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Child care options: Impact on child development

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Child care options: Impact on child development

Abstract

The desire to establish learning environments that are both stimulating and responsive and which will contribute to the cognitive, emotional, language, physical, and social development of the preschool child is the goal of parents and educators alike. Piaget proposed that children pass through a series of successive stages and that they develop intellectually by acting and reacting with their world (Travers, 1982). This particular learning theory implies that an enriched environment would encourage intellectual development and has provided a rationale for early child care and education.

CHILD CARE OPTIONS:
IMPACT ON CHILD DEVELOPMENT

A Research Paper
Presented to
Dr. Charles May
University of Northern Iowa

In Partial Fulfillment
Of the Requirements of 21:214
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Master of Arts in Education.

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CHAPTER I

INTRODUCTION

The desire to establish learning environments that are both stimulating and responsive and which will contribute to the cognitive, emotional, language, physical, and social development of the preschool child is the goal of parents and educators alike. Piaget proposed that children pass through a series of successive stages and that they develop intellectually by acting and reacting with their world (Travers, 1982). This particular learning theory implies that an enriched environment would encourage intellectual development and has provided a rationale for early child care and education.

There are four child care environments that can be utilized by any infant through preschool child (Fosburg, 1982). Each can potentially be an enriched environment that could offer children a chance to explore, to question, to play, to interact, to initiate, and to develop at their own unique paces.

The category of child care which is most frequently used is parental care; this includes those parents who choose to stay home all day with their children. The other categories, are options for a working parent or parents. In order of most frequent use according to the United States Department of Labor statistics, these include: in-own-home care (52%), family day care (35%), and group care (13%) (Clarke-Stewart, 1982). Belsky & Steinberg (1978) and Etaugh (1980) have commented that it was ironic that the bulk of existing educational studies and research had been conducted on the child care options least prevalent and that, therefore, those research findings could not be necessarily be generalized to the large majority of preschool children or child care situations.

Most of the existing research has been done in the area of group care (Irwin, 1979; Johnson, 1979; Levy-Shiff, 1983; Robinson & Robinson, 1971;

Ragozin, 1980; Rubenstein & Howes, 1979; Rubenstein & Howes, 1981; Schwartz, Krokick & Strickland, 1972; and Weiss, 1980). This environment deals with a rather small percentage of over-all child care and with a small sample of the target population of day care children. There exists some data on family day care compared with group day care (Cochran, 1977; Golden et al, 1978; Hock & Clinger, 1980; and Prescott, 1978) and a major descriptive study of family day care (Davison & Ellis, 1980; Divine-Hawkins, 1981; Fosburg, 1981; Fosburg & Grasso, 1981; Singer et al, 1980; Stallings & Porter, 1980; Stevens, 1982) but virtually no data has been collected on either in-own-home care or parental care, even though these are the most common arrangements.

There have been some research studies which describe a child's experiences in several of the individual types of child care situations and some comparative studies with two or three contrasting forms of care, but to date, only a single study (Clarke-Stewart, 1985) has attempted to correlate the possible effects that each type of care might have on the normal development of a preschool child.

Statement of the Problem

This study investigated, through a search of the literature, the effects of four differing child care situations: parental care, in-own-home care, day care home care, and group care. The investigation focused on those recent studies which had a research design dealing with some form of day care and the effect of that care on selected developmental variables. Specifically, the following research questions were posed:

1. What are the effects of various forms of child care on the physical health and development of the preschool child?

2. What are the effects of various forms of child care on the cognitive development of the preschool child?

3. What are the effects of various forms of child care on the social development of the preschool child?

4. What are the effects of various forms of child care on the emotional development of the preschool child?

5. Does one form of child care provide an environment more conducive to effective development than the others?

Importance of the Study

Parents are concerned about the welfare of their children. Both those who stay at home and those who work have reservations about the type of care their children receive and may have guilt feelings relative to the selection of one form of child care over another (Russo, 1976; Etaugh, 1980; White, 1981). Implicit in this concern is the question: Does one form of child care provide the best, or the worst, environment for the development of the preschool child? Therefore a review of the literature was conducted to investigate the actual effects of different forms of day care on the development of the preschool child.

Limitations

The major limitation of this particular study was that it was not an exhaustive review of the literature. It was, rather, a focused review of those recently published studies with a research design consistent with the purpose of this paper. Other limitations are discussed in Chapter 3.

Definitions of Terms

For purposes of this study the following terms are operationally defined:

1. Parental care is the form of child care given by one or more parent in the child's home setting during a twenty-four hour day setting where siblings could be present (Clarke-Stewart, 1982).

2. In-own-home care is the form of child care given by a father, a relative, or a non-related babysitter, in the home of the child during day hours where siblings could be present (Clarke-Stewart, 1982).

3. Day care home care is the form of regular child care given by providers in their own homes, for any part of a twenty-four hour day, to six or fewer children, including the caregiver's own (Fosburg, 1982).

4. Group care is the form of child care given in a day care center during day time hours with a group of other children (Irwin, 1979).

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Only a single existing study examines the effects of all four different forms of child care on the total development of the preschool child. There exists however, many studies on the effects of one or two and sometimes three different forms of child care on different aspects of development of the preschool child. This review of the literature will, therefore, focus on those recent studies which have a research design dealing with some form of day care and the effect of that care on differing developmental variables. In order to structure the review, the following categories will be utilized: the effect of group care; the effect of group care versus parental care; the effect of family day care; the effect of family day care versus group care versus parental care; the effect of parental care versus group care versus in-own-home care. Each study will be reviewed by stating the purpose of the study, the methods used, the materials and procedures utilized, and the results achieved.

Effects of Group Care

The National Day Care Study (NDCS) (Weiss, 1980; Irwin, 1979) did not compare different types of day care. It was not a study of the effect of day care per se, nor of day care versus home rearing. The NDCS instead focused on the effects of federal policy upon the large and growing number of children already in day care. It was a major cost-effectiveness study carried out during the period of 1974-79. Some of the results have implications for all forms of day care and is, therefore included in this report. The NDCS was important as it was the beginning of a series of investigations into the quality of day care.

The study was conducted at 67 day care centers in Atlanta, Detroit, and Seattle. All centers were licensed day care centers located in urban areas and serving, or eligible to serve, federally subsidized children. The centers had been in operation for at least one year and provided year-round full-time care to English-speaking preschool children. All centers had at least 15 or more full-time three and four-year-old children.

The study employed a sophisticated research design, but basically, the centers were divided into three groups in a quasi-experimental design, with Group 1 being the treatment group, Group 2 being the untreated low-ratio center, and Group 3 being the untreated high ratio center. A fourth group consisted of a randomized experiment conducted in 8 centers operated by the Atlanta Public Schools. Selected center characteristics were then altered systematically permitting measurement of the costs and effects associated with such changes.

The study found that group size and child to caregiver ratio were related to quality and cost. The group size variable proved to be of paramount importance. Smaller groups were consistently associated with better care, socially active children, and higher scores on developmental tests. A reduction in group size from over eighteen to no larger than fourteen produced a 15 percent gain on scores on the Preschool Inventory and a 24 percent gain on the Peabody Picture Vocabulary Test. Caregiver qualifications, especially child related education and training, also showed moderately strong and consistent relationships to child performance outcomes, with a minimal increase in cost.

Schwartz, Krolick & Strickland (1972) investigated the effects of early day care experiences on the social-emotional and cognitive development of the child. The sample consisted of 16 subjects who had been in day care for an

average of 36 months and labeled as the early starting group, and a control group of 16 children labeled as the late starting group. The groups were matched for age, sex, race, parental occupation, and education.

The groups were observed and rated for affect on a seven point scale, tension on a five point scale, position on three conditions, and action for three conditions. Ratings on these four variables were made on a time sampled basis by eight observers who were experienced with behavioral ratings.

The analysis of affect and tension ratings indicated no significant findings although the researchers noted that the early group scored higher on affect and showed less tension. The analysis of variance for social interaction scores revealed significant group differences. The early group had higher social interaction scores than the late group on the first day and fifth week; these findings were significant beyond the .05 level. However, these statistics could be contaminated because the authors used an intact day care group of children that had been with each other in the same day care environment for an average of three years. As a result, it was uncertain whether the day care experience or other factors accounted for the difference noted with respect to emotional stability.

The sample group had the added advantage of knowing the teachers ahead of time even though the physical day care environment was novel. Another problem with the study was the observers. They may have been experienced with behavioral ratings but there was no report on the consistencies of their ratings with each other. Therefore, although this study concluded that early-day-care subjects were more comfortable when entering a new group care setting, the researchers also argued that infant day care would naturally lead to emotional security. This particular study could have had important implications for the development of

day care children. It could have shed some light on the proposed issue of how differing forms of day care effect the personal-social developmental behaviors of preschool children, but because of its design flaws, questions still remain.

Effects of Group Care versus Parental Care

The first two years of a longitudinal study of children in a comprehensive day care program were reported by Robinson & Robinson (1971). The purpose of the study was to assess the effects of optimal group day care. The subjects were thirty-one children who ranged in age from a few weeks to four and a half years. The subjects were matched with non-center children on the basis of race, sex, parent's education, and occupation. Tests used were the Bayley Mental Scale, the Bayley Motor Scale, the Bayley Behavior Profile, several language-assessment measures, the Wechsler Preschool and Primary Scale of Intelligence (WPSI), the Frostig, and the Caldwell Preschool Inventory. Also a battery of intelligence tests were administered including the Stanford Binet, the Peabody Picture Vocabulary Test, the Draw-A-Man test, portions of the Illinois Test of Psycholinguistic Abilities, and the nonverbal adaption of the Arthur Leiter Scale.

Comparisons of test scores for the young infant day care group and the control group suggested that high quality programs which are carefully designed and fully staffed may enhance cognitive development at a crucial period when verbal abilities are beginning to emerge. Comparisons with test scores of the age 2-4 year old preschool group and the control group showed a marked difference between less advantaged children enrolled in day care (mean IQ of 120 on Stanford Binet) and the control group (mean IQ of 86). The researchers noted that the day

care group consistently obtained higher scores on verbal tasks than on sensorimotor tasks.

This particular study was conducted nearly ten years ago but to date no follow-up has appeared to contribute any further evidence regarding the long term effects of high quality day care for children. Since this was to be a longitudinal study it is hoped that more research will be published.

Kagan, Kearsly & Zelazo (1975 & 1978) investigated Chinese-American and Caucasian children from working-class families in the Boston area to study the effect of day care on psychological development. The sample consisted of two groups. One group of 33 infants attended a working class neighborhood day care center and the control group (parental home care) consisted of 67 infants. Thirty-two of the parental care group were matched with those in day care in age, sex, ethnicity, and social class, but lived at home during the two-and-a-half year period the investigation took place.

Each child was assessed by a staff member who was not involved in any aspect of caregiving. The inter-observer reliability coefficient was noted to be between .79 and .99. The infants were assessed at three-and-a-half, five-and-a-half, seven-and-a-half, nine-and-a-half, eleven-and-a-half, thirteen-and-a-half, twenty, and twenty-nine months of age.

The procedures were listed in the order in which they were administered during a particular session. The social interaction episode assessed reaction to an unfamiliar adult; the block, masks, light, car, auditory, and slide episodes assessed attentiveness and affect; the attachment and separation episodes assessed the children's relation to their mothers; the free play episodes at 13, 20, and 29 months assessed mode of interaction with an unfamiliar

peer; and the Bayley Scale, vocabulary, concept formation index, imbedded figures test and, memory for locations procedures assessed aspects of cognitive development.

The testing revealed no significant differences between the matched groups of day care and home reared children. The authors concluded that ". . . attendance at a day care center staffed by conscientious and nurturant adults does not seem to sculpt a psychological profile very much different from the one created by total home rearing (1975, p 37)."

Group day care, with prolonged separation of children from parents, has led psychologists to argue that any separation from the mother in the early years may weaken the development of a strong attachment between mother and child. They further argue that it may make the child less secure and trusting in the mother (Etaugh, 1980). A study designed by Ragozin (1980) provided descriptive data on attachment behavior of one-and-a-half to three year old children in day care centers compared with home-reared children (parental care). The sample included 28 children matched for age and sex and family background. Fourteen were day-care children and 14 were home-reared children.

In this investigation relationships between day care and attachment were assessed with alternative procedures: (1) normal patterns of attachment were tested naturalistically in day care centers by trained observers and; (2) day care and home-reared children were compared in a laboratory setting by trained observers. Specific behaviors were coded and summarized as the percentage of potential intervals in which a behavior occurred within an observation episode. Inter-observer reliability averaged .87 across all codes. Analyses of variance was used to analyze the data.

Results indicated that there were very few differences in the children's behavior toward their mothers. Day care and home-reared children displayed similar behaviors toward their mothers. Complimentary findings from naturalistic and laboratory situations indicated that day care produced comparable and normal patterns of attachment behavior.

There is concern, from parents, that children need a group setting to develop the social behaviors necessary for normal social development and that children who remain at home with their parents miss out on needed peer interaction. A study by Johnson (1979) compared the effect of day care settings and at-home settings on the social behavior of 3 year old children. The purpose of the study was to investigate the ways in which young children's experiences at home compared to the experiences of their counterparts in day care.

The sample consisted of 16 females and 14 males who met three criteria (1) they were between the ages of 36-47 months of age, (2) both parents were present in the home, (3) the families were in the middle to upper-middle socioeconomic bracket. Fifteen children were enrolled full-time in day care centers. Fifteen children were cared for by their mothers in the home, where siblings were the only other children present on a regular basis.

The instrument used to measure behavior was a modified version of the Instrument for the Quantitative Analysis of Tasks Test. The two trained observers had a mean reliability agreement of .92. Data were collected on two separate days for each subject with a total of 100 minutes of observation for each subject.

The researcher reported that on 31 of the 39 task variables, no significant differences were reported at the .05 level between the two groups. The results

indicated that children in day care spent 30.13% of their time engaged in social tasks while the home care children spent 31.27% of their time on the same tasks. Day care subjects spent 69.27% of their time engaged in non-social tasks, whereas the children in home care spent 68.63% of their time on the same non-social tasks. In a review of the findings for which significant differences occurred (co-operation with other, time procuring a service from others, conversation with others, gaining information through visual and auditory modes, passing time and exploring materials in the environment, eating, gaining information) the investigator suggested that the social-related behavior of young children may be more a result of numbers than of the type of setting.

In conclusion, this study of middle class children reported that the proportions of time spent in social and non-social tasks was similar in both settings. More time was spent on non-social tasks in each setting and the differences that did occur were those spent on individual tasks. This study lends support to the premise that social behavior is primarily developmental and that it tends to be more of a function of age and maturation than of other factors.

In contrast to some studies on group care, Rubenstein & Howes (1979) used community-based care as their sample group compared to university-based intervention programs. The purpose of the study was to describe and compare experiences of middle class infants in community-based group care and those of a matched group of infants reared at home. The sample consisted of 30 full-term, healthy middle-class, Caucasian infants between 17 and 20 months of age. Fifteen attended day care daily and 15 remained at home. The day care babies were matched with at-home babies by age, sex, religion, and socioeconomic status.

Two observations of two-and-a-half hours per infant, were conducted on two separate days. Observation categories were time-sampled in four areas: caregiver-infant interaction, infant-peer interaction, infant-toy interaction, and infant affect. After extensive training, inter-observer reliability was established and the correlations ranged from .71 to 1.0.

The results indicated that more adult-infant play, tactile contact, and reciprocal smiling were found in day care. More infant verbal responsiveness to maternal talking, more infant crying, and more maternal restrictiveness were found in the home. Developmental level of play with toys was higher in day care; a difference associated with interaction with peers. The importance of allowing the infant to shape his/her environment emerged clearly from the data; day care-home differences in adult-infant interaction were often a function of differences in infant as well as adult behavior. No adverse effects of daily mother-infant separation were noted in the daily social and play behavior of the day care group. Finally, the importance of peers as social objects for the toddler emerged from this study. Peers seemed to contribute to the high levels of play and to the positive affect noted in day care and it also seemed to facilitate the child's separation from adult caregivers.

Two important aspects of development are language and emotional maturity. How are these affected by various forms of child care? In a two-year follow-up study Rubenstein, Howes & Boyle (1981) studied the effects of community based day care and in-home care on the emotional and language development of children after they were three-and-a-half to four years of age. The original sample had consisted of 15 day care and 15 home reared infants. The follow-up sample

consisted of 13 home reared and 10 from day care. The samples were comparable on eight social background variables.

Measures were obtained in structured interviews, through formal language tests (The Peabody Picture Vocabulary Test, The Zimmer Preschool Language Quotient and a 50-utterance speech sample), and maternal interviews. All observational data were gathered by two trained observers and all interview material was rated by two (other) raters who had no knowledge of the observation data. Interrater reliability was established.

The two groups of children were comparable in their greeting behavior upon reunion with their mothers after an hour's separation, with regard to the degree of anxiety manifested during testing and in the overall level of behavior problems. Day care children had significantly more complex speech and day care mothers used more complex speech to their children. The data suggests that attendance in infant day care had not adversely affected the children's overall emotional or language development.

The research questions posed in this study examined the effects of various forms of child care on the development of the preschool child and examined whether it could be ascertained if one form of care is better than the others. Kibbutz communal care is an extreme form of child care which does not exist in this country, but group day care can be likened in many ways to Kibbutz communal care. The children are separated from the parents and a "significant other" directs learning activities. Will this type of care have any effect, compared to parental care, on the adaptation and social adjustment development, and on other competencies needed in early childhood? That was the question investigated by Levy-Shiff (1983). The sample consisted of 86 children, 44 born and raised

on the Kibbutzim and 42 raised in nuclear families in the city. The background variables of the parents were quite similar. Children in the two groups were compared in terms of numbers of siblings and birth order.

Data were collected by four graduate students who had been given preliminary video tape and field training and had been assessed relative to a satisfactory level of reliability on ratings. Adaptations and competencies were assessed by means of semi-structured interview, observations, questionnaire, and a series of problem solving tasks testing aspects of performance such as systematic approach and perseverance.

The results indicated that, compared to city children, the kibbutz children were found to be more instrumentally independent and self-reliant in routine and daily tasks but less effective in the problem-solving tasks. They were also less responsive and co-operative with adult strangers. No significant differences between the two groups were found with regard to attachment, difficulty in separation from parents, adjustment to non-familial setting (nursery school) and developmental disturbances. The author suggested that the differences that did emerge might have been due to differences in what is adaptive, required, and encouraged in a certain socio-cultural environment and not necessarily due to the child care practices themselves.

Effects of Family Day Care

This major descriptive study fills five volumes. It does not investigate any measurable effects of family day care but is included because it is the only comprehensive study done on family day care to date. Consequently it sheds some light on this particular form of child care.

The purpose of the National Day Care Home Study (NDCHS) (Davison & Ellis, 1980; Divine-Hawkins, 1981; Fosburg, 1981; Fosburg & Grasso, 1981; Singer et al, 1980; Stallings & Grasso, 1981; and Stevens, 1982) was to provide data about the characteristics of day care providers, the costs of care, parents' perspectives of family day care, the relationship of these factors to regulatory status of the home, and descriptive information about children's day care experiences. Three cities, Philadelphia, San Antonio, and Los Angeles were chosen for ethnic, socio-economic, geographic diversity; variability in regulatory/sponsorship status; the actual available number of day care homes; and the number of families eligible for day care subsidies. From a pool of 700 family day care homes, 352 were selected for this study; the providers in 36% of the homes were White, 39% were Black, and 25% were Hispanic.

The area of greatest concern to this study was the descriptive information about children's day care experience. Because of the large number of infants and toddlers involved and the questionable validity of infant tests, the researchers focused on observational data on caregivers and children. Observations were conducted by trained observers who recorded behavior in terms of a detailed set of pre-determined categories. They were consistently reliable with one another. Children and caregivers were observed independently. The focus was on the interaction between caregivers and children, sometimes viewed from the caregiver's perspective and sometimes from that of the child.

According to the investigators the observations indicated that family day care provided a positive environment for children. Ninety-nine percent of the time caregivers remained assessible to the children and much of their time was devoted to teaching, helping, and play/participation. Caregivers who had some

childcare training tended to display more teaching, language/information activity, music/dramatic play, and comforting.

The six recommendations from the study were: (1) promote the growth of family day care supply to meet the increased day care demand; (2) promote the development of day care systems; (3) improve community-based support for parents and caregivers; (4) continue to regulate group size and age mix to protect young children, limit caregiver burden and create flexibility for school-aged children; (5) increase the availability of caregiver training; and (6) establish a family day care credentialing system.

Effects of Family Day Care Versus Group Care Versus Parental Care

Not many studies examined the effects of more than two forms of child care. One study by Cochran (1977) described systematically and compared the experiences children were having at home, in day care home, and in day care centers, and examined possible developmental differences exhibited by children in those environments. The sample consisted of 60 home-based and 60 center-based Swedish toddlers who were matched by age, sex, number of siblings, socio-economic level of parents, and geographic location of homes. The home-based sample included 26 day care home children and the remaining 34 were parental care children.

A Quantitative Analysis Scale (QAS) described the child's entire repertoire of behavioral experiences. The Caregiver-Child Interaction Scale (CCIS) concentrated on interactions between the child and adults in the immediate surroundings. The Griffiths Mental Development Scale (GMDS) was used to assess developmental progress of children. A 3x3 analysis of variance involving age group and care setting was used with post hoc t-tests.

Findings of the study concluded that exploring activities were observed significantly more often in both parental and day care home settings than in centers. Play experiences were more frequently observed in centers. Children were carried more by caregivers in home settings. Comparisons using t-tests indicated that children in both home settings were more likely than center children to be engaged in cognitive, or in verbal, or in exploring, or in play activities when involved in interactions with adults. No overall developmental differences were found between the two groups of children when measured on an infant scale or in a separation situation. The author concluded that more similarities than differences existed among the groups and that when differences did exist, they were associated with variations in setting design, which he believed was a function of different adult-role requirements.

Golden et. al. (1980) examined how publicly funded day care programs - group care and family day care - affected families, as well as infants' health, nutrition, social competence, and cognitive/language development. The sample included 400 infants evenly stratified in three care categories: group care, family day care and parental care. The sample was homogeneous in nature. The effects of day care were examined at 18 months and 36 months. There was substantial attrition of infants from the study. Instruments used included the Bayley Mental Scale, the Stanford-Binet Intelligence Test, the Peabody Picture Vocabulary Test (PPVT) and five rating scales completed by research personnel: language competence, cognitive style, social competence with adults, social competence with peers, and adequacy of emotional functioning. Estimates of reliability for the scales ranged from .72 to .92.

The effects of day care on the health and physical development were studied by physicians as they administered comprehensive pediatric examinations at 6, 12, 18, and 36 months of age. These included vision and auditory screening as well as blood chemistry tests for iron anemia, sickle cell, and lead levels. The 6, 12, and 18 month pediatric examinations revealed no significant differences among the groups. However, at 36 months the parental care children exhibited a significantly higher proportion of physical abnormalities than the family day care group.

Several important findings emerged from the study. (1) The physical environment, health care, health surveillance, and nutritional program of the group care facilities were superior to those of the family day care programs. (2) Family day care home infants were more likely to enjoy an environment with an optimal adult to child ratio and even experience a greater quantity of social interaction. Importantly, however, there were no significant differences in the quality of interaction received by group care versus family day care infants. (3) The group care environment was more supportive of intellectual development. On other outcome measures of development (language, social, and emotional) the two groups were not found to be significantly different.

Prescott (1978) studied home care and established criterion for what was regarded as a "good home". She then evaluated day care settings based on that criterion. She observed 112 children ranging in age from two to five, each for a total of 180 to 200 minutes. Eighty-four were enrolled in a day care center, 14 in family day care homes, and 14 in parental care. An observational instrument, The Day Care Environmental Inventory was designed to permit immediate

coding of two levels of behavior. Many "marked differences" were observed but no significant differences were noted.

Effects of Parental Care Versus Group Care Versus In-Own-Home Care

In contrast to Ragozin (1980), Hock & Clinger (1980) conducted a study to measure the effects of group care, individual babysitter, and maternal home-rearing-care on the social development of infants and their attachment behavior toward their mothers. Sex of infant was a major study variable. The sample included 60 infants, 20 were in each of the three types of care: parental care, group day care, and in-own-home care. Each group consisted of 11 male infants and 9 female infants comparable on several respects on the seven point rating scale of the Hollingshead Head of Household Occupational Index. Measurements were made by the Strange Situation Behavior Instrument. Trained observers were used and the inter-rater reliability for variables of contact-maintaining, proximity-seeking, contact-resisting, proximity-avoiding (for both mother and stranger), search behavior, and cry ranged from .88 to .99.

The provision of nonmaternal care and the specific type of nonmaternal care appeared to influence the social behaviors of the two sexes differently. Home reared girls tended to exhibit fewer and less intense behaviors that were aimed at maintaining or regaining maternal proximity. Girls experiencing nonmaternal care exhibited more maternal proximity attaining behaviors than did home reared girls. whereas boys experiencing nonmaternal care exhibited fewer maternal proximity attaining behaviors than home reared boys. The interactions of type of care and sex of infant led to a consideration of differential sensitivity of the sexes to rearing conditions. The researchers concluded that empirical data was lacking which would provide an explanation for the specific direction of

these effects. Studies have not successfully measured the salient features of rearing conditions nor examined the differential effects those conditions might have on the two sexes.

Effects of Group Care Versus Parental Care Versus In-Own-Home Care Versus Family Day Care

One study exists which examines all four child care options and their effect on the cognitive development of the preschool child. The Chicago Study of Child Care and Development (Clarke-Stewart, 1982; 1985) investigated the effects of a variety of care arrangements including parental care, in-own-home care, family day care, group care, nursery school care, and a combined nursery school/babysitter arrangement on the cognitive development of the preschool child. The sample included 150 two-to four-year-old children from a mixture of home backgrounds. The children were tested on their abilities to understand sentences, to name colors, fruits, and animals, to remember numbers, to identify photographs of objects, to use play materials, to solve problems, to label pictures of emotional situations, to copy designs made with blocks, to visualize how things would look to another person, and to communicate with a listener. The researcher concluded that children in a group care situation (in nursery school, day care center, or combined center and sitter) scored higher on the cognitive development competencies than those in home care (with parents, sitter, or day care home provider). This occurred for children of all family backgrounds, for both boys and girls, after as little as six months in day care. The researcher further stated that these cognitive differences carried over into the first few school grades, but then the differences between day care children and parent-care children decreased.

Summary

The last ten years has seen an increase in research in the area of effects of child care on the development of the preschool child. The designs of the research studies, the types of care studied, and the specific effects examined have been so varied that only very general statements can be made about the actual and real effects of one or another type of child care options. These can be summarized in four very general areas: physical, cognitive, emotional, and social. Also some generalizations can be presented that are gleaned from the studies concerning the roles of adults and the differing designs due to environmental and socio-cultural factors. These will be presented in the next chapter.

CHAPTER 3

SUMMARY AND CONCLUSIONS

This study investigated the effects of four different child care situations - parental care, in-own-home care, day care home care, and group care - on the development of the preschool child through a literature search and analysis. This was achieved by reviewing the literature and focusing on recent studies which had a research design dealing with some form of day care and the effect of that care on different developmental variables. The specific findings on the effect of day care on the development of the preschool child will be discussed in the following categories: effects of various forms of child care on the physical health and development of the preschool child; effects of various forms of child care on the cognitive development of the preschool child; effects of various forms of child care on the emotional development of the preschool child; and effects of various forms of child care on the social development of the preschool child.

Summary

The major conclusions, summarized from this study, relate to the research questions.

Effects of various forms of child care on the physical health and development of the preschool child. The New York Infant Study (Golden et al, 1980) concluded that those infants in group care and family day care situations increased their physical growth faster than did those infants reared at home. Parent-reared infants evidenced a significantly higher proportion of abnormalities than the family day care group. The infants in group care had significantly advanced motor

development over family day care infants or parental care infants. Since the study found that the physical environment, health care, health surveillance, and nutritional programs of group day care were considered superior to those of the family day care program, it appeared that the advanced motor development evidenced in these economically deprived children was the result of the better food, safety, health services, and the opportunities for supervised exercise with lots of space and equipment that the centers offered.

Effects of various forms of child care on the cognitive development of the preschool child. Robinson & Robinson (1971) conducted their study in a well-funded, high-quality university-based program where the goal of the program was to enrich the students cognitively. Their sample was drawn from the low socio-economic group. This study concluded that day care in this type of situation could enhance cognitive development for the economically deprived child. The New York Infant Study (Golden et al, 1978) used community based care in its study with an economically deprived sample and concluded that such care may enhance cognitive development in the preschool child.

Cochran (1977) found no significant difference existed among children in family day care, in center care or in parental care. This finding was disputed by the New York Infant Study (Golden et al, 1978) which concluded that center based group care children developed cognitive abilities significantly better than did family day care children or parental care children. This study used economically deprived children in its sample whereas Cochran used a mixed SES group. Cochran assessed intellectual abilities mainly through observation rather than with standardized tests as did Golden and his colleagues.

Clarke-Stewart (1982, 1985) found that children in group day care situations, for as little as six months, scored higher in cognitive competencies than did home reared children. The gains in intellectual performance increased the longer the child was in day care, throughout the preschool period. But soon after they started elementary school, most home-care children caught up with their classmates who had attended a day-care center or nursery school.

The National Day Care Home Study (NDCHS) (Davison & Ellis, 1980; Divine-Hawkins, 1981; Fosbury, 1981; Fosburg & Grasso, 1981; Singer et al, 1980; Stallings & Grasso, 1981, and Stevens, 1982) has ramifications for the cognitive development of the young child in day care home settings. When providers were trained in child development they interacted more with the children, taught more, engaged in more language and informational activities, and were more concerned with stimulating fine-motor development. Training appeared to enhance the quality of caregiving provided, which in turn, enhanced the cognitive environment of the home and enhanced the cognitive development of the children also.

The National Day Care Study (NDCS) (Irwin, 1979; Weiss, 1980) found that group size and child/caregiver ratio were related to both quality and cost. A reduction in group size from over eighteen to groups no larger than fourteen produced a 15 percent gain on child scores on the Preschool Inventory and a 24 percent gain on the Peabody Picture Vocabulary Test. As in the above study, the NDCS found that caregiver qualifications, especially child related education and training, showed moderately strong and consistent relationships to child performance outcomes, with a minimal increase in cost of care.

Effects of various forms of child care on the social development of the preschool child. In the area of social development all studies (Cochran, 1977;

Davison & Ellis, 1980; Divine-Hawkins, 1981; Fosburg, 1981; Fosburg & Grasso, 1981; Golden et al, 1980; and Johnson, 1979) agreed that day care increased the degree to which the child interacted, both positively and negatively, with peers. Belsky and Steinberg (1978) concluded that all day care may ". . . predispose children toward greater aggressiveness, impulsivity and egocentrism. . .(p. 942)", but also added that these are the cultural characteristics of socialization for the preschool child in our society.

The New York Infant Study (Golden et al, 1980) found that economically deprived children are no better off with respect to social competence than children in family day care or parental care. In comparing types of care, Cochran (1977) concluded that socialization practices did differ for day care home care and group care and parental care but only when it came to ". . . frequency and focusing of negative sanctioning and restricting (p 706) " but added that this was due to the function of the building where the care was provided. If the building was a home that was also a habitat for adults as well as for children, or if the building was one used exclusively for child care altered some of the types of socialization that took place.

Johnson (1979) agreed with Cochran and concluded that the proportions of time spent in social and non-social tasks were similar in both the group care setting and in the parental care setting. Where differences occurred (co-operation with another, gaining information through visual and auditory modes, passing time and exploring materials in the environment, eating, gaining information) they were more a function of numbers.

Rubenstein & Howes (1979) expounded on the importance of peers in day care for the development of social behaviors. Peers also contributed to high levels

of play and to the positive affect of being able to interact effectively with both peers and adults.

In the studies not comparing care but looking at a specific type of care, as the NDCHS (Davison & Ellis, 1980; Divine-Hawkins, 1981; Fosburg, 1981; Fosburg & Grasso, 1981; Singer et al, 1980; Stallings & Grasso, 1981; and Stevens, 1982) the recommendations have implications for the social area of development of the young child in family day care. Since training in child development appeared to enhance the quality of care in the day care home, this training also enhances the awareness of the provider of the social development of the children in her/his care and allows these preschool children to progress developmentally.

The NDCS (Irwin, 1979; Weiss, 1980) found that group size and child to caregiver ratio were related to quality and cost with the group size variable proving to be of paramount importance. Smaller groups were consistently associated with better care and with socially active children.

Effects of various forms of child care on the emotional development of the preschool child. In the emotional development area Cochran (1977), Golden et al (1980), Levy-Shiff (1983), Ragozin (1980), Rubenstein & Howes (1981), and Schwarz, Krollick & Strickland (1972) all concluded that day care outside the home did not adversely effect the emotional bond between child and mother and no significant differences were found with regards to adjusting to a non-familial setting. Hock & Clinger (1980) refuted this finding and stated that the type of care does have an effect on behaviors exhibited in strange situations and it appeared to influence the social behavior of the sexes differently. Girls experiencing nonmaternal care exhibited more maternal proximity attaining

behaviors than did home-reared girls, whereas boys experiencing nonmaternal care exhibited fewer maternal proximity attaining behaviors than home-reared boys.

Limitations

The limitations to be discussed concern the present state of educational research on the effects of day care on the child's development. These must be reviewed if the conclusions to be presented are to be believed.

Restriction to least prevalent form of day care. Most research has been conducted in high-quality university-based day care centers. The aim of these centers was to foster cognitive, emotional, and social development. Included in this paper have been several studies which used family day care and other community-type group care to try to off set this imbalance.

Restriction to validity and reliability of instruments used as measurements. A whole array of tests have been used in the studies reviewed for this paper. When the researcher forms conclusions from the results of his tests they may agree or disagree with the findings of another researcher on the same developmental aspect studied, only to find that their instruments were different. Researchers can only give as accurate and reliable of a result as the test used. Unfortunately all tests used, whether standardized or whether observational in nature can, at best, only make rough estimates of the differences between or among groups.

Comparability of sample. If one were to have a perfect empirical study on the effects of day care on development, then one would randomly assign children

at birth to different day care options. It would then be assured that there was an unbiased sample. Unfortunately, none of the studies reviewed could do this. Recent research (Hock, 1976; Sibbison, 1973) have revealed that children in the different forms of day care - parental care, in-own-home care, day care home care, and group care - differ among themselves on several important aspects. The parental care children will probably have parents who agree that the maternal role is most important and their attitudes toward day care would reflect this. Those who choose family day care or in-own-home care were probably concerned about cost, convenience and interested in a home-like atmosphere. Those who chose high-quality center care probably were interested in the education of their child. Research has revealed that family attitudes and values influence child-rearing practices (Kohn, 1963) and these, in turn, affect the course of development of the child.

Restriction to laws of probability. No matter how many studies are completed and how many kinds of tests are administered the results can be no better than the laws of probability. When a difference is significant in a study, it is statistically significant. It is probable that one group is different from another. When a difference is found in a day care study it means that one group, that is under this form of care, is likely to behave in this way. It does not mean that every child who will be under this form of care is certain to behave in this way.

Conclusion

Parents are concerned about the welfare of their children. Both those who stay at home and those who work have reservations about the type of care their

children receive and may have guilt feelings relative to the selection of choosing one form of child care over than another (Russo, 1976; Etaugh, 1980; White, 1981). Implied in their concern is that there must be a best form and a worst form of child care. The review of the literature does not conclude this. Each form of child care has its advantages and disadvantages. But one form is not necessarily the best. One form is not necessarily the worst either. The fears of these parents should, therefore, be allayed by the results of the literature search on the effects of various forms of child care on the development of the preschool child.

The studies dealt with probabilities and not with certainties, therefore, parents who work can be assured that decent day care, whether it be in-own-home care, day care home care, or center care, has no detrimental effects on the physical, cognitive, social and emotional development of their children. Day care in a better-than-average home or center may actually accelerate the child's development of social skills and intellectual competence.

Conversely, parents who choose to stay at home with their children can also be assured that they are able to share a greater physical closeness with them. These parental care children will not be hurt by the fact that they have not attended day care or preschool since after a few years of school they will catch up with any possible advances their day care classmates may have made.

The major effect of day care seems to be an acceleration of social and intellectual skills. This occurs when day care offers children organized educational activities and opportunities to interact in small groups with a variety of other children under the guidance of a caregiver who has had child development classes and who is able to focus on the child's needs and interests. This type of opportunity is more likely to be found in day care centers (group

care) than in in-own-home care or day care home care. The possibility that the same opportunities and advantages could be offered by a caregiver in a day care home setting or in a in-own-home setting, if the caregiver could be trained in child development and if the caregiver would set aside the time to arrange and supervise those types of activities.

Recommendations

The ubiquitous call for more research can be sounded. In the last ten years educators have realized that day care is becoming a way of life in America and that research must be centered on not only group care in quality centers, but also on community group care and family day care and in-own-home care. Much remains to be done. Many more studies focusing on all forms of care and their effect on the cognitive, physical, emotional, and social development of the preschool child need to be conducted to include all groups of children. There needs to be some longitudinal studies completed to study long term effects rather than just immediate effects.

Research also should focus on exactly what constitutes quality care. The NDCHS and NDCS began to research the subject of quality and cost. If all forms of day care are to have positive effects on the development of the preschool child more needs to be investigated on the facets of quality and how these different variables affect development, both immediately and in the future.

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