Children

	Teachers	Parents	Children
Outdoor play	25	62	47
Housekeeping, dramatic play	34	36	39
Blocks and legos	35	18	9
Art activities	32	50	7
Organized games	18	11	13
Puzzles	12	9	0
Table toys	12	0	0
Sand, water, and rice	11	7	2
Musical activities	10	13	0
Books and stories	8	28	2
Balls	7	14	19
Dolls	3	22	4
Television	0	11	0
Trucks, cars, boats, planes	4	14	3
Transformers	0	5	0
Action figures	0	10	0
Video games	0	4	0
Total responses	211	314	145

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**ABSTRACT**

This study was designed to investigate the effects of child-centered group play sessions (using the play therapy interaction approach) and sex differences on self-control, free play, and sociometric ratings in young bilingual Puerto Rican children. The participants in the study were 48 bilingual Puerto Rican four- and five-year-old children from two predominately Hispanic Southeastern Pennsylvania urban communities. Analyses made of pre-test scores for the dependent measures yielded no significant differences among groups. The main analyses consisted of three 2 (treatment) x 2 (sex) analyses of variance with repeated measures (ANOVA), using pre- and post-measures on self-control behaviors, free play ratings, and sociometric scores. Separate post hoc Tukey tests were run on each of the three main dependent measures. Results showed that children who received group play sessions outperformed those in the control group on the self-control and free play rating scales; boys in the experimental treatment outperformed both girls in the experimental treatment and all children in the control group on the sociometric measure. The results were interpreted and discussed in terms of non-directive humanistic theories of play therapy (e.g., Rogerian) as they relate to intervention techniques for meeting personal and emotional needs of children in underserved minority groups.  
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The Effects of Child-Centered Group Play Sessions  
on Social-Emotional Growth of Four- and Five-Year Old  
Bilingual Puerto Rican Children

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Child-Centered Group Play Sessions

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## Abstract

This study was designed to investigate the effects of child-centered group play sessions (using the play therapy interaction approach) and sex differences on self-control, free play, and sociometric rating in young bilingual Puerto Rican children. Analyses made of pre-test scores for the dependent measures yielded no significant differences among groups. The main analyses consisted of three 2 (treatment) x 2 (sex) analyses of variance with repeated measures (ANOVR) using pre- and post-measures on self-control behaviors, free play ratings, and sociometric scores. Separate post hoc Tukey tests were run on each of the three main dependent measures. The results showed that children who received group play sessions outperformed those in the control group on the self-control and free play rating scales; boys in the experimental treatment outperformed both girls in the experimental treatment and all children in the control group on the sociometric measure. The results were interpreted and discussed in terms of non-directive humanistic theories of play therapy (e.g., Rogerian) as they relate to intervention techniques for meeting personal and emotional needs of children in underserved minority groups.

The Effects of Child-Centered Group Play Sessions  
on Social-Emotional Growth of Three-to-Six-Year-Old  
Bilingual Puerto Rican Children

Child-centered play (play therapy) for encouraging personal growth, increased maturity, and greater acceptance of others has been advocated by early theorists such as Rogers (1951) and Axline (1969). The child-centered researchers were considerably more active when the approach was first introduced than they have been in recent years (Guerney, 1983). Nonetheless, within the past 22 years several researchers (for example, Seeman, Barry & Ellinwood, 1964; Reif & Stollak, 1972; the West German researchers Schmiutchin & Hobrucker, 1978; Fleming & Snyder, 1981; and Guerney, 1983) have explored the hypothesized, facilitative effects of play therapy with individuals as well as groups of young children on peer acceptance levels, school adjustment/aggression control, and fantasy themes in free play.

Axline (1969) described the play therapy process as the opportunity that is offered to the child to experience personal growth under the most favorable conditions. As the child symbolically enacts feelings or events, the feelings are brought to the surface for the child to examine, to control, or to abandon (Guerney, 1983). Through play therapy children may achieve their own power as individuals; to think for themselves, to make their own decisions, and to become psychologically more mature (Axline, 1969). Accordingly, the realization of "self"

through the individual's own map or route is the ultimate goal of child-centered play therapy.

One may consider the fact that bilingual immigrants, such as Puerto Rican children and especially Puerto Rican boys, frequently encounter social, language syntax, and other adjustment problems upon entering a new school environment (Ekstrand, 1977; Prewitt-Diaz, 1981; Escobedo, 1983). Participation in child-centered play groups, using the play therapy interaction techniques, is hypothesized in this study, to have the potential to effect greater social acceptance in young minority-group children and to increase their self-control and fantasy expression levels, all of which are among the goals and demonstrated results of individual and group play therapy (Axline, 1969).

#### Purpose of the Study

The purpose of the study was to test the foregoing hypothesis by examining the changes in bilingual Puerto Rican children who participated, and those who did not participate, in child-centered group play sessions. The dependent variables were: (a) self-control ratings by teachers; (b) free play behaviors; and (c) social acceptance levels. Specifically, the study was designed to determine whether children who participated in child-centered group play sessions, using the play therapy interaction approach, (a) would be rated by their teachers as more "self-controlled" using the Kendall and Wilcox (1979)

Self-Control Rating Scale (SCRS); (b) would, during free play sessions, display a significantly greater number of higher level play behaviors and verbalizations on the Play Observation Scale (POS), and (c) would increase in levels of social acceptance, both displayed toward peers and received from peers. A unique feature of this study was its duration; it was conducted over a period of ten weeks with at least four hours devoted to child-centered sessions each week.

### Method

#### Participants

The participants in the study were 48 bilingual Puerto Rican four- and five-year-old children from two predominately Hispanic southeastern Pennsylvania urban communities. Each of the 48 children had lived in the mainland United States for at least six months.

The sample in the study was comprised of three subsamples: sixteen randomly selected children (eight in the experimental and eight in the control conditions) four and five years of age, who attended one of three kindergarten classrooms in Community A; eight randomly selected children (four in the experimental and four in the control treatments) three-to-six years of age, who attended a preschool center in the same community; and 24 randomly selected four- and five-year-old children (12 experimental and 12 control) from five classrooms in an adjoining

community (Community B). In all samples the control and experimental groups contained equal members of boys and girls.

The two sites have high populations of Puerto Rican residents. In Community A, nearly 20 percent of all children below five years of age are of Puerto Rican heritage; in Community B, nearly 50 percent of all children below five years of age are Puerto Rican (Pennsylvania Abstract, 1985). All participants were from "working-class" (Warner, Meeker, & Eels, 1960) homes in which the heads-of-household included factory workers, mechanics and service/custodial personnel.

Assignment of participants to experimental or control groups was made by random selection and assignment of equal numbers of boys and girls to either (a) the experimental group or (b) the control group. The children assigned to experimental and control groups were four and five years of age and bilingual. Boys and girls (24 boys and 24 girls) were equally represented. The dominant language spoken in the children's homes was Spanish. (This information was provided by teachers who were familiar with the children's families.)

### Measures

Pre- and post-measures were obtained on several scales, in order to assess behavioral changes for the experimental and control groups. The pre-tests were administered in April, just prior to the conduct of the study and the post-tests were administered ten weeks later following the conclusion of the

experiment. With the exception of the Self-Control Rating Scale (SCRS), all scales were administered by a trained assistant who was uninformed of the nature or conditions of the study. (The SCRS was administered by the children's teachers.)

Peabody Picture Vocabulary (PPVT). The PPVT Form B (Dunn, 1969) was used to assure that the groups were equivalent in language and intellectual ability prior to the conduct of the study. The PPVT is a receptive measure of language ability appropriate to the age ranges (CA: 4-5) of the children in the study. This test is individually administered and requires that the examiner administering it ask the child to point to the one picture (on each page containing a total of four black and white pictures) which illustrated the noun, verb, or adjective spoken by the examiner. For example, the child was asked by the "blind" assistant, to point to "barber" on a page which showed a barber and three other pictures of objects and people. Other pictures which the child was asked to identify, upon hearing the representative spoken word, included pledging, cash, and ambulance.

Self-Control Rating Scale (SCRS). The Kendall and Wilcox Self-Control Rating Scale (Kendall & Wilcox, 1979) was used to rate the behavior of each child on both the pre- and post-tests. The SCRS was used by the teacher (independently of the experimenter) to rate each child on a seven-point bi-polar Likert-type scale. The bipolarity was obtained on each item by

such terms as "always-never", "yes-no", "waits-interrupts" and so on. Examples of items are: When the child promises to do something, can you count on him or her to do it? (yes-no scale). Is the quality of the child's work all about the same or does it vary a lot? (same-varies scale). Does the child interrupt inappropriately in conversations with peers, or wait his or her turn to speak? (waits-interrupts scale). By summing over the ratings on the 33 items of the measure a total score for each child was obtained. High scores indicated lower degrees of self-control and low scores indicated higher degrees of self-control.

Play Observation Scale (POS). The Play Observation Scale (Yawkey, 1981) was a measure of behaviors corresponding to Piaget's (1962) stages of maturity reflected in the areas of movement, simple language, make-believe and reality. Inter-observer and test-retest reliability of the POS was established during two four-hour training sessions, for the project assistants, conducted by the investigator. Construct validity was demonstrated by the use of questionnaires concerning the appropriateness of (a) each observation instrument category; and (b) the arrangement of the scale, itself, to 75 graduate students and faculty members in the Departments of Human Development and Education.

According to Piaget's theory, these levels are sequenced in the order of the child's lesser to greater maturity. There are

17 items on this scale. Each child in both the experimental and control group was individually rated by a trained observer, while playing with three others, during a classroom free play period. The observation scale was implemented as both a pre- and a post-test. The observers, who received no information regarding the children's experimental or control conditions, systematically tallied each of the child's play behaviors every ten seconds into one of the 17 play behaviors listed on a grid scale for a total time of ten minutes for each child. In order to simplify the analysis and to identify the loci of possible changes in behavior as reflected by these ratings, four subscores were obtained (each of the 17 play behaviors is included in one of the four major sections, described below): (a) Simple motor skills (or movement). An example of one of the three items for this measure was "simple movements that had been learned were then repeated. Trying a skill for the first time and exhibiting enjoyment; e.g., the child bangs a block and smiles. (b) Language usage. An example of one of the three items for this measure was "variation of simple language: The combining of one known word with other known words, whose meaning is nonsensical. E. G. Mamma doggie baby." (c) Fantasy play. An example of one of the five items for this measure was "Imitative play of self identified with another object/person. A definite intention to be somebody else. E.G. Child pretends to be Superman, Wonderwoman, or another fantasy character." (d) Reality based play. An example

of one of the six items for this measure was "Anticipation of exact/exaggerated consequences of reality in play. The expectation about what is going to happen in the future and its verbal expression. E.G., "If Spot plays in the street, he'll get hit by a car," or "If baby is good she'll get lots of presents from Santa." In addition, an "other" category was included. Coders were instructed to use this category for any behavior about which uncertainty existed and to specify, in writing, the child's particular behavior about which uncertainty existed and to specify, in writing, the child's particular behavior..

At the conclusion of the systematic rating of each child's play behaviors, the tallies were counted for each of the four major sections. "Other" tallies were minimal (five tallies were recorded) and, upon closer examination and discussion with the rater, were found to reflect one of the 17 POS categories; thus, the five behaviors were re-categorized. High total numbers of tallies in the Fantasy and Reality play categories indicated a higher level of developmental maturity for the child than did relatively high total numbers in the less-advanced categories of Simple Movement and Simple Language (Piaget, 1962).

The Peer Rating Scale (PRS). This was a sociometric measure adapted from the preschool sociogram procedure described by Asher, Singleton, Tinsley, and Hymel (1979). It was administered individually to each child in the experimental and control groups by the experiment assistant who was "blind" to the conditions.

The child's ratings were made on the basis of pointing to one of three line drawing faces...happy, neutral, or sad. The child was shown a photograph of each classmate and, respectively, asked to point to one of the three faces on the paper, indicating his/her feelings when playing with each successive classmate; i.e. "How do you feel when you play with Beth? Point to the face that shows how you feel." A smile was scored as three points, a neutral face was two and a frowning face was one point. Total points were calculated for each child and each group, individually, before group mean scores were obtained for both the pre- and the post-tests. The former procedure (using total points) was followed so that extreme individual scores (e.g. many "ones" and/or many "threes") were not overlooked by averaging them. Additionally sociogram scores were obtained in two distinct categories: (a) scores of each child given by other classmates ("by" scores); and (b) scores of each child for other classmates ("for" scores). A high mean score "for others" represented the child's or group's acceptance of his/her peers; a high score "by others" indicated other children's acceptance of a given child or group of children. Conversely, low mean scores "by others" represented less acceptance received by others; lower scores "for others" indicated less acceptance extended to other peers.

### Procedures

The control group received all pre- and post-tests but did not participate in the child-centered play sessions. Instead, they participated in unstructured free play sessions with their classmates using toys similar to those used in the child-centered play sessions. The children in the experimental group participated in play sessions governed by the non-directive, child-centered principles (described by Rogers, 1951).

The child-centered play sessions in the experimental groups were conducted by a University faculty member who had several years experience as an elementary school teacher and three years training and experience, under the guidance of a play therapy specialist, in conducting child-centered play therapy sessions. Because the children in the present study, however, were not identified as "problem-children" by their teachers, the investigator applied techniques of the therapeutic interaction approach in play groups which were "child-centered," rather than "therapeutic."

The 24 experimental children were divided into six play groups. The composition of each group remained consistent throughout the study. Each of the six play groups contained four children: two boys and two girls. The procedures for the treatment groups lasted for 40 minutes, once each week, for ten consecutive weeks.

The child-centered play therapist provided non-directional toys which included: (a) crayons and paper; (b) modeling clay; (c) blocks; (d) puppets; (e) masks; (f) plastic "familier"; and (g) a punching figure. The children, upon entry to the play room, were told by the therapist that they could do "just about anything they wanted in this special play room." The therapist used the non-directive, child-centered approach as described by Rogers (1951), Axline (1969), and Ginott (1961) to interact with the children.

#### Child-Centered Tools

The therapist used five behavioral "tools" during each of the child-centered play sessions: (a) recognition of the child's feelings and developmental stage; (b) structuring the environment; (c) reflective responding; (d) limits; and (e) consequences.

Recognition of feelings. Sensitivity to the child's developmental level and feelings were conveyed by the therapist through body positioning, voice tone, and facial expressions of a feeling of empathy for the child and an acceptance of his/her behaviors and statements.

Structuring play sessions. Structuring the environment involved preparations for displaying toys as well as opening and closing session messages to the children. The toys were displayed, generally, in the same positions for each of the sessions. Make-believe toys such as masks, telephones, and army

men were displayed in one corner; more rule-oriented toys such as a dart board and ring-toss games were displayed in a separate area of the room. Expressive toys, such as water, clay, paper, and crayons were displayed in a third section of the room. Also, as a structuring tool, the therapist used the same opening message and closing message for each session. The child was informed as he/she entered the play room, "This is our special room. In here, you can do just about anything you want. If there's something you may not do, I will let you know." A five-minute and a one-minute "time" message were used near the end of the session. Upon leaving the play room, the therapist stated, "Our time is over for today. We will play again next week."

Reflective responding. Reflective responding involved the therapist's paraphrasing what the child said or responding to the child's behaviors or feelings. The major part of each session was comprised of interactions in which the children's actions, statements, or overt feelings were empathically received and reflected by the therapist. At no time during the session did the therapist vary from reflective responding in order to use questioning, directing, advice-giving, or praise to a child, except in the relatively rare instances in which limit-setting or enforcing consequences were necessary.

Setting limits. Behavioral limits and their resultant consequences, were pre-determined by the therapist but were

stated aloud only in the event that a child violated an existing rule or limit. Otherwise, the children completely determined the nature, roles, toy usages, and interactions which occurred during each of the ten play sessions. The therapist participated in the play only when one or more of the children requested her presence. The nature of the therapist's participation was also determined by the children.

The 24 control children received in-class treatment. For 40 minutes each week, they were permitted to play in a separate classroom area, with a set of toys. They were supervised by their teachers or classroom aide. The children were pre-tested in April and post-tested in June as were the 24 experimental children.

### Results

A preliminary one way analysis of variance (ANOVA) was used to test the hypothesis of no difference between the pre-test scores on the PPVT for the experimental and control groups. It will be recalled that the PPVT was a measure of receptive language skills and was used only as a pre-test to establish whether or not the experimental and control groups were equally competent in basic language skills.

The main analyses, made of each dependent variable, were 2x2x2 mixed analyses of variance. The between-subjects variables were treatment (experimental and control) and sex of subject (boys and girls). The within-subjects variable was the repeated

measure (pre- and post-test). Each dependent measure was analyzed separately. Tukey's Widest Significant Difference (WSD) statistic was used for all post hoc analyses of differences between means. Unless otherwise noted the level of rejection for all analyses was set at  $\alpha = < .05$ .

#### Analysis of PPVT Scores

The analysis of the PPVT scores yielded  $F(1,46)=.058$ ,  $p=.81$ , indicating that the experimental and control groups were clearly equivalent on this measure. The mean PPVT scores were 81.33 and 83.12 for the experimental and control groups, respectively. At the least, these results indicate that any further findings of differences between the two groups could not be attributed to differences in basic receptive language skills.

#### Analyses of Changes in Social-Emotional Measures

The three dependent measures (SCRS, POS, and PRS) were analyzed separately via a  $2 \times 2 \times 2$  mixed ANOVA as indicated above. The analyses of variance for each of the dependent measures are summarized in Tables 1, 2 and 3. There it can be seen that none of the analyses yielded significant main effects due to the important variables of sex or treatment. However, there were a number of important significant interactions. Therefore, only the effects attributable to the significant interactions will be presented in the following tables.

The analysis of the SCRS scores yielded a significant interaction of treatment by time of testing,  $F(1,44)=4.74$ ,  $p < .05$ .

The WSD follow-up analysis of the means involved in this interaction indicated a significant difference between the pre- ( $X=120.58$ ) and post- ( $X=110.25$ ) test scores of the experimental group. The pre- ( $X=112.41$ ) and post- ( $X=111.38$ ) test scores for the control group were not significantly different as shown in Table 1, below.

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Insert Table 1 about here

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Although the scores for the experimental group do reflect a positive change in self control ratings on the SCRS it is possible that because of the higher pre-test mean the change from pre- to post-test may be due to regression toward the mean. The interpretation that these data represent a positive change in self-control is preferred, however, since the 8.17 difference between the pre-test scores for the experimental and control groups was not significant ( $p > .05$ ).

For purpose of analysis the POS was subdivided into four separate scales. Each of the subscales was analysed separately. A significant treatment by time of measurement interaction was obtained in the analyses of each of the four subscales. These results are displayed in Table 2.

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Insert Table 2 about here

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Although there were no treatment differences at the time of pre-testing, there were significant differences between the experimental control groups on each of the POS post-tests. To determine the locus of these interactions, the Tukey WSD test was used for multiple comparisons between pre- and post-test means on each of the four POS scales. On three of the four subscales positive changes were found for the experimental group from pre- to post-test, as shown in Table 3. The experimental group achieved significant gains in make-believe and reality. The control group did not change significantly on any of the measures (i.e., movement, language, make-believe, and reality) when pre- and post-test means were compared.

The analysis of the PRS scores yielded a significant sex by time of testing interaction,  $F(1,44)=4.71$ ,  $p < .01$ , as shown in Table 3.

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 Insert Table 3 about here  
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The means for "selections given" on the PRS measure indicated that all groups were the same on the pre-test (overall mean=2.43). The WSD tests of the post-test means indicated that the experimental group boys selected others more frequently ( $X=2.63$ ) than did the control group boys ( $X=2.19$ ). Similar changes were not found for girls in selections of others (overall mean=2.45). Although this analysis indicated that boys in the

experimental group selected others significantly more often following the experimental treatment than did boys in the control group, the "received" scores were not significantly different between the two groups. These data indicated that changes resulted from the child-centered sessions in the boys acceptance of others. However, similar changes were not found for girls.

In examining the "selection given" responses on the PRS, there was a significant difference between boys and girls in both the experimental and control groups at the post-test, but not the pre-test measures. The scores for the boys in the child-centered treatment were significantly higher than the scores for the girls on the post-test measure, whereas the control boys had significantly lower scores than the control group girls at the time of post-testing.

Thus, following child-centered therapy sessions, boys increased in their willingness to accept others as a result of participating in the play sessions, presumably because the play sessions increased their own self-esteem, acceptance of themselves, or confidence in themselves. Similar changes were not found for either the girls in the experimental group or for the children in the control group. Nonetheless, the boys in the control group received higher numbers ( $X=2.47$ ) of selections from others than did the experimental group ( $X=2.32$ ) at the time of post-testing as compared with their selections of others. A likely explanation for this phenomenon is the experimental boys'

greater acceptance of others, including the boys who were placed in the control group, at the completion of the play sessions.

### Discussion

On pre-test measures of receptive intelligence, self-control, fantasy play behaviors, and peer selections, the children in both the experimental and control groups were equivalent. Accordingly, the results on the post-tests clearly indicated that the children assigned to the child-centered play groups showed significant improvement compared to those children in the control group on self-control, and the higher developmental level play behaviors of make-believe and reality. Post hoc analysis indicated that boys in the experimental group became more acceptant of others (as measured by the sociogram post-test) than boys or girls in the control group.

The results of the study supported those of Seeman, Barry and Ellinwood (1964) who found that play therapy affects the manifestations of children's levels of self-control and aggressive behavior. The present study also supported the later study by Reif and Stollak (1972) in which children who received play therapy increased in their fantasy play levels. In the present study, moreover, the more developmentally advanced play level of "reality-based play" was significantly higher for the experimental child-centered play children than for the controls. This finding was of considerable interest as an independent as well as a related finding of the facilitative effects of

child-centered group play therapy on levels of free play behaviors and corresponding adaptive and, possibly, cognitive behaviors.

The sociometric results of the present study supported the earlier findings by Schmidtchen and Hobrucker (1978). In the study, the experimental play group children scored significantly higher on acceptance measures than the no-treatment controls at the conclusion of the treatment period. However, in the present study, the experimental boys, alone, scored significantly higher in comparison to those in the control group. This finding may relate to earlier research by Fagot (1978a) who discussed the fact that boys and girls differ with regard to aggression, self-control, and sociability levels and to research by Prewitt (1981) and Ekstrans (1977) who found that Puerto Rican boys, in particular, exhibited higher levels of aggression and lack of self-control.

Thus, the results indicated that five-year-old boys may receive greater social benefits (i.e., increased acceptance feelings toward others) from child-centered group play experiences. However, in the areas of self-control and fantasy play levels, both boys and girls who receive systematic child-centered group play sessions are likely to significantly outperform children who receive no play treatment.

### Implications

The present study was unique compared to the typical laboratory experiment or the descriptive, narrative accounts typical of many client-centered investigations. The play sessions were each 40 minutes in duration. There were a total of 60 play sessions and the training took place over a period of ten consecutive weeks.

The educational/psychological importance of the study concerned the relevance of child-centered group play, gender differences and the contributions which group play sessions can make to self-control, free play enhancement, and social acceptance in four- and five-year-old bilingual Puerto Rican children. When used for preventative, remedial or enrichment purposes, the effects of child-centered group play can serve to facilitate the Puerto Rican child's social, representational, and adaptive skills in group settings.

### Limitations

Among the limitations of the study were: the results of the investigation were limited (a) to the procedures employed in the treatment conditions and (b) to the assessment instruments which were used for measuring self-control, free play levels, and social acceptance of four- and five-year olds. The measures were not characteristic of those that would normally be used in academic situations. Rather, they were theoretically related to the kinds of outcomes play sessions are assumed to produce. In

principle, the changes induced would be related to inducing adjustment to academic settings. Additional research studies incorporating different populations and/or different assessment instruments are needed.

#### Implications for Future Research

The present investigation of the results of ten child-centered play sessions on bilingual Puerto Rican preschool children confirms many of the earlier findings. Moreover, the results present many interesting new questions which future research studies could explore. Among the questions that arose from the present study, which warrant further investigations, were the following:

- (1) Why did boys who experienced child-centered play sessions improve in their selections given to others, but not received from others?
- (2) Why were girls, in general, more accepting of others than they were selected by others?
- (3) How does a child's nurturance-giving level relate to his or her acceptance levels, both extended toward other peers and received from other peers?
- (4) What are the changes in bilingual children's English language usage, both during the child-centered play sessions as well as at the conclusion of the sessions?
- (5) Would significant improvements in other areas of children's interpersonal and social adaptation, such as

"happiness," "shyness," "cooperation," "self-confidence," "self-esteem," and "friendliness," occur on standardized tests in these areas?

(6) Could a child-centered group play program be used to increase children's (a) creativity; (b) problem-solving skills; (c) acceptance of reality; and (perhaps resultant) (d) intellectual functioning?

(7) What are the effects of individual play therapy upon children from other minority groups (i.e. Black; Asian; Indian)? How do the results compare with the present study's results of child-centered group play?

(8) What are the effects of child-centered group play, or play therapy, upon preschool children who are labeled handicapped--physically, emotionally, socially, or intellectually?

(9) What are the effects of child-centered group play sessions upon children, over an extended period of time, such as nine months?

(10) How lasting are the children's social, self-control, and play area improvements which result from their experiencing child-centered group play sessions?

(11) Do post-play reports from parents of children who are enrolled in a child-centered group play program confirm the teachers' and investigator's findings of children's advanced play levels and self-control improvements?

### Implications for Teacher and Parent Education Programs

Results of the present study suggest that child-centered play group participation influences bilingual children's socially and personally adaptive behaviors in the school setting. Because of the teacher's or caregiver's regular interactions with the children and the close, familiar, and important nature of the child-teacher relationships, the school setting environment presents a potentially optimal environment in which both preventative and mildly remedial child-centered group play sessions might transpire.

One researchable question, then, involves the feasibility of training early childhood and elementary education college students in child-centered, non-directive interaction techniques. The subsequent teachers' application of the techniques--in the preschool or classroom--with the children in (a) formal child-centered group play sessions and/or (b) informal, unstructured periods of free play are two distinct possibilities.

"The integration of classroom practices that provide the needed sensory interactive experiences with the more formal structure for academic instruction is critical to children's future learning achievement. The implementation of these practices in bilingual classrooms is even more vital for Hispanic children, who have had in the past high dropout rate and a history of underachievement" (Escobedo, 1983). Moreover, the

possibility of escalating and enriching parent involvement, through training them to conduct child-centered play sessions in the home, is a final implication of the study. Teachers, parents, and children alike may then begin to cooperatively reap the social, emotional, and educational rewards which result from the child's emerging realization of "selfhood" (Azline, 1969).

## References

Axline, M. (1974). Relationships between the use of play areas and cognitive styles in preschool children. Child Study Journal Monographs, 3, 52-67.

Axline, V. M. (1976). "Play therapy procedures and results," in C. Schaefer (Ed.), The Therapeutic Use of Child's Play, New York: Jason Aronson, Inc.

Axline, V. M. (1969). Play Therapy (revised ed.). New York: Ballantine Books.

Dunn, L. M. (1969). Peabody Picture Vocabulary Test, Form B. Circle Pines, Minnesota: American Guidance Service.

Ekstrand, L. H. (1977). Migrant adaptation -- A cross cultural problem. A review of research on migration, minority groups, and cultural differences with special regard to children. Educational and Psychological Interactions, Malma, Sweden: School of Education, 59.

Escobedo, T. H. (1983). Early childhood bilingual education. New York: Teachers College Press, p. xiii.

Fagot, B. (1978a). Sex determined consequences of different play styles in early childhood. Research Paper Read at the American Psychological Association, Toronto, Canada, September.

Fagot, B. (1978b). The consequence of same-sex, cross-sex, and androgynous preferences in early childhood. Research Paper Read at the Western Psychological Association, San Francisco, California, April.

Fleming, L., & Snyder, W. (1981). Social and personal changes following non-directive group play therapy. American Journal of Orthopsychiatry, 17, 101-116.

Guerney, L. (1983). Client-centered (nondirective) play therapy. In C. Schaeffer and K. O'Connor (Eds.), Handbook of play therapy, New York: John Wiley & Sons, Inc.

Kendall, P. C., & Wilcox, L. E. (1979). Self-control rating scale. Circle Pines, Minnesota: American Guidance Service.

Munroe, R. H., Munroe, R. L., & Whiting, B. B. (1981). Handbook of cross-cultural human development. Chicago: Garland.

Pennsylvania Abstract. (1985). Harrisburg, Pennsylvania: Department of Commerce, Bureau of Statistics, Research, and Planning.

Piaget, J. (1962). Play, dreams and imitation in childhood. New York: W. W. Norton.

Prewitt Diaz, J. O. (1981). The conflicts in in-school cultural behaviors of the Puerto Rican migrant children on the mainland. Education, 48, 68-81.

Reif, T., & Stollak, G. (1974). Sensitivity to children: Training and its effects. East Lansing: Michigan State University Press.

Rogers, C. R. (1951). Client-centered therapy. Boston: Houghton Mifflin Co.

Schmidtchen, S., & Hobrucker, B. (1978). The efficiency of client-centered play therapy. Praxis Der Kinderpsychologie and Kinderpsychiatrie, 27(4), 117-125.

Seeman, J., Barry, E., & Ellinwood, C. (1964). Interpersonal assessment of play therapy outcome. Psychotherapy: Theory, research and practice, 1(2), 64-66.

Yawkey, T. D. (1983). Play observation scale. Unpublished systematic evaluation instrument, The Pennsylvania State University.

Table 1

Self-Control Rating Scale Analysis of Variance Summary Table for  
Experimental and Control Groups at Pre- and Post-testing

Source of Variance	df	<u>Self-control rating scale scores</u>	
		MS	F
Group (G)	1	287.04	.09
Sex (S)	1	11266.67	3.52
Group x Sex	1	10127.04	3.16
Error (Between)	44	3201.79	
Time of Test (T)	1	793.50	7.07*
GxT	1	532.04	4.74*
SxT	1	73.50	.66
GxSxT	1	7.04	.06
Error (within)		112.20	

\*p < 0.05

Table 2

Play Observation Scale Subcategories Analysis of Variance Summary Table for Experimental and Control Groups at Pre- and Post-testing

Source of Variance	POS Movement			POS Simple Language			POS Make-believe			POS Reality		
	df	MS	F	df	MS	F	df	MS	F	df	MS	F
Group (G)	1	4108.17	21.57**	1	100.04	1.64	1	290.51	1.18	1	3601.50	17.79**
Sex (S)	1	330.04	1.73	1	45.37	.74	1	201.26	.82	1	26.04	.13
Group x Sex	1	322.67	1.69	1	130.67	2.14	1	147.51	.60	1	408.37	2.02
Error (Between)	44	190.50		44	60.93		44	245.15		44	202.38	
Time of Test (T)	1	912.67	5.43*	1	6.00	.13	1	36.26	.17	1	1650.04	13.74**
GxT	1	5797.04	34.49**	1	301.04	6.57*	1	1020.51	4.69*	1	4510.04	37.56**
SxT	1	8.17	.05	1	273.37	5.97*	1	12.76	.06	1	140.17	1.17
GxSxT	1	22.04	.13	1	6.00	.13	1	75.26	.35	1	104.17	.87
Error (within)	44	168.07		44	45.79		44	217.70		44	120.06	

\*  $p < 0.05$

\*\*  $p < 0.01$

Table 3

Mean Post-test Play Observation Subscale Scores and Mean Changes  
Between Pre- and Post-test Scores for Experimental and Control  
Groups<sup>1</sup>

POS Subscale	Experimental Group		Control Group	
	Post-test**	Change	Post-test++	Change
Movement	2.58	-21.71*	31.21	+9.38
Language	6.21	-4.04*	11.74	+3.04
Make-believe	25.96	+5.29	15.96	-7.75
Reality	28.92	+22.00*	2.96	-5.42

\*The change is significant at  $p < .01$ .

\*\*Differences between post-test scores for experimental and control groups were significant for each of the subscale scores.

<sup>1</sup>Table 3 indicates that, for the control group of children, periods of free play did not result in increased levels of the higher developmental-level play categories of make-believe and reality; the experimental group, however, decreased significantly in the lower developmental-level play categories of movement and simple language and significantly increased in make-believe and reality play behaviors. The results therefore suggest that child-centered play sessions may be more conducive (than unguided free play) to enhancing children's developmental levels of play.