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ABSTRACT

These findings and implications are part of the final report on the National Home Start Evaluation. Home Start, a federally-funded 3-year (1972-1975) home-based demonstration program for low-income families with 3- to 5-year-old children was designed to enhance a mother's skills in dealing with her own children and to provide comprehensive social-emotional, health and nutritional services. The purpose of the evaluations was to collect information on both the Home Start process and the program's effectiveness so that the Home Start experience could lead to recommendations for future home-based programs. The evaluation describes the program, assesses its effects at various time points and compares the effects after one and two years of program participation. In addition, it compares the effects and costs of Home Start and Head Start programs. Included in the document are program evaluation and overview, findings in terms of impact on families and children, cost effectiveness, program and implications and conclusions. Appendices include: a Home Start program overview, evaluation design and methodology, and index to Home Start evaluation reports. [Author/HS]

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Dr. Esther Kresh, Project Officer

NATIONAL HOME START EVALUATION: FINAL REPORT

FINDINGS AND IMPLICATIONS

March, 1976

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FOREWORD

In 1971 the Office of Child Development initiated the National Home Start Demonstration Program to demonstrate "alternative ways of providing Head Start-type comprehensive services for young children in their homes." The program, which became operational in the spring of 1972 and continued until June 1975, was designed to enhance mothers' skills in dealing with their own children in the home. At the same time, comprehensive social-emotional, health, and nutritional objectives were adopted as part of the core program.

Concurrent with the initiation of the Home Start Demonstration Program, the Office of Child Development funded a major evaluation. Its purpose was to collect information on both the Home Start process and the program's effectiveness so that the Home Start experience could lead to recommendations for future home-based programs. The evaluation described the program, assessed its effects at various time points (relative to a randomly assigned control group) and compared the effects after one and two years of program participation. In addition, it was designed to compare the effects and costs of Home Start and Head Start programs.

This final report of the evaluation of the National Home Start Demonstration Program is addressed to a variety of audiences interested in home-based programs for young children:

- national policymakers who must identify the best possible mixture of programs for carrying out legislative intent in serving children of the poor;
- national and regional program administrators who must decide where and how to install local projects and then provide adequate control and technical assistance in helping projects use their funds more effectively;
- local program operators who are considering adding a home-based option to their already existing center program for young children; and,
- the child development research community which is constantly seeking more effective ways to help children fully develop their potential and to determine program effectiveness and impact.

It is impossible to respond completely to the information needs of each group in a succinct summary such as this or to bring out every fact we have learned about Home Start. This report can only highlight major findings obtained over the three and a half years, and briefly discuss their implications.

Information essential for understanding the findings is presented in Chapter I which briefly describes the program and the design and methodology of the evaluation. Additional details can be found in Appendix A (Program Overview) and Appendix B (Evaluation Design and Methodology) and in the seven interim reports that have been submitted in the course of the evaluation. Chapter II reviews major findings in three sections: program impact on parents and children, the relative costs and effects of Home Start and Head Start, and programmatic findings. The concluding chapter presents implications of these findings for future home-based programs and for federal demonstration programs. For background information or further details a list of all previous Home Start evaluation reports and a detailed index to 32 topics in these reports are included as Appendix C.

It is impossible to complete any evaluation as large as this without the help of numerous people. Several of these deserve special recognition for their contribution over the three and one-half years of the evaluation.

Two people, especially, were responsible for the unusual potential that the evaluation design offered to those working on it. These two people--the National Evaluation Project Officer, Dr. Esther Kresh, and the National Home Start Director, Dr. (Ruth) Ann O'Keefe--are in the Office of Child Development, Office of Human Development, U.S. Department of Health, Education, and Welfare. Their close cooperation, beginning with the initial conceptualization of the National Home Start Demonstration Program in late 1971, led to a close-knit integration of evaluation and program activities and minimized most of the major problems typically faced by other evaluators on similar projects.

Throughout the three and one-half year evaluation, the 16 local Home Start project directors and their staffs played a vital role by generously responding to the seemingly endless evaluation demands. The six directors and their staffs involved in the summative evaluation deserve special recognition. The Head Start directors and their staffs, likewise, played a vital role in securing essential family and program comparison data.

Special thanks are due to the Home Start and Head Start parents and children who voluntarily participated in many hours of interviewing and testing over the last three years,

knowing the results would never help them directly but might benefit others. Recognition also goes to the community interviewers in each summative site who approached their difficult and often discouraging data collection tasks with a level of personal dedication that overcame many seemingly insurmountable problems.

Numerous consultants volunteered their assistance on problems met at different stages of the evaluation; among them the National Review Panel convened by the Office of Child Development who made valuable contributions to the initial design and early evaluation reports, and the National Advisory Panel who assisted with many specific problems and provided ideas and encouragement for enlarging the scope of our investigations.

We also want to acknowledge the work of High/Scope Foundation and Abt Associates' staff who played major roles in the evaluation: Dennis Deloria guided the project from its inception through three years of evaluation activities. Dennis set the tone for rigorous adherence to the standards of scientific evaluation tempered with the conviction that the dedication of everyone associated with the program deserved an equal commitment by the evaluators to be sensitive to the very personal nature of Home Start and its participants; Marrit Nauta anchored the management of all field operations--testing of children, family observations and program data collection. She made major contributions to the conceptualization and writing of all reports. In short, she often was the glue that kept the project together and moving; Craig Coelen conducted all cost and cost-effectiveness analyses and made numerous recommendations for improving program efficiency by linking outcome, cost and programmatic/process data; Robert Hanvey, Nancy Naylor and their staff carried out all data processing over the three and one-half years and made major contributions to the data analysis; Kathy Hewett and Chris Jerome formed a unique team in translating interview and analysis data into several series of case studies which highlighted exciting elements of the 16 Home Start projects and jointly coordinated development of the Homesbook to provide one of the most comprehensive insights into home-based programs and their operations; and Ilona Ferraro was responsible for numerous administrative tasks, including production of all reports, planning of field visits and summative data collection, and the Home Start Information System.

For each person or groups of people mentioned above, there were many more who carried out less conspicuous but no less important roles. Each contributed in his or her own unique way to the completion of the work presented here. The names

of all contributors not mentioned here are listed in Appendix D of this report. We are indebted to all for their encouragements and contributions of time and ideas. We hope that the information obtained from this evaluation will in some way be useful to those who strive to improve the quality of life for children and their families.

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March 1976

I

PROGRAM AND EVALUATION OVERVIEW

A brief overview of the National Home Start Demonstration Program and the Home Start evaluation is presented here to provide a context for findings and their implications included in subsequent chapters of this report. A more detailed discussion about the Home Start Program and the evaluation ca. be found in Appendices A and B.

Program Overview

Home Start was a program for low income preschool children and their families, funded for a three-year demonstration period by the Office of Child Development, Office of Human Development, U.S. Department of Health, Education, and Welfare. The program started in March 1972 and concluded in June 1975. Sixteen Home Start projects were funded as part of the three-year demonstration, with each project receiving approximately $100,000 per year with which to serve 80 families.

Program Focus

Recognizing the importance of the early years in the child's development and the family's role in providing an environment for young children conducive to child growth and development, Home Start's intent was to build upon existing family strengths. Through a conscious effort to focus program efforts primarily on parents (rather than on children as is done in center-based programs), parents played a unique role in Home Start: they were viewed as the "first and most important educators of their own children."[1] While Home Start was certainly designed to benefit preschool children, it was <u>through the parents</u> that Home Start hoped to have its impact.

In many respects, Home Start was a program not only concerned with the preschool child but with the well-being of the <u>total family</u>. In addition to educational concerns (getting the child ready for school and giving her or him a "head start" in life while still at home), the program stressed the importance of good health care and nutrition and acquainted families with a variety of community resources they could utilize to help meet family needs. This "total family" focus was crucial to program success, with program services expected to benefit not only parents and preschool children, but older and younger siblings and those not yet born as well.

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[1]Home Start Guidelines, page 1.

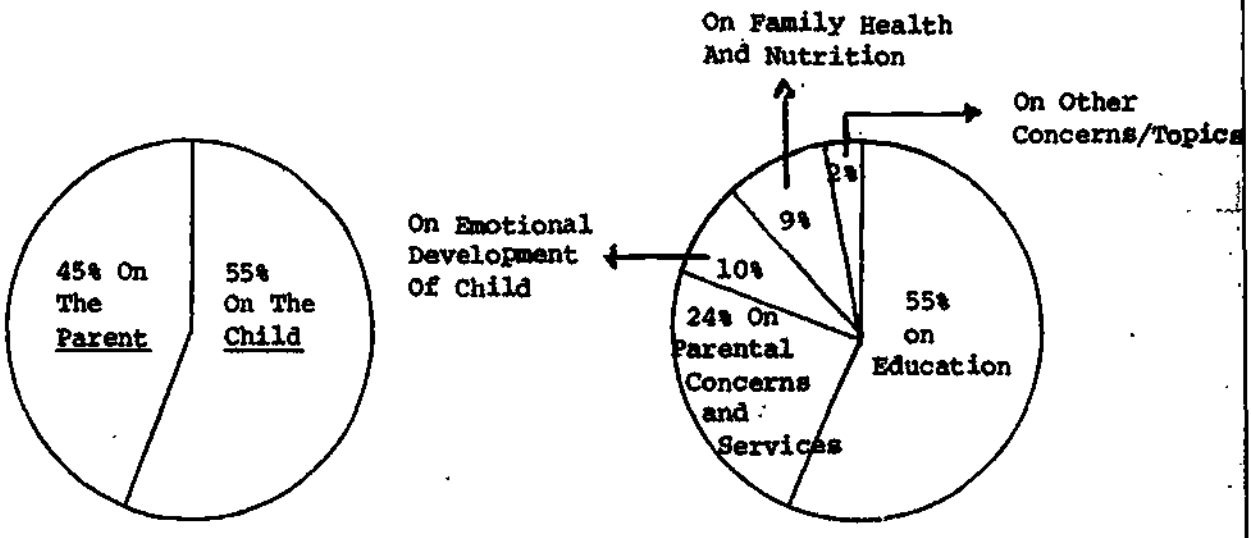
Program Activities

Program staff (primarily home visitors) translated program goals into action through regular home visits, group activities for parents and children, and arrangements with community agencies to help meet a variety of needs. The principal mechanism for providing services to families was the home visit. Typically, these took place an average of twice a month and lasted roughly an hour and a half with each family. The visit focused about equally on parent and child activities, which were most often introduced or initiated by the home visitor. Although the focus of the home visit was primarily the parent, since the parent was almost always present and actively involved when child activities were being conducted, in terms of interactions among participants, the time was about equally divided: one third of the interactions were between home visitor and parent, one third between home visitor and child, and one third were interactions involving all three participants.

Most home visitors followed a curriculum for the home visit to insure that all four components (education, health, nutrition and social/psychological services)[1] were covered during the visit. As is shown in Figure 1, over half of the visit time was devoted to educational concerns (school readiness and physical development of the child, and educating the parent about child development and education). No two home visits were the same; they were specifically geared to the needs of the individual parent and child being visited. Home visitors

Figure 1

Focus of Home Visit Activities



[1] These four components were adopted for Home Start evaluation purposes; official program components of Home Start, as well as Head Start, however, were: education, health (including nutrition, dental and mental health), social services and parent involvement.

frequently left materials in the home and encouraged the parent to continue to do similar activities with the child following the visit to maximize program benefits for the child.

Home visits were supplemented by monthly group activities for parents and children in most of the projects. The children's groups were designed to give them an opportunity to develop socially and cognitively outside the home prior to entering school. This was especially important since many of the Home Start children lived in isolated communities and had little opportunity for socialization. Monthly parent group meetings provided not only opportunities to get together with other parents, but also to learn about child development, nutrition, adult basic education courses and other topics of interest. Through these meetings parents became involved in Home Start business, planning of program activities and policy making.

The program consisted of four components which were designed to meet the educational, nutritional, health and psychological/social needs of families.[1] Parent involvement was not included as a Home Start component since it formed the foundation of the entire program. These components are described in detail in Appendix A.

Program Participants[2] and Staff

On the average, Home Start projects each reached 126 "different" families over the course of one year and had a quarterly enrollment of about 74 families. Eligibility guidelines were the same as for Head Start--families were considered eligible if their annual income was within federal poverty guidelines and if they had at least one child between the ages of three and five. The average income of the Home Start family was less than $6,000 per year to support a family of four or five. Incomes were supplemented at least for some families by the use of a variety of community resources such as Welfare and AFDC (45%) and food stamps (40%). In many families (41%) neither parent was employed. In general, the parents represented a low socio-economic status, as reflected in occupational level (median of 7 on the 96 level Duncan index) and educational level (mean of 9.7 grades completed for the mother). About a quarter (28%) of the mothers had graduated from high school.

Of the 242 children under age five that each Home Start project reached per year, 160 were between the ages of three and five. Almost all (93%) of these children were considered focal and received full program benefits. Most had received

[1] Ibid.

[2] The program participant characteristics reported are a profile of families involved in the summative evaluation.

essential immunizations when they enrolled in Home Start (about 85%), but had not seen a doctor for almost eight months. Some of them (13%) had been medically diagnosed as handicapped (most of these were physical handicaps). This exceeded the Head Start requirement for a handicapped enrollment of 10%.

The typical project had a staff of 12: seven home visitors, a director, three specialists (a nurse, social service/parent involvement coordinator and either a home visitor supervisor or an education/child development specialist), and a secretary. The home visitors, more than being key persons in the program, were the program so far as most families were concerned. On the average, they provided services to from 10 to 11 families each. The typical home visitor was a 34-year old woman, with a family of her own. She completed high school, spent some time in college, and before joining Home Start was employed in a job which in some way related to her work as a home visitor.

Evaluation Overview

A national evaluation was funded to run concurrently with the Home Start Demonstration Program (1972-1975). The evaluation was designed to measure the effects of home-based program operations by documenting actual changes in parents and children (summative evaluation) and to determine the relative cost effectiveness of Home Start and Head Start (cost-effectiveness evaluation). A third component of the evaluation (program and process evaluation) examined several key aspects of program operations to provide a relatively complete understanding of the program. The collection of programmatic and process data also permitted an examination of the relationship between parent and child outcomes, costs and key elements of the program, as well as providing a basis for making recommendations for operating home-based programs and for improving program efficiency.

Evaluation Design

A critical feature of the design was the randomly assigned, delayed-entry "control" group and the comparison group of Head Start families against which to judge Home Start's impact and effectiveness. Whereas all 16 Home Start projects participated in the program and process evaluation, only six were involved in the summative evaluation. Although the six were not randomly selected for a variety of practical considerations, there appeared to be no major differences between the summative sites and the other ten.

To permit the selection of a control group, the summative projects recruited twice as many families as could be enrolled in the program. An attempt was made to randomly assign families to Home Start and control groups; although, technically, full random assignment was not achieved, there were virtually no differences between the two groups in their entering characteristics.

The families in the control group participated in Home Start after they had been on the waiting list for one year. They then became the one-year program group for comparisons of two- vs. one-year program effects.

Families were not randomly assigned to Head Start, and indications are that Head Start and Home Start in the six summative sites served different populations. In general, Head Start families were less disadvantaged than Home Start families. Head Start comparison groups were tested at four of the summative sites where there were two-year programs. During the final year of the evaluation, data were also obtained from Head Start programs in the two urban sites operating one-year programs.

It is important to point out that the Home Start-Head Start comparison is more complicated than the Home Start-control comparison. In addition to serving different populations, the program focus of each is quite different. Home Start focused more on the development of parenting skills; in contrast, one of the important indirect services provided by Head Start--day care for mothers who work--was a benefit Home Start was not expected to provide.

Data Collection

Summative data were collected each fall and spring starting in 1973 and ending in 1975, following a pilot year designed to give projects an opportunity to become fully operational and to test the measures selected for the summative evaluation. Data were obtained at four time points to assess program impact: fall 1973 (pretest), spring 1974 (7 months later); fall 1974 (12 months later) and spring 1975 (20 months after the pretest). The final phase of the evaluation (1974-75) included a comparison of program impact after one and two years of program involvement, as well as a replication study of the 7-month findings.

Measures

To provide a broad assessment of program effects on children and parents, 11 measures were selected for the summative evaluation. Impact on children was measured in the areas of school readiness, social-emotional development, physical development, nutrition, and medical care. The program goals for mothers[1] that were measured included mother/child relationship, mother as teacher, home materials for the child and use of community resources. Descriptions of the measures are included in Appendix B.

[1]Although both parents are equally emphasized in the Home Start Guidelines, about 95% of the parent data obtained were from mothers.

II

FINDINGS

The evaluation results discussed below are based on interviews, standardized measurements, and analyses which policy makers need to make decisions about national child care resources. Neither federal program staff nor evaluation staff, however, believe that such evaluation results tell the entire story about a program which served diverse families in various locations. Throughout the three-year evaluation period, researchers talked to dozens of parents, grandparents, agency staff and townspeople to fill in the lively details of the Home Start story. In fact, there is no typical Home Start story; there are many, many different ones. To know a few details about some families in Home Start is to understand more fully the changes and experiences which the findings in this section can only suggest.

Home Start's families were diverse in every respect--in their cultural backgrounds (white, black, Appalachian, Eskimo, Navajo, Migrant, Spanish-speaking and Oriental), their economic circumstances, their sizes, their attitudes toward life, their physical surroundings, and their needs. According to program eligibility guidelines, all families shared a common circumstance: not enough money to buy food, clothes, shelter, and services they needed. Some families lacked experience to successfully manage the limited funds available to them. Although poor could mean one set of experiences in the Appalachian hills of West Virginia and another in the streets of Cleveland, no family wanted to be poor. Program staff soon learned, as one Home Visitor said, "You can't lump them all together, poor people--they're individuals like everyone else."

Equally diverse and individual are the "results" which parents and staff attribute to their Home Start experience.

- When their breadwinner father became partly paralyzed after a work accident, a family in Utah had Home Start help in obtaining financial support and in developing new family routines which included the father in caring for two preschool-age daughters. In addition, the mother found part-time work and made friends, both personal and professional, who helped her to cope with the changes in her life.

- Another mother, a young Cleveland widow with six boys, relied on Home Start primarily for encouragement in expanding the activities she was already doing with and for her children. She began with the program's Parent Advisory Council; later became elected committeewoman in her ward, and returned to school for her General Equivalency Diploma (GED).

- In Gloucester, Home Start staff helped arrange for a series of screenings for the youngest boy of a large family whose parents believed he might have learning problems. When no physical difficulties were identified, the Home Visitor helped parents to change their expectations for the boy and be less protective of him. Soon he talked more readily, was more independent, played alone, and had little difficulty with the games of colors and numbers his older sisters liked to play with him.

- A young Binghamton mother with three small children found that Home Start helped break her self-imposed isolation. "Before," she said, "I wouldn't go out of my house. But Home Start, when I finally tried it, got me out of my shell, got me talking with other mothers. Home Start is a two-way thing; it's very good for the children and it's good for me to find that my own problems aren't that earth-shaking."

One staff member in the Arizona program reported that many Navajo parents showed increasing interest in all their children's education after being in Home Start. Joint efforts of staff and parents in the Weslaco, Texas program helped to begin the long process of improving health and community services to migrant families in the area. In West Virginia, groups of parents formed to help each other repair homes, provide electricity and plumbing, and improve local roads.

In short, many changes in Home Start families as a result of their program experience are unrecorded here; they persist in the ways that parents approach continuing and inevitable problems with housing, jobs, or family members; in their willingness to tackle new jobs and learn new skills; in knowing where to go and how to ask for help on their own terms when they need it. And for many parents, the influence of Home Start shows up simply in the quality of the relationship between them and their children--a relationship more clearly understood by some, more eagerly developed by others, and more rewarding, they say.

Alaska's Project Director approached Home Start with some real questions; but at the end of three years, she said "I have seen that progress is possible and that it is possible in a relatively short time. Parents really can help themselves if someone can come up with a basic pattern about how to develop a plan for it. If it works here in the midst of all the other givens we have in Alaska--the isolation, the cold weather, the high prices, the alcoholism, the you-name-it--if it works here, it should really work in other places."

* * *

There are a number of research findings from the three and one-half years of the evaluation which support the descriptive program successes presented above. These findings, based on a systematic assessment of the program and its impact on participants, provide clear evidence that Home Start was effective for both parents and children. The research findings address a number of key questions about the program, its operations and its costs, as well as examine the relationship between program characteristics and processes and program impact.

The research findings are presented in three sections: The first reports the impact that Home Start had on families and their preschool children as measured by the summative evaluation. Results from the different phases of the evaluation are integrated in this discussion, organized around key questions. For example, data from the 7-, 12- and 20-month outcome analyses are presented together in order to completely describe program impact on children and parents. Also addressed is the issue of whether two years of Home Start were more effective than one year. The second section summarizes cost-effectiveness findings, comparing Home Start with Head Start and examining length of program participation.

The third section presents findings regarding the implementation of the Home Start program (program characteristics, processes, staffing and costs) and examines relationships between program and staff characteristics and some variables that are indicative of the implementation process. Also addressed are relationships between implementation variables and child or parent outcomes reported in the beginning of the chapter. The key variables included in these discussions are the home visit, the home visitor, program structure, program services, family participation, and program costs.

Impact on Families and Children

The impact of Home Start on families and children examined at each time point from spring 1974 to spring 1975 is summarized here according to key questions. Analyses related to additional questions of a less general interest have been reported in earlier interim reports. Earlier reports also contain details on the specific measures and the particular analyses that were conducted to produce the findings.

1. Was Home Start effective for parents?

YES; on a number of dimensions at both 7 and 12 months, Home Start produced significant changes in parents compared to the control group.

These findings are particularly important because of the potential that changes in parents have for enhancing the growth of all children in the family. The 7-month findings indicated that Home Start mothers when compared with controls were more likely to allow their children to help with household tasks, reported teaching more reading and writing skills to their children, provided more books and common playthings for their children to use, and read stories to their children more often. Home Start mothers were more likely to employ a teaching style involving thought-provoking questions, as assessed in the 8-Block Task situation, to engage in a higher rate of verbal interactions in that situation, and to focus their talk around the dimensions of the task.

The 7-month findings also showed that Home Start parents reported more involvement in community organizations such as parent-teacher groups, boy scouts, church organizations, etc., than control parents. When asked about their use of community resources such as the housing authority, job training programs, etc., however, Home Start mothers reported greater usage of only one out of fifteen.

After 12 months of involvement in the program some of the differences between Home Start and control families diminished. In most cases where the findings changed, it was due to improved performance on the part of the control group since they had entered the Home Start program by the time fall 1974 testing and interviewing began.

2. Was Home Start effective for children?

YES; when tested after 7 months and again after 12 months of program involvement, Home Start children were found to differ significantly from the control children in several aspects of their growth and development.

In school readiness, after 7 months the Home Start children were significantly above the controls as measured by the Preschool Inventory, the DDST language scale and the child talk score from the 8-Block Task. At 12 months the PSI was the only single school readiness measure to differentiate the groups, but when all four outcomes were analyzed simultaneously using multivariate analysis a significant difference was found favoring the Home Start children.

In social-emotional development, only one of the measures (Task Orientation) showed a significant Home Start-control difference at 7 months (favoring Home Start children), but after 12 months Home Start children were rated by their mothers as having greater tolerance as well as higher levels of task orientation, and the testers rated Home Start children as superior to the controls in task orientation.

Home Start children were reported by mothers as receiving better medical and dental care than controls after both 7 and 12 months (Home Start children had seen a doctor and dentist more recently and the doctor's visit was more likely to have been for preventive reasons; but there was no difference at either time point in the number of basic immunizations children in the two groups had received). There were no strong differences in children's fine and gross motor development at either time point.

In the area of child nutrition, according to mothers' report of food intake, the two groups did not differ in the overall quality of their diets. Nevertheless, at both time points the quality of children's diets was low in relation to levels commonly recommended by nutritionists.

3. Were two years of Home Start more effective than one year?

NO; there were very few differences in outcomes for children and mothers who participated for two years and those who participated for one year.

In the second year home visitors rated their two-year families as having greater potential for social and educational development than their one-year families, but this effect was not strong. Of the 53 other variables examined to answer this question, differences between the two-year and one-year groups were found on only five.

Given these few differences, the question arose as to whether there might be a difference for families whose children entered at one age but not another. Two sets of analyses were performed to investigate the two-year vs. one-year effects--one for families with children entering at age three and one for those with four-year-olds. Again, very few differences were found, supporting the conclusion that one program year is just as effective as two for both parents and children, regardless of whether families entered when children were three or four years of age. These findings are consistent with research on center-based programs which generally supports the conclusion that program duration within the preschool years is not a potent variable. Program duration and age of entry may have greater effects in programs for infants.

4. Was Home Start as effective for parents as Head Start?

YES; when the two groups were compared after 7, 12, and 20 months of program involvement, there were some differences favoring Head Start and some favoring Home Start; for most variables, however, there were no differences in the effects of the two programs.

Comparisons of Home Start and Head Start have been made cautiously in this evaluation since the two groups were found to be serving different populations initially, and because it is not known how representative these few Head Start programs are of all Head Start programs in the country. It should also be kept in mind that the two are very different kinds of programs and the services and benefits provided by the two programs do not completely overlap.

Differences that were found were primarily on home environment variables and in the use of community resources. At both 7 and 12 months, Home Start mothers reported teaching more elementary reading and writing skills to their children. At 20 months, Home Start mothers reported they more frequently let their children "help" with simple household tasks. When parents were asked to indicate the extent to which they had used various community resources, there were few group differences.

Although the minor differences that were found suggest that Home Start's advantage is in producing a more positive effect on the mother-child relationship, there were actually very few Home Start-Head Start differences. Given the large number of variables examined within the summative evaluation, it must be concluded that the two programs had very similar effects on parents.

5. Was Home Start as effective for children as Head Start?

YES; although some significant differences were found at 7, 12 and 20 months, for most variables there were no differences in the effects of the two programs.

In the area of school readiness, Home Start children surpassed Head Start children on the Preschool Inventory at 7 months but not at the other time points. In social-emotional development, Head Start children surpassed Home Start children in test orientation and sociability (POCL) at the 12-month posttest only. At 12 months Head Start also showed greater gains on the DDST fine motor scale and at 20 months Head Start children had gained

more in height than Home Start children. At both 7 and 12 months the Head Start group showed higher quality of reported nutritional intake, but this difference disappeared by 20 months; at two time points (12 and 20 months) Home Start children were reported by mothers to have gained more in their intake of vitamin supplements.

As was true of the parent findings, the few differences between the effects of Home Start and Head Start programs on children lead to the conclusion that the two programs are virtually equally effective.

Cost-Effectiveness Findings

The findings relative to cost-effectiveness can be summarized around two basic issues--the cost-effectiveness of Home Start relative to Head Start and the cost-effectiveness of increasing the length of the Home Start program.

1. Was Home Start as cost-effective as Head Start?

YES; since the costs per child of Home Start were equal to or slightly less than the costs of Head Start, and since the programs had essentially comparable effects, Home Start was a cost-effective use of public funds relative to Head Start.

A useful assessment of the overall cost-effectiveness of Home Start was made by comparing its costs and effects with the costs and effects of the Head Start program. Head Start is a good model for comparison for two reasons. First, it is a well-established program, with considerable support at the community level, among child advocates and in Congress. Second, while the objectives of the two programs are not identical, there are enough similarities that their effectiveness can be compared along a number of dimensions.

Based on data from 16 sites, the cost of Home Start to the federal government per family per year was $1400. Based on data for projects in the six summative sites, the federal government's cost for Head Start was $1730 per child per year. Home Start appears to be the less expensive of the two programs. These two estimates of unit costs suggest that 24% more children can be served via Home Start than through Head Start for a given level of federal spending. Based on data for only the four sites for which test data are available for comparisons of program effectiveness, the cost differential is even larger--31% more children served by Home Start than through Head Start--but this probably overstates the relative costs of the two

programs on a national basis. Nevertheless, it does reflect the relative quantities of resources (labor and materials) which were used in generating the family performances measured by the tests and questionnaires. Although no measurements have been made of long-range maintenance of Home Start effects, it would appear that at least in the short run the Home Start program is a cost-effective use of public funds.

2. Did increasing program length increase the cost-effectiveness of Home Start?

NO; there was little evidence that the greater costs of longer family enrollment resulted in greater benefits to children or parents.

A major difference between 7- and 12-month programs was in the summer operations. Although no test data are available with which to make a direct comparison of 7-month and 12-month programs, some indirect comparisons are possible. First, data on the service records of local projects indicate that maintenance of a consistent home visit schedule is especially difficult during summer months. Second, those families who received regular home visits during the summer months scored no higher on summative measures than those families who received very few visits. It is possible that there would be some long-range effects of longer program duration that are not apparent in immediate 12-month outcomes, but on the basis of this evaluation there is no strong evidence that summer programs are worth the additional cost. Operating programs only during the September-June period has implications for staff who would be unemployed during the summer months.

Federal cost per family for the 7-month period, October 1973 to May 1974, averaged approximately $900 across the 16 local projects. Federal cost for 12 months averaged $1400 per family. From these two figures, one would project the cost of 20 months of operation at $2300. A decision to adopt a full-year program would reduce the number of families by one-third from the number that could be served in a 7-month period for a given level of funding; a 20-month program would require a 60% cutback in families. On the basis of effects measured immediately upon completion of the program, a 20-month program is not cost-effective compared to a 7-month program. The Home Start evaluation was not designed to determine whether there might be long-range benefits extending beyond the one or two years of participation in the program that would justify increasing the length of family participation.

Programmatic Findings

Two sets of findings are presented in this section. The first and largest set are implementation findings from the 16 Home Start projects. These are important for two reasons: they constitute data regarding what actually happens when a demonstration project is implemented, and they provide a context for understanding the summative and cost-effectiveness findings. The second set of findings consists of relationships that were found between implementation variables and program and staff characteristics, and findings relating implementation variables to parent and child outcomes.

Program Implementation Findings

1. Services received varied considerably from family to family.

Although the same types of services were available to all Home Start families--home visits, group meetings for children and parents, and referrals to community agencies to help meet family needs--the intensity of services families received varied across as well as within projects. Some families received weekly home visits, while others participated only in one per month. Variations in home visit frequency resulted primarily from emergencies or illnesses in the family or of the home visitor. Emphasis and duration of the visits differed as well with some home visitors spending considerably more time on child activities. Variations were also found in the extent to which families participated in group activities.

2. Across-site variations were found in family enrollment and per family costs.

On the average, Home Start projects served 74 families during a quarterly period--8% short of OCD's goal to reach 80 families. This ranged from a low of 63 to a high of 86.[1] The cost of serving a family for one year averaged $1,750 ($1400 in federal funds and $350 in locally contributed goods and services) but ranged from a low of $1,325 to a high of $2,505.

[1] Excluded from these ranges are three projects which obtained special permission from OCD to serve fewer families per quarter because of the high cost of living in the areas served. Also excluded is the quarterly enrollment of one project which served considerably more families with a supplementary federal grant.

3. The number of specialists employed in various service delivery areas varied considerably across projects and affected program cost.

Certain local projects employed staff specialists whose training and responsibilities were heavily concentrated in a single service area. One project employed a speech therapist, an educational therapist and two educational aides but no nutritionist or social service coordinator. Another project had on the staff two social service coordinators and a nurse but no educational specialist. Several projects employed no staff specialists at all. Although the evaluation was not designed to determine the impact of specialists on parents and children, an overemphasis on any particular service delivery area would likely not be as effective in providing a wide variety of services to families.

Home Start was a highly labor intensive program (with 75% of the budget being spent on personnel). The addition of specialists increased per family cost. Hiring a home visitor supervisor, a coordinator/supervisor and a nurse/nutritionist and paying consultants would increase project costs by an additional 25-32%.

4. Projects were successful in obtaining a considerable amount of resources from community sources.

Roughly 20% of the total resources used by Home Start were obtained from local community sources. This represented about $350 in services and goods per family (including medical and dental exams, clothing, food, adult education classes and similar services). Thirteen of the sixteen projects matched more than 20 cents for every federal dollar with locally obtained goods and services. In a few projects, the matching rate was as high as 40 cents per federal dollar.

5. Home visitors were paid low salaries for the professional work they did.

Home visitors on the average were paid slightly over $5,000 per year, often for working 50 to 60 hours per week, a salary which provided less than 70% of a low income standard of living for a family of four.[1] This percentage varied substantially

[1]The low income standard of living for a family of four was determined using U.S. Department of Labor statistics (Monthly Labor Review, August 1974) for metropolitan areas nearest to the Home Start projects.

across projects, from a low of 52% of a low-income budget to a high of 85%, and cannot be explained in terms of regional variation in the cost-of-living index.

6. Home visit focus on parents increased over the course of the demonstration program.

The emphasis placed on the parent in home visits increased considerably over two years as determined by observations of home visits. The shift in emphasis from child to parent can be attributed to an increasing awareness on the part of home visitors and other project staff of the appropriate role of the parent in the home visit, as well as to training and technical assistance provided by National Home Start office staff.

7. Home Start was partially successful in involving other family members in program activities.

Although projects did their best to involve fathers in the program, both parents were considered "focal" in only a few Home Start families (16%). Participation of fathers in home visits was minimal (10% of the observed visits) primarily because visits usually took place during the day when fathers were at work. The curriculum used for home visits frequently encouraged father involvement in activities to be conducted in-between visits. Several projects arranged special activities of interest to fathers such as workshops, covered dish suppers and other social events. Fathers made up 16% of Parent Policy Council membership. The extent of father involvement in the program was affected by the considerable number of single-parent families (24%) that participated in the program.

On the other hand, sibling participation was considerable in Home Start. In 85% of the families with siblings, they were almost always involved in home visit activities. They also participated in child group meetings and in other Home Start events, such as field trips, picnics, etc. Several projects made special arrangements to involve older siblings in Home Start or outside youth program activities.

8. Supervision provided to home visitors was not completely adequate.

While projects on the average devoted 6.5 hours per month per home visitor to in-home supervision, 12 of the 16 projects provided less of this direct supervision. An additional 4.5 hours were spent in office supervision, reviewing home visiting and referral records and consultations with individual home visitors. Projects providing minimal supervision in the field (primarily because they lacked the staff for such monitoring) spent considerably more time on office supervision. Although there are no established standards for the extent to which supervision should be provided, in-home supervision appears essential for the home-based program in view of the complexity of the home visitors' jobs and their educational backgrounds.

9. A considerable number of referrals were made to help meet family needs.

Home Start projects utilized a wide variety of resources and services in the community on an as-needed basis to provide education, health, nutrition, social and psychological services for families. Referral activity was considerable, with an average of seven referrals made per family during a one-year period, or a total of 15,600 referrals for the entire program. Few federal OCD dollars were expended to pay for services to help meet family needs (less than 3% of total federal expenditures[1]). Variations in the number of referrals made across projects were considerable, suggesting that referral activity was dependent primarily on the number and types of services that were available in the community. There is no indication that the presence of specialists resulted in increased referral activity for families. In many projects with social service coordinators, for example, the number of referrals was actually lower than in projects without such specialist staff. This was most likely the result of a lack of resources in the community or more careful identification of family needs before a referral was made for services.

[1] This included paid consultants to provide training services for staff, to conduct workshops for parents, and to develop curriculum for home visits.

Relationships among Implementation, Program and Staff Characteristics, and Outcomes.

1. *Home visitors working with more than 13 families had difficulty maintaining frequent and regular contact with families.*

Home visitors worked with an average of 10 to 11 families, but the number of families assigned per home visitor ranged from a low of six to a high of 20. Home visitors working with more than 13 families made home visits less frequently, resulting in a decline in child development in the areas of school readiness and language development.[1] In contrast, there is no evidence to suggest that home visitors serving fewer than nine families had greater impact on parents.

2. *Home visitors with children made fewer home visits than those with no children at home.*

Home visitors with children of their own made fewer visits to families than those with no children. Most likely, home visitors with children were away from their jobs more frequently because of emergencies or illnesses of children at home or because they worked less.

3. *Home visitor age and the length of time she had been employed by the project affected home visit focus and content.*

Two home visitor characteristics were found to affect the content and focus of home visits. Older home visitors spent less time on educating the parent about the child than younger home visitors did (about a third less time with each ten-year interval). Older home visitors tended to adopt a "grandmotherly" attitude and focused most of their attention on the child. The longer the home visitor had worked with the program the more time she devoted to educating the parent about the child, which implies she was getting more comfortable with the stated goal of emphasizing the parent as the most influential educator of her own children. There is, however, no evidence that home visitors who spent more time with the parent had a greater impact on either parents or children; it is possible, of course, that the relative emphasis on parents could relate to long-term effects for both parent and child.

[1] As measured by the Preschool Inventory and the Denver Developmental Screening Test.

4. *Specialists did not have an impact on the length of time spent on specific content areas during home visits.*

There is no evidence to suggest that the presence of a particular specialist had an impact on the amount of time home visitors spent on specific component activities. For example, home visitors in projects with or without a health specialist spent the same amount of time on health education in home visits. Although the study was not designed to determine the impact of specialists on parents and children, it is clear that they made a qualitative difference in project operations by supporting and helping home visitors and by providing some direct services to families.

5. *The amount of home visit time spent on a particular component was not associated with positive parent and child outcomes.*

There was no statistically significant relationship between the amount of visit time devoted to a specific program objective and parent and child outcomes in that area. It was found, for example, that the heavy emphasis placed on school readiness (27% of total visit time) in home visits was not warranted. Home visitors spending consistently more time in the area of school readiness did not achieve different results with children than home visitors who devoted less time to this program objective.

6. *Home visit frequency was affected by program location and focal child age.*

Families located in urban areas received fewer home visits than those residing in rural locations. This is probably because it is more difficult to set up a regular home visiting schedule with urban families. Home visit frequency also related to the age of the focal child--families with older focal children received fewer visits but the visits were considerably longer in duration than those made to families with a younger focal child. Variations in frequency and duration of home visits are probably related to children's capacity to participate in home visiting activities for given lengths of time.

7. Variations in the frequency and duration of home visits had an effect on parent and child outcomes.

There was a statistically significant relationship between frequency and duration of home visiting activity with families and parent and child outcomes. The language abilities of focal children developed more slowly in instances where home visitors made fewer than three visits per month. Significant declines in child development[1] were associated with contact time between the family and the home visitor falling below about an hour and a half to two hours per home visit.

[1] As measured by the Preschool Inventory and the Denver Developmental Screening Test.

III

IMPLICATIONS AND CONCLUSIONS

The results of the evaluation of the National Home Start Demonstration Program show that a home-based program can be successful along a number of child and parent dimensions, and that it is cost-effective relative to Head Start programs in the same communities. The evaluation findings extend beyond these basic conclusions that were summarized in Chapter II, however, in that they contain a number of implications both for the operation of future home-based programs and for the conduct of federal demonstration programs. The purpose of this chapter is to present the major implications that appear to follow from the wealth of information collected as part of this evaluation. This report concludes with a discussion of the generalizability of these findings and implications.

Implications for Home-Based Programs

1. *Paraprofessionals can be effective providers of Home Start services.*

Many of the Home Start achievements can be directly attributed to the home visitors, 90% of whom had little or no formal training and did not generally have much experience in working with families or in providing the varied child development, nutrition and health services. They played a key role in the delivery of these services and did the work of professionals. In fact, not being "professional" was viewed by many project staff as an asset, making it easier to establish a close and trusting relationship with parents.

Besides these positive features of using paraprofessionals, there are cost advantages. Employing home visitors with college degrees would have increased the cost of the Home Start program by 15-20%. Further, analyses of summative data indicated that home visitors with degrees had the same impact on parents and children as visitors who had only the pre- and inservice training provided by the program.

Given the importance of paraprofessionals, it might be appropriate for OCD to review Child Development Associate (CDA) policies and consider including home visiting experience as part of the basis for certification.

2. Three features of program operations--training, supervision, and the use of specialists--deserve special attention.

Home Start projects devoted an average of five and one-half days per month to inservice training to help home visitors in their demanding and multi-faceted jobs. Staff gained skills in teaching parents to educate their children as a result of this training, on-the-job experience, and courses taken with the help of the program. Staff also perceived personal gains in self-confidence, understanding, and communication skills.

In-home supervision appears essential for home-based programs in view of the nature of the home visitors' jobs and their educational backgrounds. Findings showing variation in home visit frequency and in activities during home visits suggest that increased supervision could possibly improve the quality of the program.

Many projects employed specialists in a number of areas and used professionals on a consulting basis. It was not possible to test statistically the contribution of staff specialists to specific areas of program effectiveness, yet it is clear that specialists improved the overall quality of program operations through the support provided home visitors and direct services provided to families. Since specialists do increase project costs, however, care should be taken to employ specialists that are most useful in relation to the needs of families served and to use occasional consultants to supplement project staff.

3. Efficiency in operation can be achieved by controlling the number of families served.

Project size influences both program costs and program effectiveness. There is convincing evidence that costs per family can be substantially reduced by increasing enrollment to at least 80 families per project. Although total program costs would increase, an increase in enrollment from 50 to 80 families would result in a 14% reduction in per-family costs. Further increases in size would result in smaller cost advantages, e.g., increasing enrollment from 80 to 110 families would only reduce per-family costs an additional 12%.

The number of families per home visitor (an important cost factor) relates to program impact. It appears that visitors should work with between 9 and 13 families. When home visitors work with more than 13 families they make fewer visits per family and the children gain less in school readiness and language development. On the other hand, there is no apparent advantage to serving fewer than nine families per home visitor. Controlling the number of families served would allow programs to follow two

other implications that stem from the findings: families should be visited three times per month and the home visit should last between 90 minutes and two hours.

4. The typical school year (September - June) may represent the optimal program duration.

A full two-year program is twice as expensive as a one-year program, and there is little evidence that an additional year results in any important additional benefits for children or parents. Increasing program length from a school year to a full year is accomplished by providing services through the summer. Evidence suggests that it is more difficult to maintain program operations during the summer months and that summer programs did not substantially increase the benefits to families. For a given level of funding 50% more families can be served in a 7- or 8-month program than in a full year program. Although the optimal program duration will vary with the family being served, in general, a school-year program seems the most suitable as long as some services are provided to families on an as-needed basis during the summer.

Since these implications result partly from an analysis of short-range program effects, it is important to recognize the possibility that a longer program may produce longer lasting effects. It might be possible for projects to develop criteria for deciding how long each family should be involved in the program. These criteria might include the degree of independence the family achieves and parenting skills that are acquired.

It should be pointed out that operating programs only during the September to June period results in home visitors being unemployed during the summer months. Home visitors received very low salaries at most local projects. Summer unemployment would impose an additional financial burden on them and might make it increasingly difficult for projects to retain the most effective staff members.

Implications for Federal Demonstration Programs

Demonstration programs such as Home Start provide a means of testing programs, learning how they might operate, and obtaining some indication of their effectiveness. Just within the Office of Child Development, several such demonstration programs have been conducted in recent years (Planned Variation Head Start, Parent Child Centers, Parent Child Development Centers, Child and Family Resource Program, and Project Developmental Continuity, to name a few). The evaluations conducted on these programs are designed primarily to provide information about the program itself. At the conclusion of the Home Start program, however, it seems appropriate to discuss briefly some issues that relate to

the conduct of demonstration programs in general. In the Home Start evaluation a number of methodological goals were accomplished and the experience may be relevant to future evaluations of this nature.

1. The evaluation should begin simultaneously with, if not before, implementation of the demonstration program.

The Home Start evaluation schedule permitted time for selection and pilot testing of measures before actual evaluation data had to be collected. This was accomplished during the start-up period of the demonstration program which gave projects an opportunity to get off the ground without intensive evaluation. If demonstration programs include start-up phases, it is important that this time be used for developing or refining evaluation procedures.

2. Both process and impact data must be collected for a meaningful assessment of the total project.

It is often easiest to measure indices of program success or failure, but without measures of the processes of program implementation and operation, the impact data cannot be explained. At both the process and impact levels, a variety of methodologies need to be employed to obtain as broad and comprehensive a picture of the program as possible. On the process side, methodologies can include program case studies, interviews, observations and record keeping systems. Impact data can also come from a variety of sources--interviews, tests, ratings. Some of the most valuable findings are possible when relationships between process and impact can be examined.

Program successes with selected individual program participants should be documented to supplement research findings and to provide a more comprehensive insight into program impact. Descriptive details highlight the experiences of and changes in families not measured by more traditional assessment procedures.

3. A careful cost analysis is essential if findings are to be applicable to future programs.

As important as knowledge of program effects might be, its usefulness is limited without information about the costs of producing the effects. The best program in the world might be prohibitively expensive. And even more valuable than overall

costs is a cost analysis that is able to identify costs attributable to various phases of the program or to each of the program components. If other programs (such as the Head Start projects in Home Start communities) are available to serve as meaningful comparisons, an analysis of the relative costs and effects of the two programs is especially helpful for arriving at recommendations for policies affecting future programs.

4. *Random assignment of eligible participants to program and control groups adds considerable power to the design and is feasible under certain conditions.*

In the Home Start program, the idea of a waiting list was compatible with the program philosophy and with local conditions. Since more families were available than could be served by the program in one year, twice as many were recruited and half (selected at random) were asked to wait one year before entering the program. Thus the requirements of the evaluation design could be met while not denying service to anyone.

5. *A sample of projects can provide meaningful evaluation data so long as information is obtained on the generalizability of the findings.*

Of the 16 projects in the national demonstration, only six were included in the summative evaluation. But since information on program process was available for all 16 projects, it was possible to determine that the six summative projects were representative of the national program.

6. *The funding level of demonstration projects should be adjusted to regional variations in the cost-of-living index.*

Since project quality is potentially directly related to cost of operation, operations are made effectively different across sites when their real costs vary. In the typical demonstration project, including Home Start, the same level of funding is provided all projects. Because of variations in the local cost-of-living index, this results in site-to-site variation in the ability to provide services to families. For the same federal dollar, the site in large, eastern metropolitan centers cannot purchase as many staff (for example) as the rural southern site. With the large number of site-to-site differences that exist for other reasons, controlling the cost factor would add a measure of uniformity to the projects being evaluated.

Conclusions

The findings have indicated that Home Start was "successful", and Chapter II has spelled out the meaning of success in terms of the measures used and comparisons made in this study. It seems appropriate to conclude this report with a brief discussion of the generalizability of these findings and their implications.

The results of any study should be interpreted in light of the assumptions underlying the study and the conditions and circumstances that surround the project that is being evaluated. There are three basic considerations that must be kept in mind when interpreting the Home Start results.

First, the program was special. As a national demonstration, the 16 Home Start projects received support and attention from dedicated staff in Washington that is not typical of large-scale service programs. To the extent that local Head Start programs establishing a home-based option do not benefit from the same intensive support from a national office, the generalizability of the findings might be questioned.

Second, Home Start demonstrated a particular model of home-based program. Projects with widely differing mixtures of home and center activities and with variations in the duration, intensity and substance of parent and child contacts may achieve different results.

Third, the selection of the demonstration sites severely limits the generalizability of the findings. The 16 sites were selected through a regional nomination process with few standard national criteria. The sites may thus represent the best, the most cooperative, or the most politically viable ones in their regions. Whatever the sites' characteristics, it is very likely that a systematically drawn, representative sample of Head Start grantees throughout the nation would be different from the sample studied in this project.

These three points are raised as cautionary notes only. These factors by no means invalidate the study. The evaluation was designed and carried out in such a way that extensive information is available on the characteristics of the Home Start sites, the populations involved in the program, and the nature of project operations. It is hoped that this information will facilitate appropriate interpretation and application of findings by those who are interested in improving programs for children and families.

APPENDIX A

HOME START PROGRAM OVERVIEW

Some basic facts about the Home Start Program were presented in Chapter I. To provide the reader with a more comprehensive overview of the program and how individual projects operated, some key aspects are discussed here in more detail. The overview section concludes with answers to commonly asked questions about Home Start.

Sixteen projects located throughout the United States were funded as part of the National Demonstration Program (1972-75). They operated in a variety of settings. Nine of them served families primarily living in rural areas, and the remainder were considered urban or reached out to urban or a mix of urban and rural families. Participating families represented many different ethnic and cultural backgrounds including white, black, Appalachian, Eskimo, Navajo, Migrant, Spanish-speaking and Oriental. Over half (61%) of the families served were members of minority groups.

Home Start was a program with four distinct components[1], designed to meet the educational, nutritional, health and psychological/social needs of program participants. Parent involvement was not included as a Home Start component since it formed the foundation of the entire program.

Education Component

The educational component of Home Start was designed primarily to help parents become more effective in their role as the first and most important "educators" of their own children. Time was devoted in the home visit to make parents aware of the importance of spending time with the child each day and to discuss the child's experiences, feelings and thoughts. Developmental stages of the child also were addressed both in the home visit and in group meetings when parents got together to discuss a variety of topics relating to the child.

Home visits and group meetings also were designed to help parents to use elements in the child's typical environment as teaching tools and to turn everyday experiences into constructive learning experiences for the child. Reminding parents about the teaching potential of all household tasks and familiarizing them with the many objects in the home that could be used as instructional materials were two ways home visitors tried to get parents more involved with their child and to provide them with a stimulating environment. Many home visitors brought materials for use in the home visit activities, but they were simple and designed to

[1]See footnote on page 7.

show the parent how to make them cheaply or at no cost at home. Some projects conducted toy making workshops for parents while others took families to a library to obtain books for their children or made arrangements for a bookmobile to make occasional visits to the community. About half of the educational activities were designed primarily to prepare the child for school.

Health Component

Home Start families were to receive the same health services as provided to children enrolled in Head Start. One of the objectives of the program, as a result, was to insure that focal children received physical and dental examinations, immunizations and needed follow-up care. Services were provided primarily by community agencies at no cost or for a reduced fee. Most projects insisted that parents be present when the child received services to encourage more regular visits arranged by families themselves. Transportation to health services frequently posed a problem for families. To insure that program objectives were met staff took families to the health services or in a few instances brought the services to the families or arranged for the two to meet in a central location. Projects also helped families eligible for Medicaid to apply for the service and to keep basic health records on the child.

Many of the activities conducted as part of the home visit focused on preventive medicine, hygiene and safety. Activities frequently involved the focal children, preparing them for doctor and dentist visits and getting them used to washing their hands and brushing their teeth. Health education also was addressed in group meetings for parents and focal children.

Nutrition Component

The nutrition component of Home Start was geared primarily to improving children's diets. Since no funds were available to subsidize family food budgets or to provide families with nutritious meals, this component had primarily an educational emphasis. Home visitors made parents aware of the importance of good eating habits and showed them how they relate to good health and overall child growth and development. Information was presented about basic food groups, food buying, preparation and preservation both in home visits and group meetings. Emphasis was placed on augmenting the ethnic/cultural eating habits of families rather than totally changing them. Some projects assessed family food intake, made suggestions for improvements in diets and provided vitamins for the focal children. Children frequently were involved in nutrition activities to get them to try different foods and to make them aware of healthy foods to eat. Some families were put in touch with emergency food programs and charitable organizations or applied through the help of Home Start for food stamps.

Social/Psychological Component

This component was designed to address a wide array of needs of the family, such as for improved housing, employment, legal services and counseling. Social/psychological needs were met primarily by putting families in touch with appropriate agencies in the community. Activities in the home visits were designed not only to acquaint families with available services but to encourage families to make contacts themselves and to become more independent in meeting family needs. Group activities provided opportunities for both parents and children for socialization outside the home and to meet with others in similar situations.

Home Start linked up with existing community resources to meet a variety of family needs. During the course of one year (1973-74), families were referred an average of seven times--four times for health needs (primarily of the focal child), twice for social/psychological needs of the family, and once for nutrition. Half of the families also were referred once for educational needs of either the parent or the child. Most (63%) of the referrals were made for focal children.

Commonly Asked Questions About Home Start

- What kind of families did projects serve?

  The focal parent served by Home Start was most often the mother. She was about 30 years old and had between 3 and 4 children. About a quarter of the mothers had graduated from high school. In general, parents represented a low socio-economic status; the average Home Start family income was less than $6,000 per year to support a family of four or five. In many families (41%) neither parent was employed and about a quarter of the families were single-parent households.

- How large was Home Start overall?

  --Families. The program reached an average of 1,183 families per quarter. During the second year of Home Start, a total of 2,020 families were served with a total of 3,871 children under five. Of these, 2,561 were focal children.

  --Staff. 195 staff were working with Home Start during the final phase of the demonstration program (or one staff member per six families). There were 107 home visitors among the total staff each serving from 10 to 11 families.

- What was the "typical" Home Start project like?

  --Families: During the second year of Home Start, projects each served an average of 70 families per quarter and reached 130 children between the ages of zero and five. Of these, 84 were focal children. On the average, a total of 126 different families participated in each project during a year, indicating a relatively high turnover rate as kindergarten-age children left the project in the fall.

  --Staff: The typical Home Start project had twelve staff members: a director, three specialists, a secretary/bookkeeper and seven home visitors. The typical home visitor was a female who was 34 years old, had completed high school and spent some time in college. Before joining the Home Start project, she was employed in a job which in some way related to her work as a home visitor. She served between 10 and 11 families.

- What kinds of services did Home Start families receive?

  --Home Visits: The typical home visit occurred twice a month and lasted one hour and a half. Although the home visitor, focal child and the focal parent always participated in home visits, in 85% of the homes in which there were siblings, they were also involved in home visiting activities. Over half of the home visit time addressed child activities, with most of this time being spent on either school readiness or physical development. The remainder of the home visit was devoted to parent activities, emphasizing primarily parental concerns.

  During the home visit, the home visitor interacted with the focal child about a third of the time and also a third with the focal parents. Most of the remaining time was spent in three-way interactions. Home visitors encouraged parents and children to work together on Home Start-type activities between home visits.

  --Other Home Start Activities: Although the primary emphasis of the program was the home visit, projects planned other activities for families, such as group meetings for children and/or parents and Parent Policy Council meetings. Occasionally, home visitors and other staff provided transportation for families enabling them to visit a doctor, dentist, or social service agency.

--Community Services: Families received a number of community services through referrals by home visitors and other staff. The focal child was the primary recipient of referral services, receiving more than half of all referrals made. During the second year of Home Start, an average of 1,018 referrals which resulted in service delivery were made per project.

- What were the per-family costs of providing Home Start services?

Project and per-family costs for one year of Home Start services were as follows:

	Per Project	Per Family
Federal Expenditures	$ 103,510	$ 1,400
Local Contributions	25,880	350
Total Cost	$ 129,390	$ 1,750

Personnel costs represented approximately 75% of local project's costs; 8% was spent on materials/supplies, 6% on travel to home visits, and 11% for other costs (e.g., space and equipment).

APPENDIX B

EVALUATION DESIGN AND METHODOLOGY

The National Home Start evaluation was carried out by the High/Scope Educational Research Foundation of Ypsilanti, Michigan as the prime contractor and Abt Associates Inc. of Cambridge, Massachusetts (as sub-contractor). The evaluation consisted of three components which were considered complementary means of viewing the effects of Home Start: a program and process evaluation; a summative or outcome evaluation; and a cost-effectiveness evaluation. The three components of the evaluation are described in detail below.

Program and Process Evaluation

This aspect of the evaluation provided basic descriptive information about key aspects of individual Home Start projects, such as project organization, staffing patterns, staff qualifications, time-use patterns, program participant and staff characteristics, program components, the home visit, goals and objectives, and services.

Two site visits were conducted yearly to obtain programmatic data from the six projects[1] selected for participation in the summative evaluation. Non-summative projects received site visits only once a year. Trained field staff conducted in-depth interviews with project staff during the site visits to obtain data on a variety of programmatic aspects and issues. Interview data were supplemented by self reports from staff and quarterly Home Start Information System reports. These reports provided some basic statistics about the projects--family and staff characteristics, services provided to families, as well as some information about financial expenditures. This information was gathered by local project staff as part of their routine record keeping activities.

To obtain information about the principal mechanism for service delivery in home-based programs--the home visit--an observation instrument was developed. The instrument captured information about the content of home visit activities and interaction patterns between participants. Information also was obtained about plans for the visit, home visit length, location

[1] Summative projects were located in Huntsville, Alabama; Dardanelle, Arkansas; Wichita, Kansas; Cleveland, Ohio; Houston, Texas; and Parkersburg, West Virginia.

of activities, materials used and amount of activity followup during subsequent home visits. Home visits to as many as three families per home visitor (or a total of 133 home visits) were observed by local community interviewers twice a year in the six summative projects.

The collection and analyses of these data resulted in a series of evaluation reports which explored a number of issues germane to program operations and processes, several case study reports highlighting interesting aspects of the program, and the Homesbook which provides a comprehensive insight into home-based program operations. Summaries of the Home Start Information System reports from local projects were prepared to provide the National Office with quarterly statistical information about the demonstration program.

In summary, the program/process evaluation was designed to obtain factual information about the projects, to make suggestions for program improvements and to gauge the success of the implementation of recommendations, as well as providing a context for summative (outcome) findings. The factual findings and recommendations included in the seven evaluation reports frequently were used by National Office staff as a basis for technical assistance and training visits to local projects.

Summative Evaluation

The summative evaluation provided information about Home Start's overall effectiveness by measuring changes in parents and children. In this section the design, sample, measures, data collection and analysis plan of the summative evaluation are reviewed.

Design

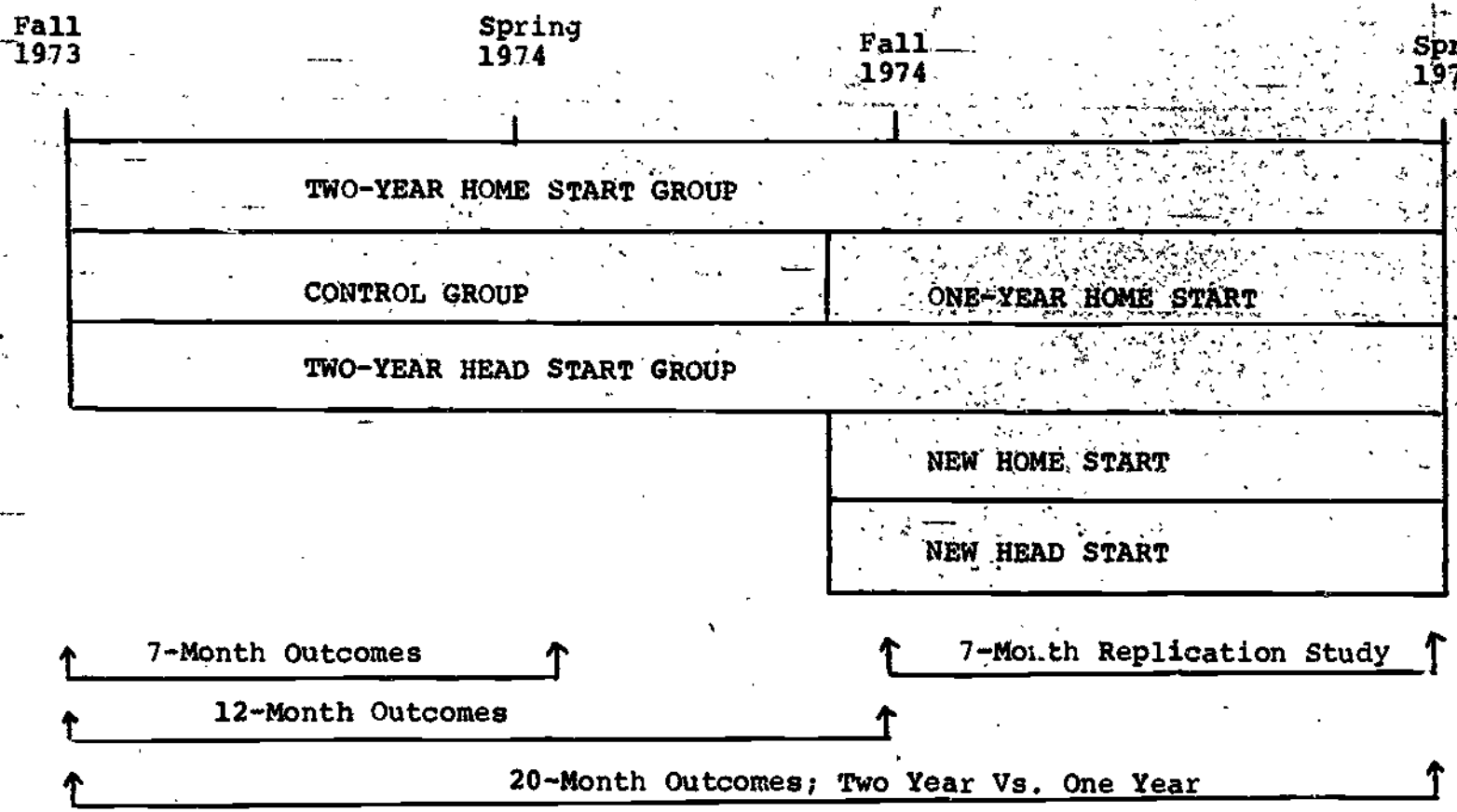
The design of the evaluation study is illustrated in Figure B-1. Three groups were pretested (fall 1973) and retested after 7 months (spring 1974), 12 months (fall 1974), and after 20 months (spring 1975). The Home Start and control groups consisted of families recruited by the projects and randomly assigned to one of those groups. The Head Start group was obtained from Head Start programs in the Home Start communities.

The control group entered the Home Start program in fall 1974 and experienced one year of the program. New groups of Home Start and Head Start families were added in fall 1974 to supplement the groups already in the evaluation.

Whereas all 16 sites participated in the formative evaluation, only six were involved in the summative evaluation.

Figure B-1

SUMMATIVE EVALUATION DESIGN AND ANALYSES



*Arrows indicate testing times; horizontal lines joining arrows indicate intervals between test points, labeled with the analysis that was performed.

Although an attempt was made to select representative sites for inclusion in the summative evaluation, practical considerations also entered in (e.g., site start-up delays, travel costs for the evaluation) so that the six sites were not randomly chosen from the 16. Nevertheless, data collected as part of the information system on all 16 sites indicated that there were no major differences between the summative sites and the other ten.

Sample

For the pretest, an attempt was made to include 40 families in each of three groups at each site: Home Start, control and Head Start. In most sites 40 was the maximum number of Home Start openings available (where a site had more than 40 openings in the program, 40 were randomly selected from the total number). Fewer than 40 families per group were involved in the evaluation in some projects because a large proportion of their families were Spanish speaking. Non-English speaking families were not included in the evaluation activities.

The control families were very similar to the Home Start families; the two groups did not differ significantly on any of the scale scores used in the analyses. This was fortunate since, strictly speaking, the assignment was not random due to a number of problems in the field. A complete discussion of these problems and the reasons for concluding that there were no systematic differences between the two groups can be found in Interim Report IV, Summative Evaluation Results, pp. 13-17.

Families were not randomly assigned to Head Start, and fall 1973 data indicated that in the four sites included in these analyses the two programs served very different populations. In general, Head Start families were less disadvantaged than Home Start families. To be eligible for testing, Head Start children were to be the same age as the entering Home Start children from that site, come from the same geographical regions and not have any prior preschool experience. For several reasons, it was not always possible to meet these criteria: Home Start usually served more counties within a region than Head Start; Head Start children had to live near a road, within busing distance of a center; and Head Start programs were often three-year programs, starting children at a younger age than Home Start.

One concern in a study spanning two years is whether attrition from the sample would affect the original random assignment in any way. At each test point (spring 1974, fall 1974, and spring 1975) families who dropped were compared with the remaining families on their entering scores. A few differences were observed on some measures at different time points, but in general sample attrition appears not to have added any serious bias to the group comparisons. The amount of attrition was extensive, however, with 42% of the Home Start children remaining by spring 1975 from the 251 who were tested in fall 1973; 44% of the original 162 control children; and 43% of the original 143 Head Start sample.

Summative Measures

To provide a broad assessment of program effects on children and parents, 11 measures were selected: two children's tests, two child rating scales completed by adults, one mother rating scale completed by the community interviewer, three parent questionnaires, a parent-child interaction measure and child height and weight. The measures listed below are described in some detail in Exhibit B-1.

- Preschool Inventory (PSI)
- Denver Developmental Screening Test (DDST)
- Child 8-Block Task
- Schaefer Behavior Inventory (SBI)
- Pupil Observation Checklist (POCL)
- High/Scope Home Environment Scale (H/S HES)
- Mother Behavior Observation Scale (MBOS)
- Parent Interview
- Child Food Intake Questionnaire
- 8-Block Sort Task
- Height and Weight

Fifty-six variables were derived from these 11 measures for use in assessing program outcomes. The variables have been categorized into nine Home Start goal areas for presenting findings. Five of them are child goal areas: school readiness, social-emotional development, physical development, nutrition, and medical care. (See Exhibit B-2 for a more detailed description of goal areas.) Four of them are parent goal areas: mother/child relationship, mother as teacher, home materials for the child, and use of community resources (Exhibit B-3).

The full range of contemporary criteria were taken into account in selecting the measures. Among them were: completely new measures could not be developed, total testing time had to be reasonable, individual items had to be interpretable, instruments had to measure national or local objectives, measures had to be appropriate to the population, tests and interviews had to be practical to administer, some measures should have been used in other evaluations, and the measures had to have good psychometric characteristics.

Data Collection

The measures were administered to families by paraprofessional interviewers selected from the Home Start communities and brought together for training by Abt Associates staff. There were three to five community interviewers at each site and one locally hired and specially trained site coordinator who assisted in training, monitoring, and scheduling. All testing and interviewing was done in the home for Home Start and control families and in centers for most of the Head Start children. Families were assigned to community interviewers randomly in urban sites, and by geographic region in rural

sites to reduce costs. All protocols were forwarded weekly to the Coordinator of Field Operations at Abt Associates who checked all tests and interviews for completeness and obvious scoring errors before sending them to the High/Scope Foundation for processing and analysis.

Data Analysis

Figure B-1 shows what comparisons were made for the main analyses reported in Chapter II.

Four basic sets of analyses have been carried out. First, descriptive data on the number of families and children, missing data, conditions of testing, and other information needed to assess data collection quality were compiled. At every time point (and during the pilot year as well) item analyses were performed for individual measures; these included item response distributions, percent passing, internal consistency reliability, item intercorrelations and principal components factor analyses. These analyses provided a continuing assessment of the psychometric qualities of the measures. A third set of analyses has also been completed at each time point: analyses of scale scores; these included calculations of scale score or total score means for each measure, standard deviations, correlations between scores, and factor analyses of all scale scores in the battery. The fourth set of analyses was conducted to assess program impact. These analyses have been done in spring 1974 (seven-month outcomes), fall 1974 (12-month outcomes) and spring 1975 (20-month outcomes), and have included analyses of variance and covariance, multivariate analyses of covariance and regression.

Cost-Effectiveness Evaluation

Cost data were obtained over the three-year period both from Head Start and Home Start projects. The collection of cost data was more extensive in the Home Start projects where information on both federal expenditures and levered resources were obtained to provide a comprehensive overview of program cost. The types and quantities of benefits produced by the two programs, and the number of participants that benefits could be extended to for a given level of public spending were compared to determine whether Home Start represented as cost-effective a program as Head Start.

The cost-effectiveness evaluation also was designed to examine the relationship between program/process, cost and outcome findings and to formulate recommendations for improving program efficiency and for policy decisions at the national, regional and local levels.

EXHIBIT B-1

DESCRIPTION OF SUMMATIVE MEASURES

Brief descriptions of each of the child and parent measures used in the summative evaluation are included in this Exhibit. The child measures listed in Exhibit B-2 are organized into five program goal areas for children. Parent measures are grouped into four goal areas and are presented in Exhibit B-3.

Child Measures

Preschool Inventory (PSI)

The PSI is a general measure of children's achievement in areas that are often regarded as necessary for success in school. Children are asked questions of general knowledge (e.g., "What does a dentist do?") and basic concepts (e.g., "Put the blue car under the green box"). The PSI used in the Home Start evaluation is a 32-item adaptation of the 64-item Cooperative Preschool Inventory published by the Educational Testing Service. The 32-item version was originally adopted for the Head Start Planned Variation study and was selected for use in the Home Start evaluation partly because of its previous use in a national evaluation.

Denver Developmental Screening Test (DDST)

The DDST was designed to aid in the early discovery of developmental problems in four areas: Fine Motor Adaptive, Language, Gross Motor, and Personal-Social. It is primarily intended to be used as a diagnostic screening procedure with individual children to identify those who are developmentally delayed.

Since the DDST includes items that are applicable for children who range in age from two weeks to six years, items suitable for the Home Start age range had to be selected. This was done by examining the norms published in the DDST Manual and selecting items that would discriminate among children in the 3- to 6-year-old range. For the fall 1972

pilot testing, 32 items were selected that ranged in difficulty, according to the norms, from those that 90% of the 3-year-olds passed to those that no child in this age group would be expected to pass. A few DDST items falling in this range were not included since they duplicated PSI items. Three items found to be deficient in the spring evaluation were deleted in an attempt to make the instrument more stable and more sensitive to age changes. In addition, revisions were made in a few items, instructions to community interviewers in the test booklet were clarified, and the order of administering the subscales was revised so that Fine Motor items were administered first. Experience of the test's authors suggested that rapport with children in this age group might be better established if these items were given first.[1] As administered for this evaluation, answers to the Personal-Social scale items were provided by the mother. The other three scales were administered directly to the children. The test was not designed to yield scale scores, but for the purposes of the Home Start evaluation, scale scores were obtained by adding together items within each of the four separate areas of functioning.

Child Food Intake Questionnaire

The Child Food Intake Questionnaire was developed in spring 1973 to obtain a quantitative and qualitative index of food consumption. It utilized a system of 24-hour recall — whereby mothers were asked to report all foods eaten by their child on the preceding day. Specifically, the mother was asked what the focal child ate for breakfast, lunch and dinner, and any snacks in between. The interviewer probed for exact quantities of all foods. To help the mother estimate quantities of food more accurately and to help the tester reliably record the mother's responses, the tester used plastic, child-size beef patties (2 ounces), glasses (4 ounces and 8 ounces) and bowls (10 ounces) marked at one-fourth cup intervals, and tablespoons. The testers were instructed not to suggest "appropriate" amounts of food; rather, the mother was asked to point to markings on the glasses and bowls that indicated how much of a certain food the child had eaten. The tester mentioned particular foods only when probing for possible additions which might have been forgotten (such as milk on dry cereal or lettuce on sandwiches). An additional element was added to the Food Intake Questionnaire in fall 1973 by having community interviewers ask whether the child took vitamins.

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[1]Throughout the development of the DDST format used in the Home Start evalution, Dr. William Frankenburg and Mrs. Alma Fandel have been extremely cooperative in helping to adapt their instrument.

The questionnaires were coded according to two sets of criteria. The first was based on the total number of "servings" eaten in each of seven food groups (milk, meat, eggs, vitamin-A vegetables, breads, and cereals). A total Food Score was then derived by summing the number of servings across food groups. The second set of criteria provided qualitative information by setting a maximum score for each of the seven food groups based on the nutritional requirements for that group. If the number of food servings was greater than the maximum Nutrition Score for a particular food group, the maximum score was coded. The scores for the seven groups were then summed to create a total Nutrition Score for each child.

Height and Weight

Information on the height and weight of children in the sample was collected to assess physical growth and to determine possible height and weight differences among groups. These are particularly important data for addressing the question of initial group differences since height and, to a lesser extent, weight are general indicators of physical growth and large discrepancies from the norms may be related to nutritional status.

Schaefer Behavior Inventory (SBI)

The SBI consists of 15 descriptive statements of child behavior that are read to the child's parent. Two typical items are "Stays with a job until he finishes it" and "Likes to take part in activities with others". The mother indicates the degree to which the description fits the child by responding on a seven point scale from "never" to "always". The SBI contains three scales of five items each, labeled Task Orientation (TO), Extraversion-Introversion (EI), and Hostility-Tolerance (HT).

Pupil Observation Checklist (POCL)

Upon completion of testing and interviewing, each community interviewer was asked to rate the child on a seven point scale consisting of 9 bipolar adjectives such as "resistive-cooperative" and "quiet-talkative".[1] The checklist has two scales: Test

[1] A tenth item ("calm-excited") was added to the rating form in fall 1973 to conform to the rating scale completed for the home observations, but is not included in the analysis of the POCL data.

Orientation items pertaining to the child's behavior during the testing situation, and Sociability items pertaining to the child's general overall behavior as seen by the testers.

8-Block Task

A score was derived from the 8-Block Task based on the child's placement and explanation at the end of the mother's teaching. This measure is described as part of the 8-Block Task description under the section on parent measures.

Medical Care

Information on medical care was collected as part of the Parent Interview (see Exhibit B-2).

Parent Measures

High/Scope Home Environment Scale (HES)

The Home Environment Scale is a 37-item parent questionnaire designed to obtain information on the child's home environment. The final form of the HES was derived from the spring 1973 testing. Twenty-nine of the items are "yes-no" questions on three different checklists and the rest are single questions which present the mother with three responses from which to choose. Out of these 37 items, only 26 are used in the six scale analyses. Most of the extra items were included in the questionnaire as fillers, since they were likely to be answered favorably by the mothers and thus contribute to a more pleasant interviewing experience.

Mother Behavior Observation Scale (MBOS)

The Mother Behavior Observation Scale is a 10-item observation checklist filled out by the community interviewer following the last visit to a family. The checklist provides three possible responses corresponding to the frequency that the behavior was observed (never, once or twice, and three times or more). There are five items belonging to a "supportive" behavior scale and four to a "punitive" scale. One item (amount of child's artwork displayed in the home) refers to behavior not directly observed, belongs to neither scale, and was not included in the analysis. This item also was not recorded for many of the Head Start families as testing generally took place at the Head Start center.

Parent Interview (PI)

The Home Start Parent Interview was originally developed to obtain information about the child's medical history, the parent's involvement in activities outside the home, the parent's use of community resources and parental locus of control. It was also used as a vehicle for obtaining feedback from the parents on their reactions to the testing and interviewing.

8-Block Sort Task

One of the more widely used procedures for assessing mother-child interaction in a teaching context is the 8-Block Task developed by Hess and Shipman in their Chicago study of maternal teaching styles. The 8-Block has been used in the Planned Variation Head Start evaluation and in the ETS-Head Start Longitudinal Study, which was one of the reasons it was originally selected for use in the Home Start evaluation. Although the situation created by the task is artificial it does provide the opportunity for direct observation of the mother's behavior that complements the verbal reports obtained from parents by the Home Environment Scale.

There are three stages in the 8-Block Task. The community interviewer guides the mother through the block sorting procedure in a standardized way, the mother is asked to teach the task to the child, and at the end the child is asked to demonstrate whether he has learned the principles according to which the blocks are sorted.

In the first stage, the community interviewer teaches the mother how to sort eight wooden blocks into four quadrants of a 12" x 12" board. The blocks vary on four dimensions--height (tall or short), mark (X or O on the ends of the blocks), color (red, yellow, green, or blue), and shape (rectangular or circular in cross-section). The relevant dimensions for sorting are height and mark. In the second section of the task, the mother teaches her child how to sort the blocks. Although the community interviewer proceeds through a series of discrete steps in a fixed order, the mother is told she can teach the child in any way she wants. The third stage of the task begins when the mother tells the community interviewer that she is finished with her "teaching". The community interviewer then gives the child two new blocks (one at a time) and asks him to place them on the board in the group where they "belong". The results of the child's placements and his explanations of the placements indicate whether the child has learned the sorting task and can generalize the sorting principle to new objects that vary on the same dimensions.

The complete task was tape recorded and coded. Three items of non-verbal behavior were coded by the interviewer: punishment, mother moving blocks, and child moving blocks.

EXHIBIT B-2

CHILD MEASURES
NATIONAL HOME START EVALUATION
SPRING 1975

Measure	Type	Respondent
School Readiness		
• Preschool Inventory, a measure of children's achievement in skill areas that are commonly regarded as necessary for success in school;	Test	Child
• DDST[1] Language Scale, a measure of children's ability to understand spoken language and to respond verbally;	Test	Child
• S-Block Child Task Score, a measure of children's ability to acquire abstract concepts taught by the mother;	Test	Child
• S-Block Child Talk Score, a measure of how many task related comments children make while mothers teach them to sort four kinds of blocks into groups.	Observation	Coder, from audio tape of Mother & Child
Social-Emotional Development		
• SBI[2] Task Orientation Scale, a measure of children's task involvement and motivation to complete tasks;	Rating Scale	Mother
• SBI Extraversion-Introversion Scale, a measure of children's interest in relating to other people;	Rating Scale	Mother
• SBI Hostility-Tolerance Scale, a measure of children's ability to refrain from emotional outbursts when things don't work out just right;	Rating Scale	Mother
• DDST Personal-Social Scale, a measure of children's ability to dress themselves and to mix with others;	Rating Scale	Mother
• POCL[3] Test Orientation Scale, a measure of children's task involvement while working with the community interviewer;	Rating Scale	Tester
• POCL Sociability Scale, a measure of the level of children's social interaction while working with the community interviewer.	Rating Scale	Tester
Physical Development		
• Height;	Direct Measurement	Tester
• Weight;	Direct Measurement	Tester
• DDST Gross Motor Scale, a measure of children's ability to coordinate movement of the whole body to accomplish a task;	Test	Child
• DDST Fine Motor Scale, a measure of children's ability to perform complex movements with portions of the body.	Test	Child

[1]DDST: Denver Developmental Screening Test
[2]SBI: Schaeffer Behavior Inventory
[3]POCL: Pupil Observation Checklist

EXHIBIT B-2, CONTINUED

CHILD MEASURES

Measure	Type	Respondent
Nutrition -- (Foods eaten by the child during the past day)		
• Milk Group score (milk, cheese, ice cream);	24 Hour Recall	Mother
• Meat Group score (meats, peanut butter, dried beans and peas);	24 Hour Recall	Mother
• Egg Group score (eggs);	24 Hour Recall	Mother
• A-Vegetables score (carrots, squash, sweet potatoes);	24 Hour Recall	Mother
• Citrus Fruits score (oranges, grapefruits, tomatos);	24 Hour Recall	Mother
• Other Vegetables score (potatoes, apples);	24 Hour Recall	Mother
• Breads and Cereals score (breads, cereals, macaroni, rice);	24 Hour Recall	Mother
• Nutrition Total score (sum of previous scores);	24 Hour Recall	Mother
• Vitamins (yes/no).	24 Hour Recall	Mother
Medical Care		
• Immuniration Since Fall, a yes/no score indicating whether children have had DPT, polio, or measles immunizations between fall 1974 and spring 1975;	Questionnaire	Mother
• Months Since Last Doctor Visit;	Questionnaire	Mother
• Reason for Last Doctor Visit (checkup or something wrong);	Questionnaire	Mother
• Months Since Last Dentist Visit;	Questionnaire	Mother
• Reason for Last Dentist Visit (checkup or something wrong);	Questionnaire	Mother

EXHIBIT B-3

PARENT MEASURES
NATIONAL HOME START EVALUATION
SPRING 1975

Measure	Type	Respondent
Mother and Child Relationship		
• H/S HES[1] Mother Involvement Scale, a measure of how often mothers spend time with their children in games, pleasant conversation, and other activities children like;	Questionnaire	Mother
• H/S HES Household Tasks Scale, a measure of how often children "help" their mothers with some simple household tasks;	Questionnaire	Mother
• MBOS[2] Supportive Scale, a measure of how often mothers praised or encouraged their children in the presence of the community interviewer;	Observation	Tester
• MBOS Punitive Scale, a measure of how often mothers scolded, threatened, or criticized their children in the presence of the community interviewer.	Observation	Tester
Mother as Teacher		
• H/S HES Mother Teaches Scale, a measure of which elementary reading and writing skills mothers are trying to teach their children;	Questionnaire	Mother
• 8-Block Request Talk, a measure of how frequently mothers attempt to elicit child talk focusing on the relevant block sorting dimensions of height and mark;	Observation	Coder, from audio tape of Mother & Child
• 8-Block Diagnostic, a measure of how many requests the mother makes for talking of the kind likely to get the child to think about the sorting problem (open-ended questions, rather than questions seeking the answer about the specific dimensions);	Observation	Coder, from audio tape of Mother & Child
• 8-Block Talk About, a measure of how frequently mothers talk about the relevant dimensions of the sorting task;	Observation	Coder, from audio tape of Mother & Child
• 8-Block Interactions/Minute, a measure of the average number of times per minute that the conversation shifts from the mother to the child and vice versa;	Observation	Coder, from audio tape of Mother & Child
• 8-Block Mean Length of String, a measure of the average number of uninterrupted mother comments, reflecting the extent to which the mother engages in a monolog;	Observation	Coder, from audio tape of Mother & Child
• 8-Block Feedback, a measure of how frequently mothers react to children's comments or block placements (includes praise and acknowledgement, encouragement, and corrections).	Observation	Coder, from audio tape of Mother & Child

[1]H/S HES: High/Scope Home Environment Scale
[2]MBOS: Mother Behavior Observation Scale

EXHIBIT B-3, CONTINUED

PARENT MEASURES

Measure	Type	Respondent
Home Materials for the Child		
• H/S NES Books Scale, a measure of how many children's books are in the home, and how often someone reads stories to the children;	Questionnaire	Mother
• H/S NES Playthings Scale, a measure of how many of some common, ordinary playthings most children like are in the home.	Questionnaire	Mother
Use of Community Resources		
• Welfare department;	Questionnaire	Mother
• Food Stamps program;	Questionnaire	Mother
• Medicaid;	Questionnaire	Mother
• Food commodities;	Questionnaire	Mother
• Local hospital;	Questionnaire	Mother
• Public health clinic;	Questionnaire	Mother
• Mental health clinic;	Questionnaire	Mother
• Family counseling agencies;	Questionnaire	Mother
• Planned Parenthood;	Questionnaire	Mother
• Day care program;	Questionnaire	Mother
• Recreational programs;	Questionnaire	Mother
• Legal aid program;	Questionnaire	Mother
• Housing authority;	Questionnaire	Mother
• State employment office;	Questionnaire	Mother
• Job training programs.	Questionnaire	Mother
Organizational Total, a score indicating how many of the llowing organizations some family member belongs to: parent-teacher's organization; boy scouts, girl scouts, 4-H Club, or other youth groups; church organization or social club; and political organization.	Questionnaire	Mother
Parent Locus of Control, eight questions dealing with practical problems to be solved; scored to indicate degree of personal responsibility for solving the problem.	Interview	Mother

APPENDIX C

INDEX TO HOME START EVALUATION REPORTS

A list of reports that were prepared during the three and a half years of the Home Start evaluation follows. Several of these reports are available from the ERIC Clearinghouse on Early Childhood Education and may be obtained by writing to the ERIC Document Reproduction Service, 4936 Fairmont Avenue, Bethesda, Maryland 20014, specifying the ERIC document number for the report desired. Volumes not yet in ERIC are available at cost from the High/Scope Educational Research Foundation, 600 North River Street, Ypsilanti, Michigan 48197.

Background information or further details on the contents of all previous Home Start evaluation reports are provided in a detailed index of 32 topics which follows the listing of evaluation reports. The index guides readers to issues addressed in the reports which are of specific interest.

A wealth of information about home-based program operations also is contained in two Office of Child Development publications: A Guide for Planning and Operating Home-Based Child Development Programs, [DHEW Publication No. (OHD) 75-1080], June 1974, with versions available in Spanish and English; and A Bibliography of Home-Based Child Development Resources [DHEW Publication No. HEW-391], March 1973. Copies may be obtained free of charge by writing Home Start, Office of Child Development, P.O. Box 1182, Washington, D.C. 20013.

HOME START EVALUATION REPORTS

- Interim Report I (August 1972)
  - Formative and Summative Evaluation (ED 069 439)
  - Case Studies IA (ED 069 440)
  - Case Studies IB (ED 069 441)

- Interim Report II - Pilot Year (July 1973)
  - Program Analysis (ED 091 074)
  - Summative Evaluation Results (ED 085 398)
  - Case Studies IIA (ED 091 081)
  - Case Studies IIB (ED 092 225)

- Interim Report III - Pilot Year (August 1973)
  - Evaluation Plan 1973-1974 (ED 092 227)
  - Program Analysis (ED 092 226)
  - Summative Evaluation Results (ED 092 229)
  - Case Study Summaries (ED 092 228)

- Interim Report IV - Pre-Test (May 1974)
  - Program Analysis (ED 107 379)
  - Summative Evaluation Results (ED 107 380)
  - Field Procedures Manual*

- Interim Report V - 7-Month Findings (November 1974)*
  - Executive Summary
  - Program Analysis
  - Summative Evaluation Results
  - Cost Effectiveness Analysis
  - Field Procedures Manual

- Interim Report VI - 12-Month Findings (March 1975)*
  - Executive Summary
  - Program Analysis, Summative and Cost Effectiveness Results
  - Field Procedures Manual

- Interim Report VII - 20-Month Findings (November 1975)*
  - Twenty-Month Program Analysis and Findings
  - Homesbook: What Home-Based Programs Can Do For Children and Families
  - Field Procedures Manual

- Home Start Information System Manual (December 1972)*

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* Volumes not yet in the ERIC system.

INDEX TO HOME START EVALUATION REPORTS

Table of Contents

CASE STUDIES. Four sets of case studies on individual Home Start projects were prepared during the course of the three-year evaluation. Interim Report I Case Studies (Volumes Ia and b) documented start-up operations, such as project organization, policy making, staff recruitment and training, and family enrollment. Identified were project goals and objectives for the four service components (health, education, nutrition and psychological/social services). Discussions also focused on the relationship projects had with Head Start as well as resources shared. A two-page summary of each case study was included in Interim Report I (pp. 25-61). A brief description of the projects also was presented in Chapter I to the Homesbook (pp. 1/19-24). The success and/or problems projects had in achieving preliminary goals and objectives were discussed in Interim Report II Case Studies. Project goals were compared with actual services provided to families. Family needs identified through a needs assessment procedure were examined, resulting in the development of a set of refined goals and objectives. The third set of Case Studies (Interim Report III) summarized the first two, with a brief update regarding changes in project organization, staffing and service delivery, and a discussion of problems projects encountered in starting up their operations. To portray some of the accomplishments of the Home Start projects, Case Studies in Interim Report V highlighted an authentic family success story for each project. Also discussed were problems the projects dealt with or continued to deal with in their communities and changes in staff composition, project organization and service delivery since the previous set of case studies was prepared.

Each case study contained an "In Brief" section providing factual information regarding the Home Start projects. The "In Briefs" listed the project sponsor, staff positions, start-up date and operating hours. Also included was some basic demographic information such as number of families and children enrolled, employment and family income, age of the focal parent, and the ethnic match between focal children and staff. Budget information was presented showing both federal and total costs (including levered goods and services).

COST EFFECTIVENESS. The Cost-Effectiveness Volume of Interim Report V (pp. 24-46) examined several aspects of Home Start project operations to define areas in which efficiency could be increased and to make specific policy recommendations. The content of home visits was evaluated to determine ways the home visit process could be improved. Extensive analyses also were performed to find a set of home visitor characteristics (both in terms of personality traits and years of schooling) which were statistically related to test performance of focal families (pp. 31-32). Interim Report VI (pp. 85-99) identified five general characteristics of Home Start which are major determinants of cost: (1) duration and intensity of service delivery; (2) credentials sought of home visitors; (3) number and

type of support staff; (4) supplementary goods and services provided to families; and (5) target sites for funding of local projects. Although cost implications of variations in the duration and intensity of service delivery were examined, no data were presented regarding the effects on families. These were reported in Interim Report VII (pp. 106-109). Also reported were determinants of variations in program services.

The methodology used for determining the relative costs and benefits of the Head Start and Home Start programs (constant cost analysis) was discussed in Interim Report V (Cost Effectiveness Volume, pp. 47-50). Information was presented regarding unit costs as well as (summative) outcomes for the two programs after seven months. Also briefly discussed were basic differences between the two programs to be taken into consideration when examining the relative cost-effectiveness of Head Start and Home Start. Interim Report VI (pp. 100-105) compared Head Start and Home Start costs and benefits after one year. Similar data were presented in Interim Report VII (pp. 104-105) 19 months after pre-test data were obtained.

COSTS OF HOME START. Interim Report II (pp. 25-26) examined Home Start budgets as they were submitted with first-year proposals. Some preliminary recommendations were made regarding the allocation of funds. Projected expenditures were reexamined in Interim Report III (pp. 38-64) by budget line item as well as by functional category. Unit costs per family were determined on the basis of these projections and were adjusted to reflect regional variations in the cost of living. Cost data presented in Interim Report IV (pp. 49-68) were for the six summative projects only. The report again examined allocation of OCD and levered resources costs by functional category to determine per-family unit costs. The Cost-Effectiveness Volume of Interim Report V (pp. 2-23) reported cost and expenditure patterns of the sixteen projects and examined site to site variations, based on eight-month cost data. Projections were included regarding yearly costs. Model budgets were presented for an average urban and rural area in the U.S. with three different levels of family enrollment. Model budgets, together with cost of living indices, can be used to adjust costs to reflect the cost of living in different locations in the country. Also addressed was the intra-program efficiency of projects, as well as a number of other cost-effectiveness issues (see COST EFFECTIVENESS). Cost data reported in Interim Report VI (pp. 45-51) covered OCD and levered resource expenditures of the six summative projects for a full year. Similar data were presented for all sixteen Home Start projects in Interim Report VII (pp. 29-34). Home Start costs and cost issues to be considered in converting from a center- to a home-based operation also were addressed in the Homesbook (pp. 6/24-47).

For a comparison of Home Start and Head Start costs see HEAD START COSTS AND BENEFITS.

DATA COLLECTION PROCEDURES - FORMATIVE. Interim Report I (pp. 81-82) briefly discussed procedures followed in obtaining data during spring 1972 site visits and outlined plans for data collection in the fall. Instruments used for spring 1973 site visits were included in Appendix A of the Program Analysis Volume of Interim Report III as well as a description of general field procedures. The purpose of spring 1974 site visits was discussed in the Program Analysis Volume of Interim Report V (pp. 7-11). Also included was a brief description of instruments used, training of staff, data reduction and analysis. In the Appendix of the same volume problems with instruments and data quality were discussed. Similar discussions of formative evaluation methodology were included in Interim Report VI (pp. 124-130) and Interim Report VII (pp. 137-142).

DATA COLLECTION PROCEDURES - SUMMATIVE. Manuals outlining in detail procedures to be followed in obtaining data from control, Home Start and Head Start families were prepared for each data collection period starting in the fall of 1972. Manuals described the organization and responsibilities of on-site staff, site preparation activities to be conducted prior to data collection, monitoring and logistics. Also included was a section outlining problems which might be encountered in obtaining data and suggestions for handling those situations. A brief discussion of data collection procedures and problems during each data collection period (including such issues as recruitment of community interviewers, sample attrition, training procedures and data quality) were included in the Summative Evaluation Volumes of Interim Reports II through VII. Discussions can be found starting on p. 9 of Interim Report II,* p. 8 of III,* p. 18 of IV,* p. 16 of V,* p. 167 of VI, and p. 187 of VII.

DATA QUALITY - HOME VISIT OBSERVATIONS. Inter-observer reliability on the Home Visit Observation Instrument was reported in Interim Report V (Program Analysis Volume, Appendix B, p. 105) and VI (pp. 131-139). Appendix A of Interim Report V also discussed problems that were encountered in collecting other programmatic data in the spring of 1974.

DATA QUALITY - SUMMATIVE. Interim Report II (Summative Evaluation Volume, pp. 9-24) discussed five issues concerning the quality of summative data collected during the pilot year: fidelity of the randomized family lists, incidence of missing data, conditions of testing in the home, battery administration time, and data collection start and finish times. Similar aspects of pilot year data were included in Interim Report III (Summative Evaluation Volume, pp. 8-16). Inter-judge reliability in scoring parent and child responses and average number of

*In Summative Evaluation Volumes.

errors made in the "administration" of the measurement battery also were presented in this report (pp. 217-220). Interim Report IV (Summative Evaluation Volume, pp. 18-39) addressed fidelity to random sample lists for the control, Home Start and Head Start groups of families at the time of the pre-test, as well as other aspects of data quality. The two subsequent reports reviewed similar data quality issues and discussed sample attrition and attrition effects (Interim Report V, Summative Evaluation Volume, pp. 16-28 and Interim Report VI, pp. 168-207). A two-year profile of inter-judge reliability on the Preschool Inventory (PSI) and the Denver Developmental Screening Test (DDST) was presented in Interim Report VII (pp. 194-196). Also included was an overview of total sample attrition over the two years and a profile showing average number of errors made in the administration of the summative measurement battery since the fall of 1973.

DEMOGRAPHIC INFORMATION. Some basic facts about projects, families and staff were included in each of the seven Interim Reports based primarily on Home Start Information System reports which projects completed quarterly. Specific aspects of project operations and organization that were reported on in more detail included discussions on:

- Family Enrollment, to determine how enrollment affected per-family cost (Cost-Effectiveness Volume of Interim Report V, pp. 37-46 and VI, p. 93).

- Home Visitor and Parent Age and Education, to determine the degree of match on a project-by-project (Interim Report IV, pp. 19-21) and a family level (Program Analysis Volume of Interim Report V, pp. 21-22).

- Project Stability, examining turnover of staff and families (Interim Report IV, pp. 10-11, the Program Analysis Volume of V, p. 17, and VII, pp. 38-40). Tables presented in the last volume focused primarily on family turnover and the length of time families remained in the program.

- Staff and Child Ethnicity, to determine whether projects were sensitive to the cultural needs of families. Interim Report II (p. 22) examined the ethnic background of staff and focal children and showed the degree of match for the Home Start program. Similar data on a project-by-project basis were reported in Interim Report IV (pp. 14-18), while the Program Analysis Volume of Interim Report V (pp. 22-27) showed ethnic match for the entire program, individual projects, as well as on a family level.

One-to-one match data (at a family level) were presented for the six summative projects only.

GENERALIZABILITY OF FINDINGS. Interim Report IV (pp. 76-79) examined the extent to which findings from the six summative projects reflect the entire Home Start program in such areas as home visit characteristics and allocation of funds. Several figures and tables included in the Interim Reports showed totals for the six summative as well as for the ten non-summative projects although differences between the two sets of projects were not discussed in detail. Specific comparisons were made in the areas of:

- Cost	Interim Report IV, p. 72 Interim Report VII, p. 34
- Demographic Characteristics	Interim Report V, pp. 74-75
- Ethnic Match	Interim Report IV, p. 16 Interim Report V, pp. 24, 26, 79, 80, 81
- Family Enrollment	Interim Report V, p. 16 Interim Report VI, p. 107 Interim Report VII, p. 115
- Home Visitor/ Family Ratio	Interim Report VI, p. 108
- Home Visits	Interim Report IV, pp. 76, 78
- Referrals	Interim Report V, pp. 67, 68, 70 Interim Report VII, p. 121
- Time Use	
Directors	Interim Report V, pp. 82, 84
Specialists	Interim Report V, pp. 35, 37, 39, 83, 84

Interim Report VI (pp. 52-55) addressed some issues relating to the generalizability of findings and discussed the extent to which future home-based projects can expect to replicate the achievements of the Home Start demonstration program.

GOALS AND OBJECTIVES. Interim Report I (pp. 9-24) examined in detail preliminary goals and objectives of local projects as well as those of the National Office to determine compatibility. Preliminary objectives were reported for families and children in each of the four program component areas (health, nutrition, education and psychological/social services). Discussions about local project goals and objectives also were included in individual case studies (Volumes Ia and b of this first report). The relationship of program goals to the measurement battery also was discussed (pp. 85-93). Interim Report II (pp. 5-13) re-examined

national objectives and the way local projects organized themselves to meet these objectives. Local objectives for specific components of the program were reviewed to determine their relationship to project structure and to services provided to families. A refined set of objectives and goals based on needs assessments of families was included in the report. Aids and deterrents to meeting first-year objectives were discussed in Interim Report III (pp. 67-70), as well as the extent to which goals and objectives were achieved. Chapter II of the Homesbook (pp. 2/18-28 and 4/2-9) discussed family needs assessment procedures as a preliminary step in setting individual goals and objectives for children and their families.

HEAD START COSTS AND BENEFITS. The Cost-Effectiveness Volume of Interim Report V (pp. 47-50) compared the unit costs of Home Start and Head Start based on 8-month cost data. Also discussed were the relative benefits for Home Start and Head Start families after having been involved in the program for seven months, as well as program differences to be taken into consideration in comparing program costs and benefits. Home Start and Head Start outcomes are discussed in more detail in the Summative Evaluation Volume of this report (pp. 133-135) and the Interim Report V Executive Summary (pp. 12-13 and 18-20). Similar discussions were included in Interim Report VI (pp. 101-105) based on data obtained twelve months after Home Start and Head Start children entered the program. A more detailed discussion of 12-month outcomes for Home Start and Head Start children was included on pp. 70-71 and 76-77 of the same volume. These findings were summarized in Interim Report VI Executive Summary (pp. 15-18). Interim Report VII compares two years of Home Start with two years of Head Start in terms of benefits (p. 91) and the cost-effectiveness of the two programs (pp. 104-105).

HOME VISIT. Interim Report III (pp. 6-37) discusses an ideal home visit, as well as qualities, training and characteristics the ideal home visitor should have according to project directors and supervisory staff. Ideal profiles were compared to the actual home visit and home visitor characteristics. Home visit data were obtained through observations in the home of interactions between the home visitor and family, home visit content, utilization of materials and communication style and tone. Interim Report IV (pp. 22-42) again presented data regarding the home visit activities. Also included in this report were discussions by home visitors on how they transfer skills to parents and how they know they have been successful. Examined were theories of modeling behavior to determine to what extent modeling occurred during the home visit. Home visit data included in Interim Reports III and IV were based on frequency analysis. More complex analysis techniques were used for subsequent reports which documented the amount of time spent on various interaction patterns.

The most comprehensive view of the home visit was presented in Interim Report V (Program Analysis Volume, pp. 45-64). Included were home visit profiles for the typical project, as well as discussions regarding across and within site variations in home visit characteristics. Home visit data (obtained through observations) were compared with home visitor reports of the content areas covered during the visit. Also discussed was the extent to which home visitors encouraged parents to work with the child between home visits and the amount of follow-up home visitors did with families. Reasons home visitors chose specific activities for their home visits were reported. Less extensive analyses of home visit observation data were conducted for Interim Reports VI and VII. Interim Report VI (pp. 28-31) reported on discussions with project staffs regarding the home visit profile to determine how accurately the observations captured what went on in the home. Some measurement problems were identified in the Report. Also discussed were changes in home visit characteristics from spring to fall, as well as changes in the observation instrument and how they affected comparisons. Interim Report VII (p. 20) presented a two-year profile of home visit emphasis (content and interactions) to determine how it changed over that period. Anecdotal information on home visits was included in the Case Study Volume of Interim Report V and the Homesbook.

Interim Report V (Cost Effectiveness Volume, pp. 24-33) discussed the content of home visits and evaluated the potential for improving the effectiveness of the home visit process. Multiple regression analyses were used to determine the relationship between the amount of time spent on specific home visit content and child or parent outcomes (as measured by the summative measurement instruments). Subsequent multiple regression analyses (reported in Interim Report VI, pp. 37-38) examined how home visitor background and the amount of time the home visitor had worked with families affected home visit characteristics (emphasis on either parent or child, content, as well as total visit length).

The frequency of home visits, the number of families not visited weekly, reasons for missed visits, and the total amount of time home visitors spent per week in home visits were reported in Interim Report V (Program Analysis Volume, p. 42) and VII (pp. 12-16), based on home visiting records for summative families. Also reported in Interim Report VI (pp. 11-13) were changes parents would like to see in home visit frequency and duration and how these changes would affect per-family cost. Interim Report VII (pp. 108-109) also examined the relationship between home visitor and/or family characteristics and home visit frequency and duration.

Inter-observer reliability on the Home Visit Observation Instrument was reported in Interim Report V (Program Analysis Volume, Appendix A, p. 105) and VI (pp. 131-139). A copy of the observation instrument was included starting on p. 140.

HOME VISITOR. Interim Report III (pp. 11-20) discussed the ideal home visit and home visitor. Concerns were raised about home visitor experience as it related to home visit emphasis. Also examined was the consistency of project emphasis with home visitor experience and background. Information was presented regarding the educational backgrounds, previous experience with children or adults and skill levels of home visitors. A more detailed profile of home visitor demographic information was included in Interim Report V (Program Analysis Volume, p. 19), including length of time with the Home Start project, number of families served, prior employment experience, and level of education. Multiple regression analysis techniques were used for Interim Report V (Cost-Effectiveness Volume, pp. 31-32) to determine a set of home visitor characteristics (personality and years of schooling) statistically related to test performance of focal families. Interim Report VI (pp. 37-38), using similar techniques, examined the effect of home visitor background and the amount of time the home visitor had worked with the family on home visit characteristics (emphasis on parent or child and content), as well as on total visit length. Also examined in this report were cost implications of variations in the number of families assigned per home visitor and credentials sought by projects in hiring home visitors. Similar analyses were conducted for Interim Report VII to identify home visitor characteristics that affected visit length and duration (pp. 100-109).

For a discussion of age, ethnicity and education match of home visitors and the families they served, see DEMOGRAPHIC INFORMATION.

The amount of time home visitors spent in the home, on family support services (home visit preparation, referrals, parent meetings and providing transportation for families), training, other activities and travel to and from families were reported in the Program Analysis Volume of Interim Report V (pp. 38-43). Also examined was the relationship between the amount of time home visitors spent with families in the home and time spent on training activities.

The role of home visitors and their varied duties were described in the Homesbook (pp. 1/10-11). Chapter IV of the book (pp. 4/15-18) discussed the relationship of the home visitor and the families she worked with.

HOMESBOOK: WHAT HOME-BASED PROGRAMS CAN DO FOR CHILDREN AND FAMILIES. Developed in lieu of a fourth set of case studies on the sixteen Home Start projects, the Homesbook compiles the experiences of project staffs who operated home-based programs over the past three years. It is based on interviews with project staff, as well as on previous case study volumes (see CASE STUDIES). Written in an informal style, the book is addressed primarily to individuals either affiliated with Head

Start or other child care programs, or who have at least some working knowledge of child care programs in general. The book is not intended strictly as a "how to" guide; rather, it details the experiences of Home Start staff in dealing with issues and problems which are important for home-based early childhood development.

The Homesbook is organized into six chapters; a brief description of topics addressed in each chapter follows:

I. Home Start in Action

This chapter presents a brief background history of Home Start as a demonstration program and discusses its relationship to Head Start, the Office of Child Development, and the families it served. Some general findings from the demonstration program are discussed. Three family "success stories" are presented as well.

II. Getting Underway

This chapter addresses basic issues involved in starting a home-based program. Planning includes finding and hiring staff; recruiting families; and arranging for services (social, health, educational) and resources (meeting and office space, transportation) which are essential to home-based programs.

III. A Basic Program

Education in the home is the first issue discussed in this chapter, including its staffing, development of curricula, use of materials, and working with parents as teachers of their children. Sample materials and curricula are included. Health and nutrition components are addressed as well, including staff, kinds and sources of services provided, and different approaches to providing health and nutrition education to parents and children.

IV. Working with Families

This chapter deals with the issue of working with families as a whole--focal children, older siblings, parents, grandparents; of helping to meet varied needs while encouraging families to be independent. Provision of community services is explored in terms of problems (employment and training, benefits, counseling, etc.) and roles of social service staff responsible for these services. Parent involvement--through parent groups and policy councils--is discussed, along with children's groups, as part of the "social Home Start." A discussion of Home Start's function as an advocate for its families' service needs concludes the chapter.

V. Management Issues

A number of basic issues relating to the operation of a home-based program are addressed in this chapter. Pre- and in-service training for staff are discussed with detailed descriptions of how four programs handled in-service training. Sample training schedules are included. The last section of the chapter addresses long-range planning issues as well as ways projects evaluated progress with families and their overall operations.

VI. Planning Issues for Home Based Programs

The chapter is devoted to major issues to be considered in planning a new home-based program or converting a Head Start Center program to include home visiting. Discussed are setting program goals and local demand for a home-based program; program organization and families to be served; resources needed to start a program, such as space, staff, transportation; conversion of Head Start; and costs and financial management.

INFORMATION SYSTEM. To obtain basic statistical information regarding families, staff, referrals and financial expenditures from local projects, a Home Start Information System was prepared in 1972 under a separate contract from OCD. The Home Start Information System Manual (December 1972) contained detailed reporting procedures for local projects and for compiling a national profile by quarter and year, as well as combining data from all sixteen projects for the entire demonstration period. Demographic information included in each of the Interim Reports was based on Information System data. The development of the Information System was discussed in Interim Report I (pp. 74-75).

LITERATURE REVIEW. A review of research literature on home-based child development programs was presented in preliminary form in Interim Report VI (Appendix I). This review was updated for Interim Report VII and was included as Appendix E. Abstracts of 35 research reports were included, along with a critique of studies and a synthesis of the findings.

MEASUREMENT BATTERY. Guidelines and criteria for the selection of measures were presented in Interim Report I (pp. 86-90) together with recommendations for the measurement battery to be used during the pilot year of the evaluation. The proposed measures were discussed in detail in this report (pp. 90-106). Interim Report II identified a number of problems with the measures and recommended changes in the battery (pp. 150-155). Based on pilot-year data, the strengths and weaknesses of the measures were re-examined resulting in further battery refinements for conducting the 1973-1975 summative evaluation (Interim Report III, p. 87). In-depth discussions about each of the measures were included in each of the seven reports (see PSYCHOMETRIC ANALYSES).

NATIONAL HOME START OFFICE. Interim Report I (p. 83) presented a short profile of the history of Home Start--its birth, early planning and selection of projects. Also examined was the relationship between the Home Start and Head Start program and the future of Home Start as an alternative to Head Start rather than a separate program. A history of Home Start also was included in the Homesbook (pp. 1/3-6). In the appendix to Interim Report I a number of documents were included which relate to Home Start, such as a copy of the Home Start Guidelines. The national case study included in the Case Study Volumes of Interim Report II described the responsibilities of the four full-time staff members of the National Office and discussed activities performed over six months, such as visiting local Home Start projects, planning and information dissemination. Also addressed were resources the National Office used, as well as roles and responsibilities of the regional offices and the local Home Start projects. The national case study concluded with a discussion of the future of Home Start. Interim Report VI (pp. 52-55) addressed the issue of replicability of Home Start demonstration program achievements by other projects that do not have strong National Office support. Discussions about the kinds of support services the National Office extended, how they were valued by local projects, and suggestions for improvements were included in Interim Report VII (pp. 51-63). The impact of National Office guidance was examined in two areas of program operations--home visitor supervision and nutrition for Interim Report VII (pp. 64-77).

PARENT EXPECTATIONS. Shortly after joining Home Start, parents were asked by their home visitors what they expected from their involvement in the program. Parent comments were reported in Interim Report II, Program Analysis Volume (pp. 40-42) and in Appendix C of the Summative Evaluation Volume. Expectations for themselves and their preschool children were described in relation to the start-up nature of the projects.

PARENT INVOLVEMENT. Three types of parent involvement and the frequency of parent activities were discussed in Interim Report II (pp. 28-29): parent policy councils, group meetings and social activities. Educational objectives of local projects were examined to determine whether parents or children were to receive primary attention from home visitors (p. 34). (See HOME VISIT for more in-depth discussions about parent involvement in the home visit.) Interim Report VI (pp. 42-44) presented some preliminary findings regarding family participation in c and parent group meetings, parent policy council meetings, ef home visits, trips to the doctor or other social service providers, and other activities. A more comprehensive overview of family participation in these types of activities was presented in Interim Report VII (pp. 21-27), as well as a more detailed discussion about these activities. The Homesbook

(pp. 4/1-9) discussed program emphasis on the total family rather than only on the focal child, and how projects involved other family members in program activities (such as fathers, siblings, etc.) and helped to meet their needs. Family involvement in parent and children's groups and policy making also were addressed in the book (pp. 4/25-37).

PROGRAM COMPONENTS. Interim Report II (pp. 31-39) discussed local objectives for each of the program components (health, education, nutrition and psychological/social services), how each of the components was staffed, component activities conducted in the home, as well as referrals in each of the service areas. The nutrition component was studied in depth for Interim Report VI (pp. 20-26) because of a lack of significant summative findings in this area. Data reported in this report included the amount of staff time that was spent on nutrition (planning, training, consultation with home visitors, and on providing direct services to families in the home or at parent meetings) in the six summative projects. Also reported was the amount of time that was spent in staff meetings and providing individual help to home visitors (both in pre- and in-service training); time spent on nutrition in home visits as well as the type of topics covered; the relative emphasis that was placed on daily nutritional needs, food groups, menu planning, shopping, cooking, food storage; nutrition assessments; and provision of vitamin supplements. Interim Report VII examined changes in the nutrition components of the 16 projects which were made in response to nutrition findings reported in the fall of 1974. Also reported were staffing patterns in the 16 Home Start projects for the four program components (pp. 11-12). Chapter III of the Homesbook extensively discussed various aspects of the education (pp. 3/1-49), the health (pp. 3/62-77) and the nutrition components (3/50-80), including staffing, curriculum and materials. The social service component of the program was addressed in Chapter IV of the book (pp. 4/9-24).

PROGRAM EFFECTIVENESS AND EFFICIENCY see COST EFFECTIVENESS.

PSYCHOMETRIC ANALYSES. The internal characteristics of each measure were examined at each testing time. These analyses included response distributions, item intercorrelations, factor analyses and internal consistency reliabilities. The analyses for the fall 1973 pilot testing were reported in Interim Report II* (pp. 25-120) and for the spring 1973 testing in Interim Report III* (pp. 19-70). Psychometric analyses of fall 1973 testing were reported in Interim Report IV* (pp. 40-100), spring 1974 testing in Interim Report V* (pp. 29-107), fall 1974 testing in Interim Report VI (Appendix E), and spring 1975 testing in Interim Report VII (Appendix D).

*In Summative Evaluation volume.

REFERRALS. Interim Report II (pp. 37-39) briefly examined the number and types of referrals that were made and the actual services families received. Staffing patterns of local projects were reviewed to determine whether staff had been designated to coordinate referral activities with community agencies. Interim Report III (pp. 58-64) again presented referral data not only by type but also by recipient of referral service and discussed the success projects had in completing referrals. The role of referrals and the utilization of levered resources were examined in detail. In addition to reporting the number of referrals made and received, Interim Report IV (pp. 42-48) discussed how much time staff spent making referrals, as well as variations across projects in the number and types of referrals made. Similar information on referrals was included in Interim Report V (pp. 65-70). Interim Report VI (pp. 14-19), on the other hand, examined eligibility of summative families for food stamps and Medicaid and family usage of these two programs. Also discussed were reasons not all eligible families were availing themselves of these services, as well as the role of home visitors in changing basic family attitudes about community resource usage. A list of agencies to which referrals were made was included in the Homesbook (pp. 6/14-15).

SAMPLE ATTRITION. Attrition of families from the sample between fall 1973 and each subsequent testing was analyzed and reported in Interim Report V* (p. 32), Interim Report VI (pp. 169-170) and Interim Report VII (Appendix C).

SERVICE DELIVERY MECHANISMS. Interim Report II (pp. 13-16) examined initial planning documents, proposals and guidelines to identify basic features of the program and to develop a model showing service delivery mechanisms. Staffing patterns of local projects were compared against the model to determine whether they were consistent with the intent of the program. The role of the home visitor and the diverse nature of home visitor responsibilities were discussed in detail. The length of the Home Start program year was examined in Interim Report VI (pp. 7-9) to determine whether it followed the school year or permitted families to be involved for a full year. Discussions also focused on the number of weeks during the year home visits did not take place because of special training activities, vacations, holiday celebrations, etc. The length of time families were served by local projects was reported in Interim Report VII (pp. 38-40), as well as variations in the duration and intensity of service delivery both across and within projects (pp. 41-42). The effects of variations in the duration of home visits on parent and child outcomes were examined in

*In Summative Evaluation volume.

the Cost-Effectiveness Volume of Interim Report V (pp. 32-33). Similar analyses were performed for Interim Report VII (pp. 107-108). The impact of other variations in the intensity and duration of service delivery on family development (7 months of service compared with one year and one year compared with two years of program involvement) was examined in Interim Report VII (pp. 106-107).

For a discussion of other aspects of service delivery see HOME VISIT, PARENT PARTICIPATION and REFERRALS.

STAFF TRAINING. Interim Report II (pp. 30-31) described various aspects of staff training--frequency, format, affiliation with Head Start, the use of consultants and academic institutions, and content areas covered. Training needs of home visitors, methods of delivering training services, and content were discussed in Interim Report III (pp. 11-19). Also examined was the role of pre-service training in home visitor skill development and the types of training home visitors received in pre- and in-service training, as well as perceived effectiveness. Interim Report V (Program Analysis Volume, pp. 30-43) reported on the amount of time home visitors, directors and specialists spent on training. The amount of time spent in pre- and in-service training for the nutrition component was reported in both Interim Reports VI (pp. 21-23) and VII (p. 72). Interim Report VI (p. 91) discussed the amount of time spent in staff training by home visitors and examined its effect on time spent with families in home visits or the provision of direct services to families. Pre-service and in-service training were discussed extensively in the Homesbook (pp. 5/36-63).

START-UP OF PROGRAM OPERATIONS. Interim Report II (pp. 19-20) discussed recruitment of families by local Home Start projects and the types of families that joined the program. Concern was raised about recruiting methods as well as the age of focal parents who entered the program. Problems projects encountered during the first nine months as they were starting up were addressed (pp. 48-56), such as (1) staff and family turnover, changes in program activities and locating office space; (2) staff morale and support services required by home visitors (especially in the area of training); and (3) demands by outsiders for information. Some recommendations were made for addressing problems which were not solely of a start-up nature but part of the ongoing process of project operations. Interim Report III (pp. 65-70) summarized aids and deterrents which were experienced by a large number of project directors in meeting first-year local objectives. Chapters II and IV of the Homesbook addressed a wide range of planning and start-up issues to be considered by Head Start projects adopting the

home-based I & I option or other child development programs establishing a Home Start-type operation. Issues discussed include determining the demand for home-based services, setting goals and identifying resources required. Also included were discussions about recruiting staff and families, preservice training, arranging for services and resources. Costs of operating home-based programs were addressed in Chapter VI of the book.

SUMMATIVE EVALUATION DESIGN. The design of the summative phase of the evaluation was briefly described in Interim Report I (pp. 85-86). The summative volume of each interim report briefly describes the design, and the most complete description can be found in Appendix B of the Final Report.

SUMMATIVE FINDINGS. Although program outcomes were not analyzed until later, Interim Report II, Summative Evaluation Volume described entering performance levels of Home Start children in the pilot phase of the evaluation (pp. 121-149; 152); the Program Analysis Volume (pp. viii-ix; 41-47) summarized these findings and discussed child and family characteristics in terms of entering family needs.

Preliminary findings were estimated from the first (pilot) year of the evaluation, 1972-73, for four of the child tests and rating scales, using growth curves estimated from the fall 1972 scores (there was no control or Head Start group at that time)--Interim Report III, Summative Evaluation Volume (pp. 77-83).

Entering characteristics of children and families participating in the true evaluation were described in Interim Report IV, Summative Evaluation Volume (pp. 101-116).

The outcomes from the first seven months of the true evaluation (fall 1973 to spring 1974) were presented in Interim Report V. The Summative Evaluation Volume (Chapter VI) described the comparisons of the Home Start and control groups, organized by child outcomes (school readiness, social-emotional development, physical development, nutrition and medical care) and mother outcomes (mother-child relationship, mother as teacher, home materials for the child, and use of community resources). The comparisons of Home Start and Head Start on the same variables were also included in Chapter VI. The Executive Summary summarized these findings (pp. 9-20), related them to program costs and suggested ways of making Home Start more cost/effective.

Twelve-month findings (fall 1973 to fall 1974) were reported in Interim Report VI, Part B (pp. 56-82). Both Home Start-control (pp. 64-67) and Home Start-Head Start (pp. 76-77) findings were presented and discussed. The Executive Summary summarized the impact of Home Start during the first 12 months (pp. 12-15) and related these findings to the 7-month outcomes. The 12-month costs and effects were also compared with corresponding costs and effects of Head Start (pp. 15-18). Interim Report VI also attempted to explore possible relationships between entering child and parent characteristics and child and parent gains. The results of regression analyses were described in Appendix H and summarized on pp. 333.

Interim Report VII presented the results of comparisons of two years of Home Start with one year (the Home Start group compared with the delayed-entry group on spring 1975 scores) in Chapter IV (pp. 90). In addition, outcomes of the two-year Home Start program (pp. 91) and the relative effectiveness of the Home Start treatment for 3-year-olds and 4-year-olds was also explored (pp. 91-92). Data from the formative evaluation (pp. 99-103) were used to show the impact of Home Start on project staff (pp. 97-99) and to show how home visitors' expectations for their families and children were affected by the program.

SUPERVISION. Interim Report III (pp. 16-20) identified staff responsible for home visitor supervision and examined whether systematic supervision was being provided. Discussions by directors and supervisory personnel about how often supervision should be provided and actual frequency of in-home supervision as reported by home visitors were presented. Interim Report V (Program Analysis Volume, pp. 36-38) reported the amount of time directors and specialists spent in the home supervising home visitors. Also discussed were other mechanisms for supervising staff. The Cost-Effectiveness Volume of this report (pp. 33-34) examined the relationship between the presence of a staff member primarily responsible for supervision and the amount of supervision provided. The issue of home visitor supervision was examined in more detail for Interim Report VII (pp. 64-71) to determine whether time spent on home visitor supervision had increased in response to National Office guidance. The different supervision mechanisms identified in Interim Report V were described extensively in this report. The Homesbook (pp. 5/1-35) also addressed issues relating to staff supervision and management.

TIME USE. Interim Report V (Program Analysis Volume, pp. 38-43) examined how home visitors spent their time, as well as the relationship between in-home and training time. Shown were the percentages of time that were spent on travel, in the home, on family support services, training and other activities. Similar data were presented for directors and specialists (pp. 30-39)--percent of time spent on administration, in the home, family support (helping home visitors prepare for visits, referrals and meetings with parents), staff supervision and staff training. The relationship between the amount of time spent on administration and family support services was examined. The Cost-Effectiveness Volume of this report (pp. 90-91) again examined staff time use of home visitors, cost implications of variations in the number of families served per home visitor, as well as trade-offs between time spent on in-service training and in-home time with families.

APPENDIX D

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