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## ABSTRACT

In order to determine the effect of day care center sponsorship on children's development, the authors examined the ways in which programs, objects and materials, and teacher/child interactions affected the preoperational behavior of 4-year-old black children in publicly and privately supported day care centers. A total of 120 4-year-olds (30 from public day care, 30 from private day care, and 60 middle- and lower-class controls not attending day care) served as subjects. All groups received selected sections of the comprehensive Piagetian Preschool Battery pretest and posttest for determining cognitive growth. Results indicated that while significant differences existed between day care center children and control children with respect to preoperational behavior, no significant differences were found between public and private day care center children. Based on these findings, five suggestions for providing a quality day care center for children under 5 years of age are outlined. (MP)

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DAY CARE PROGRAMS: A PART OF THE EDUCATIONAL CONTINUUM

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## ABSTRACT

This study focused upon preoperational behavior of young children attending publicly and privately supported Day Care Centers.

One hundred and twenty 4-year-olds (30 public Day Care, 30 private Day Care, 30 control-middle class, and 30 control-lower class) served as subjects in this study. All groups received a Comprehensive Piagetian Preschool Battery pretest and posttest. The results of a one dimensional analysis of covariance showed significant differences in preoperational behavior among Day Care Center children and control children. No significant differences were found in preoperational behavior between public and private Day Care Center children.

# DAY CARE PROCRAMS: A PART OF THE EDUCATIONAL CONTINUUM

During the past 15 years, the number of Day Care Centers in the United States has grown. This growth has been shared by proprietary, public and private, non-profit centers. More than 700,000 children are cared for in Day Care Centers which half are operated by proprietary enterprises and half are operated by public or voluntary organizations (Levitan & Alderman, 1975). The services rendered by Day Care Centers vary from custodial to developmental; however, some basic activities are common to all centers. All centers provide children with a structured environment supervised by adults outside the child's immediate family.

During a child's formative years, zero to five, quality Day Care Programs can enhance his potential for growth and development as long as they consist of effective learning opportunities rather than performing a custodial service (Beard, 1969; Todd, 1970; Robinson & Robinson, 1971; Mondale, 1971; Kagan, 1971; Caldwell, 1974). Quality Day Care is a child's extended family. It provides an educational program along with a network of other services that promote wholesome development for the child in cognitive, affective, and social areas. These other services, provided for the child and his family, include psychological services, community referral services, health services, social services, and parent education (Todd, 1970).

In order to determine whether the sponsorship of a Day Care Center makes a difference, this writer investigated publicly and privately supported Day Care Programs in a large eastern city. This researcher examined and compared how programs, objects and materials, and teacher/child interactions affected the preoperational behavior of 4-year-old black children in publicly and privately supported Day Care Centers.

## Research Questions

The following research questions were investigated:

- Are there differences between the preoperational behavior exhibited by 4-year-old black children attending public Day Care Centers and by 4-year-old black children attending private, profit-making Day Care Centers as measured by the Comprehensive Plagetian Preschool Battery?
- 2. Are there differences between the teacher/child interactions In terms of the sponsorship of the Day Care Centers as measured by the Flanders System of Interaction Analysis?

#### REVIEW OF LITERATURE

The review of literature is reported in the following four areas:

- I. goals for Day Care Programs
- 2. characteristics of teachers for young children
- 3. teacher/child interactions within an educational settings
- 4. preoperational development of children

### GOALS FOR DAY CARE PROGRAMS

Day Care Programs can support the child's development during the preschool years by providing the child with the kind of care he receives from his own parents and by providing the child with meaningful, social experiences with competent concerned adults and with peers. Day Care Programs must provide activities that meet a child's development maturity and ability to perform different tasks and must create opportunities for learning by making materials and situations available in an organized manner. These programs must support the child's family life by involving parents in the program, thus, making parenthood a pleasant and rewarding opportunity rather than an extra burden (Cohen. 1975).

Butler (1970) states that Day Care Centers have the responsibility for the total development of the child. They should provide the child with everything that he should get in a good home, plus what he should get in a good school. The educational experiences should be planned to challenge the child's abilities and lead him to make observations and perform tasks which are not previously within the scope of the child's behavior. These experiences should invite and should nurture the child's excitement about learning.

According to Todd (1970), Day Care Programs must help young children to obtain information, to learn skills and facts, to think of new ways of doing things, to create a desire to continue learning, to Learn how to live with others and enjoy the experiences, and to become self-reliant and confident. Day Care Programs hold an important place in providing all children with the essential experiences which support optimal development. Quality Day Care Programs, geared to the needs and abilities of each child, can provide the challenges that summon each child to experiment, explore, and manipulate his environment with zest and excitement.

## CHARACTERISTICS OF TEACHERS FOR YOUNG CHILDREN

No matter what the aims of a program, the materials provided, or the theoretical justification, the responsibility for the success or failure of any method lies primarily with its interpreter - the teacher. Butler (1970) has stated that in measuring the impact of educational practices, the study of the method itself may be far less imformative than observation of teacher style because it is what the teacher actually does that has an effect on the child.

According to Plaget (1970), the teacher helps children adapt to the environment and encourages this adaption by using the impulses inherent in

children along with spontaneous activities. The teacher, also, must make every effort to present the subject content in accordance with the individual child's mental development, allowing for individual rates of achievement.

The teacher must set problems for the child, prepare the materials for the child, create the appropriate situations for the child, and offer conflicting evidence when the child is too quickly satisfied with his solutions so as to introduce a temporary lack of equilibrium that will force him to modify previously assimilated patterns of thought (Goodlad, 1973):

At every level, the teacher plays an important role in helping their students grow and learn. The teacher's role in relation to the children in Day Care Centers depends upon her attitudes and beliefs about children. Her effectiveness in the teaching role depends on the emotional climate of the school in which she teaches (Dowley & Bromwich, 1972).

Day Care Programs depend heavily upon their teachers. Theory, materials, and equipment by themselves are no substitutes. Program implementation will be successful only if the teacher is an effective facilitator. Children will learn if they are carefully taught (Gordon & Jester, 1973).

# Teacher-Child Interactions Within An Educational Setting

Teaching is a social process involving communication between at least two people, a teacher (professional or para-professional) and a student. It is a kind of dialect in which both teacher and student act as teacher and student at different times and at different levels (Amidon & Hunter, 1966). A teacher not only instructs but also learns about that student by using what he has learned from the student in making decisions concerning what to do next in the course of teaching situations.

Although interaction patterns encompass both the verbal and the non-verbal behavior that takes place in day care, elementary, secondary, and college class-rooms (Garrard, 1966), teacher and pupil responses are expressed primarily through spoken words (Flanders, 1970).

The teacher's or classroom assistant's behavior pattern can create contrasting classroom climates which may be an integrative pattern for some or a dominative pattern for others (Flanders, 1970). The integrative pattern of behavior can be described as one that accepts, praises, encourages, clarifies, and supports ideas of pupils, asks questions to stimulate pupil participation in decision making, and asks questions to orient pupils to schoolwork. The dominative pattern of behavior, on the other hand, can be described as one that expresses or lectures about own ideas and knowledge, gives directions and orders to pupils, and criticizes and depreciates pupil behavior with intent to change it.

In Day Care classrooms, a persistent problem has been the identification of effective techniques for assessing a teacher's verbal behavior in order to provide him with the information necessary to improve his teaching performance. Interaction analysis is concerned primarily with verbal behavior which although only one aspect of teaching behavior, is one of the most important since most of the functions associated with classroom teaching are implemented by verbal communications (Bondi, 1970).

Educators assume that teachers who are aware of and able to autilize a variety of appropriate verbal behaviors will be able to facilitate more learning in their classrooms. If this is true, then we must provide experiences whereby both prospective and inservice teachers can become more aware of and flexible in using a variety of appropriate teaching behaviors related to positive student attitudes toward school, their teachers, and student achievement (Bondi, 1970).

## Preoperational Period of Development

The preoperational phase comprises the child's development from the close of the sensorimotor phase up to the time when his thought processes become operational (Flavell, 1963; Almy et al., 1966; Evans, 1973). The dominant mental activities of the child have changed from overt actions, characteristic of the sensorimotor period, to perceptual actions. These operations occur within a framework of classes and relations that make possible mobility of thought (Phillips, 1969). According to Piaget (1960), this period of development which starts at age two and ends at age seven or eight is divided into two stages, the preconceptual stage (ages two to four) which is the child's first fuzzy attempts at generalizations and the intuitive stage (ages four to seven) which is the beginning of operational thought.

In the intuitive stage, the young child is able to cope very well with the physical world around him on the basis of sensorimotor activities and perceptual adaptations (Flavell, 1963). The young child does not know how to define the concepts he employs and confines himself to designating corresponding objects or to defining them by usage (Piaget, 1967). Gradual coordination of the representative relations develops along with a growing conceptualization. The child now is more able to address himself to a specified task, to apply intelligence to the task, and to reason out more complex problems (Flavell, 1963).

During the preoperational period, the most important single development is the development of language. Language opens doors to the child that were not previously open to him. It acts to increase the rate at which experiences can take place. Plaget contends that the emergence of verbal behavior increases the power of thought in range and speed (Ginsburg and Opper, 1969). Furthermore, it also enables the child to adapt to his social environment by means of conversation.

## Cognitive Growth

Cognitive growth consists in part in the development of systems of representation as means for dealing with information (Flavell, 1963; Ginsberg & Opper, 1969). Cognitive growth refers to the processes involved in knowing - perceiving, remembering, imagining, judging, and reasoning (Brearley et al., 1970). The growing child begins with a strong reliance upon learned action patterns to represent the world around him. An effect of this development is the power for organizing acts of information processing into more integrated and long range problem solving efforts (Bruner, 1964).

Cognitive growth in children depends upon the emergence of two forms of competence which are ways of representing the recurrent regularities in the environment and linking the past to the future (Bruner, 1964). Cognitive growth in children is significant in that such growth depends not upon capacity but upon the unlocking capacity by exposure to the specialized environment of a culture.

#### **METHODS**

Based upon a discussion of the problem and a review of relevant literature, this study was planned to examine and compare the preoperational behavior of young children in privately and publicly supported  $\hat{\phi}$  ay Care Centers.

## Population

This investigation involved two public bay Care Centers, two private, profit-making Day Care Centers, and 10 Sunday Schools. The public centers were composed of AFCD (Aid to Families with Dependent Children) and lower class black children. The private, profit-making centers were composed of middle class black children. Sunday Schools were composed of lower class and middle class black children. The total number of black children involved in this study was 120. The centers and the children were randomly selected.



## Procedures / 1

The selected public and private, profit-making Day Care Centers responded to a background questionnaire. For each child who was involved in this study, a permission letter was obtained. Each child selected from the public Day Care group, the private Day Care group, the middle class Sunday School Group, and the lower class Sunday School group was administered individually the selected sections of the comprehensive Riagetian Preschool Battery developed by Thomas Yawkey and Steve Silvern. The investigator observed teacher/child interactions in each selected Day Care Center classroom for 4-year-olds for one day a month for a period of 10 months using the Flanders System of Interaction Analysis. The observations were for 3 ten-minute periods and were recorded on a matrix.

## Design

Cognitive growth, the dependent variable, was studies as a function of one independent variable and two intervening variables. The independent was type of Day Care Center, public or private, profit-making sponsorship. The intervening variables were race, black, and age, 4-year-olds. The study used the pretest - posttest control design as described by Tuckman (1972).

### Analyses of Data

For the Comprehensive Piagetian Preschool Battery, the data were analyzed using a one dimensional analysis of covariance. The pretest scores were covarivate variables, and the test scores on the posttest were the criterion variables. The computer program BMDUOM - ANCOVA 3 facilitated the analysis of the data.

For the Flanders System of Interaction Analysis, the results of items number 4: asking questions, number 5: lecturing, number 8: student talk-response, number 9: student talk-initiation, and number 4-9 cross were calculated in percentages and compared with respect to the sponsorship of the Day Care Centers.



## **RESULTS**

Significant differences between the adjusted means of the experimental groups, and the control groups were found (Figure I) in the cardination section (F = 45. 4139, df = 3,119, p<.01), in the ordination section (F = 34.1701, df = 3,119, $\phi$ p<.01), and in the classification section (F = 47.5171, df = 3,119, p<.01).

From the results of the Comprehensive Piagetian Preschool Battery, the researcher found that the cognitive growth for children involved in Day Care Programs when compared with children who did not attend Day Care Programs was significantly greater indicating that Day Care Center children had had many opportunities to seek new information and explore the environment than the control group of children had had. The key to the significant results of Day Care Center Children seemed to be the many discovery learning experiences they had had during the school year in structured and unstructured activities.

The results of the Flanders System of Interaction Analysis indicated that:

(1) teachers in both public and private Day Care Centers asked their students questions but for less than 10 percent of the time that the children were in school each day, (2) teachers in both settings lectured their students more than they questioned their students but for less than 20 percent of the time that children were in school each day, and (3) children in publicly and privately supported Day Care Centers were allowed to respond to ideas and to initiate ideas for at least 40 percent of the time that they were in school each day. Teachers in publicly and privately supported Day Care Centers exhibited similar behaviors with regard to questionning and lecturing children while allowing children numerous opportunities to verbally express themselves within the Day Care setting. These results suggested that teachers have a responsibility to create an environment conductive to discovery learning and based upon children's past experiences.

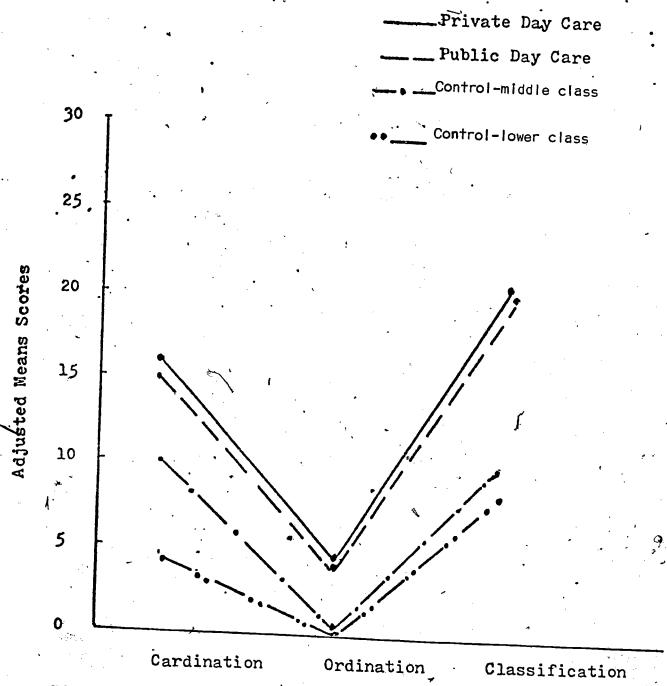


Figure 1. Description of the Adjusted Means for the Experimental and Control Groups on the Selected Sections of the Comprehensive Piagetian Preschool Battery

## RECOMMENDATIONS FOR EDUCATORS

Realizing the growing need of families for Day Care services and for before and after school care in the United States, the researcher would like to make five suggestions to professionals striving to provide quality Day Care for children under 5 years of age. These suggestions are:

- f. to plan programs that consider and reflect a child's stage of development
- 2. to seek specially trained people to-fill staff vacancies
- to help children develop the discipline necessary to achieve in school, at work, and at play
- 4. to involve the child's whole family, parents and siblings, in the learning process within the Day Care Center and make them aware of the stages of child development
  - 5. to acquaint parents with the Day Care Center's philosophy, objectives, and curriculum.

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