

R E P O R T R E S U M E S

ED 020 998

UD 006 131

ASSESSMENT OF CHILDREN PARTICIPATING IN A COMPREHENSIVE
ATTACK ON FAMILIAL POVERTY.

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PUB DATE 68

EDRS PRICE MF-\$0.25 HC-\$0.96 22P.

DESCRIPTORS- *POVERTY PROGRAMS, *EXPERIMENTAL PROGRAMS,
*FAMILY PROGRAMS, *PRESCHOOL PROGRAMS, *CHILD DEVELOPMENT,
RESEARCH, EVALUATION METHODS, DATA COLLECTION, LANGUAGE
DEVELOPMENT, SOCIAL DEVELOPMENT, STANDARDIZED TESTS,
MEASUREMENT, ACHIEVEMENT, HOMEMAKING SKILLS, FATHERS, HEALTH
PROGRAMS, PHYSICAL DEVELOPMENT, PERCEPTUAL DEVELOPMENT,
PROJECT KNOW HOW, FLORIDA

DESCRIBED ARE THE COMPONENTS OF PROJECT KNOW HOW (PKH),
AN OFFICE OF ECONOMIC OPPORTUNITY EXPERIMENTAL PROGRAM.
DESIGNED TO ATTACK INDIVIDUAL FAMILIAL POVERTY, PKH INVOLVES
A PRESCHOOL TRAINING PROGRAM BEGINNING IN THE FIRST YEAR OF
LIFE AND CONTINUING TO SCHOOL AGE, A SALARIED ASSISTING
MOTHERS PROGRAM, A FATHER'S PROGRAM, AND A FAMILY HEALTH
PROGRAM. RESEARCH AND EVALUATION FEATURES ARE BUILT INTO THE
PROJECT AND INCLUDE THE COLLECTION OF PHYSICAL-MEDICAL DATA
AND THE ASSESSMENT OF MENTAL-MOTOR, LANGUAGE, AND SOCIAL
DEVELOPMENT BY MEANS OF STANDARD TESTS. IT ALSO HAS PLANS FOR
MEASURING ACHIEVEMENT AND PERCEPTION. SOME SUPPLEMENTAL
MATERIAL ON CHILD DEVELOPMENT AND GUIDANCE AND ON THE
BEHAVIORS OF PKH FATHERS IS INCLUDED. THIS PAPER WAS
PRESENTED AT THE AMERICAN EDUCATIONAL RESEARCH ASSOCIATION,
CHICAGO, 1968. (NH)

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ASSESSMENT OF CHILDREN PARTICIPATING
IN
A COMPREHENSIVE ATTACK ON FAMILIAL POVERTY¹

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The primary aims of Project Head Start are to provide a pre-school training and health care program for disadvantaged children between the ages of 4 and 6. In evaluating the impact of Head Start Programs, one finds that where control groups are used the Head Start participants tend to score higher on various dependent measures than their controls. In some instances, however, these differences are not significant. In follow-up studies based upon I.Q. and/or achievement test scores, with few group exceptions, differences between Head Start and non-Head Start children had been reduced by the second, fourth, and sixth months after the end of the experience. Two cautionary notes should be added to these comments. First, most assessments stress cognitive - intellectual development and tend to ignore social - affective outcomes. Secondly, the criteria by which these programs are judged are often so poorly defined and/or so narrowly drawn as to provide no definitive test of a program's merit. Regarding the first caution, when the outcome criterion is teacher or parent estimates of pupil development or adjustment, the results consistently favor the positive contribution of the preschool experience.

Granting the aforementioned problems, many voices echo the cry that Head Start is "too little, too late." These constructive

¹Presented at the American Educational Research Association, Chicago, 1968. U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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critics point out that Head Start programs are "too little" to negate the cumulative effects of poverty. The program is "too late" in that the intervention program should begin much earlier, perhaps at the child's birth rather than at age four.

On April 1, 1967, the Office of Economic Opportunity (of which Head Start is a subcomponent) started an experimental program entitled PROJECT KNOW HOW (PKH) to attack individual familial poverty. Dr. Richard M. Dunham of the Institute of Human Development, Florida State University, Tallahassee, Florida directs PROJECT KNOW HOW. This move on the part of the Office of Economic Opportunity provides a four-pronged assault on poverty through (1) a preschool training program for children beginning at age one and continuing until the participants are of school age, (2) an assisting mothers program, (3) a father's program, and (4) a family health program.

Preschool Training. The Preschool Training Program rests on the currently accepted assumption that mental maturation and intellectual development are a consequence of a suitable array of environmental experiences (Hunt, 1961; Pettigrew, 1964). Under normal circumstances in modern society, the stimulation provided by relatively sophisticated adults is a major and crucial component of intellectual development. Unfortunately, lower class children receive less adult attention and a less sophisticated quality of adult attention, both conceptually and syntactically (Bernstein, 1961; Hess and Shipman, 1965).

The preschool program started with 30 children divided into two curricula which can be relatively differentiated, for comparative

purposes, into group and individual orientations with the individual being more reminiscent of Montessori techniques (Montessori, 1965; Morra, 1967). Obviously, it is difficult to differentiate two separate curricula for one year olds; however, as the children get older the curricula become more differentiated. Specific learning experiences are provided for the children to help them acquire certain fundamentals of knowledge as soon as possible. It is assumed that they will then be able to acquire more complex knowledge on their own from their environment. These fundamentals include developing a more precise command of language; acquiring conceptual tools needed for interpreting the environment; discriminating more sharply between nuances of those concepts; manipulating the environment in order to obtain better information to communicate more effectively; attending to relevant stimuli; and, acquiring habits of delaying responses until a sufficient amount of information is available to make a correct response. The overall plan proposes the addition of 30 one year old children each year until the maximum size of the PROJECT KNOW HOW preschool program reaches 150 children during the fifth year of operation. There will be two teachers and a maximum of five assisting mothers per 15 children in each preschool setting.

Assisting Mothers Program. The Assisting Mothers Program protects and strengthens the mothers in the role of homemaker. Observation shows that economic and social pressures tend to force the mother in the poor family into the inappropriate roles of breadwinner and head-of-the-household. The mother then forces the

father out of his roles, and often out of the family entirely.

All participating PKH mothers are eligible for employment in the Assisting Mothers Program during part of each year. For providing assistance to the teachers, these mothers receive a salary to compensate for income loss from their submarginal local employment; however, their PKH remuneration is not high enough to place them in competition with their husbands as breadwinner.

The Assisting Mothers Program has as one of its foci the development of an educational program designed to help mothers of low income and limited educational skills learn new and strengthen present homemaking skills. The assumption underlying such a program is that competency achieved in the performance of the role of homemaker will lead to feelings of personal worth and to satisfaction in the homemaking roles. Intrapersonal competency, it is believed, will lead to interpersonal competency. The homemaker who perceives herself as competent in her role as wife and mother is better able to adapt to and find constructive solutions for the problems she faces within the family.

Inherent in such an educational program is the assumption that children who are exposed to a model whose role performance meets societal expectations are better able to interiorize coping norms which sustain the family. For example, investigations of families experiencing crisis tend to show that behavior of families is related to social class. The middle class family which for generations has been rewarded for persistent striving in the face of stress tends to make the adjustments necessary when faced with

crisis. The lower class family, on the other hand, reflects a different mode of response. Specifically crisis results in a higher rate of dissolution of family units among lower class than middle class families. It is believed that the dissolution of family units among the lower class results not only because of less adequate material resources, but because many lower class families have not learned the problem solving skills necessary with which to handle stress.

The Assisting Mothers Program involves several curricula, each reflecting an aspect of the role of homemaker. The morning activities for the children of the preschool program are devoted to individual and group instruction provided by the teachers who in turn are assisted by the mothers. After lunch, the children nap while the mothers participate in another facet of the educational program. The curriculum concentrates on the content areas of conventional high school home economics courses and role relationships within the family.

Curricula for the Assisting Mothers Program include the following areas:

1. Clothing, textiles, related art
2. Home Management, family economics, and consumer buying
3. Personal and family relations
4. Child development and guidance
5. Food and nutrition
6. Housing, home furnishings, and equipment

For each of these six areas the curricula includes: (1) detailed objectives, (2) unit contents, (3) learning experiences, and (4) bibliographic and text resources. The first handout on "Child Development and Guidance" illustrates an outline of one of the six areas on the first three points mentioned above.

Since the mothers come from low income families and have received only a limited education, less than five per cent of one-thousand pamphlets, brochures, and bulletins that have been reviewed are suitable for these participants to use.

Father's Program. The objectives of the Father's Program are explicitly to reinforce the father in his roles as breadwinner, head of the household, and parent. The techniques of occupational intervention followed by those of teaching financial management will be utilized to reinforce the concept of breadwinner. The concept of head-of-household is associated with the desirability of influencing the father to take a more active role in decision making, to take an increased interest in home improvement. In strengthening the father in his role of parent, emphasis will be placed in developing his understanding of and communication with the target child and the siblings.

In addition to these explicit objectives, there are some objectives that are implicit in all three role developments: (1) To help every father to manage himself, which includes not only improving his ability to communicate and compute when such skills are basic, but also such abilities as reaching rational conclusions from available information; (2) To provide more than a fair chance

or equal opportunity for each participant to develop himself; which includes not only developing such ability as understanding his environment and his relationship to it, but also going beyond by removing barriers; (3) To effect the creative and intuitive insights and aesthetic choices of the participating fathers. Handout #2 outlines some of the behaviors that we hope will be influenced as a result of PKH participation.

Health Program. This facet of PKH protects the health of the participating families and aids each individual in reaching and maintaining his best possible state of well-being.

The Health Program is based on professionally accepted standards and is adapted to the health needs of participants, local customs, and available community resources. The major components of the Health Program are threefold: medical screening, health education, and medical protection.

Research and Evaluation. PROJECT KNOW HOW has a general demonstration function in developing a method for helping the deprived family stabilize itself and become self-sustaining. PKH has a specific research function in evaluating the demonstration program.

A variety of dependent measures test the following hypotheses: (1) that children participating in the preschool training program will develop at a normal rate or better, (2) that participating mothers will show greater interest and confidence in the role of homemaker and less interest in work outside of the home, (3) that the PKH fathers will show increasing interest and confidence in the roles of breadwinner, head-of-the-household, and parent.

Implicit in these hypotheses are two types of comparisons. One is that the hypothesized changes will persist, or in some cases develop over time and will reveal themselves in before-and-after comparisons. The second is that the hypothesized effects will display themselves when the PKH participants are compared with some untreated families (control group).

Two primary control groups are being studied and evaluated longitudinally. Poor families that meet the criteria for PKH participation (Head Start criteria), yet do not become participants, compose the first group. The second group is a middle class sample that is comparable to the PKH participants and the poverty control group in certain demographic characteristics (such as age and ethnicity), but not social class and closely related factors, such as occupation and education. In general, it is predicted that the PKH participants will move away from the characteristics of the poverty control group and come to resemble the middle class control group as PKH continues.

Since dependent measures have been specified elsewhere to evaluate the mother's and father's program, this paper will concentrate on the dependent measures adopted to assess the growth and development of the PKH children.

A strongly felt responsibility to maximize the value of Project research data led to an extra concern with the selection of measurement instruments and the scheduling of their use. This concern involved considerations which go beyond the classic criteria and resulted in investments of time and resources whose dividends will be evident both within and beyond Project goals.

One consideration is the continuing commitment to the use of tests which measure behavior directly, rather than relying on verbal reports of behavior. This led to the decision to use situational tests and others which permitted direct-behavior analysis as far as possible. In some cases, existing instruments and techniques were adapted with varying degrees of modification. One example of adaptation was the imbedding techniques used to permit data on language development to be gathered during administration of tests for mental-motor ability. In other cases, new tests and procedures had to be developed. Although the time and technical problems involved in both development and on-going use of this type of instrument are greater than in simpler types, the justification for their use lies in the increased precision of the resultant data, and in broader application for purposes not yet identified.

The second consideration also recognizes that purposes other than those central to the Project may be served in the process of collecting and analyzing Project data, and has taken the form of a strong effort to make contact with others involved in research whose components can be matched with those of the Project in such a way that a maximum application of results can be achieved. In comparing several aspects of the Project with those of a number of other experimental programs, some interesting parallels were found, and wherever possible, consistent with economy and proper focus, cooperative arrangements were worked out which will multiply the application of results and facilitate their interpretation. In some cases, where identical instruments could justifiably be used, the

possibility for identical scheduling arrangements was explored. In other cases, where dependent variables appeared to be essentially similar, more precise and mutually-usable definitions increased the possibility of cooperation in test development and in comparison of results.

In selecting instruments for assessing change in the children and parents within the Project, and in planning for test administration, every effort was made to assure both precise measurement and broad application of resultant data. Handout #3 outlines the plan which will be followed during the second and subsequent years of the Project. For the first year, modifications have been necessary due to the occupation of time and personnel in the extensive, careful planning of measurement and evaluation procedures which have occupied much of this first half year.

Physical-Medical Data

The physical and medical data is of incidental importance at this time; however, certain medical records are being compiled and various measures of physical and motor development are being taken.

The physical and motor development of the experimental children is being manipulated through special playground equipment, operant conditioning on specific tasks, and a special curriculum, all designed to develop the upper extremities (hands, chest, arms, and shoulder muscles).

Mental-Motor Development

The Bayley Infant Scales of Development (BISD), mental and motor, were selected for two reasons. (1) The BISD is the best

instrument currently available to assess growth and change in young children because all other scales of infant development have poor standardization data. The BISD has been selected by the Psychological Corporation to be standardized on a large national stratified random sample of infants. When this normative data is published in 1968, our raw scores will be converted to these developmental quotients. Currently, we are using the norms developed by Dr. Nancy Bayley from a sample of 1400 children from various geographical locations in the U. S. (2) The BISD provides comparison data between our Project and other projects. The research program entitled "Intellectual Stimulation of Culturally Deprived Infants," administered by Drs. Earl Schaefer and Paul Turfey of National Institute of Mental Health and the Catholic University of America, respectively, includes the BISD administered at various intervals between ages of 14 and 27 months. Dr. Don Steadman is using the BISD to assess the growth of a selected group of babies at the Educational Improvement Program at Duke University.

During the first year of Project Know How, the BISD are being administered to infants just prior to admission to the Project and at 24 months of age. Unfortunately, I do not have the 24 month data to report today because many of our experimental and control children are not yet 24 months old. The baseline entrance data merely indicate that our lower class experimental and control groups come from the same population.

In addition, an imbedding technique was developed to permit data on language development (using an adaptation of the McCarthy-

Templin Situational Test) to be gathered during administration of the BISD.

The Piaget Infant Situation Task will be taken from the research by Ina Uzgiris and J. McV. Hunt (Uzgiris and Hunt, 1965). Their scales measure such Piaget-type behaviors as the permanence of objects, the development of means for achieving desired environmental events, the development of operational causality, etc. These scales have a two-fold importance for Project Know How: first, it will help tie our experimental research to the theoretical framework of Jean Piaget and, secondly, it will allow us to monitor developmental changes longitudinally rather than by cross-sectional studies. This instrument will be used in the second and subsequent years of the Project.

The Palmer Battery was chosen to enable us to assess many important behaviors of 2 and 3 year olds including a child's use of language, his ability to interpret his environment, his ability to perform on a discrimination learning task, and his ability to attend to relevant stimuli in a learning task. A more thorough discussion of this instrument can be obtained by writing Dr. Palmer. The Palmer Battery was selected because it provides assessment of behavior relevant to a major hypothesis of the Project and because it provides data comparable to another study. Since this test takes approximately 8 hours to administer, it will be given prior to the child's 24 month birthday at which time Dr. Frank Palmer's subjects in his intervention Project in Harlem begin their 8 month curriculum. Project Know How experimental children will receive

the Palmer curriculum beginning at age 24 months. The test battery will also be administered at 33 and 43 months of age. This testing schedule provides for (1) assessment of the overall development of experimental children at age 23 months with the Project curriculum from age 12 to 23 months, (2) a baseline measure on these tasks prior to the Palmer curriculum, and (3) two post-test measures (33 and 43 months) after the Palmer curriculum ends.

The Stanford-Binet and the Wechsler Scale for Preschool Intelligence (WSPI) are included to provide traditional measures of intelligence. It is important to note that the Stanford-Binet will be administered initially to overlap with the Bayley Scales at 24 and 30 months. At age 48 months the Binet will overlap with the WSPI and then at 54 months the Binet is administered again and at 60 months the WSPI is given.

Language Development

The Schaefer Language Development Check-list was developed by Dr. Earl Schaefer of the National Institute of Health by listing ordinarily the various language patterns that appear in young children (e.g., ranging from the lowest level of babbling to the use of single words, to the use of sentences, etc.). We plan to monitor closely the language development of the experimental children by having a weekly administration of the Schaefer Check-list by the Project teachers, thus providing a close examination of the acquisition of language between the ages of 12 and 36 months. The situational test of language development will be conducted in the controlled environment of the lab and incorporated

into the general assessment program. During the administering of the BISD and/or the Binet the entire proceedings will be recorded on video tape. The spontaneous verbal activity as well as verbal responses of the child to McCarthy-Templin-type tasks can be reliably recorded for later analysis. The next step will be to score the child's language development according to the McCarthy-Templin criteria such as number of words, parts of speech, etc.

At ages 48, 54, 60 months, in order to provide comparison data between the language skills of our children and other research programs around the country, selected subscales of the Illinois Tests for Psycholinguistic Abilities (ITPA) will be administered. These data will enable us to compare our children with the experimental and control children of other programs such as the ones at the University of Illinois, at Duke University, and at Peabody College. The research at the University of Illinois (Karnes, et. al., 1966) indicated that some subscales do not differentiate between their experimental and control groups. However, there are marked differences on such subscales as auditory deciding, visual decoding, and visual-motor association.

Social Development

The Preschool Attainment Record (PAR) was developed by Doll (1965) and his associates who were the original authors of the Vineland Social Maturity Scale. The PAR merely extends downward the social development scale of the Vineland and increases the number of items. The Family Service Worker will administer this scale at the entrance date and every six months to the parents of the children.

Achievement

The Metropolitan Readiness Test will be administered when the children are 48, 54, 60 months, to provide an index of both reading readiness and of his ability to comprehend number concepts. The combined score will give us the "readiness status" of the child indicating whether he represents a poor risk, a low normal, an average, high normal, or a superior risk in school readiness. National standardization data are available for the Metropolitan Readiness Test as well as scores of children at ages 4,5,6 years that have participated in other experimental programs (e.g., the research done at the University of Illinois on culturally disadvantaged children participating in a highly structured and traditional curriculum preschool program (Karnes, et.al., 1966).

Perception

In an effort to determine the level of perceptual development of the PKH children, the Frostig Developmental Test of Visual Perception will be administered at ages 48, 54, and 60 months. This instrument may be scored on five subtests or a composite "perceptual quotient" may be obtained. This test, coupled with the achievement test, will help both in evaluation and diagnosis of problem areas. It should be noted that this was one of the major dependent variables used by the preschool intervention programs at the University of Illinois in the Institute for Research on Exceptional Children. In their research program on preschool disadvantaged children, consistent differences on the Frostig, in favor of the groups that had received a preschool intervention program, were obtained (Karnes, et. al., 1966).

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Handout #1

Child Development & Guidance

A. Objectives

1. To increase the understanding of mothers concerning the behavior characteristics of children at different stages of development.
2. To help mothers develop a keener appreciation of the responsibilities of parents.
3. To encourage the interaction of mothers with children.
4. To increase the mothers' competencies in caring for and guiding children.
5. To identify for mothers the bases for specific kinds of guidance.
6. To encourage mothers to offer approval to their children whenever the children's achievement warrants it.
7. To develop a keener appreciation of the importance of accepting some of the goals of children.

B. Content

1. Learning to understand about the growth and development of children.
2. Learning to care for children.
3. Meeting the basic needs of children.
4. Understanding the behavior of children.
5. Understanding the values of children.
6. Parent-child interaction.
7. Accepting individual differences of children.
8. Increasing skills in participant in the play of children.
9. Safety and suitability of toys and equipment.
10. Sexuality of children.
11. Time, energy, and money required to rear children.
12. Preparing for the arrival of children.

C. Suggested Learning Experiences

1. Guide mothers to look for causes of behavior when observing children.
2. Have mothers check the center for safety hazards. Check for things which have been provided to help make the center safe.
3. Invite the project nurse to explain about first aid for children.

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4. Have nurse discuss signs of children's illness and indicate what to do when children become ill.
5. Demonstrate how to make simple, inexpensive, and safe toys for children.
6. Discuss desirable characteristics of the play area.
7. Encourage group planning to improve the play areas in their own home.
8. Discuss the basic needs of children and how they are best met.
9. Encourage the participants to have their children eat properly and to obtain sufficient rest.
- 10.. Discuss several restful activities for children who are not ready to lie down at nap time.
11. Show child development films which portray developmental patterns at different stages of growth.
12. Help mothers to note skills the children in the centers are learning as the result of the experiences provided.
13. Utilize a T group for the purpose of exploring their attitudes toward children's expression of their sexuality.
14. Use a bulletin board to list common reasons why children express fear, jealousy, anger.
15. Discuss infant development in terms of the experience of the mothers and the additional information they wish.
16. Discuss time, energy, and money involved, in rearing children.
17. Discuss the importance of affection and respect in the guidance of children.
18. Stress kinds of guidance which are effective but are not harmful physically and psychologically.
19. Discuss the importance of adults serving as models.
20. Emphasize the importance of having responsible persons to care for children when parents are absent from the home.
21. Compare the limits a young child can understand in relation to the limits an adult may set for the child.
22. Discuss how to control the behavior of children without resorting to physical punishment for nonacceptable behavior.
23. Show films that depict differences of temperament and personality.
24. Review methods of guiding children which enables them to release aggression in acceptable ways.

25. Use films to show the biological development of new life from conception to birth.
26. Help mothers consider what practical preparations may be made for an infant.
 - a. Financial
 - b. Space
 - c. Change in life style
 - d. Equipment
27. Discuss ways of preparing children in the family for the birth of a new family member.
28. Have nurse discuss prenatal and post-natal care.
29. Have nurse discuss recommended medical care for children.
30. Help mothers select articles for infants.
31.
 - a. Needs
 - b. Cost
 - c. Durability

IMPORTANT BEHAVIORS OF PROJECT KNOW HOW FATHERS

A. Breadwinner

- I. Work History A man's work life can be analyzed on the basis of the pattern his complete job history reveals. Each father's work experiences will be classified into entry, developmental, transitional and peak occupations. Post measures when compared to pre project involvement measures will be assumed to report a degree of project success, fewer entry and transitional jobs, more developmental and peak occupations.
- II. Job Change The circumstances of the termination of one's employ and of his assumption of another job provide indices of his ability as a breadwinner. To be fired, or to quit work without knowing how the family is to be fed, is obviously less responsible than seeking out and/or preparing for a job opportunity offering a swift move to more or better working conditions and/or pay.
- III. Increased earning power can be negated quickly by poor management. Although certain difficulties are anticipated in collecting relevant data, the continuation of families in the Project should be in part predicated annually upon a statement of net worth. One would logically correlate an increase in net worth with increased breadwinner ability.
- IV. Increase Take-Home Pay Data can be obtained from participants concerning the amount of money earned. This dollar value when assessed in terms of take-home pay for each member of a family provides a basis for determining the greatest contributor to the total family income. Know How fathers should demonstrate substantial increases in pre and post measures.
- V. Less Dependency As the participating father develops in his breadwinner role, his financial dependency upon his wife, family of origin, and others will lessen. Although complete data is recognized as unattainable, the number of known instances will decline.
- VI. Learning Activities Participation in formal learning activities will show an increase in pre and post measurements. This gain will be demonstrated by increased instances of participation and hours per month of involvement. Although such activities are encouraged, they are not required for Project Participation.
- VII. Employer's estimates of the workers competencies should reflect increased regard.

B. Head of Household

- I. Appearance of Home Assuming that the head of a family is concerned with the appearance of the home, independent raters will rate the dwelling occupied by the Project family on a number of criteria at various time intervals.
- II. Non-Derogation In a bell-wether situation, a measure will be systematically made by a Family Service Worker to score personnel derogation of family members by the father in a timed interview responding to designed statements with questions built around a decision the family has made. One would predict that, as growth occurs, the incidence of derogation by fathers would decrease and incidence of participation in decision making would increase.

- III. Role Ascription Strong role ascription procedures both in group and individual contacts designed to help the father reinforce his wife as a homemaker and a mother will be employed. The practice of encouraging the wives' confidence and efforts, will be a planned curricular activity. Assuming that such takes place, one can anticipate a decrease in the outside-of-home work the wife assumes. This record will be made monthly by the Supervising Teacher in the child development centers.
- IV. T-Group T-Group experiences designed to increase father's skills in bringing about family cohesiveness, increasing family planning and decreasing overt conflict are in use.
- V. Motivation As a father develops as the head of his household, his purposefulness should reflect cognitive change. A record of his undertakings, a statement of his reasons and his accomplishments will furnish evidence of growth which, certainly, can be objectively quantified and the quality can be scaled.

C. Parent

- I. In a family conference timed to coincide with school report card issuance, the progress of the siblings who are in school and in the nursery will be discussed. The frequency and nature of both father and mother contributions during the conference will be recorded as well as the actual averages attained by each child. Fathers should demonstrate increasing interest in their child's school progress. School visitations in cases of problems should increase with fathers participating.
- II. School experience: Experiences will be designed to reinforce the value of school, teaching, and the learning processes.
- III. Understanding Children Child control vs. child understanding will be the subject of sustained curricular endeavor. Changes can be estimated by direct observations of Family Service Workers, situational tests and content analysis of taped conversations.

MEASUREMENT OF CHILD DEVELOPMENT

| Dependent Variables | Instruments | Time or Age (In Months) of Measurement Until First Grade |
|--------------------------|--|--|
| Physical-Medical Data | Clinical Examination Initial Medical Record Illness & Accident Report Linen Tape, Pinch Calipers, Sliding Calipers, Hand Dynamometer | Entrance & Yearly Entrance Upon Occurance 12, 15, 18, 21, 24, 30, 36, 42, 48, 54 |
| Mental-Motor Development | Bayley Infant Scales of Development Piaget Infant-Situation Interactions Series Stanford-Binet Palmer Battery Wechsler Scale for Pre-school Intelligence | 12, 15, 18, 21, 24, 30 12, 15, 18, 21 24, 30, 36, 42, 48, 54 23, 33, 43 48, 60 |
| Language Development | Schaefer Language Development Checklist Content Analysis of tapes during other testing Selected subscales of Illinois Test for Psycholinguistic Abilities | Weekly between 12 & 36 months 15, 18, 21, 24, 30, 36, 42, 48 48, 54, 60 |
| Social Development | Preschool Attainment Record and/or Vineland Social Maturity Scale | Entrance and every 6 months |
| Achievement | Metropolitan Readiness Tests, Form R | 48, 54, 60 |
| Perception | Frostig Developmental Test of Visual Perception | 48, 54, 60 |