

Some Implications of Day Care
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The problems involved in determining the advisability of adopting an extensive system of day care centers are complex. Any program must consider the potential effects of a broad-based system of day care on the emotional and cognitive development of the children it serves, as well as certain social and cost factors. Research findings in key areas are either nonexistent or ambivalent. There are, accordingly, a wide range of views on the advisability of day care. The following questions will be considered in this paper:

1. What is the present status of day care in the United States? The first section describes existing day care arrangements. The cost of providing day care will be compared with providing income under an income maintenance program.

2. What is the effect of day care on the emotional development of children and their ability to form meaningful relationships? Research findings have indicated that the impersonal care characteristic of many institutions can seriously impair the development of young children. The effect of partial institutional care, or day care is less clear. This paper will describe behavioral research and theory bearing on this issue and the experience of other countries with day care centers.

3. Can a day care system function in coordination with a Head Start program to transmit learning and cultural experiences to disadvantaged children? Many child development specialists feel that enrichment programs for disadvantaged children must begin well before the age of three and that programs for three- and four-year old children are already too late, and are remedial rather than preventative. This paper will consider the potential role of day care in this area.

4. What are the social implications of providing a broad-based system of day care? Would day care be used by middle as well as low income groups, or would it in fact become a lower-class institution? What are some of the effects of raising this particular segment of the population in a distinct environment? If there were day care for lower class families and parental care for the rest of the population, what are the implications involved in a government policy which states, in effect, that deprived children are better off away from their parents?

5. Any impact of a day care system on the behavioral development of children depends largely on the caretakers which this system provides. Would it be possible to staff an extensive day care system with stable, perceptive and interested caretakers? What is the experience of other countries in this area, and how is this experience related to the particular social structure of those countries?

Present Status of Day Care in the United States

The poor population is increasingly made up of families which are headed by women. These families are increasing in the large urban centers, although their absolute numbers have remained the same in the country as a whole. The number of female-headed families is increasing, however, relative to the total poor population (Bateman, 1968). Table 1 describes these trends.

The 1967 Social Security amendments set up a Work Incentive Program which requires welfare recipients to participate in the program or lose their welfare checks. The program does not exempt mothers with small children, but the welfare departments are required by law to find day care for children of mothers it refers to the training program. If there are no day care centers available, mothers need not participate in the training program.

The lack of a broad-based system of day care facilities stems in part from certain assumptions about day care which have influenced government policy. The assumptions have been that day care is basically a service to troubled families and that care in a center is justifiable if it prevents something worse (.e.g. neglect, abuse, family

breakup). These assumptions have resulted in a program of very limited size directed toward those with the most severe financial, social or psychological need (Kearns, 1966). Many facilities that exist in the United States are similar to the poorest institutional care in other western countries (Meers and Marans, 1968).

Table 2 presents the number and capacity of licensed day care facilities for children, by type and auspices of facility (Low, 1967). The table indicates the lack of government-sponsored day care facilities. (Brittain and Low (1965) in their study of child care arrangements of working mothers found that two percent of the children were in group care and 8 percent were in family day care (cared for by a nonrelative in a home other than their own). These two categories (totalling 10%) represent the number of children provided for by day care as this term is usually defined. The child care arrangements are described in detail in Tables 3 to 7 which present the preliminary statistics describing (a) number of children under 14 years of age of working mothers, by age of children; (b) number of children under 14 years of age of working mothers, by family income; (c) child care arrangements for children

of working mothers by age of children; (d) child care arrangements for children under 6 years of age of working mothers, by age of children; (e) child care arrangements for children of working mothers, by family income.

The following are some day care arrangements that have been suggested (HEW, 1967):

1. Expansion of OEO Head Start day care service.
2. Neighborhood day care using AFDC mothers.
3. Expansion in use of commercial group care facilities.
4. Day care in connection with industry in which mother works. This plan was used during World War II.
5. Expansion of child care services as part of children's welfare services of Children's Bureau.
6. Expansion of HUD day care services.
7. Family day care for children of AFDC mothers provided by other AFDC mothers, with Federal Government paying 75 percent of the cost. Each mother would take three children.
8. Similar family day care plan using other low income families.

Kearns (1966) compared the cost of providing day care with that of providing welfare payments to mothers. Table 8 describes expected earnings (1965), cost of day care, and benefit-cost ratios by education of mother and age of children. For purposes of this table, the cost of day care is estimated at \$1,000 per child under 6 years of age and \$600 per child between 6 and 17. Costs include compensatory education and casework services. However, OEO estimates the average cost of this type of day care to be about \$1,200 for 3 to 5 year olds and up to \$2,000 for infants and small children under 3. These cost estimates exclude capital costs. The cost estimates indicate that the cost of providing day care to mothers of preschool children who have not completed high school is greater than the mothers' potential income. Mothers who are more educated or mothers with older children can earn more than the cost of day care. Table 9 describes the net gain or loss to AFDC recipients, taxpayers, and the economy, of a day care program. The \$1600 welfare payment used in the table was the average amount received by AFDC families (with 4.2 recipients) in 1965. Results indicate that the average welfare mother can earn \$1200 more by working than by receiving welfare if her children are between 6 and 17, and only \$200 more if her children are under 6. Taxpayers would pay \$300 more to provide day care than to provide welfare payments for mothers of school age children, and \$1600 more for mothers of preschool children.

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Schorr (1966) has proposed a preschool allowance of \$600 per year per child. He believes that income maintenance programs for children should be directed toward making it possible for mothers with children under 6 to stay home. The chances that a mother will work are three times as high if all her children are of school age. Poor women (whose husbands earn less than \$3,000) with school age children are more than twice as likely to work as those whose husbands earn more than \$10,000. Poor women with preschool children are nearly 4 times as likely to work as those whose husbands earn more than \$10,000. These statistics clearly support the finding that 86 percent of the mothers gave their main reason for working as economic (Brittain and Low, 1965). Schorr feels that many mothers with preschool children would decide not to work under an adequate income maintenance program. These mothers would not be sought out as likely prospects for employment and training; therefore, day care centers for working mothers would not be required in quantity.

Effects on Cognitive and Emotional Development of Child

There has been a wide range of studies indicating the damaging psychological effects of prolonged and early institutionalization of infants and young children (see reviews by Ainsworth, 1962; Bowlby, 1951; Yarrow, 1961). Certain studies, such as those by Spitz and Wolf (1946) and by Goldfarb (1943) have examined the effects of adverse institutional conditions, in which the institutionalized infants were isolated from social and cognitive experiences. In Spitz and Wolf's study, the infants became severely retarded; the average developmental quotient (a measure of general physical and mental development, for infants) dropped from 124 in the first 4 months of life to 72 in the ninth to twelfth months to 45 by the end of the second year. A control group of children who remained with their delinquent unmarried mothers showed an initial DQ of 101.5, as compared with an average DQ of 105 in the ninth to twelfth months. In Goldfarb's study, children brought up in institutions until the age of three and then placed in foster homes were compared with others who had gone straight from their mothers to foster homes in which they had remained. The children in the institution

group were significantly lower in intelligence, speech, ability to conceptualize, reading, arithmetic, social maturity, and ability to keep rules; the children had less guilt on breaking rules, and unimpaired capacity for meaningful relationships. Thirteen of the fifteen institutional children were markedly detached and incapable of close affectional ties, while this was true of none of the foster home children. Nine of the institutional children were severely maladjusted, while only one seemed "normal"; two of the controls were severely disturbed and ten normal.

The behaviors displayed in these studies can be broken down into two major components, (a) a lack of learning experiences, resulting in deficiencies in intelligence, speech, etc. and (b) maternal deprivation, resulting in an inability to form deep emotional ties. Both of these components were absent to an extreme degree in the institutions studied by Spitz and Goldfarb. The severity of behavioral impairment is related to the degree of insufficiency of the institutional environment. Institutionalized children who have fewer learning experiences, fewer opportunities for close attachments, and who undergo these depriving experiences for extended periods of time will demonstrate the most

severe and long lasting behavioral effects. The impact of these adverse experiences is directly related to the age of the child. Thus, deprivation occurring from three months to three years is most serious; from three to five, the impact is serious, but less so than in earlier years (Bowlby, 1951). The results of studies of children in "partially depriving" environments are less clear than the studies reported by Spitz and Goldfarb. These results are not fully consistent with each other because there was considerable variability among different institutions as to opportunities for learning and for close emotional relationships. The authors of studies did not set the partial deprivation forth in sufficient detail concerning such differences to permit careful conclusions as to the specific environmental conditions which produced varying behavioral effects. These inconsistencies, however, do not invalidate the initial findings that if opportunities for learning and attachments do not exist, adverse effects on both intellectual and personality functioning will result. Of course, the types of depriving experiences described can occur within the home as well as in an institutional environment. In particular, the retardation in intelligence and language are

typical of children from disadvantaged homes which lack meaningful learning experiences.

Experiences in Other Countries

Meers and Marans (1968) in reviewing group care in other countries have generally found what they refer to as marginal retardation in institutionalized infants and social promiscuity in institutionalized preschool children. Social promiscuity refers to a mock sociability whereby the children exhibit an indiscriminate openness to strangers which tends to mask personality disorders and inability to form close emotional ties. Bowlby (1951) also refers to children who respond either apathetically or by a cheerful indiscriminating friendliness; he suggests that these behaviors often represent a shallow adjustment not based on a real personality growth and are probably precursors of psychopathic behavior.

Meers and Marans conclude that risks in developing mass care programs seem enormous and that mass programs in other countries have failed to research the longitudinal consequences of their own innovations. They feel that preschoolers are not ready for group care, except where the alternative is worse, and they include the disadvantaged population in this evaluation. This problem will be discussed in more detail later.

The three countries that have ostensibly had the most success with group care programs are the Soviet Union, Israel and Greece. In the Soviet Union, over 10 percent of all Soviet Children under two years of age are currently enrolled in public nurseries. About 20 percent of the children between 3 and 6 attend preschool institutions. Approximately 5 percent of all school age children are enrolled in boarding schools and schools of the prolonged day. Relatively few infants are in day care. Infants who do enter Soviet day care centers at three months of age are placed in group playpens with 6 to 8 children in each. In the better centers, there is one caretaker for four children in the younger groups. The caretaker trains each child in sensory, motor, cognitive and social development. Particular stress is placed on teaching children to share in cooperative activity (Bronfenbrenner, 1967). The Soviet program, in theory, is expected to involve one-third of all children by 1970 and 100 percent by the 1980's. However, informants in other Eastern European countries have indicated that this Soviet plan is being reappraised as a result of less than complete satisfaction with the outcome of the programs to date. Similarly, although Lourie found that the senior

staff in Russia appeared dedicated, it was also apparent that some of the senior and knowledgeable staff did not make use of available day care centers for their own children. However, there are no research data available to objectively evaluate the effects of various programs on child development (Meers and Marans, 1968).

In Israel, approximately 4 percent of the population lives on collective farms or kibbutzim. Women who have received training in child care share with parents the care of children; these women are selected by the community and are under its continued scrutiny. The mother provides the major portion of feeding and care during the first year of the child's life; subsequently, because of the proximity of communal living, mothers spend considerable time with their children, and fathers spend more time with them than is common in Western families. There is evidence of more peer support between the children in these groups than is observed within families. Research findings of particular personality characteristics are somewhat contradictory, but studies conducted by the Oranim Mental Hygiene Clinic which serves almost the entire kibbutzim population, found no difference between the incidence of emotional disorders in kibbutz

children and that of Israeli children in urban centers in Western countries (Meers and Marans, 1968).

The Metera Babies Center in Greece is considered model for institutional care for infants. Caretakers are highly selected and trained. The attempt is made to keep a baby-staff ratio of one-one per twenty-four hours. Although most babies do quite well, those who remain in the center beyond eight months of age do not continue to demonstrate consistent, optimum developmental progress (Meers and Marens, 1968).

In evaluating these programs, the differences between the social and philosophic goals in these countries and in the United States are of particular import. In both the Russian day care center and the Israeli kibbutz, there is a strong emphasis on communal living which would appear to provide considerable emotional support to children in day care. The Israeli kibbutz is an agricultural community without the problems of American urban centers. In addition, certain contrasts in childrearing practices between the United States and Russia are apparent (Bronfenbrenner, 1967). Soviet babies receive considerably more physical contact of an affectionate, protective

and restrictive nature. Soviet childrearing practices resemble American middle class practices in the 1930's when extremely tight emotional bonds between parent and child were established and children were disciplined by subtle techniques of guilt and withdrawal of affection. In Russia at the present time this is compounded by a trend toward very small families. These childrearing practices facilitate the maintenance of strong attachments despite group care and are in direct contrast to those of the disadvantaged population in the United States. In addition, it is considerably more common for persons other than the child's own mother to step into a maternal role in the Soviet Union. In that country, as well as in Israel and Greece the caretakers are highly valued and frequently carefully selected and trained. It is relevant also that in 1960 there was an excess of 20,000,000 women over men in the Soviet population. In spite of these social conditions, Russians are reputed to pay an exorbitant economic investment for their group care programs and possibly even greater price in damage to personality and mental health of the children concerned (Meers and Marans, 1968).

Caretakers in East Germany, Czechoslovakia and Hungary have low social status, and these countries have

had difficulty in hiring an adequate staff. Although the supervisory personnel are capable, actual caretakers are often ineffective; there is high turnover and high child-staff ratios (10 to 15 children per caretaker). Hungary has an institute where caretakers work four 12-hour days per week to give infants some continuity. Better institutions are built to provide more contact between caretakers and children. Children in some institutions showed severe retardation, and even in the well-run day care facilities, there appeared to be a high percentage of marginal retardation among children placed there during their first weeks or months. None of the Eastern European countries described was basically satisfied that its program approximated its ideals. The Czechoslovakian government has stopped construction of day care facilities for the child under age one, as a result of recent Czech psychological research. Hungarian and Czechoslovakian child care specialists feel that day care for the younger child should be terminated as soon as national economic conditions permit. This conviction is not based solely on the possibility of potential retardation, but rather on humanitarian concerns for the discomfort and unhappiness of the young child separated from his mother. In contrast, East Germany has placed greater emphasis on technical intervention to reverse deprivational conditions (Meers and Marans, 1968).

Experience in the United States

With the exception of Head Start day care centers and certain experimental centers which will be described in detail below, there has been no adequate research in this country to determine the behavioral effects of day care. There are no data, for example, comparing the psychological results of family versus group care. Welfare literature generally assumes that family care is less dangerous emotionally for children under three. However, this type of care provides few learning opportunities. A study of the unsupervised family day care arrangements in New York City found that day care homes do not meet Health Department requirements in approximately two-thirds of the cases; however, the author feels the day care mothers are satisfactory. The report recommends adequate supervision to include reliable care and learning opportunities, and suggests that the Health Code be revised to provide for licensing all privately operated family day care homes (Willner, 1966).

Collins (1966) describes the organization and operation of a day care neighbor service in Portland, Oregon. Although the author feels the service is potentially useful, she found a high rate of discontinuity in the care of children; this discontinuity was

caused more by the mothers, than by the day care mothers' withdrawal. Day care mothers did not enjoy a high occupational status; these mothers assigned it either no vocational position or one lower than that of work outside the home. The few high quality day care givers were not anxious for their neighbors to know them in their day-care role. The author believes that those who sought status would no longer provide day care when their status was threatened. This combined with the shortage of high quality day care givers would lead to the use of less competent caretakers whose material needs kept them from withdrawing. The results of a training program for mothers were not encouraging.

Prescott (1964, 1965) examined the child training patterns in homes and group day care centers to determine similarities and differences existing between them. However, the behavioral effects of the day care were not studied.

Studies of working mothers are difficult to interpret because the supplementary mothering arrangements that have been made are not specified. Stolz (1960), for example, has reviewed research on working mothers and found

that children of working and nonworking mothers do not differ significantly. However, very little of the research was concerned with the effects on infants and preschool children and none of it with the effect of the supplementary mothering arrangements that were made.

The OEO Head Start program for 1968 provides 3,500 part day centers for 161,000 children and 1,500 full day centers for 54,000 children. The approximate budgets are \$163 million for the part day centers, \$70 million for the full day centers and \$18 million for training programs for teaching aides. The program serves three to six year old children, with a small number of two year olds included. The program stresses work with parents; parents are encouraged to participate in the classroom program and can enroll in training programs to become aides. Research in progress is comparing the psychological effects of full and part day care.

Preliminary findings indicate higher IQ's for children in the centers than for control groups, when comparable control groups are available.

Recent Federal day care standards are based largely on Head Start standards and require a 5-1 child/staff

ratio, with the staff including teachers, aides and volunteers. However, the programs are hampered by budget cuts as well as a shortage of space, early childhood experts, and well qualified teachers. The children in the centers have many problems and the demands on the teachers are considerable. On the other hand, the teachers are often rigid and unable to meet the individual requirements of young children. As one teacher remarked, the standards look good on paper, but they don't apply within the four walls of a day care center; the children are taken away from one miserable situation and placed in another.

There have been several experimental model day care centers recently set up in this country which have a potential for providing some data concerning the behavioral effects of group care for children under three. These centers have been designed in part to provide cognitive enrichment programs for infants and young children. The programs are based on the growing conviction that corrective intervention such as provided by Head Start programs for three and four year olds might be too late and that these programs are remedial rather than preventative (e.g. Hunt, 1964; Schaefer, 1968). The

cognitive and particularly the language difficulties experienced by certain poor children are comparable to the hospitalism syndrome. These children are often isolated in deprived homes or receive the excessive stimulation of changes in living circumstances, caretakers, divorce, violence. The mixed results of such programs as Head Start and the More Effective Schools program in New York City, as well as intelligence and achievement scores of disadvantaged children have contributed to this view. The major findings are (Schaefer, 1968):

1. Measurable differences in mental test scores between infants from different socioeconomic groups and from different races have not been found up to 15 to 18 months of age.

2. Much of the difference in intellectual level between socioeconomic groups emerges between 18 and 36 months. These results, as well as relatively low scores on verbal tests support the conclusion that culturally deprived children may learn language rules that interfere with development of conceptualization and intelligence.

3. In some enriched environments the mean IQ may increase during the school years and in some impoverished environments it may decrease during these years. However, socioeconomic groups typically maintain the mean IQ that was established in the preschool years.

A study by Schaefer (1968) provides dramatic evidence of the potential value of early cognitive intervention. Tutors visited the home of each experimental infant for an hour a day, 5 days a week beginning when the infant reached 15 months of age and continuing through 36 months. The educational program emphasized the development of positive relationships, the provision of varied experiences, and verbal stimulation of the infants. The mother and other family members were encouraged but not required to participate in the education of the infant. Table 10 presents mean IQ scores for the experimental group (28 cases) and for a comparative control group (30 cases). The Bayley Infant Mental Test was used at 14 and 21 months and the Stanford-Binet Intelligence Test at 27 and 36 months. At 14 months, before the tutoring began, the mean IQ was 105

for the experimental group and 108 for the control group. At 36 months, the mean IQ was 106 for the experimental group while the control group's IQ had fallen to 89. In addition to supplementary tutoring, the adequacy of maternal care was found to be significantly related to child behavior and mental test scores at 36 months of age.

There are four experimental day care centers designed to prevent culturally determined retardation; these are longitudinal studies, with planned collaboration among them: (a) The Children's Hospital in Washington, D.C. (Marans, Meers and Huntington, 1968); (b) The Frank Porter Graham Child Development Center in Chapel Hill (Robinson, 1968); (c) The Yale Child Study Center Project (Provence, 1968); and (d) The Children's Center in Syracuse, New York (Caldwell and Richmond, 1968). The programs within these centers are experimentally designed to test effects of different types of child care arrangements and cognitive enrichment programs. Comparisons will be made between the behaviors of children living within their own families; in foster families; in residential care and in full- and part-time day care. The effects of these treatments

for different socioeconomic groups and the effect of social services will also be examined. All of the studies are in early stages and require long term followups.

The programs stress stimulating and responsive learning environments, achievement motivation and high frequency of adult contact with relatively small numbers of adults (one to four staff-child ratio for children under three). One center (Robinson, 1968) arranges the children in "family units"; each unit has twelve children ranging in age from early infancy through the kindergarten years. These day centers are run under optimum conditions, with interested and trained caretakers, a large number of professional staff, small numbers of children and a varied and rich program. They offer in reality individualized "private" schooling for young children. The approximate annual budget for the Children's Center in Syracuse is \$250,000 of which 90 percent is for personnel. The authors derive an estimated cost per capita per day of \$11.54, by subtracting \$40,000 as the estimated cost of research being conducted, and assuming that by streamlining certain supervisory and training functions, 90 children could be cared for (50 full-day, 40 half-day, representing

70 full-time equivalents). If we assume that the ordinary child-care year is 260 days (5 days per week for 52 weeks), the estimated cost per child per year is \$3,000.

Preliminary results from the Children's Center in Syracuse indicate gains in developmental quotients. The two-year old children demonstrated good socioemotional development, although one consultant thought they might lack a differentiated social reaction, i.e. they were indiscriminately friendly to strangers. However, the authors feel that major difficulties of maternal separation can probably be avoided if certain emotional safeguards are provided. Preliminary results from Chapel Hill are also positive. The intelligence scores are high; the children's primary attachments remain with their parents, but they seem to adjust to a variety of caretakers during the day. However, at present there are only 27 children of various social backgrounds enrolled in the center, with a staff of approximately 27. Robinson (1968), the staff director at Chapel Hill believes that carefully planned group care programs carry little risk and that eventually at least part day group care will be chosen by most parents during the first year of life. He feels that programs should be of such high quality that all

classes could consider them an alternative to full-time family care. However, he states that to reach this goal, we would need greater numbers of professional personnel and large numbers of child-specialists for day care centers. He points out that this would necessitate considerable training and experience of a type not available in this country today.

Implications of a Day Care Program in the United States

1. Behavioral. We know from existing data the damaging effects of poor group care, particularly on the young child. There is little data describing the impact of good day care on children's emotional development or their ability to form relationships. As noted above, we have evidence of the potential effectiveness of early cognitive training for disadvantaged children. Implications of these findings for optimal child care arrangements and some of the intrinsic problems involved are specified by Gewirtz' (1961, 1968) behavioral analysis. Gewirtz stresses the need for providing effective learning conditions for the child. The child's learning depends not only on whether stimuli are available, but whether the stimuli provided are functional for behavior, i.e., whether they are discriminable, whether the child responds to them and whether the responses are appropriately

reinforced. Caretakers, therefore, have a subtle role in providing stimulation for the infant and subsequently reinforcing the child's appropriate responses, such as smiles and vocalizations. As the child matures, caretakers can provide the more complex cognitive enrichment programs.

The problem of multiple mothering as provided in group care is more complex. There is danger even in good day care centers of controlling a child's behavior by reinforcers without the child becoming attached to the person dispensing the reinforcers. Gewirtz distinguishes between a child's general social dependence and his attachment to a particular person. Attachment would be involved only when a child consistently seeks from a particular person various reinforcing stimuli such as attention and approval, even when these stimuli are available also from other persons. The relationship is compounded by the fact that parents learn attachment to their children; infants "condition" many of the parents' responses to them. This very subtle discrimination learning between parent and child is difficult to duplicate

under conditions of group care. The problem is compounded by the fact that a child's response may be reinforced by one caretaker and not by another.

We do not know whether the amount of time a young child spends in day care would damage his ability to form close attachments, or whether any detriment that occurs is reversible. However, there is no reason to believe that day care would enhance the emotional development of children, except in those cases where parents are seriously disturbed. The greatest potential of day care for poor children appears in the opportunity it provides for cognitive enrichment. At present, outside experiences are much more available to middle class children through facilities such as nursery schools, kindergartens, etc.

Learning opportunities could be provided for part of each day without the concomitant dangers of full day care. Caldwell and Richmond (1968) have introduced a half-day program for some children at the center in Syracuse. They believe that a part time program provides enrichment without disrupting the child's primary family relationships. Studies of intellectual stimulation of culturally deprived

infants (e.g. Schaefer, previously described) indicate that large IQ increments can be attained with relatively short time intervals per day. Mothers could be involved in part of the program to help them develop more stimulating child-care practices. There is some evidence that very early learning depends largely on intimate interpersonal interaction. Ainsworth (1962) suggests, for example, that for the infant under six months of age, the chief perceptual stimulation comes through the mother in the course of caring for, handling, playing with and talking to the child. In the case of the child over two, efforts to enrich the institutional environment by providing nursery-school experience seem to be less effective in stemming retardation of development than efforts to facilitate the attachment of the child to a substitute mother. Skeels and Dye (1939) transferred a group of 13 orphanage children under two and one-half years of age to an institution for the feeble-minded, where they were placed 1 or 2 babies to a ward, with older feeble-minded girls (mental ages 9 to 12 years). The mean IQs of the children improved from 64 to 92 over a mean period of 19 months. The IQs of a control group who remained in the orphanage declined from a mean of 87 to one of 61. The authors

attribute the improvement of the experimental group to the establishment of an attachment to one adult, for each child had one person, older girl or attendant, to care for him. Similarly, Wyatt (1965) suggests that "prolonged separation between mother and child occurring during the critical period of language learning - age 2-5 years- may lead to disorganization of the child's language behavior, unless a familiar mother substitute . . . is available, who enjoys the child and is willing to 'tune in' on the child's level of speech and provide corrective feedback in a manner similar to the one the child was used to."

2. Social. We have described some behavioral implications of day care arrangements. We must also consider the social effects of providing a broad-based system of day care. No one seriously advocates removing young children from middle-class homes and placing them in full time day care centers. In practice, therefore, day care would be used primarily by low-income groups; we do not know the effect of raising this particular segment of the population in a distinct environment. If this separation between day care for lower class families and parental care for the rest of the population were to

occur, we must consider the ethical issues involved in a government policy that states in effect that poor children are better off away from their parents. The dangers of further separating an already distinct subclass are evident: the environment is a segregated one; the feeling of inferiority among the children can be overwhelming; and the incentives to produce controlled behavior are strong. There are also dangers of hastily prepared day care arrangements to facilitate enforcement of such laws as the 1967 Social Security Amendments.

Related to this is the danger of providing a structure within which a white racist middle class could control the upbringing of poor children. Many middle class members, even those who consider themselves liberal, believe that the Negro lower class family has nothing of value to offer its children. The Soviet Union uses day care to transmit the values of society to young children in an effort to produce cultural homogeneity. The middle class in this country increasingly feels that this is necessary. We must distinguish between cognitive enrichment and the direct teaching of a government's or majority's social ideals and moral values. A relevant description is provided by Bronfenbrenner (1966) of a

Soviet "school of the prolonged day" for school-age children of unskilled workers who had recently moved into Moscow from agricultural areas. The school was part of the housing project in which these workers lived. The director pointed out that his school had an especially challenging task since many of the parents came from a limited background and lacked the qualities necessary to raise their children well. It is interesting also that these children of unskilled workers are directed at an early age into vocational training. This school specializes in the building of industrial and scientific models. Children begin in the first grade by learning to hammer a nail or saw a block of wood.

The research evidence indicates that group care without high standards could have disastrous results. A consideration of the public schools in disadvantaged areas provides one indication of the type of day care system which could evolve in these same areas. Kozol's (1967) description of the Boston school system in Death at an Early Age is applicable to systems in other large urban areas. From Kozol's observations of slum grade schools, we can envision day care centers with some of the caretakers demonstrating subtle and direct racism; punishment rather

than attempt to seek help for emotionally disturbed children; encouragement of children to be obedient, apathetic, and unimaginative; condescending attitude toward children with general feeling that the ghetto child does not deserve much; grossly substandard facilities; intimidation of parents attempting to participate; inadequate and unstable caretakers; "compensatory" programs existing in name only. All the dangers inherent in a school system such as this would be compounded in a day center for very young children. We can contemplate the effects on young Negro children of caretakers who describe the school as "a zoo" and the children in it as "animals," and who regret that they are not allowed to punish physically the "goddamn little buggers" in first and second grade.

Any impact of day care on the behavioral development of children depends largely on the caretakers which this system is able to provide. We have briefly noted the experiences of Russia, Israel and Greece where caretakers have high status and are often well trained. We have also noted that this condition does not prevail in the Eastern European countries described and that caretakers in these countries are inadequate and unstable. Conditions

for obtaining effective caretakers do not seem to prevail in the United States (Meers and Marans, 1968). There is evidence of high turnover, low status and difficulty of providing training. Jones (1967) found that staff turnover in some positions in certain agencies approximated 300 percent during the study year (the average was 137%). The succession of substitute teachers described by Kozol would not be tolerable for young children. Instability of caretakers has an adverse effect on the quality of the program provided, and increases the difficulty of establishing good relationships and consistent learning situations. Family day care seems to many to be safer than group care for young children. Admittedly this type of care is also unstable, and the women who provide "home care" cannot be said to offer greater intellectual stimulation than the child's mother. Similarly, there seems no cognitive or emotional advantage for young children to be placed in a group situation under the care of welfare mothers.

The risk involved in placing a large portion of disadvantaged young children in day care must be measured against the potential benefits of the mother's income to the family and to the community, in terms of reduced income maintenance payments. The evidence indicates

that satisfactory day care would be considerably more costly than providing mothers with adequate income. Moreover, the salary potential of many lower class mothers is barely greater than that provided by even average welfare payments. Optimum day care such as that provided by the experimental centers has been estimated to cost \$3,000 per year per child and is clearly costly when compared with adequate income maintenance programs.

The present evidence does not support the establishment of a mass system of day care centers. It seems most advantageous at present: (a) to continue the type of longitudinal research being conducted at model day care centers for preschool children and at OEO Head Start centers. These programs can provide behavioral data, while at the same time offering cultural enrichment. Any expansion of this type of center should occur only under high standards of supervisory personnel, child-staff ratio, and cognitive programs. The small child's need for highly individualized attention cannot be overstressed: (b) to develop cognitive enrichment programs for children under three as well as for children between three and five. These programs could be half-day

programs, or probably even less if the children received individualized attention. The optimum program would provide for children with learning experience part of each day, and involve mothers in the program for another portion of the time. Bronfenbrenner (1968), for example, feels that many disadvantaged children receive sufficient attention from their parents, but this attention is not appropriately discriminating. These parents often do not provide selective reinforcement for language and other behaviors. The participation of parents in the program would help them give their children more meaningful experiences. (c) to establish supervised recreation and study programs for school age children. In some areas, after school care presently is being given in churches and public schools. Mothers are most likely to work when their children are in school, and it is these children who are most often unsupervised during non-school hours. Data presented in Tables 5, 6 and 7 describing child care arrangements of working mothers indicate that 8 percent of the children cared for themselves; this arrangement varied by age; amounting to 1 percent for the children under 6, 8 percent for those 6 to 11 and 20 percent for those 12 or 13 years of age. Ten percent of the children in families with incomes under

\$3,000 and 7 percent in families with incomes above \$6,000 were expected to care for themselves. A program similar to Sweden's (Bruun, 1966) where children could study and engage in supervised activities during nonschool hours would be highly desirable.

At present, a policy which safeguards the care of children whose mothers choose to work without subjecting one social class to institutional day care appears desirable. There is no doubt that large numbers of children of working mothers are cared for by inadequate substitutes under poor conditions of hygiene, security, and with a high degree of restrictiveness and boredom. Some of the children are apathetic and borderline mentally retarded (Robinson, 1968). We question, however, whether the solution can be found in placing one segment of society in group care. It seems more meaningful to support social programs to relieve the financial needs of these parents while at the same time providing their children with the early learning opportunities which are presently available to the middle class.

In short, preschool programs should not be designed primarily to permit women to work. The dangers from this approach are too great. Rather, the programs should be

designed to assist in the cognitive and emotional development of children, and as an ancillary matter provide a facility for working mothers. This emphasis will tend to avoid some of the problems described in this paper.

TABLE 1

The Changing Composition of the Non-aged Poverty Population

	<u>TOTAL</u>		<u>EMPLOYED</u>		<u>UNEMPLOYED</u>	
	1961	1966	1961	1966	1961	1966
Total Families (%)	100.0	100.0	100.0	100.0	100.0	100.0
Male (%)	74.5	64.8	83.0	74.5	41.1	38.6
Female (%)	25.5	35.2	17.0	25.5	58.9	61.4

TABLE 2

Number and capacity of licensed day care facilities for children, by type and auspices of facility,
United States, March 31, 1967

Type of facility	Auspices									
	Total		Public		Voluntary		Independent		Auspices not reported	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity
Total	34,700	475,200	1,200	25,100	3,000	115,200	25,300	303,200	5,200	31,700
Day care centers	10,400	393,300	400	22,600	2,600	113,900	6,900	239,300	500	17,500
Family day care homes	24,300	81,900	800	2,500	400	1,300	18,400	63,900	4,700	14,200

Table 3. NUMBER OF CHILDREN UNDER 14 YEARS OF AGE OF WORKING MOTHERS,
BY AGE OF CHILDREN, UNITED STATES, 1965

Age	Number of children	Percent distribution
Total children under 14..	12,291,000	100
Under 6 years.....	<u>3,778,000</u>	<u>31</u>
Under 3.....	1,580,000	13
3-5.....	2,198,000	18
6-11 years.....	<u>6,100,000</u>	<u>50</u>
6-8.....	2,796,000	23
9-11.....	3,304,000	27
12 and 13 years.....	<u>2,413,000</u>	<u>20</u>

Table 4. NUMBER OF CHILDREN UNDER 14 YEARS OF AGE OF WORKING MOTHERS,
 BY FAMILY INCOME IN 1964, UNITED STATES ^{1/}

Percent distribution

Family income	Number of children	Percent distribution
Total children.....	12,291,000	100
Less than \$3,000.....	1,957,000	16
\$3,000-\$5,999.....	3,797,000	31
\$6,000-\$9,999.....	4,465,000	36
\$10,000 and over.....	2,072,000	17

^{1/} Covers all family income, including that of the working mother.

Table 5. CHILD CARE ARRANGEMENTS FOR CHILDREN OF WORKING MOTHERS,
BY AGE OF CHILDREN, UNITED STATES, 1965

Percent distribution

Type of arrangement	Percent distribution			
	Total	Under 6 years	6-11 years	12 or 13 years
Total.....	100	100	100	100
Care in child's own home by--.....	<u>46</u>	<u>47</u>	<u>47</u>	<u>38</u>
Father.....	15	15	15	14
Other relative.....	21	18	23	21
Under 16 years.....	5	2	6	5
16-64 years.....	13	13	13	13
65 years and over.....	4	3	4	3
Nonrelative who only looked after children.....	5	8	4	2
Nonrelative who did additional household chores (maid, housekeeper, etc.).....	5	7	4	2
Care in someone else's home by--.....	<u>15</u>	<u>30</u>	<u>11</u>	<u>5</u>
Relative.....	8	15	5	3
Nonrelative.....	8	15	6	2
Other arrangements.....	<u>39</u>	<u>23</u>	<u>43</u>	<u>57</u>
Group care (day care center, etc.)	2	6	1	<u>1/</u>
Child looked after self.....	8	1	8	20
Mother looked after child while working.....	13	15	12	11
Mother worked only during child's school hours.....	15	1	21	24
Other arrangements.....	1	1	1	1

1/ Less than one-half of one percent.

Table 6. CHILD CARE ARRANGEMENTS FOR CHILDREN UNDER SIX YEARS OF AGE OF WORKING MOTHERS, BY AGE OF CHILDREN, UNITED STATES, 1965

Percent distribution

Type of arrangement	Percent distribution		
	Total Under 6 years	Under 3 years	3-5 years
Total.....	100	100	100
Care in child's own home by--.....	47	46	48
Father.....	14	14	15
Other relative.....	18	17	19
Under 16 years.....	2	2	3
16-64 years.....	13	13	13
65 years and over.....	3	3	3
Nonrelative who only looked after children.....	8	8	8
Nonrelative who did additional household chores (maid, housekeeper, etc.)...	7	7	6
Care in someone else's home by--.....	30	33	27
Relative.....	15	17	12
Nonrelative.....	15	16	15
Other arrangements.....	23	21	25
Group care (day care center, etc.).....	6	4	7
Child looked after self.....	1	1/	1/
Mother looked after child while working.	15	15	16
Mother worked only during child's school hours.....	1	0	2
Other arrangements.....	1	2	0

1/ Less than one-half of one percent.

Table 7. CHILD CARE ARRANGEMENTS FOR CHILDREN OF WORKING MOTHERS, BY FAMILY INCOME, UNITED STATES, 1965

Percent distribution

Type of arrangement	Total	Family income			
		Less than \$3,000	\$3,000-5,999	\$6,000-9,999	\$10,000 and over
Total (percent)	100	100	100	100	100
<u>Care in child's own home by---</u>	<u>46</u>	<u>39</u>	<u>43</u>	<u>50</u>	<u>46</u>
Father.....	15	7	15	19	13
Other relative.....	21	27	21	19	18
Under 16 years.....	5	5	6	4	3
16-64 years.....	13	20	13	11	11
65 years and over.....	4	3	3	4	4
Nonrelative who only looked after children.....	5	4	4	6	5
Nonrelative who did additional household chores (maid, housekeeper, etc.)...	5	1	3	5	10
<u>Care in someone else's home by-</u>	<u>15</u>	<u>17</u>	<u>19</u>	<u>14</u>	<u>12</u>
Relative.....	8	9	9	7	5
Nonrelative.....	8	8	10	7	8
<u>Other arrangements.....</u>	<u>39</u>	<u>44</u>	<u>39</u>	<u>36</u>	<u>42</u>
Group care (day care center, etc.).....	2	3	2	2	3
Child looked after self.....	8	10	8	7	7
Mother looked after child while working.....	13	20	15	10	12
Mother worked only during child's school hours.....	15	11	14	17	20
Other arrangements.....	1	1/	1/	1	1

1/ Less than one-half of one percent.

Table 8.

EXPECTED EARNINGS, COST OF DAY CARE, AND BENEFIT-COST RATIOS BY
EDUCATION OF MOTHER AND AGE OF CHILDREN

Education/Age of Children	Age of Mother	Median Annual Full- Time Earnings (1965)	No. of Children	Cost of Day Care	Benefit/Cost Ratio
Less than High School Graduate					
Children 6-17	28	\$2792	2.8	\$1680	1.7
Children under 6	20	1798	2.2	2200	.8
High School Graduate					
Children 6-17	31	4366	2.9	1740	2.5
Children under 6	23	3947	1.9	1900	2.1
College Graduate					
Children 6-17	33	6410	2.8	1680	3.8
Children under 6	25	5536	2.5	2500	2.2

Table 9 .

NET GAIN OR LOSS TO AFDC RECIPIENTS, TAXPAYERS, AND THE
ECONOMY OF A DAY CARE PROGRAM

	Potential Income of AFDC Recipients(1965)	Cost to Taxpayers	Net Gain in Income to Economy
<u>Children 6-17</u>			
Without Day Care	\$1600	\$1600	0
With Day Care	2800	1900	+\$ 900
Net Gain	+\$1200	-\$ 300	+\$ 900
<u>Children Under 6</u>			
Without Day Care	\$1600	\$1600	0
With Day Care	1800	3200	-\$1400
Net Gain	+\$ 200	-\$1600	-\$1400

TABLE 10

Mean I.Q. Scores for Experimental and
Control Groups in Schaefer's Experiment

Age in Months	14	21	27	36
Experimental Group Mean I.Q.	105	97	101	106
Control Group Mean I.Q.	108	90	90	89

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